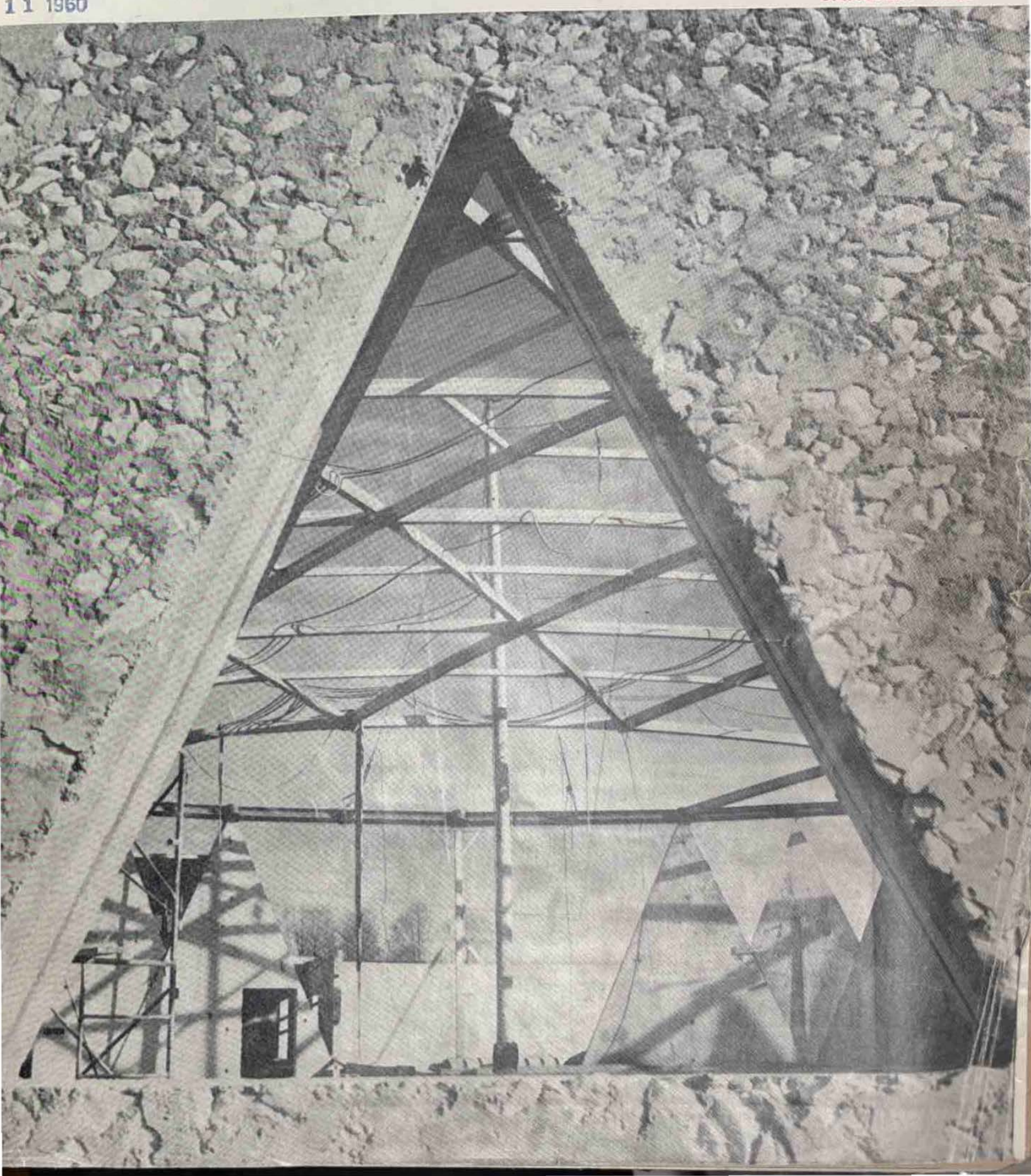
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NEW EXTRUDED ALUMINUM

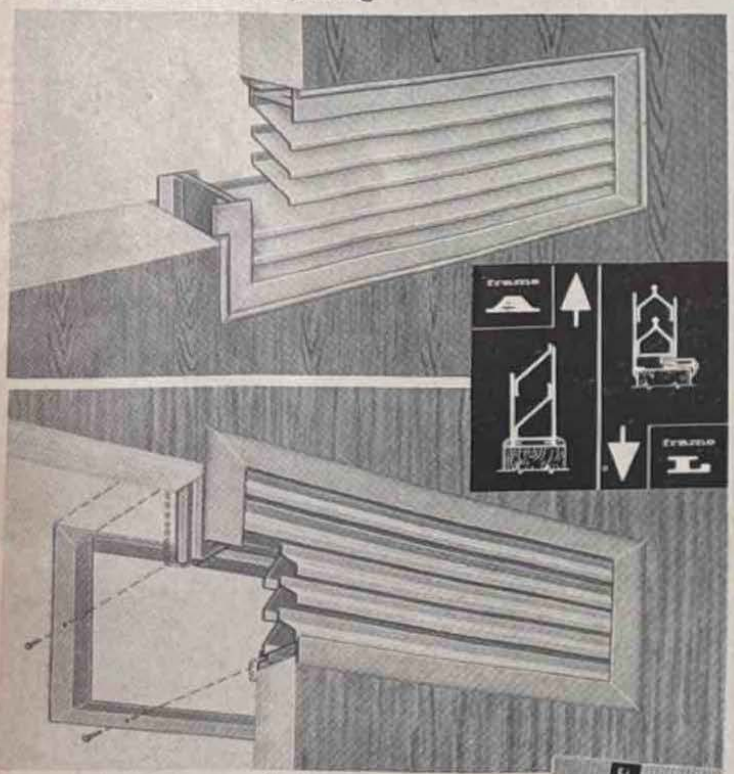
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November passes '58 by $48 million

Dollar volume of building permits reported by 155 key agencies in the 13 western states for November is $259,054,469, a whopping good $48.7 million higher than the same period in 1958. Nine of the states report increases with California topping the list at $23.1 million. Other states showing higher totals are Arizona, up $11 million; Hawaii, $9.8 million; Oregon, $5.5 million; Washington, $3 million; Utah $1.5 million; New Mexico, $680,000; Wyoming, $520,000; and Alaska, $182,000.

Biggest drop by states is in Montana, down $2.4 million from November 1958. Idaho figures are $2.3 million lower; Colorado, $1.8 million; and Nevada, $122,000.

Top 15 agencies

Eight of the top 15 agencies for November are in California, two each in Arizona and Washington and one each in Hawaii, Oregon and Colorado.

	November 1959	November 1958
1. Los Angeles	$42,300,322	$25,886,180
2. San Diego	17,298,625	14,166,742
3. Honolulu	15,283,579	5,480,566
4. Maricopa County, Ariz.	14,708,974	7,954,659
5. Los Angeles County	12,970,968	12,047,312
6. San Diego County	10,444,600	6,017,500
7. Sacramento County	9,966,606	7,824,044
8. Seattle	6,831,034	4,381,549
9. Oakland	5,773,281	2,378,073
10. San Francisco	5,342,552	6,220,152
11. Portland	5,314,165	4,592,745
12. Denver	5,204,402	7,868,645
13. Phoenix	5,097,493	3,583,226
14. King County, Wash.	4,991,784	7,243,205
15. Orange County	4,849,801	3,041,836

November below October tally

Although five states show increases over October, a big drop in California pulled the 13-state volume to $42.4 million below the previous month. California volume for November is $40.4 million lower than October. Other states showing substantial decreases are Washington, down $5.1 million; Alaska, $4.1 million; and Montana, $2.5 million.

A spurt in housing, primarily multifamily dwellings, in Honolulu boosted Hawaii's total to $6.8 million higher than October. Arizona records a $4.3 million increase, Oregon, $1.9 million; and Colorado and Utah just barely above October.

A definite slowdown in housing starts seems to be in the making, due primarily to the tightening mortgage market. Of the nine agencies listed in the table below, only two, Portland and Honolulu, record higher dollar volume of dwelling permits as compared to October.

Analysis of selected areas—November

	Dwelling	Commercial & Industrial	Public
Los Angeles	$ 9,345,260	$2,234,385	*$ 745,300
Orange County	4,428,458	177,820	
Sacramento County	7,765,576	1,553,021	538,615
Las Vegas	486,647	504,025	205,000
Denver	1,103,305	2,239,417	50,000
Seattle	2,887,744	3,558,310	261,000
King County	3,426,119	245,050	810,000
Portland	2,277,650	1,343,450	111,655
Honolulu	10,349,799	2,693,425	2,017,329

*Does not include $2,464,125 for tax-supported school construction

Building Permit Totals for 155 Western Agencies for November

CALIFORNIA	Nov. 1959	Nov. 1958
Alameda County	$ 1,112,650	$ 1,075,900
Anaheim	4,110,505	2,372,688
Bakersfield	568,198	931,425
Burbank	846,341	630,243
Contra Costa County	3,179,572	2,621,008
Fresno	888,307	1,232,850
Fullerton	1,914,990	2,375,236
Glendale	890,907	1,341,619
Inglewood	818,198	520,841
Long Beach	3,078,280	3,912,655
Los Angeles	42,300,322	25,886,180
Los Angeles County	12,970,968	12,047,312
Oakland	5,773,281	2,378,073
Ontario	461,425	385,079
Orange County	4,849,801	3,041,836
Palo Alto	2,962,227	797,089
Pasadena	1,196,017	1,542,556
Pomona	746,434	918,429
Richmond	369,839	919,838
Riverside	622,175	2,446,034
Sacramento	3,213,700	2,859,177
Sacramento County	9,966,606	7,824,044
San Bernardino	1,440,520	1,057,342
San Bernardino County	4,695,141	4,350,372
San Diego	17,298,625	14,166,742
San Diego County	10,444,600	6,017,500
San Francisco	5,342,552	6,220,152
San Jose	4,634,745	4,344,784
San Mateo	1,451,901	671,247
San Mateo County	956,060	1,038,655
Santa Ana	1,677,494	2,488,634
Santa Monica	854,004	1,190,120
Stockton	897,564	1,296,857
Sunnyvale	1,186,019	10,076,065
Torrance	1,333,801	377,419
West Covina	658,121	1,251,455
TOTAL	**$155,711,890**	**$132,607,456**

OREGON	Nov. 1959	Nov. 1958
Albany	$ 83,625	$ 251,900
Astoria	2,445	12,137
Baker	54,600	86,250
Bend	83,804	92,210
Coos Bay	132,974	102,996
Corvallis	214,000	231,050
Eugene	442,720	307,495
Grants Pass	46,000	88,550
Gresham	30,600	19,200
Hillsboro	248,650	38,797
Klamath Falls	106,525	81,200
LaGrande	46,706	1,900
Lane County	552,520	449,657
Medford	547,711	349,750
Multnomah County	4,779,243	1,111,826
North Bend	157,541	89,905
Oregon City	339,300	12,770
Portland	5,314,165	4,592,745
Roseburg	240,766	28,910
Salem	243,145	250,627
Springfield	107,640	65,590
The Dalles	85,300	89,674
TOTAL	**$ 13,857,980**	**$ 8,355,089**

WASHINGTON	Nov. 1959	Nov. 1958
Aberdeen	$ 71,025	$ 11,651
Anacortes	8,425	226,070
Auburn	94,300	525,618
Bellingham	533,942	129,929
Bremerton	74,170	102,480
Centralia	91,761	41,004
Chehalis	11,098	15,633
Ellensburg	5,600	6,050
Ephrata	16,400	23,175
Everett	95,757	1,443,725
Kelso	63,600	23,600
Kennewick	213,450	20,250
King County	4,991,784	7,243,205
Kirkland	19,300	30,800
Longview	100,018	156,278
Moses Lake	113,440	162,703
Olympia	1,369,977	119,325
Pasco	274,755	88,121
Pierce County	1,344,608	1,152,624
Port Angeles	11,300	74,450
Puyallup	170,400	73,070
Seattle	6,831,034	3,381,549
Spokane	793,955	1,373,346
Spokane County	1,075,290	1,231,858
Tacoma	3,108,192	807,843
Vancouver	738,632	303,185
Walla Walla	122,474	657,156
Wenatchee	224,740	29,190
Yakima	173,346	211,114
TOTAL	**$ 22,742,773**	**$ 19,665,002**

ALASKA	Nov. 1959	Nov. 1958
Anchorage	$ 338,219	$ 205,525
Fairbanks	42,520	
Juneau	20,000	300
Ketchikan	Nil	12,000
TOTAL	**$ 400,739**	**$ 217,825**

IDAHO	Nov. 1959	Nov. 1958
Boise	$ 246,683	$ 2,403,131
Caldwell	80,775	35,000
Coeur d'Alene	111,425	31,775
Idaho Falls	536,826	647,309
Jerome	21,400	7,500
Lewiston	52,163	83,129
Nampa	119,150	99,050
Payette	17,775	46,550
Pocatello	109,750	255,205
Sandpoint	18,550	25,200
St. Maries	17,300	Nil
Twin Falls	126,300	132,800
TOTAL	**$ 1,458,097**	**$ 3,766,599**

MONTANA	Nov. 1959	Nov. 1958
Billings	$ 235,500	$ 211,400
Bozeman	32,150	43,600
Butte	28,400	5,200
Glasgow	3,750	16,700
Glendive	1,250	33,300
Great Falls	238,488	2,563,756
Helena	118,145	306,950
Kalispell	39,523	31,759
Lewistown	14,000	90,000
Livingston	23,550	21,900
Miles City	91,900	21,332
Missoula	101,370	26,000
TOTAL	**$ 927,026**	**$ 3,371,897**

WYOMING	Nov. 1959	Nov. 1958
Casper	$ 447,210	$ 244,200
Cheyenne	699,826	390,120
Sheridan	140,569	134,494
TOTAL	**$ 1,287,605**	**$ 768,814**

COLORADO	Nov. 1959	Nov. 1958
Aurora	$ 1,009,301	$ 979,204
Boulder	725,641	581,356
Denver	5,204,402	7,868,645
Englewood	476,517	282,135
Fort Collins	1,500,476	451,285
Grand Junction	83,100	295,000
Greeley	432,303	374,478
Pueblo	464,993	1,494,353
Trinidad	633,693	6,105
TOTAL	**$ 10,530,426**	**$ 12,332,561**

UTAH	Nov. 1959	Nov. 1958
Logan	$ 139,500	$ 135,200
Murray	95,475	98,458
Ogden	394,500	395,600
Provo	1,910,800	297,200
Salt Lake City	1,061,862	1,138,041
TOTAL	**$ 3,602,137**	**$ 2,064,499**

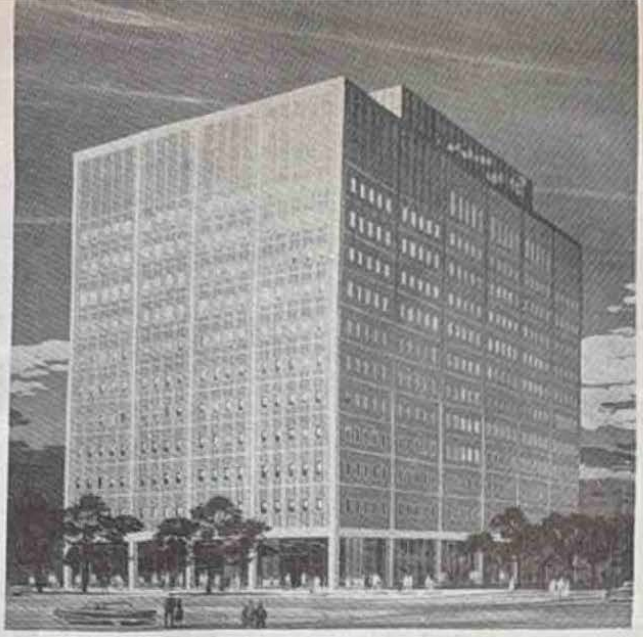
NEVADA	Nov. 1959	Nov. 1958
Elko	$	$
Las Vegas	1,220,047	1,625,840
Reno	851,191	925,603
Sparks	428,468	70,386
TOTAL	**$ 2,499,706**	**$ 2,621,829**

ARIZONA	Nov. 1959	Nov. 1958
Douglas	$ 52,448	$ 77,800
Flagstaff	76,826	65,864
Glendale	356,485	286,533
Maricopa County	14,708,974	7,954,650
Mesa	1,336,967	441,481
Phoenix	5,097,493	3,583,226
Tucson	2,848,827	933,912
Yuma	26,775	146,645
TOTAL	**$ 24,504,795**	**$ 13,490,120**

NEW MEXICO	Nov. 1959	Nov. 1958
Albuquerque	$ 4,047,103	$ 3,650,044
Carlsbad	152,350	71,860
Clovis	240,364	170,212
Gallup	82,638	162,989
Hobbs	57,915	172,360
Las Cruces	600,000	725,000
Roswell	393,600	
Santa Fe	242,124	181,850
TOTAL	**$ 5,816,094**	**$ 5,134,315**

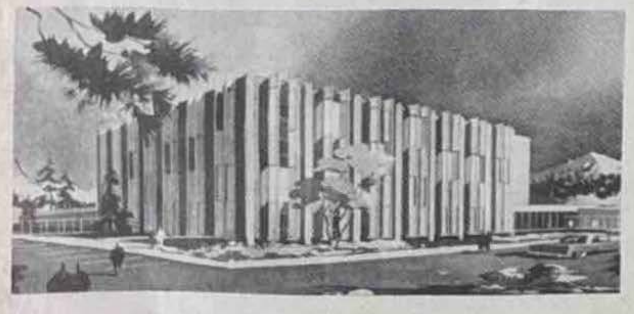
HAWAII	Nov. 1959	Nov. 1958
Hawaii County	$ 297,224	$ 233,843
Honolulu (city-county)	15,283,579	5,480,566
Maui County	134,398	173,180
TOTAL	**$ 15,715,201**	**$ 5,887,589**
GRAND TOTAL	**$259,054,469**	**$210,283,595**

PROJECT PREVIEW



12-STORY HOME OFFICE

building for Public Service Co. of Colorado in Denver will have minimum of windows as means of sun control. To relieve massive appearance of exterior, building will be faced in two granite finishes in alternating vertical stripe pattern. Columns will be faced with stainless steel and floor lines accented by stainless steel strips. Penthouse equipment area will be surrounded by glass that will act as reflective mirror picking up color of sky by day and as illuminating beacon by night. Costing $8 million, building will house guest center for demonstrations, customer service and display area in addition to offices and cafeteria, auditorium and lounge for employees. Architects: Berne, Muchow, Baume & Polivnick.



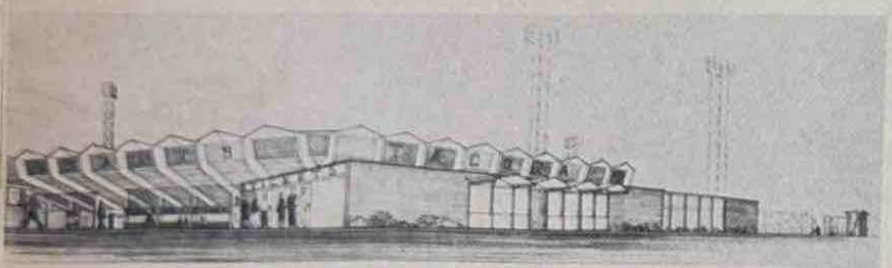
125-BED GENERAL HOSPITAL

for Anchorage will be started in April by Sisters of Charity of Providence. Four-story $3½ million structure has been designed so that all patient rooms will be located directly across corridor from nursing station. Structure will be of fireproofed steel and masonry with aluminum louvers of double thickness to protect all glass areas on exterior walls of the nursing units in case of prolonged storms. Service facilities will be located in separate building. Plans call for eventual expansion to 500 beds and construction of nursing school and convent. Architects: Charles Luckman Associates.



WINDOWLESS CHURCH

for First Congregational Church in Vancouver, Wash., will be lighted from continuous skylight running full length of curved roof. Aluminum standing seam roof on wood sheathing will be supported by two steel cables attached to concrete piers at each end of structure and by steel tension ribs. Educational wing is two-story, flat roofed, crescent shaped plant with window walls looking out onto expanse of fir and dogwood trees. Cost is estimated at $170,000. Architect: Warren Weber.



PACIFIC COAST LEAGUE BASEBALL PARK

in Tacoma will seat 3,500 under cover and 2,500 in bleachers. Grandstand will be reinforced concrete structure using some precast and some cast-in-place members. Other buildings in $590,000 complex will include administration building, team facilities area and pressbox, all to be of masonry construction with laminated beam roof system. Architects: E. L. Mills & Associates.

Urban redevelopment moves ahead in Los Angeles

Los Angeles is well underway on an urban renewal program, backed by an active Citizens Urban Renewal Advisory Committee. Two projects have been started, the Barrington Plaza in West Los Angeles and Bunker Hill, downtown. In addition, there are a number of others in the final survey or planning stage.

The program encompasses all phases of redevelopment, including revision of building codes and zoning ordinances; formation of a comprehensive general plan for the community as a whole taking in the problem of annexations, acquisition of land for public school sites, park development, etc.; study of blight areas and redevelopment and relocation of displaced persons. It is in its fifth year of certification by the federal government.

Sparkplug of the program is the citizens committee which was formed in June 1957 and is at present under the chairmanship of architect I. F. Mendenhall. CURAC is comprised of approximately 70 leading citizens from various civic organizations, business, chambers of commerce, realty boards, churches, labor groups, etc. Members are nominated by city council members and city departments comprising the Urban Renewal Coordinating Committee.

Activities are varied

Purpose of the citizens group is to evaluate and submit recommendations on urban renewal activities of the city and to serve as a public relations agency in developing an understanding of the program and promoting its support.

More specifically, activities of CURAC, as outlined in a recent report by Mendenhall to the City Council, include inspecting urban renewal project areas and providing counsel as to blight conditions; maintaining close liaison with individual councilmen and exchanging views on project advantages and disadvantages; stimulating the formation of neighborhood organizations and advising them of project benefits, advantages and disadvantages; lending assistance with public hearings; assisting with publicity and public relations efforts to eliminate unnecessary negatives; keeping committee members fully informed on local urban renewal matters and on program procedures in other cities; passing and publicizing supporting resolutions on worthy projects; revealing and supporting worthy legislative changes; encouraging local and other financial support; stimulating the creation of relocation housing for site occupants displaced by renewal work; and emphasizing the need for senior citizens' housing.

Mendenhall commented that a preliminary survey showed 11% of the 1,000 neighborhoods in the city needed early remedial action. "We in CURAC are dedicated to the objective of a decent home for every citizen," he said, "but we believe it can become a reality only with the most careful coordination, understanding and mutual support of agreed objectives between legislative bodies, city agencies and the citizenry at large."

Competition in Oregon set for Eugene's city hall

A statewide competition will lead to the selection of an architect for Eugene's proposed city hall, marking the first time that such a method has been employed for the design of a public building in Lane County.

All interested architects in Oregon will be invited to submit sketches of their basic design proposals in the first stage of the competition, to be conducted under rules established by the AIA.

From these entries, a jury of five members, including at least three architects, will select five finalists. These five will submit more detailed plans, leading to the selection of a winner, who will be commissioned to design the building for the city.

The cost of the competition will run about 1% of the total cost of the city hall, probably from $10,000 to $15,000, the City Council has been told. This will include nominal payments to the finalists and fees to the jury and competition director.

Preliminary space requirements indicate that a structure with about 90,000 sq. ft. will be necessary.

Nelson and Eames team up to discuss Russia

A New York architect joined a Los Angeles designer recently in discussing the problems they experienced in putting together the U.S. National Exhibition in Moscow. George Nelson, director of design for the show, and Charles Eames, creator of its multiple screen film presentation, make it plain, however, that they share great admiration for the Russian people.

Their joint talk, "What Happens When One Nation Tells Its Story to Another Nation," was presented before the November meeting of the Southern California Chapter, AIA, at the Ambassador Hotel. (For news of the December meeting, see p. 46.) It was an elaborate presentation, including hundreds of film slides of the exhibition and of Russian people, street scenes and architecture.

Both men described an improbable maze of red tape and bureaucratic dilemmas which make it remarkable that the exhibition was able to open on time. They also related the considerable problems of matching American working methods with the Russian.

At a press conference, Nelson and Eames, who both design furniture for Herman Miller Co., gave further first-hand impressions of Russia.

Techniques of building in that country are likely to be "tremendously impressive" in another 10 years, Nelson said, and he termed the people "rabidly peaceful"—perhaps in contrast to their government. "It was interesting that whenever they recognized us as Americans they went out of their way to treat us as guests," he continued. "When we offered bus fares, the fares were declined. When we joined lines of customers, we were invited to go to the head of the line."

Eames said that one of his strongest impressions of Russia was its extreme cleanliness. "In Moscow I saw a truck lose a quantity of straw on the street," he declared. "Immediately, motorists on all sides jumped out of their cars and picked it up."

No 'snow job' for Russia

Both men attributed the success of the exhibition and the manifest good impression it made on the Russians to the fact that "we didn't give them a big snow job." Politically, they said it was their opinion that the prevalent Russian view of U.S. society and our economic system is dated back about the turn of the century.

In a later talk in New York on "Aesthetics for the Businessman," Nelson again made reference to his visit. "In Russia, the ornate subways are in very doubtful taste, but the subway system is so far superior to that of any other city that evidently taste in this instance is less important than performance. Similarly, as one views the rapid deterioration of American cities, it seems evident that art will not play an important role in urban environment until something is done to make it livable and workable."

$370 million building program underway at UCLA

A mammoth building program involving almost 150 separate structures or building additions and costing more than $370 million is well underway at the University of California at Los Angeles. Planning for the program began in 1949. Target date for completion is 1967 to meet an expected enrollment of 27,500 students by that date.

In order to assure an orderly, harmonious development the regents decided to name a firm as supervising architects for the entire campus and picked Welton Becket & Associates for the job. The firm, in cooperation with UCLA's own office of architects and engineers, has developed a master plan for the campus and is supervising all building projects, including those designed by other architects.

The master plan divides the campus into three major use areas: academic, recreational and residential. Because of the high cost of the original Italian Romanesque design of the old buildings, a more simple and modern form has been developed, while retaining the red brick and cast stone.

At present 16 buildings are being constructed with four more scheduled to start before this semester ends. These 20 structures will cost $51 million. Twenty other projects have been completed since 1949 at a cost of more than $60 million. Remainder of the program will be completed by 1967.

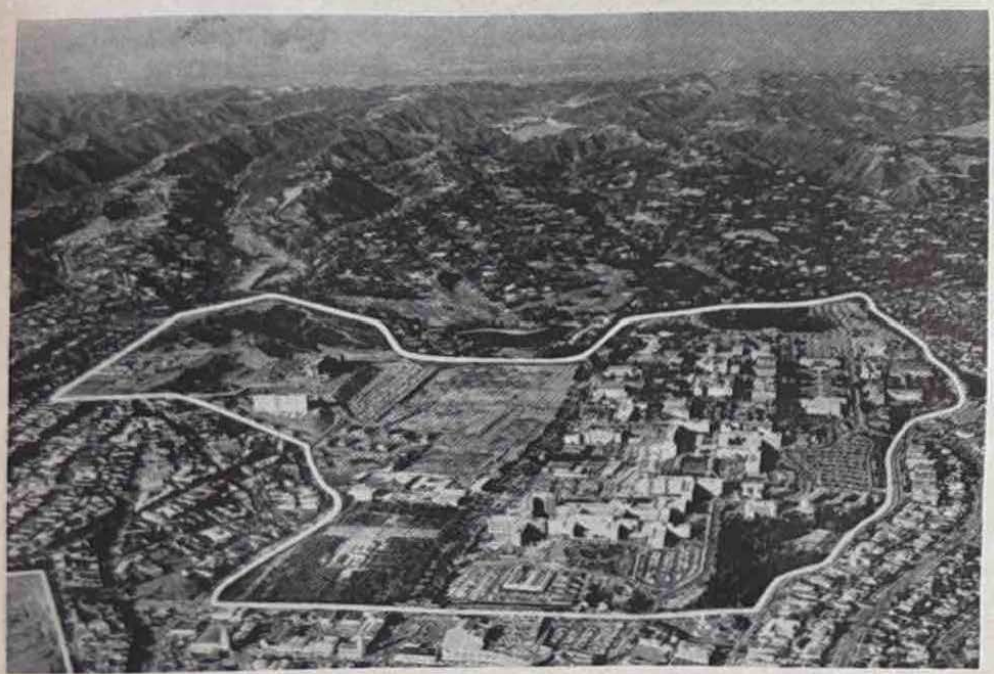
Projects run the gamut from an addition to the Law Building to eight residence halls to house 6,500 students. The ever-growing problem of automobile parking is getting its share of attention, too. Eight multilevel parking structures and several surface parking lots will ring the campus and provide a total of 15,000 spaces.

Buildings scheduled to be started this semester include an engineering unit, estimated at $5,719,000; Institute for Nuclear Medicine and Radiation Biology, $2,550,000; multilevel parking structure, $1,835,000; and Theater Arts Building, $2,612,000. Funds also are available for the $1,900,000 Marion Davies Children's Clinic wing of the Medical Center.

Money for preliminary planning and for working drawings has been allotted for a Chemistry-Geology Building addition; North Campus Library, Medical Center basic sciences unit; social science unit; and a residence hall.

Scale model display in Denver

Architectural scale models ranging from ancient temples to modern structures with suspended roofs, geodesic domes and hyperbolic paraboloids are on display at the Denver Art Museum's Living Arts Center. The exhibit, which includes 32 models, plus a display of contemporary materials and techniques, is sponsored by the AIA. It will run through April 3.



MUSHROOMING UCLA CAMPUS is scene of largest educational building program in U.S.

PASADENA AWARDS OF MERIT

(See story across page)

SHORELINE HOUSE, Hollywood: Smith & Williams, architects; Kolesoff & Kariotis, structural engineers; George D. Buccola, contractor.

SAGE RESORT MOTEL, Disneyland: Bissell & Duquette, architects; Donald V. Kendall, structural engineer; Watt & Goodman, contractor.

STUDIO-OFFICE BUILDING, Los Angeles: Arthur Lavagnino, architect; William C. Taylor, structural engineer; Riksen, Inc., contractor.

FIRING LINE SHELTER at Civil Defense Center, Pasadena: Harold B. Zook, architect; Kolesoff & Kariotis, structural engineers; Ted Tyler, contractor.

TIERRA DEL SEL RESIDENTIAL DEVELOPMENT, Palm Springs: Richard R. Leitch, architect; Desert Sun Development Corp., contractor.

Home builders to meet in Chicago in January

Some 35,000 representatives of the building industry are expected to attend the 16th annual convention and exposition of the National Association of Home Builders opening in Chicago January 17.

Money, or rather the lack of it, probably will be a major topic of discussion during the five-day meeting. Government and industry speakers are slated to discuss such topics as "What Builders Want to Know About Next Year's Money Supply"; "Mortgage Opportunities in '60"; and "Government's Influence on Homebuilding in 1960."

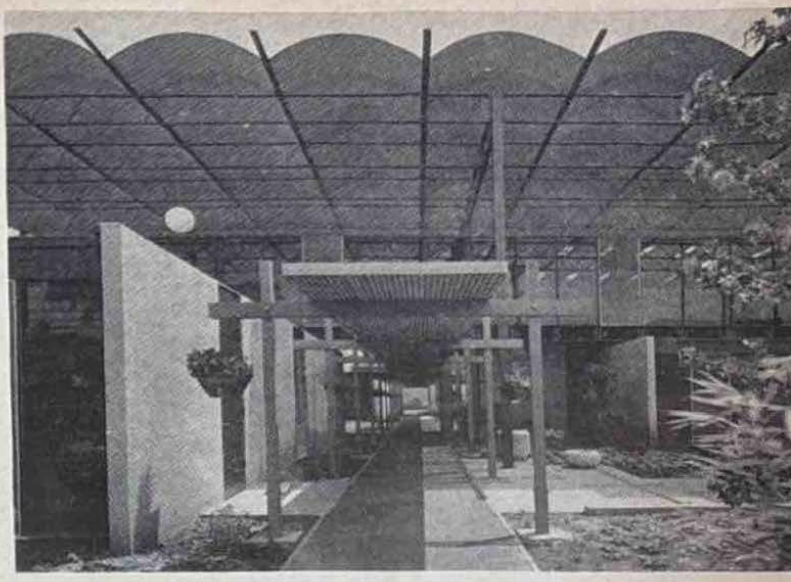
Conferees will have before them a prediction by leaders in the housing field that the 1960 market will be characterized by tight money producing, in turn, a 10% to 12% drop in the year's volume of dwelling units to be built. This report came out of a recent conference sponsored by the NAHB on "Builders' Intentions — 1960" in Washington, D. C., and attended by 25 selected representative builders. Their judgment was presented to top government and private housing experts and staff members of congressional committees who were invited to participate in the discussions.

Builders at the conference were nearly unaniminous in their expectations that the tight supply of mortgage money will continue in 1960. Another aspect of the money market given considerable attention was the fact that builders have been less successful in obtaining advance commitments from lenders to cover next year's starts.

Pasadena AIA cites 11 buildings in Honor Awards competition

Eleven citations—an Award of Excellence, five Awards of Honor and five Awards of Merit—were presented by the Pasadena Chapter, AIA, at a banquet in the Sheraton-Huntington Hotel December 2. The jury included Dean Arthur Gallion of the School of Architecture at the University of Southern California; Dr. Thomas Leavitt, director of the Pasadena Art Museum; Los Angeles architects Maynard Lyndon and D. M. Deasy; and John Entenza, editor of Arts & Architecture.

Concerning the top award, the jurors said: "In times such as these when the burdens of economy, efficiency and practicality weigh heavily upon us, it is exciting to find a structure which arouses us from our lethargy. Dullness is the common denomination of so many buildings that we have become inured to mediocrity."



1

Award of Excellence

1. **COMMUNITY FACILITIES OFFICE BUILDING,** South Pasadena: Smith & Williams, architects; Kolesoff & Kariotis, structural engineers; Ted Tyler, contractor.

Awards of Honor

2. **MYERS MOUNTAIN CABIN,** Running Springs: John F. Galbraith, architect; Henry A. Myers, builder.
3. **LEE B. KLINE OFFICE BUILDING,** Los Angeles: Lee B. Kline, architect; Hillman & Howell, structural engineers; Riksen, Inc., contractor.
4. **ATLANTIC SAVINGS AND LOAN ASSOCIATION BUILDING,** East Los Angeles: Burge & Roach, Henry C. Burge, architects; Mackintosh & Mackintosh, structural engineers.
5. **EDWARDS RESIDENCE,** Los Angeles: Buff, Straub & Hensman, architects; Duffy Edwards, builder.
6. **MIRMAN RESIDENCE,** Arcadia: Buff, Straub & Hensman, architects; Dr. Ben Mirman, builder.

Photographic credits: Marvin Rand—1; Rolland Lee Alhambra—2; Julius Shulman—3, 5, 6; John Hartley—4.

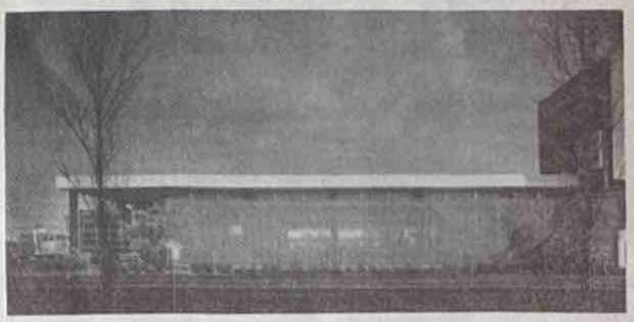
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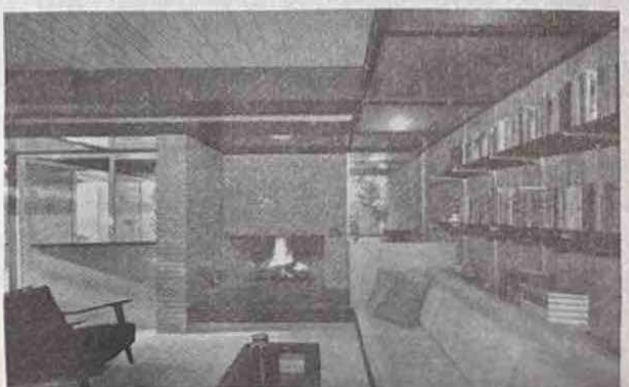
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Washington State AIA honors eight current projects, two older jobs

Art Hupy photos





HONOR AWARDS PRESENTATION takes on festive air early in December in form of reception at Seattle Art Museum, where architects and guests view entry panels and later enjoy coffee and cake.

In its ninth annual Honor Awards program, the Washington State Chapter, AIA, premiated nine buildings—three First Honor Awards and six Awards of Merit—and presented two innovations. For the first time, panels illustrating the 30 entries were exhibited in the Seattle Art Museum; and also for the first time, the chapter cited two outstanding older buildings.

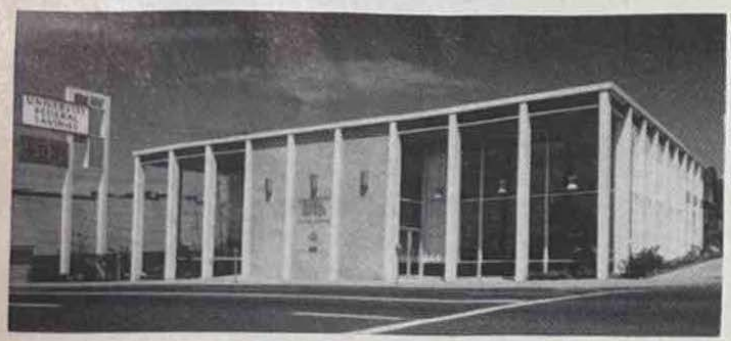
Jury members were J. Lister Holmes, Seattle architect; Prof. Peter Oberlander of the University of British Columbia and Kenneth W. Brooks, Spokane architect. Wherever possible, the jurors visited the building sites to make a more thorough study than the illustrating panels allowed.

Citation Awards recognizing the "professional excellence and enduring quality" of two Seattle projects went to Mrs. Kenneth Chapman of Everett on behalf of her father, Ellsworth Storey, who now resides in the East, for the Storey Cottages at Coleman Park; and to Joseph Wilson and A. H. Albertson of the firm of Albertson, Wilson & Richardson (disbanded in 1934) for St. Joseph's Church.

Constructed between 1908 and 1910, seven of the eight original cottages still remain. They were cited as "significant for their simple, direct use of local materials, complete absence of stylized mannerism, fine scale, excellent proportion and for the architect's skillful site planing which has made the difficult hillside topography a positive advantage to the development."

St. Joseph's, completed in 1930, was called "important because of the architects' early mastery in the expressive use of reinforced concrete, skillful handling of difficult masses, particularly the well-proportioned tower, and fresh, imaginative use of ornament within an extremely limited budget, which has helped to transform an austere gray building into a place of worship."

First Honor Awards



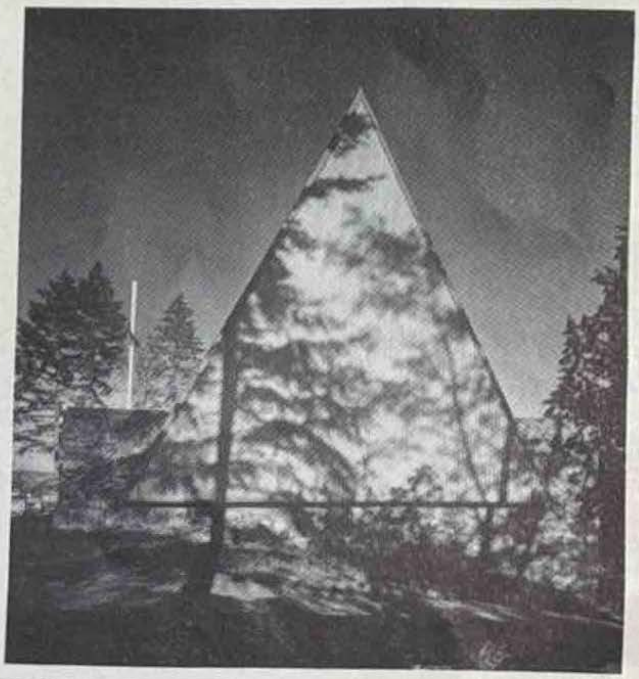
Hugh N. Stratford

UNIVERSITY FEDERAL SAVINGS & LOAN ASSOCIATION, Seattle: Decker & Christenson, architects.

MARGARET WEEKS RESIDENCE, Bellevue: Mithun, Ridenour & Cochran, architects.



Charles R. Pearson



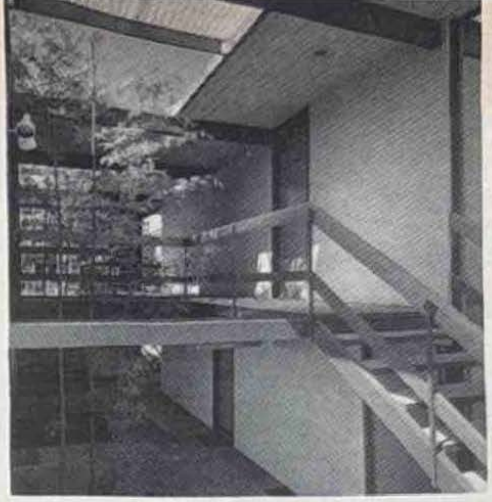
Art Hupy

BELLEVUE PRESBYTERIAN CHURCH: Mithun, Ridenour & Cochran, architects.

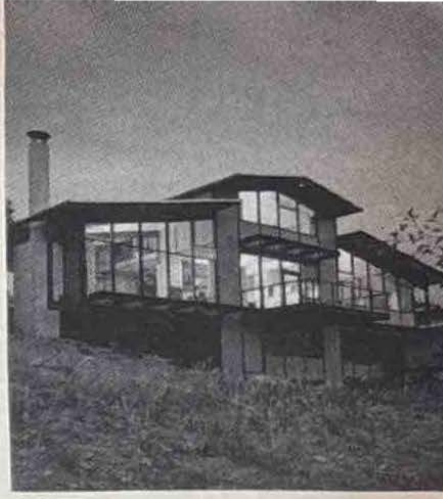
Awards of Merit

1. **Pero Medical Center,** Everett: Paul Hayden Kirk & Associates, Donald S. Wallace and David A. McKinley, architects.
2. **Wallace J. Reed Residence,** Seattle: A. O. Bumgardner, architect.
3. **Health and Physical Education Building,** Ellensburg: Ralph H. Burkhard, architect.
4. **Westgate Elementary School,** Edmonds: Dan F. Miller and Earl Morris, architects.
5. **Edmonds Senior High School:** Waldron & Dietz, architects.
6. **Bothell Methodist Church:** Durham, Anderson & Freed, architects.

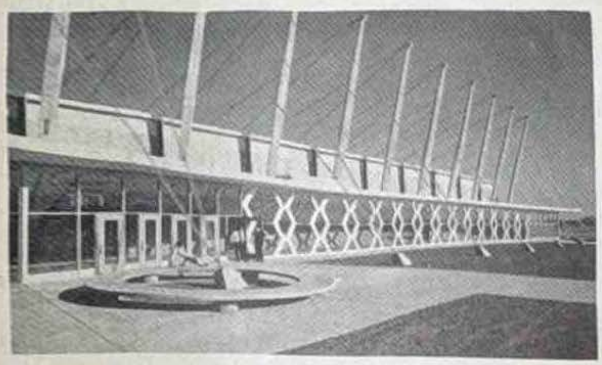
Photographic credits: Dearborn-Massar—1, 2; Carl Lewis—3; Art Hupy—4, 5, 6.



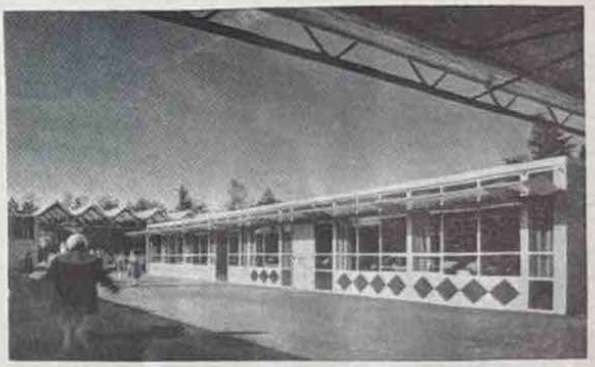
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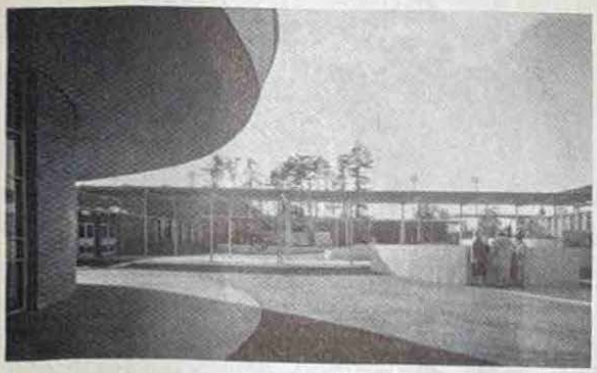
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Citation Awards

ST. JOSEPH'S CHURCH, Seattle (completed 1930): Albertson, Wilson & Richardson, architects.

STOREY COTTAGES at Coleman Park, Seattle (completed 1908-10): Ellsworth Storey, architect.

Art Hupy





University of Oregon honors Belluschi

Pietro Belluschi was honored as one of Oregon's outstanding architects, designers and educators at recent University of Oregon Charter Day ceremonies in Eugene.



BELLUSCHI

The citation, presented by Walter Gordon, dean of the School of Architecture and Allied Arts, read: "Belluschi, a native of Italy, who came to Portland as a young man, designed beautiful residences, churches and other important buildings in an imaginative style, inspired by the generous scale of the Northwest region and characterized by great sensitivity of taste and use of native materials. In this he proved an inspiration to a generation of Northwest architects. Possessed of a vigorous creative spirit, strong will and high qualities of intellect, he continues, as dean of the School of Architecture and Planning at the Massachusetts Institute of Technology, to make important artistic contributions to American culture."

Seattle Metro program cited at conference

The Municipality of Metropolitan Seattle, also known as Metro, received national attention recently when the Municipal League of Seattle and King County was presented with one of four 1959 Fruin-Colnon awards at the 65th National Conference on Government. Awards were made on the basis of action towards solution of urgent urban and metropolitan problems.

The Municipal League was cited for its part in establishment of Metro, an organization of Seattle and 10 nearby cities set up to program and construct a sewerage system for the area.

Other awards financed by the engineer-construction firm and administered by the National Municipal League went to the Bureau of Public Administration, University of California, Berkeley, for publication of "Annexation? Incorporation? A Guide for Community Action"; to Robert Coldwell Wood for his book "Suburbia, Its People and Their Politics"; and to the Cleveland Metropolitan Service Commission for its program of research, publication and civic activity to increase public understanding of the problems of the Cleveland metropolitan area.

School plant is problem for $25,000 competition

"Education for Youth and Adult—Recreation for All the Family" is the theme of the second annual architects' competition sponsored by the mastic tile division of the Ruberoid Co. First prize will be $10,000; second, $5,000; and third, $3,000.

The 1960 competion calls for the complete design of an economically feasible education and recreation plant for the use of everyone in the community with technical facilities, parks and other amenities relative to comprehensive educational training and recreation on a 295-acre site. Judging will be based on creative approach, best economic development and greatest aesthetic contribution.

The contest is approved by the committee on competitions of the AIA and the National Institute for Architectural Education. It is open to all registered architects in the U.S., architectural assistants to registered architects and students of schools which are members or associate members of the Collegiate Schools of Architecture. Deadline for entries is June 30.

A. Gordon Lorimer, New York City architect, is serving as professional advisor for the sponsor. Jury includes John Lyon Reid, San Francisco architect.

California will host lighting exposition

Some 150 exhibits devoted to new development in commercial, industrial, office and residential lighting fixtures will be on display as part of a lighting exposition to be held during the 10th biennial Electrical Industry Show scheduled for March 23-26 in the Shrine Exposition Hall, Los Angeles.

Special sessions also will present technical speakers discussing various illuminating practices. Illuminating engineers of the 13 western states are being invited to the conference sponsored by the Electrical Maintenance Engineers Association of Southern California.

Another conference scheduled for the Shrine Hall in Los Angeles is the third Western Air Conditioning, Heating, Ventilating and Refrigeration Exhibit and Conference to be held April 27-30. Program plans call for a contractors' day devoted to technical sessions for plumbers, sheet metal, air conditioning and refrigeration contractors and several general sessions covering such topics as control of air-borne infections in hospitals and residential heat pumps.

Farther north, the 1960 national convention of the Construction Specifications Institute will be held in San Francisco in April.

Intermountain builders hold first conclave

First annual Intermountain Builders Conference brought delegates from eight states to Salt Lake City in November. Conference was sponsored by the Home Builders Association of Greater Salt Lake, Weber Basin Home Builders Association and Utah Valley Home Builders Association.

The Salt Lake group elected Stephen M. Smith, vice president of Alan E. Brockbank, president; Jack B. Neilson, vice president; and Richard S. Prows, secretary-treasurer.

Richard L. Adams of Richard L. Adams Contracting Co., Orem, was elected president of the Utah Valley group, and Wallace H. Wade, Wade Brothers Construction Co., Ogden, was named president of the Weber Basin association.

Briefs

- The American Association of Nurserymen will present one of its top 10 national awards to Lawrence Halprin & Associates, San Francisco landscape architects; A. Edward Balzer, Spokane nurseryman; and Washington Water Power Co. for landscaping at the company's Central Service Facility in Spokane. The award for industrial landscaping and beautification, will be presented early this year at regional and state meetings of the association.

- A multimillion dollar retirement community eventually including more than 1,600 homes in the $8,000 to $15,000 price range will be constructed by Del E. Webb Construction Co. 13 miles northwest of Phoenix, according to L. C. Jacobson, executive vice president and general manager. The firm will build a complete community for retired or semi-retired senior citizens. Plans call for commercial, medical and recreational facilities and an activity center, park and an agricultural center for growing flowers, vegetables and small crops.



SANCTUARY



CHAPEL

A religious philosophy sketched in concrete, glass and steel

ENCINO COMMUNITY CHURCH, LOS ANGELES: A three-stage $1,355,000 building program for this nondenominational church serving the San Fernando Valley will provide a simple, yet inspiring array of buildings for worship and recreation. Thin shell concrete, glass, stone and steel has been utilized by the architects, as the pastor says, to "translate the simplicity and straightforwardness of our religious philosophy."

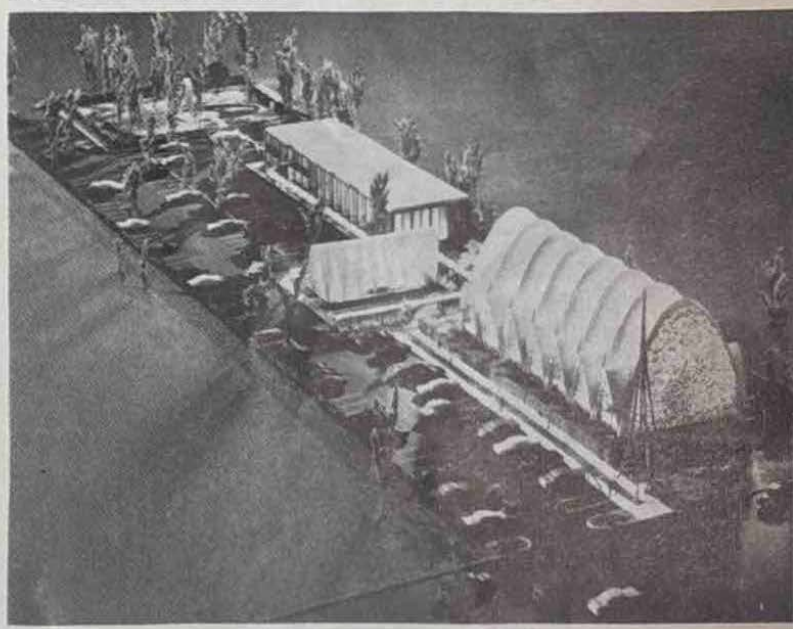
Plans call for three structures — a two-story glass, steel and stone multipurpose fellowship hall; a 60-ft. high vaulted thin shell concrete and stained chipped glass sanctuary; and a chapel of alternating segments of thin shell concrete and tinted glass. Also included is an outdoor seminar-recreation area.

The buildings will be tied together with landscaping, covered walkways carrying out the barrel vaulted, thin shell concrete design of the sanctuary and a parking lot extending the entire length of one side of the long, narrow lot.

The half-elliptical concrete shell of the sanctuary will enclose a space 56x137 ft., reaching 60 ft. at the peak. Seven windows at each side will project from vaulted concrete segments. Entire east end will be enclosed by a huge expanse of thick chipped glass embedded in a concrete or fiberglass mold. Chipped glass also will be used to enclose the west end, rising in triangular figures contrasting with triangular solid surfaces to form a design defining the entry.

Inside, the entrance will be from a raised platform, affording a dramatic view of the altar. Behind the raised altar will be a sculptured shape of horizontal steel rods rising to the ceiling, implying the abstract shape of a figure with arms outstretched. Seating for 500 persons will slope toward the pulpit. Three-dimensional wood

SITED on long, narrow lot, long-range building program when completed will include outdoor activity area with swimming pool in eucalyptus grove at rear of property, fellowship hall, chapel (small vaulted structure), sanctuary and 90-ft. high bell tower which can be seen in photo at entrance to site.



paneling is planned for interior partitions, none of them extending to the roof.

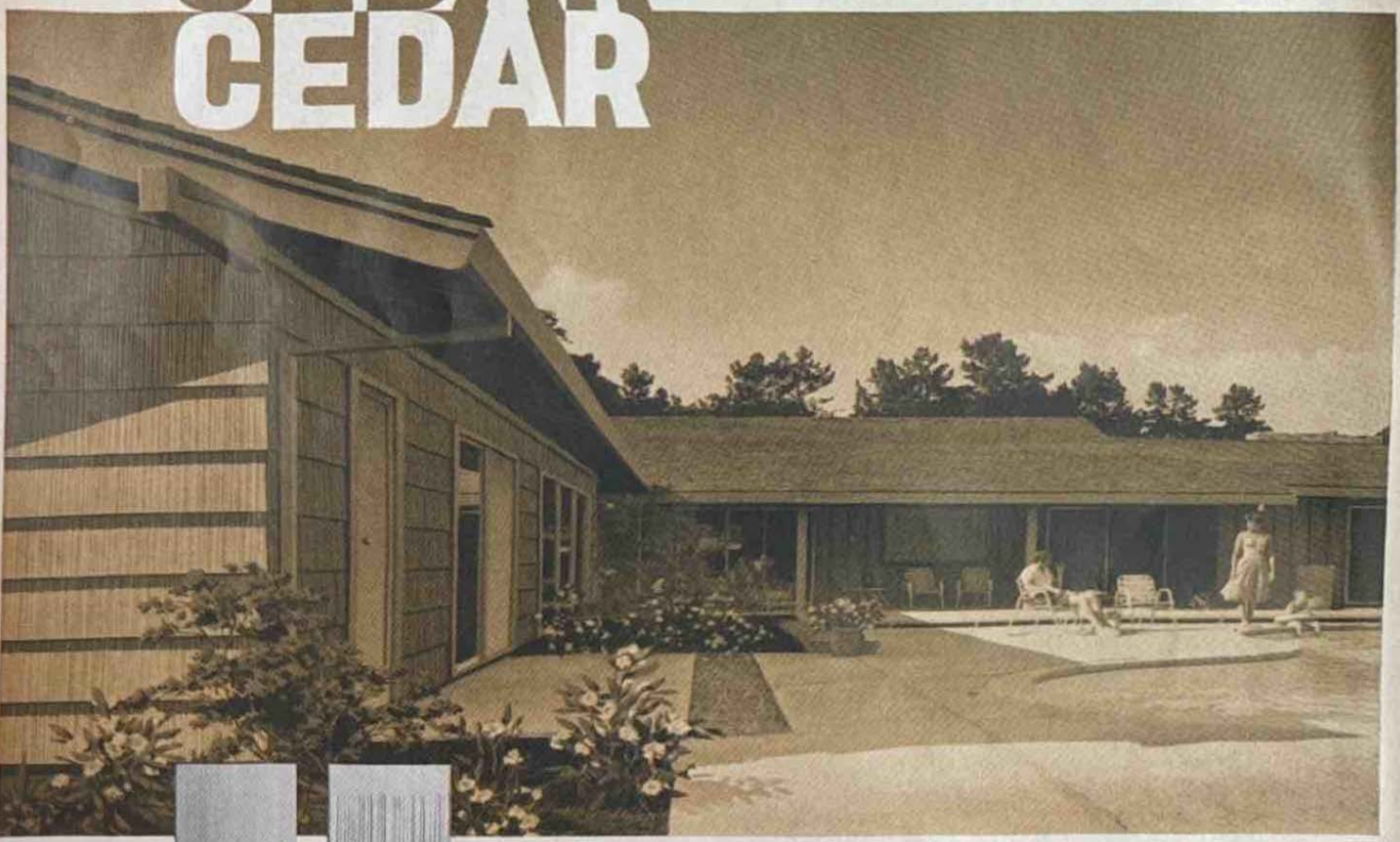
The sanctuary will be the second phase of construction which is estimated at $670,000. At this time the bell tower, formed by four steel tubes coming to a peak at 90 ft. above ground at the entrance to the site and covered walkways, will be constructed.

Phase 1 will include a $440,000 fellowship hall, a steel frame structure with floor-to-ceiling panels of gray tinted glass spaced at 10-ft. intervals by exposed steel columns and interspersed with floor-to-ceiling stone panels. Two-story multipurpose room will seat 600 as an auditorium and 400 as a banquet hall. Final phase of the building program estimated at $135,000, will include a chapel seating 100 persons. The 20x56-ft. building will be formed from eight circular segments of thin shell concrete 8 ft. wide at the top and coming to a point at the ground. Between these will be inserted triangular areas of tinted glass. Two reflecting pools and a large oval swimming pool will be constructed during this phase. Architects: Welton Becket & Associates.

Two ways to say quality

Your prospects can tell a great deal about a home—and its builder—by the level of quality they see used on the exterior. That's one of the reasons so many fine new homes feature cedar shingle roofs and cedar shake walls. Cedar says quality. Those three, long-lasting layers of cedar shingles on the roof . . . the unmistakable thickness of a double-coursed cedar shake wall . . . make a lasting impression on quality-conscious customers. This is the season to put the quality of genuine cedar on your selling team!

CEDAR CEDAR

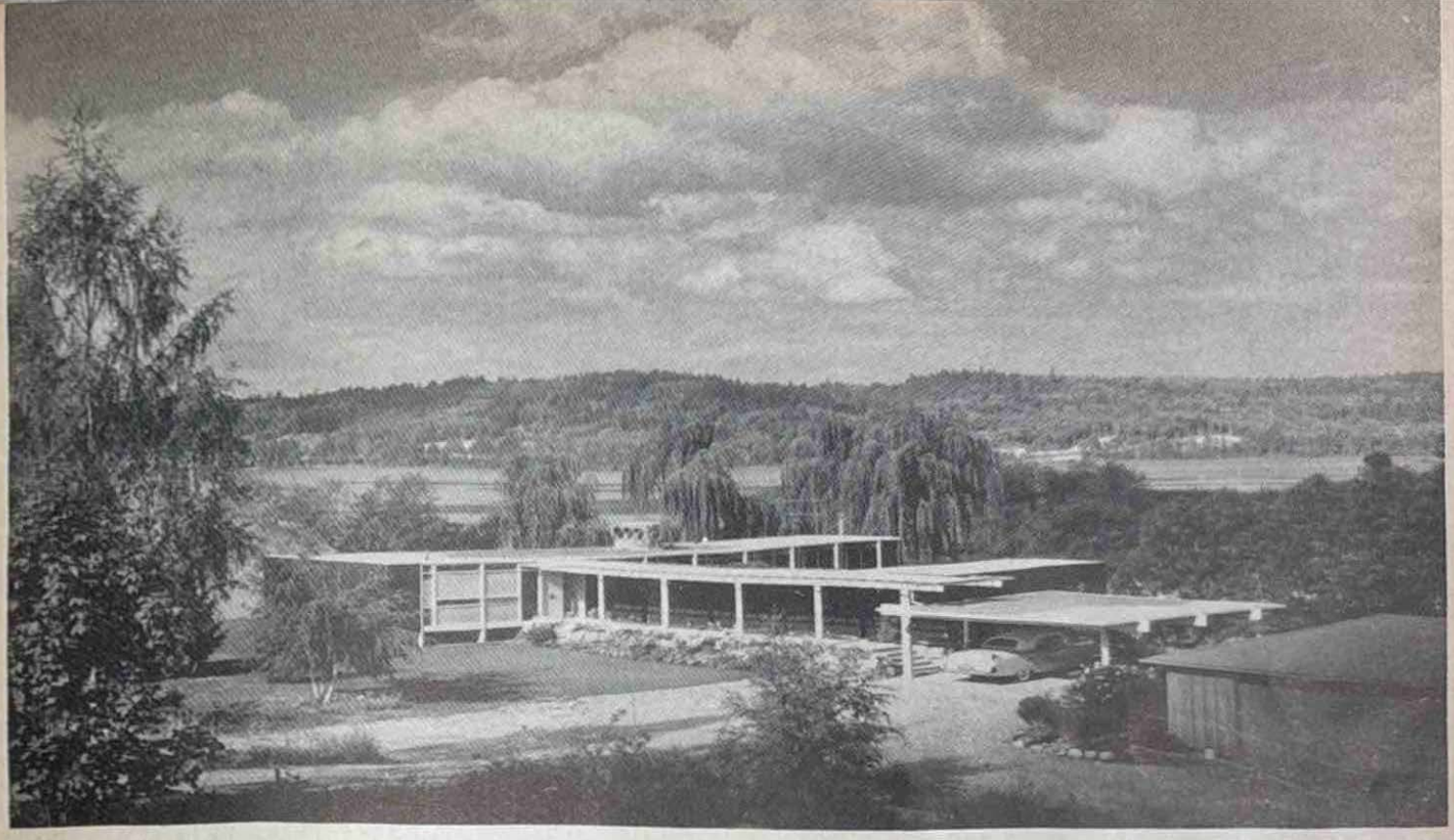




For complete application details, see your Sweet's File, or write . . .

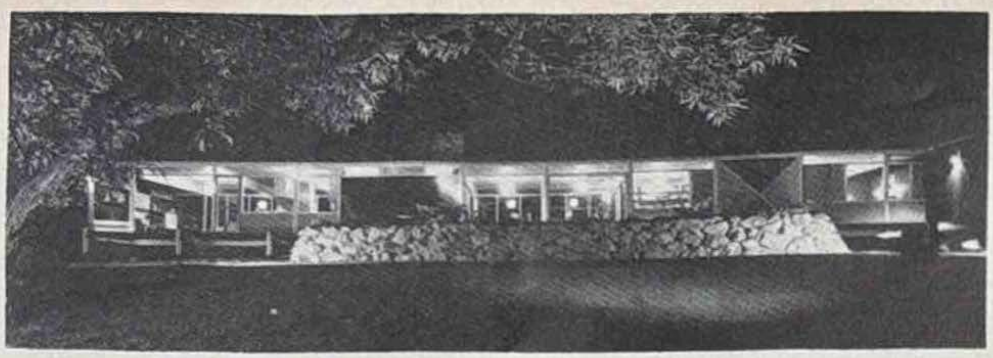
RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Washington
550 Burrard Street, Vancouver 1, B. C.



Six houses: a total response to the site

All six houses featured in this issue are oriented to a view, but they share a more common interest than that. In each case, the house reacts completely to its environment—reactions that are expressed architecturally in several different ways, to be sure. No. 1 (also shown above) has a lake as its constant companion, but pays homage to the entire countryside around. No. 2 romps with the beach, yet is apart from it. No. 3 deliberately dominates the site through a lively interplay of vertical space. No. 4, the second beach house, nestles in the sand, while providing the practicality of a sheltered court. No. 5 is another example of the house complementing the site by contrasting with it. Finally, No. 6 represents the most subtle integration, in its textures and all-embracing orientation, to the surroundings.



Disciplined insert in the landscape

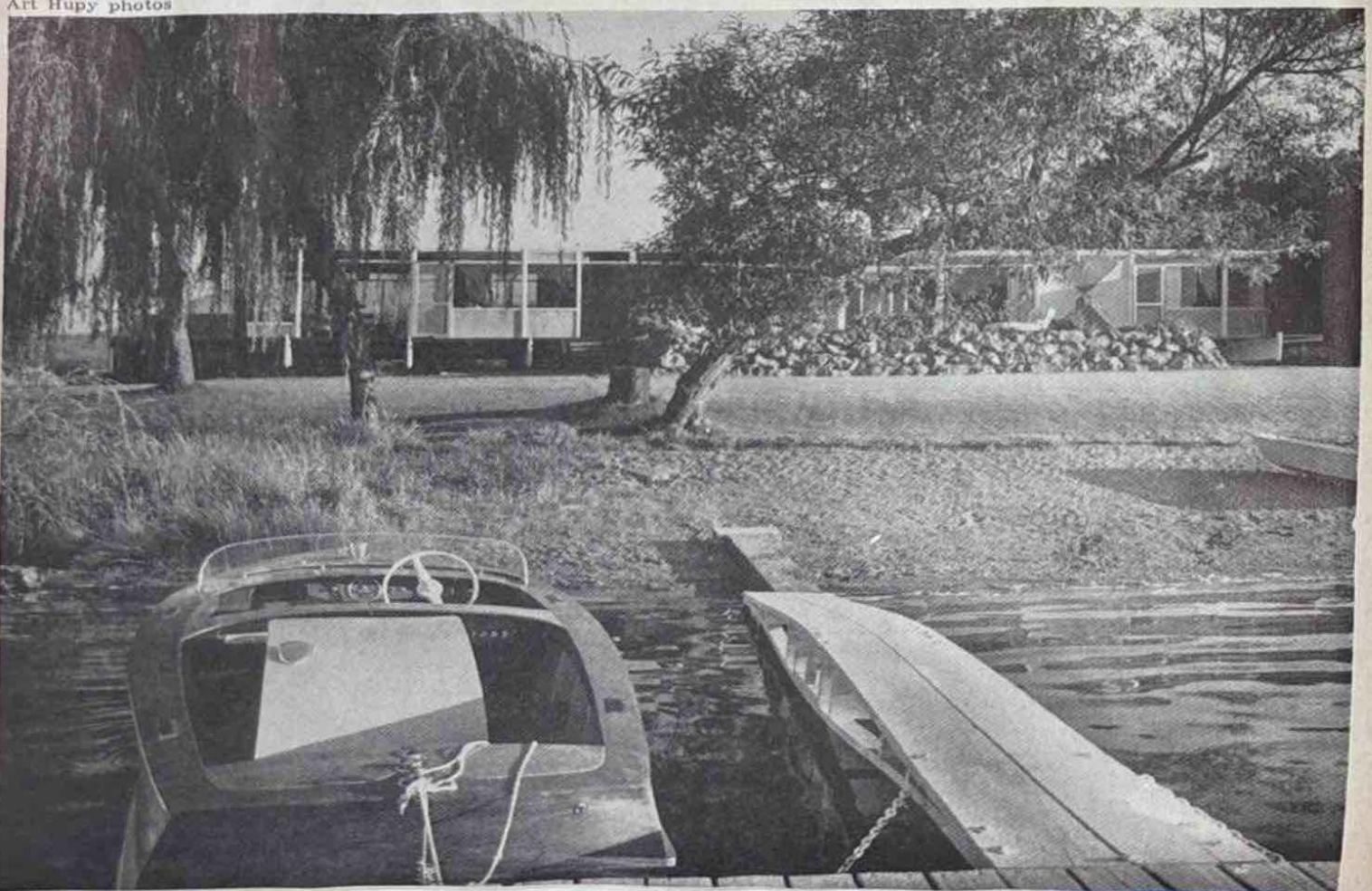
1. Joe A. Chandler Residence
Lake Sammamish, Washington

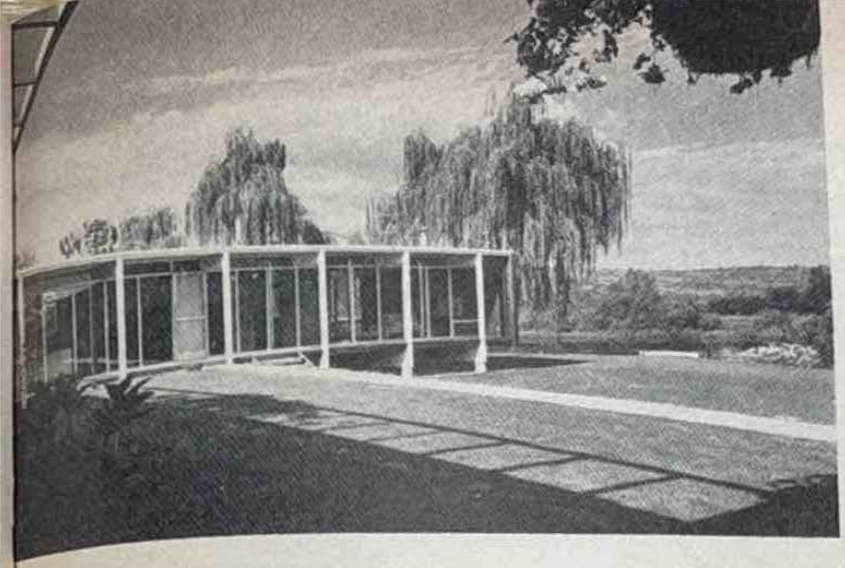
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MITHUN, RIDENOUR & COCHRAN
Architects

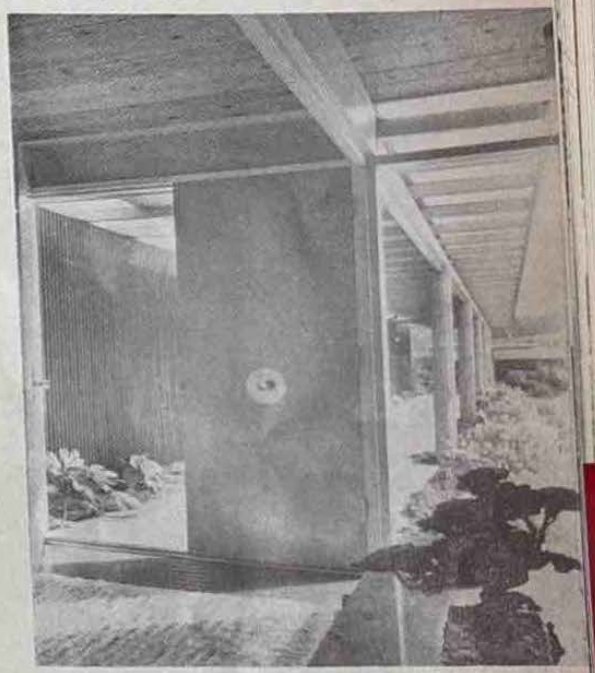
RAYMOND CONSTRUCTION CO.
Contractor

Art Hupy photos





WALKWAY from carport to main entrance is protected by canopy and sun grid of cedar and peeled cedar logs. Floor-to-ceiling glass panels on either side of double doors introduce plenty of light.



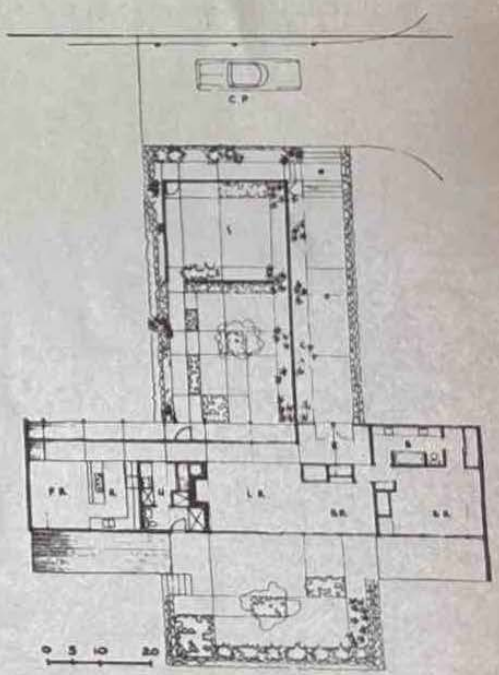
HERE is an excellent example of how a problem location was turned into an asset. The house is in complete harmony with its setting and the changing moods of the lakeside. The architects comment: "This is one of the most interesting pieces of property we've developed. On fall mornings considerable fog and mist lay on the lake and valley to the south. The mist with the sun breaking through is reminiscent of the delicate mood created in some Japanese watercolors. Again, at high water, the effect created is of a floating pavilion as all that can be seen to the north is water."

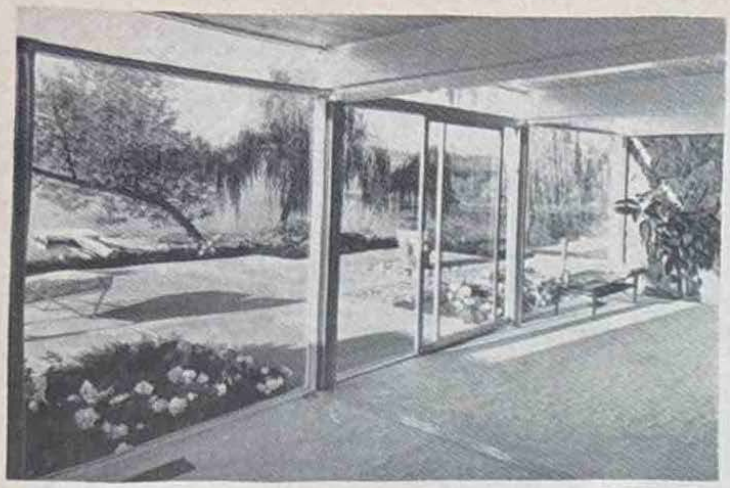
Detailed history of the winter water levels, subsurface ground structure and earth filling supplied by the owner showed that the site would not permit conventional construction techniques since the maximum flood level was 2 ft. above grade and the substructure of the soil was saturated blue clay for at least 60 ft. under 5 ft. of sand fill. To meet this problem the architects designed a foundation grid of 12x12-in. reinforced concrete grade beams with the structure symmetrically loaded on the grade beam intersection by columns supporting the floor and roof loads. The living room fireplace is the one exception. It rests on a large reinforced concrete pad tied into the grade beam grid.

Bottoms of the floor beams are set at maximum high water level. To insure continuous livability of the house when the site is flooded, the septic tank and drain field are located in the elevated terrace which the house in effect straddles.

Family room, kitchen and living room are oriented to the view of the lake to the north and the mountains to the south that ring the Issaquah Valley. To provide privacy from the state highway running alongside of the property, these areas and the terrace are screened by fencing and storage rooms on the south between the terrace and the carport.

Cedar siding and walnut paneling have been used wherever possible in the finish in place of plasterboard because of the possibility of settlement.

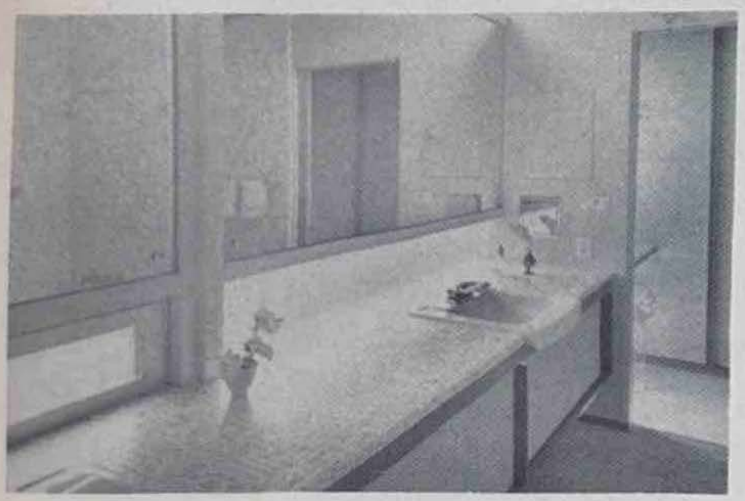




LIVING ROOM GLASS WALLS provide view across terrace and toward boating and bathing pier. Colors are neutral, with blue and green accents picking up tones of lake and mountain vistas.



SHUKSAN STONE END WALL of living room is highlighted by fireplace with arch and hearth of Italian blue mosaic tile.



BATH AND KITCHEN COUNTERTOPS repeat glazed mosaic tile.

OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete grade beams; frame: job laminated beams and columns; roof: 2x6 hemlock t&g striated face exposed; floors: 2x8 joists and 16-in. o.c. plywood sheathed.

Exterior Finish: 1x4 cedar t&g with creosote stain—Samuel Cabot, Inc.

Roof Surfacing: granite chips.

Windows: fixed glazing to structural members, operating vents—Fentron Industries, Inc.

Doors: birch flush; aluminum sliding doors—Crestview.

Floor Surfacing: tile in kitchen, family room, utility and baths—Armstrong Cork Co.; carpet in living room, study, bedroom; 1x2 apitong t&g in entrance gallery.

Insulation: 1½-in. thick rigid wood fiber in roof; 3½-in. thick aluminum incased fiberglass bats in walls and floor.

Interior Finish: plasterboard or 1x4 cedar siding.

Ceilings: t&g striated face exposed.

Lighting Fixtures: Hanging glass — Raymore Manufacturing Co.; wall mounted—Prescolite Manufacturing Co., Litecraft Manufacturing Corp.

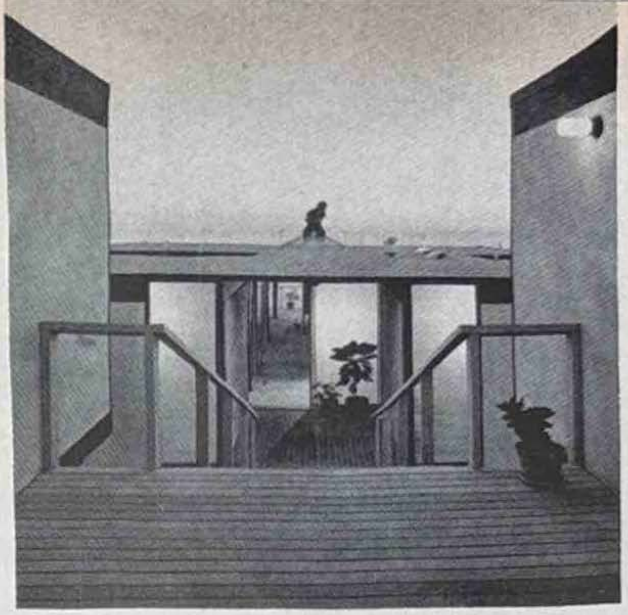
Heating: forced warm air, oil fired—Rossoe Service, Inc.

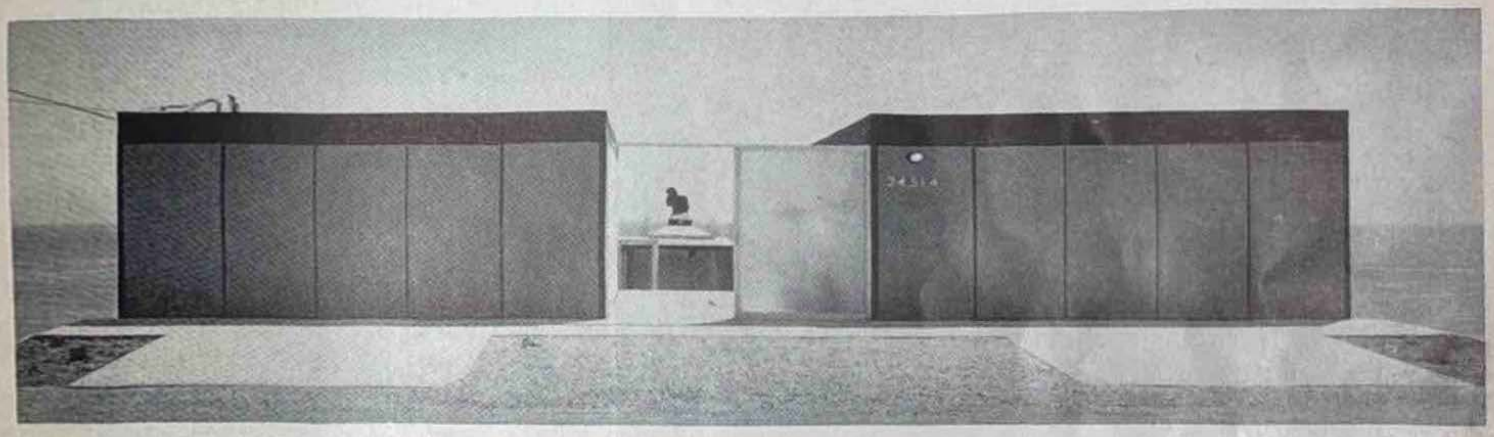
Plumbing and Sanitary: white porcelain—American-Standard; stainless steel—Elkay Manufacturing Co.

Total Area: 1,500 sq. ft., heated; 3,500 sq. ft., roofed.

Cost per Square Foot: $15.10.

Date of Completion: June 1957.





Orderly aloofness from the sand

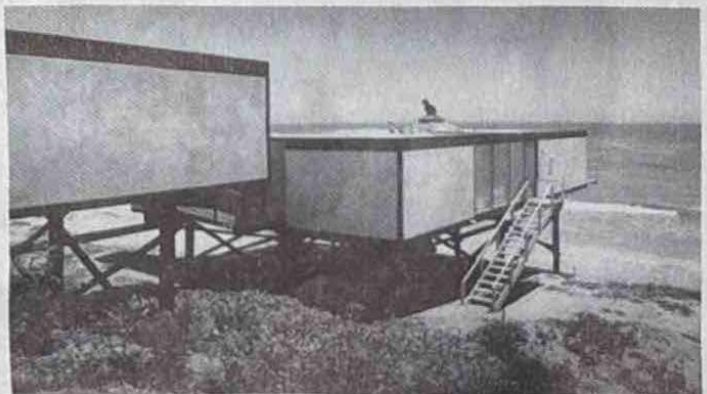
2. Victor Hunt Beach House
Malibu, California

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CRAIG ELLWOOD
Designer

JERROLD E. LOMAX
Associate

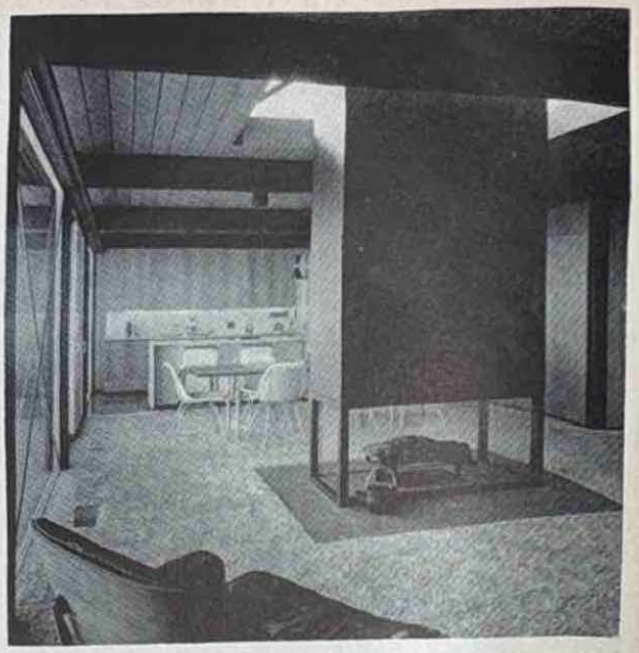
ROY NORVELL
Contractor

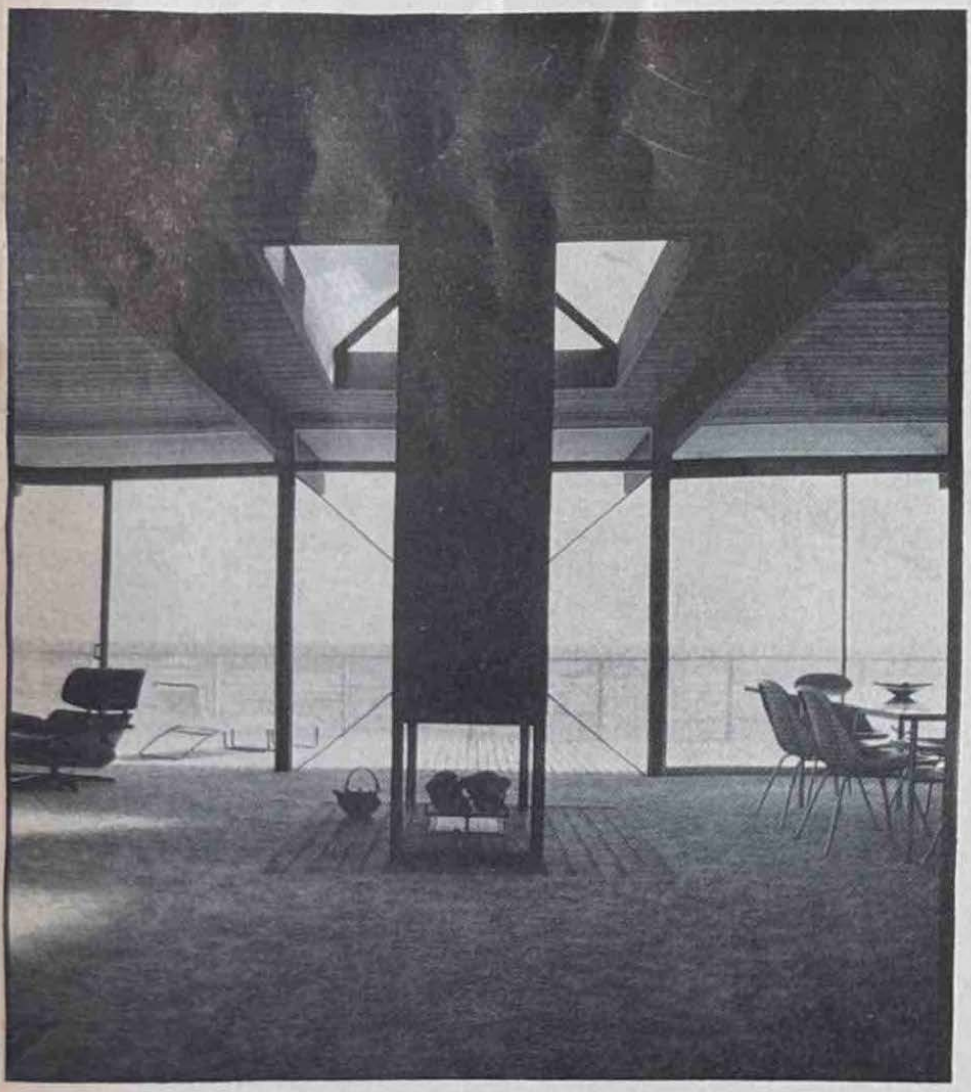


A PRECISELY DEFINED FORM accents sand and shoreline in this beach house designed for maximum outdoor living regardless of the weather. To get away from the stock garage on the street appearance, this area was split in two sections flanking an aluminum framed sliding translucent glass panel that leads to the entry ramp. One large and one small interior deck offer protected sunning and viewing when onshore winds make use of the oceanside deck impractical and provide visual extension of bordering rooms.

Another problem common to ocean sites, downdrafts in the fireplace chimney, was solved by capping it with a rotary unit. The fireplace itself is of steel supported on a reinforced concrete pad. Three walls of the firebox are of clear heat-resistant glass. The chimney extends through a skylight with floodlights above turning it into a light fixture at night.

Colors have been kept simple and subdued. Philippine mahogany paneling and cabinetwork are finished in natural golden brown, posts and beams are flat black and plaster walls are white. A small room below the main structure houses heating system and storage for beach equipment.





OUTLINE SPECIFICATIONS

Structure: foundation: 12-in. diameter piling with 12x14-in. cap beams; frame: 3x12 wood beams and 3x6 wood posts at 8-ft. centers, spanned with 2x6 Douglas fir sheathing; floors: ¾-in. plywood over 2x8 wood joists.

Exterior Finish: plaster; ⅜-in. plywood on garage fronts—(Harborite) Harbor Plywood Corp.

Roof Surfacing: built-up — Pabco Division, Fibreboard Paper Products Corp.

Windows: glass jalousies—Louvre Leader, Inc.

Doors: exterior: aluminum sliding glass—Lynart-Aluma—Sliding Glass Door Co.; interior: wood slab—Geneer Co.

Floor Surfacing: vinyl tile in baths and kitchen—(Corlon) Armstrong Cork Co.; carpeting.

Insulation: 1-in. rigid over roof sheathing—Owens-Corning Fiberglas Corp.

Interior Finish: plaster and ¼-in. natural Philippine mahogany plywood.

Ceilings: exposed 2x6-in. Douglas fir sheathing; gray stain— Samuel Cabot, Inc.

Lighting Fixtures: incandescent — Holliday Lighting Co.

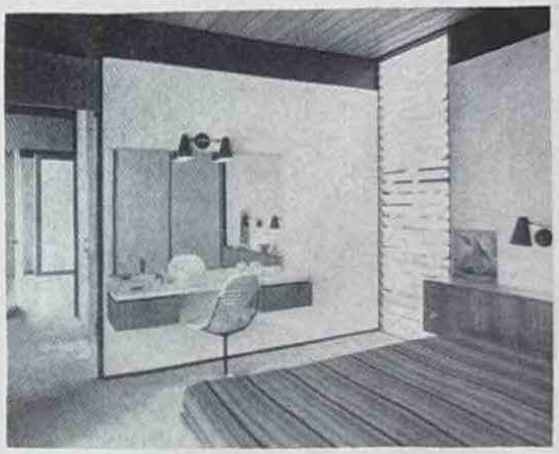
Heating: perimeter forced air—Lennox Industries, Inc.

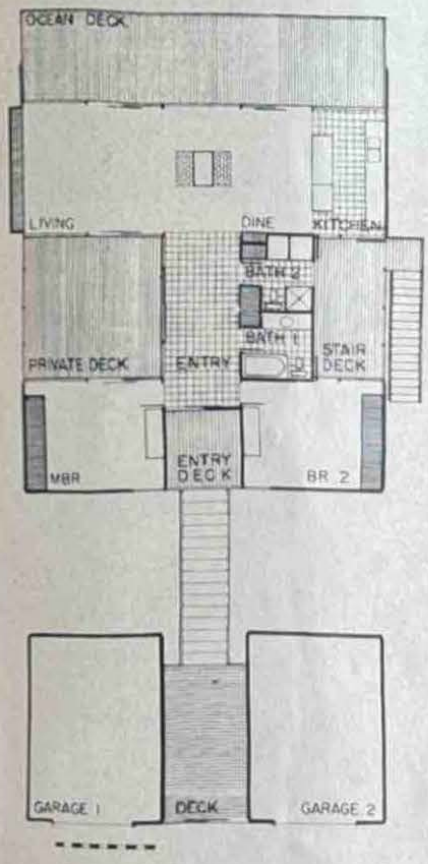
Plumbing and sanitary: Crane Co., American-Standard.

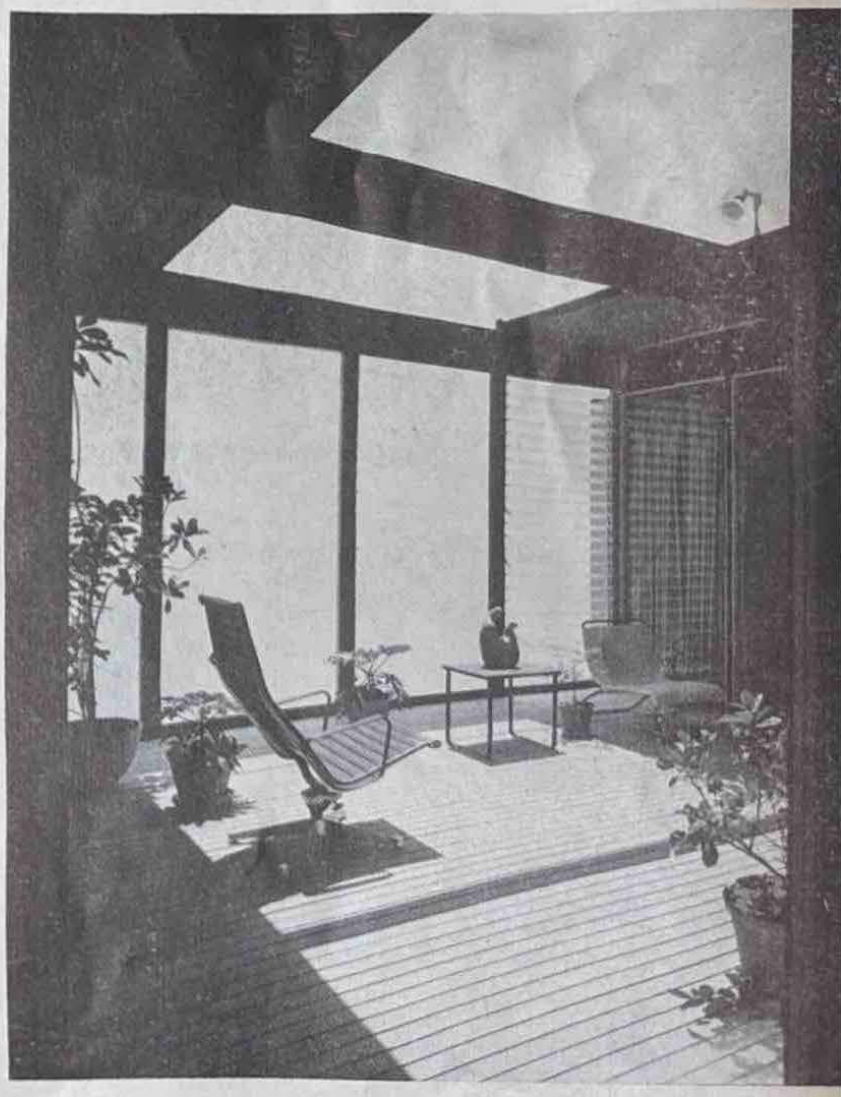
Total Area: 1,450 sq. ft.

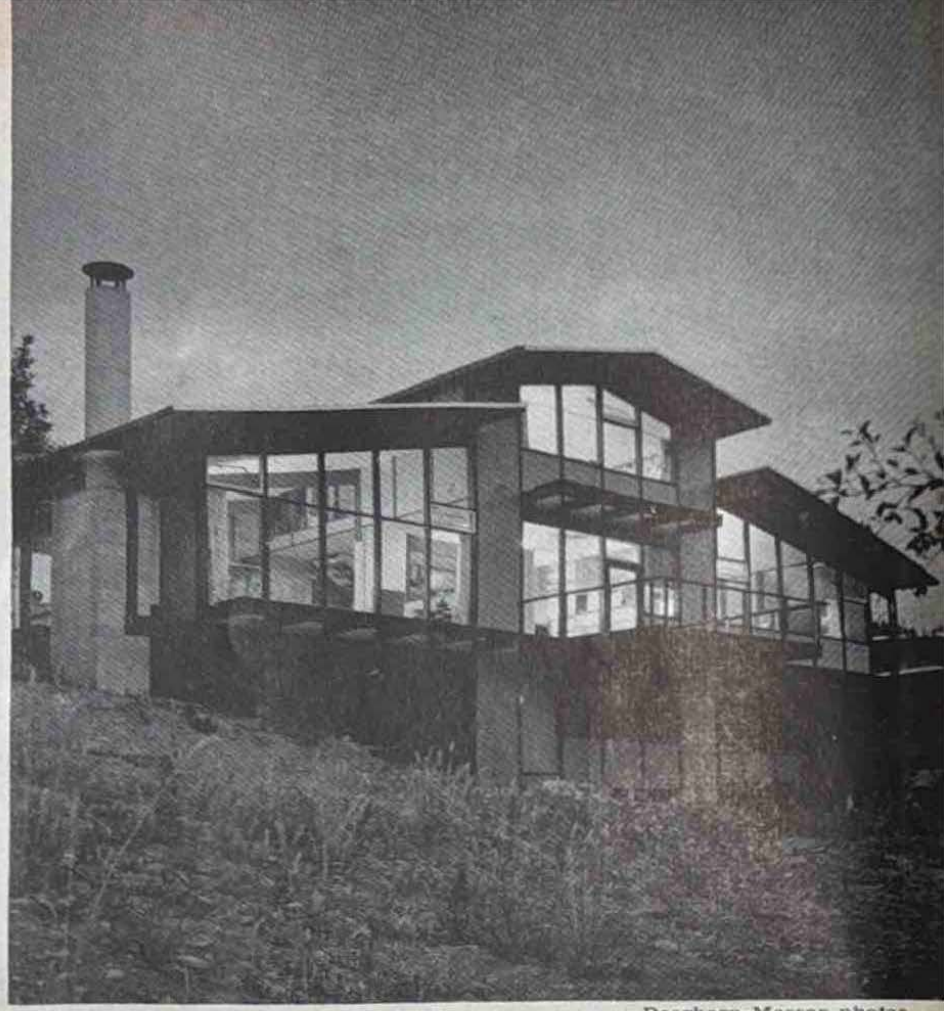
Date of Completion: August 1957.

MASTER BEDROOM has its own private deck and, in turn, ocean view, as does second bedroom next to smaller deck.



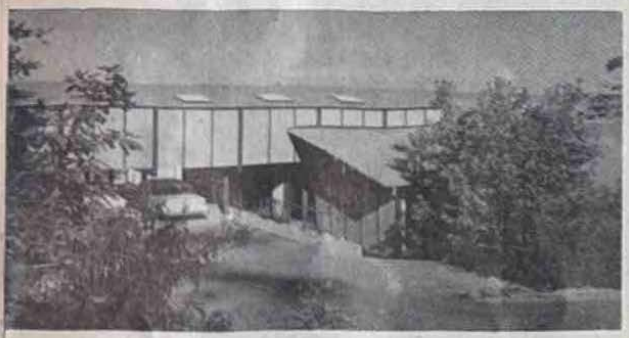


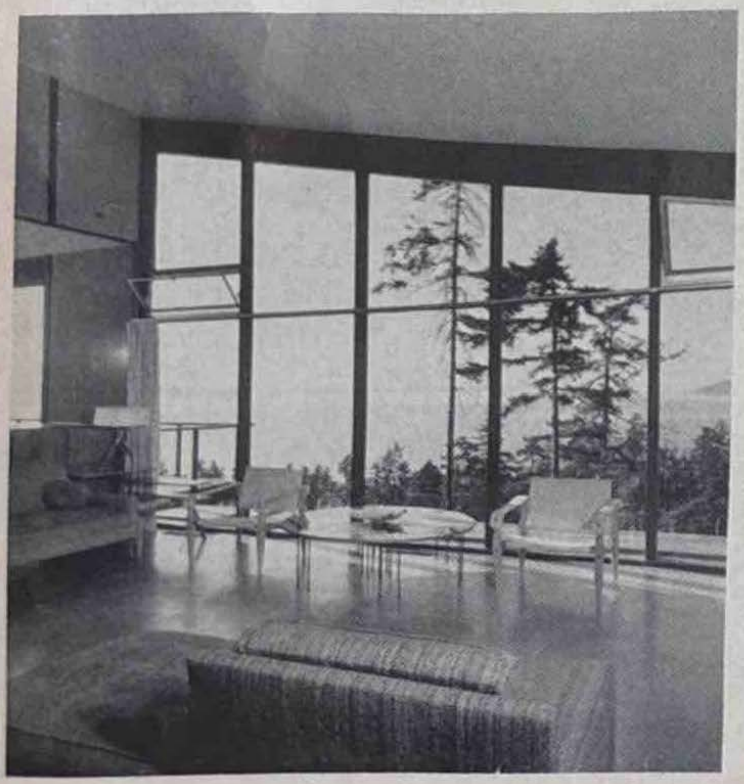




Dearborn-Massar photos

BEDROOM WING EXTENSION forms a double carport underneath. For privacy from roadway below, this is one of few elevations where extensive glass has not been used.





3. Wallace J. Reed Residence
Seattle, Washington

•

A. O. BUMGARDNER
Architect

E. C. BRUNBERG
& SON
Contractors

STEEP HILLSIDE LOT affords sweeping view of Puget Sound, punctuated by tops of tall firs on slopes below. High ceiling and open plan accentuates spacious feeling of view.

Dramatic dominance of the site

THIS SITE presented both the exciting challenge of dealing with a 54-ft. vertical drop and the opportunity of utilizing a magnificent view. The architect took full advantage of both. No attempt was made to merge the house into the hillside. Instead the structure sits slightly offset from the two main terrace levels created along the entire south side of the lot.

Commenting on the site problem, the architect says: "On a steep hillside lot such as this, it was felt that the most valid architectural solution was to dramatize this fact and to make a lively interplay of vertical space. The principal living level runs east-west, with the long north face to the sweeping view of Puget Sound. The opposite south wall has high windows for south sun in the living areas and floor-to-ceiling glass from the family kitchen looks out directly to the deck and terrace at the same level."

Terrace is divided into the east area for guest parking and double carport and the west half for outdoor living and dining, retained by a concrete wall which creates a moat between it and the house. Entry is down four risers onto a wood deck bridge spanning the moat.

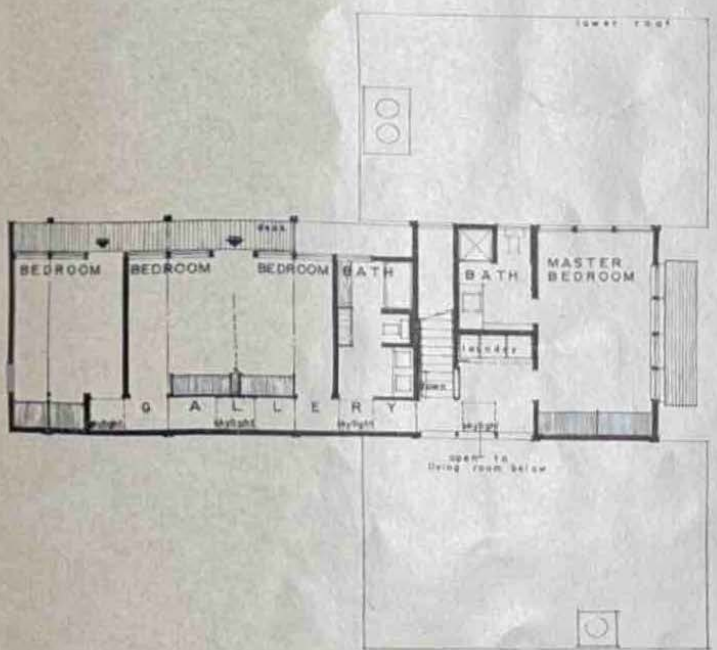
The upper bedroom wing runs perpendicular to the lower living level and penetrates the lower level at the highest point of its 14-ft. ceiling. This upper wing is punctured at the head of the stairs so that from the living room one can see up to a height of 20 ft. From above one can look down obliquely through the living room to a close-at-hand madrona clump.

The house, strongly silhouetted against the sky from the main road below, creates a striking view of its own with the staggered roofs, solid three-story vertical structural panels painted royal blue, with bright orange-red steel plates, column footing plates and deck rail supports.

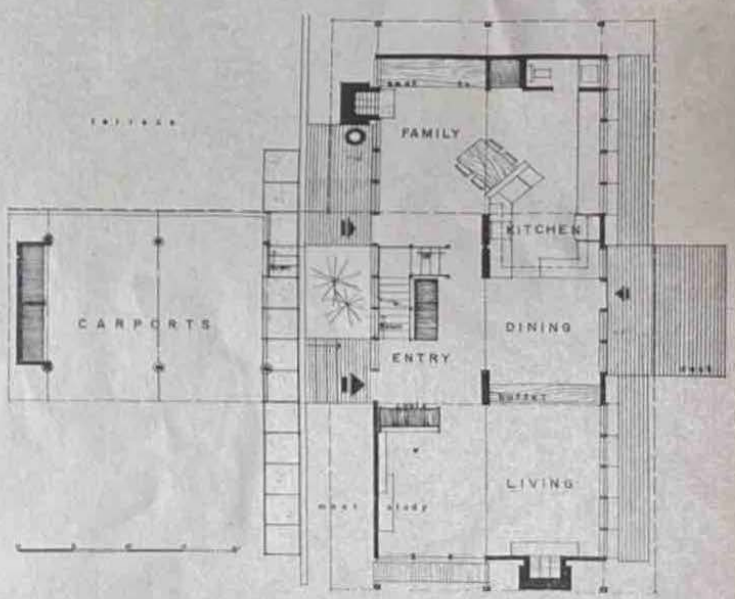
In designing the interior, the architect was guided by the needs of a young family (a girl, 10, and two boys, 7 and 8) and a specific request that the house be proportioned for tall people (he is 6 ft. 5 in. and she is 5 ft. 9 in.). The clients also desired above-average lighting, both daylight and artificial, resulting in an abundance of gable windows, clerestories and skylights.

Space on the main level was planned for entertaining 20 to 25 people when entire living-dining-family areas would be used, as well as separate entertaining as children progress into their teens. To this end, space on each floor was not divided into separate rooms, but each floor remains a volume in itself. There are no wall-height partitions. Even the utility closet and half-bath have glass relights over the door line. All cabinetwork, such as buffet, coat closets and kitchen cabinets, is treated as furniture set about in one large space and is of red birch with a medium walnut stain. Floors, walls and ceilings carry throughout each level in the same materials.

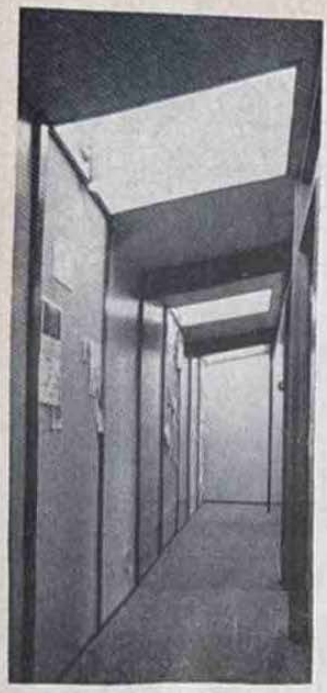
On the upper floor, the hall-gallery from which the bedrooms are entered has no windows in order to give privacy to this corridor from the driveway below. But four regularly spaced 8-ft. square white plastic skylights flood the area with light. Children's bedrooms front on an exterior gallery of narrow decking for sunning to the west.



UPPER FLOOR



MAIN FLOOR



REED RESIDENCE

OUTLINE SPECIFICATIONS

Structure: foundation: poured concrete; frame: 3x4 posts spaced 3½-ft. o.c.; roof: 2x6 joists on 4x12 beams spaced 10½ ft. o.c.; floors: 2x10 joists covered with 1⅛-in. plywood.

Exterior Finish: ⅜-in. fir plywood directly on studs.

Roof Surfacing: ⅜-in. plywood with three-ply built-up, pea gravel topping.

Windows: glass stopped in wood; aluminum vent sash.

Doors: exterior: fir frame with glass panels; interior: birch faced flush panel.

Floor Surfacing: vinyl cork on lower floor—Dodge Cork Co.; vinyl asbestos in upper bedrooms—Armstrong Cork Co.; coir matting in upper hall, stairs and landing.

Insulation: rigid with foil backing—Owens-Corning Fiberglas Corp.

Interior Finish: painted plasterboard—Kaiser Gypsum Co., Inc.

Ceilings: ½-in. plasterboard.

Lighting Fixtures: flush and accent—Prescolite Manufacturing Co.; fluorescent—John C. Virden Co.

Heating: oil hot air—Southern-Aire.

Plumbing and Sanitary: Crane Co.; septic tank drainage system.

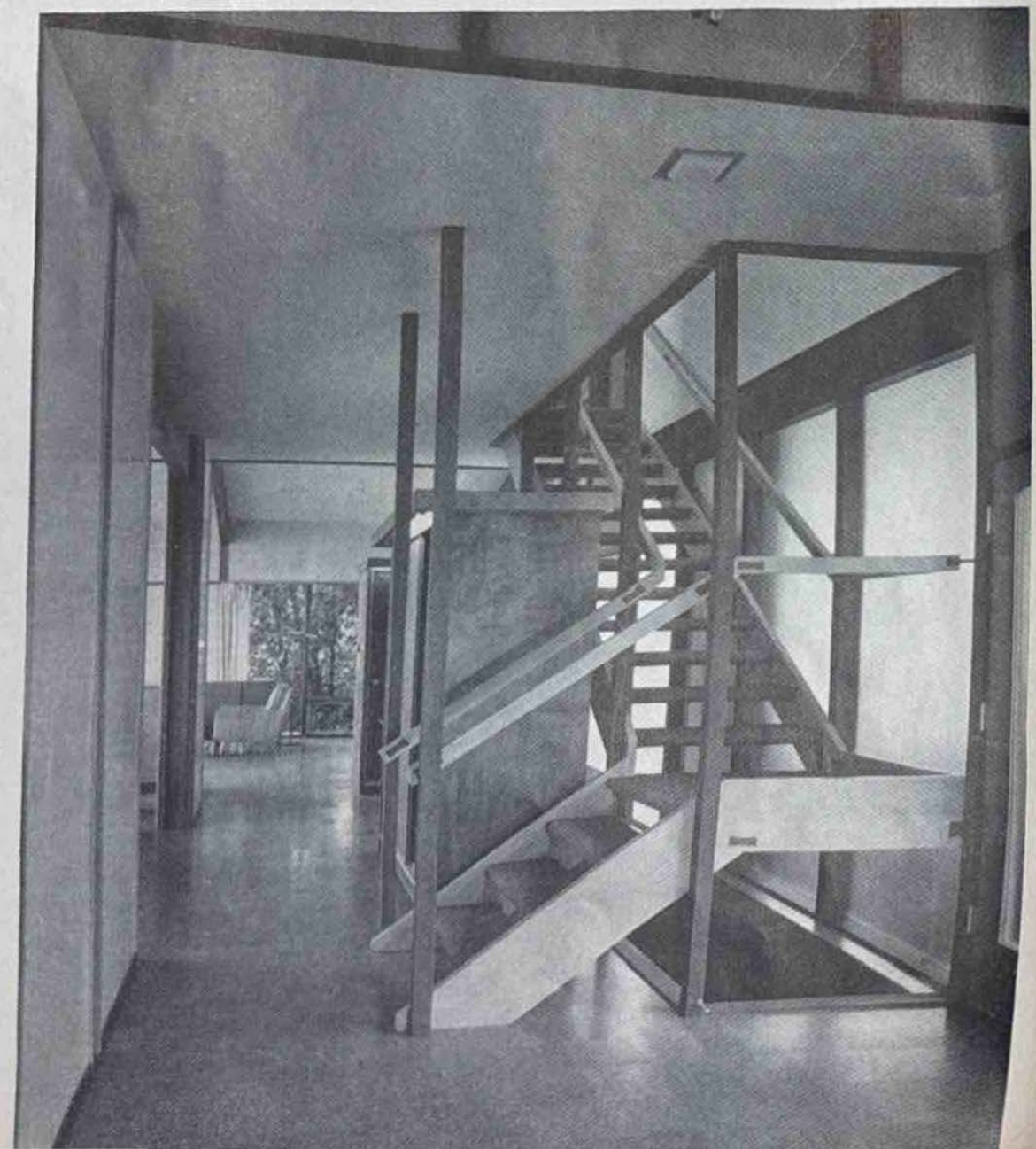
Total Area: 1,210 sq. ft., main floor; 1,088 sq. ft., upper; 715 sq. ft., lower (unfinished).

Total Cost: $31,565.

Cost per Square Foot: $12.52.

Date of Completion: November 1957.

SKYLIGHTED GALLERY which leads to children's bedrooms has floor-to-ceiling panel of cork for artwork display. Stairway is hung so that space flows through open risers.





4. F. C. Bishop Beach House
Del Mar, California

FREDERICK LIEBHARDT
Designer

EUGENE WESTON
Associate

SELBY C. SCOTT
Contractor

Informal interplay with the sand

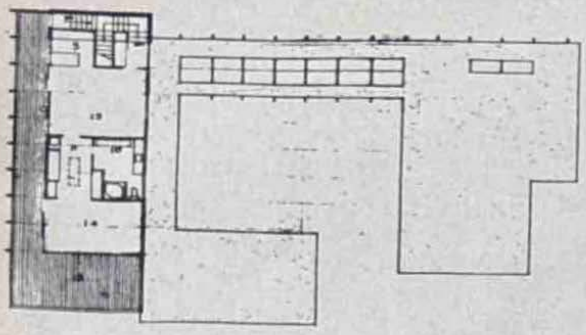
SET RIGHT DOWN on the beach, this house becomes an integral part of the shore despite its relatively large size. Design primarily was dictated by the fact that it would serve as a seasonal residence for the owner, a raiser of thoroughbred race horses, and would be rented for the rest of the year. Entertainment on a day-to-day and house guest basis was an important factor.

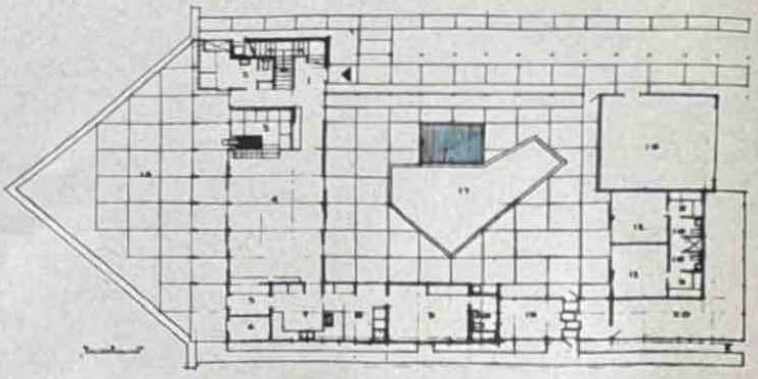
At the same time, since the house was to be considered as a business asset to a major extent, the general approach placed much emphasis on economy of cost and maintenance wherever compatible with development of a cheerful, pleasant environment.

The solution: a zoned scheme around a pool court. The owner's apartment, a self-contained unit, is upstairs for complete privacy and maximum view. The guest unit on the east side of the court has direct access to the pool and a view to the ocean through glass walls of the living area. The latter, on the west side of the court, has direct access to pool and ocean. The kitchen serves to the court and to the dining area. Servant quarters are adjacent to the kitchen and utility area.

Floor plan also provides access to the ocean from the pool court through the entry and direct access from the beach and from the entry to the shower and dressing area. Those sections that are subjected to action of tracked-in sand and water are floored with quarry tile. Exterior siding is resawn surface redwood mill dipped in a protective coating and trim is of same material with creosote stain to avoid paint which is susceptible to attack by salt fumes. Deep overhangs with slatted shades provide sun control. Landscape architect: Harriett Wimmer.

BISHOP BEACH HOUSE





1. Entry; 2. Cabana; 3. Sunken Area; 4. Living Room; 5. Bar; 6. Storage; 7. Kitchen; 8. Utility; 9. Servant; 10. Bath; 11. Dressing; 12. Guest Room; 13. Sitting Room; 14. Master Bedroom; 15. Deck; 16. Garage; 17. Swimming Pool; 18. Terrace; 19. Drying Yard; 20. Dog Run.

OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: Douglas fir beams and columns, 6-ft. module; roof: 2x6 Douglas fir t&g planking; floors: concrete slab.

Exterior Finish: redwood boards and battens, resawn surface, mill dipped — (Woodlife) Protection Products Manufacturing Co.; redwood trim with creosote stain — Samuel Cabot, Inc.

Roof Surfacing: brown gravel in bitumen—(Aquadam) Johns-Manville Corp.

Windows: glass jalousies.

Doors: exterior: solid core; interior: hollow core slab.

Floor Surfacing: quarry tile, cork and carpeting.

Insulation: rock wool batts between floor.

Interior Finish: painted drywall and Philippine mahogany plywood paneling.

Ceilings: open beam throughout except under second floor; insulating wood wool slab—(Heraklith) Harold A. Whipple Corp.

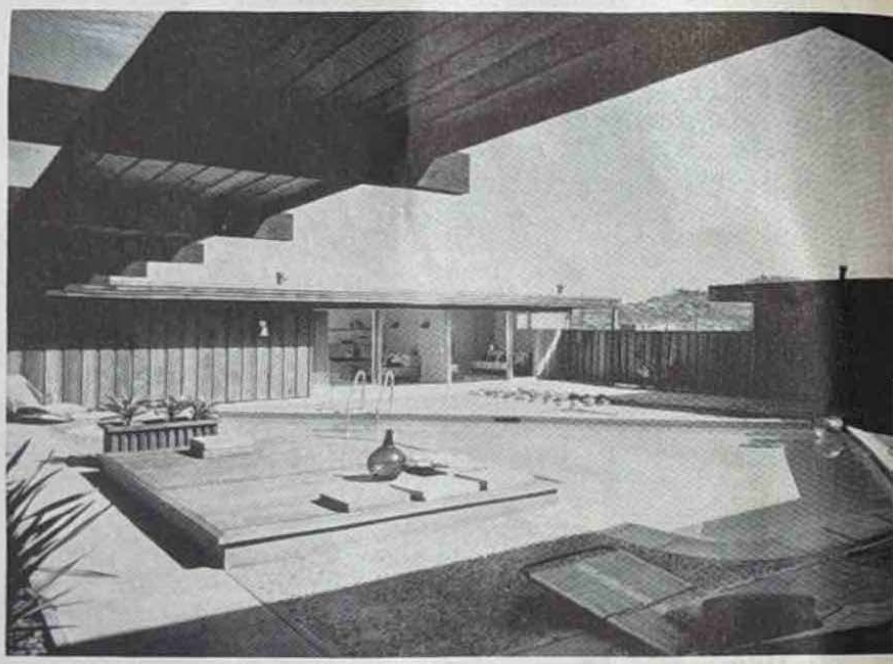
Lighting Fixtures: Prescolite Manufacturing Corp., Lightolier, Inc., General Lighting Co., Inc., Unlimited Design.

Heating: forced air.

Plumbing Fixtures: Norris-Thermador Corp., Zeigler-Harris & Co.

Total Area: 3,220 sq. ft. (excluding garage).

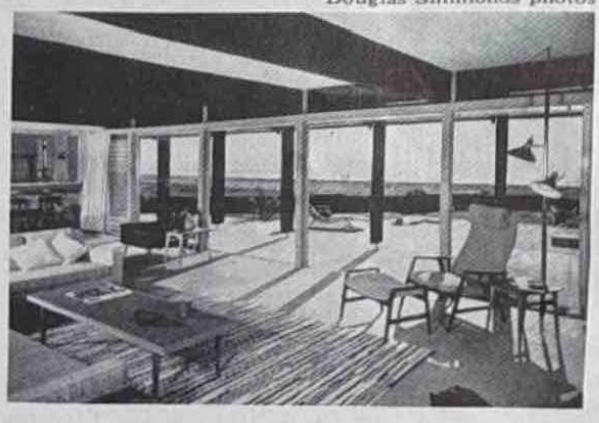
Date of Completion: July 1957.

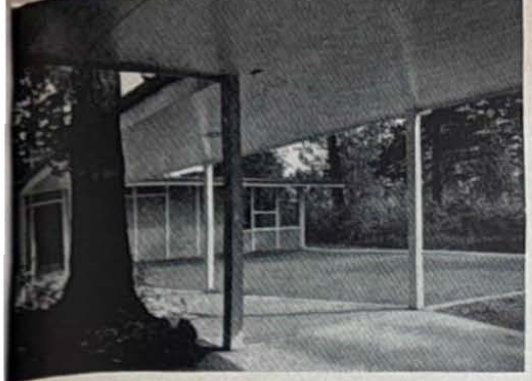


GUEST QUARTERS in pool court (right) are furnished to double as lounge-cabanas during daytime. Paved sunbathing terrace (lower right) has prow shaped sea wall to prevent sand encroachment. Upper deck (below) adjoins master bedroom.

Douglas Simmonds photos





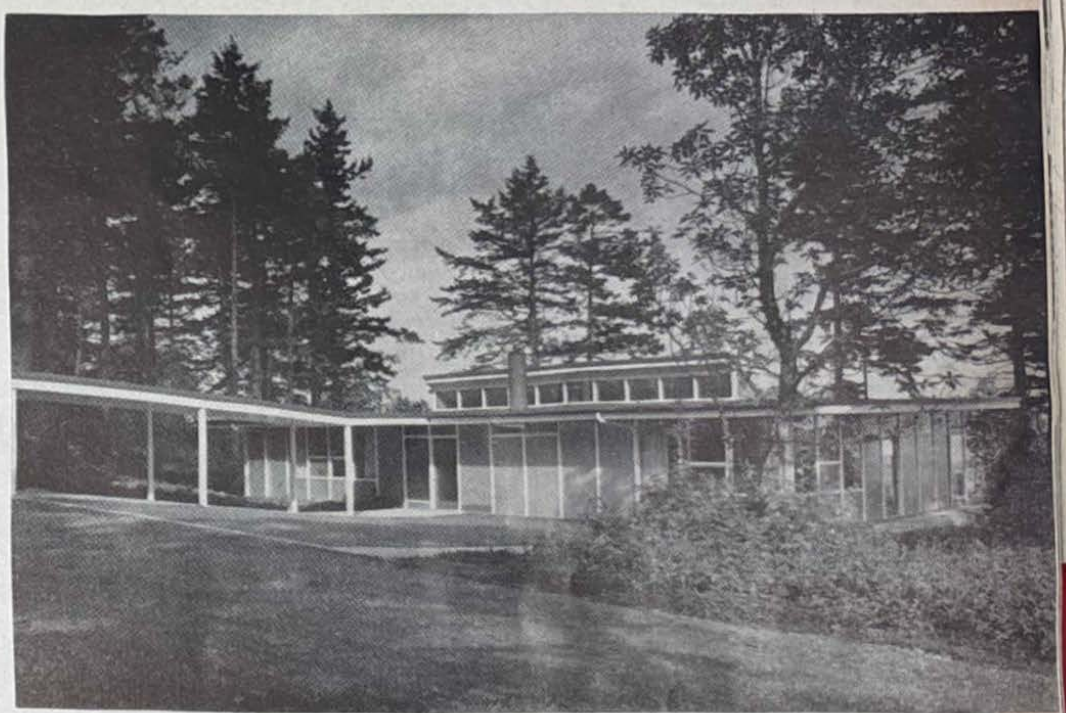


5. Earl Helander Residence
Port Townsend, Washington

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DANIEL M. STREISSGUTH
Architect

MRS. EARL HELANDER
Contractor



Definitive contrast with the site

OVERLOOKING the entrance to Puget Sound from the top of a high bluff, known locally as the Crow's Nest, this house is sited on heavily wooded land with attractive native ground cover. With its regularity of form, smoothness of surface, geometric patterning and its color (ochre stained plywood panels, white battens and trim) the house was consciously designed to contrast with the site.

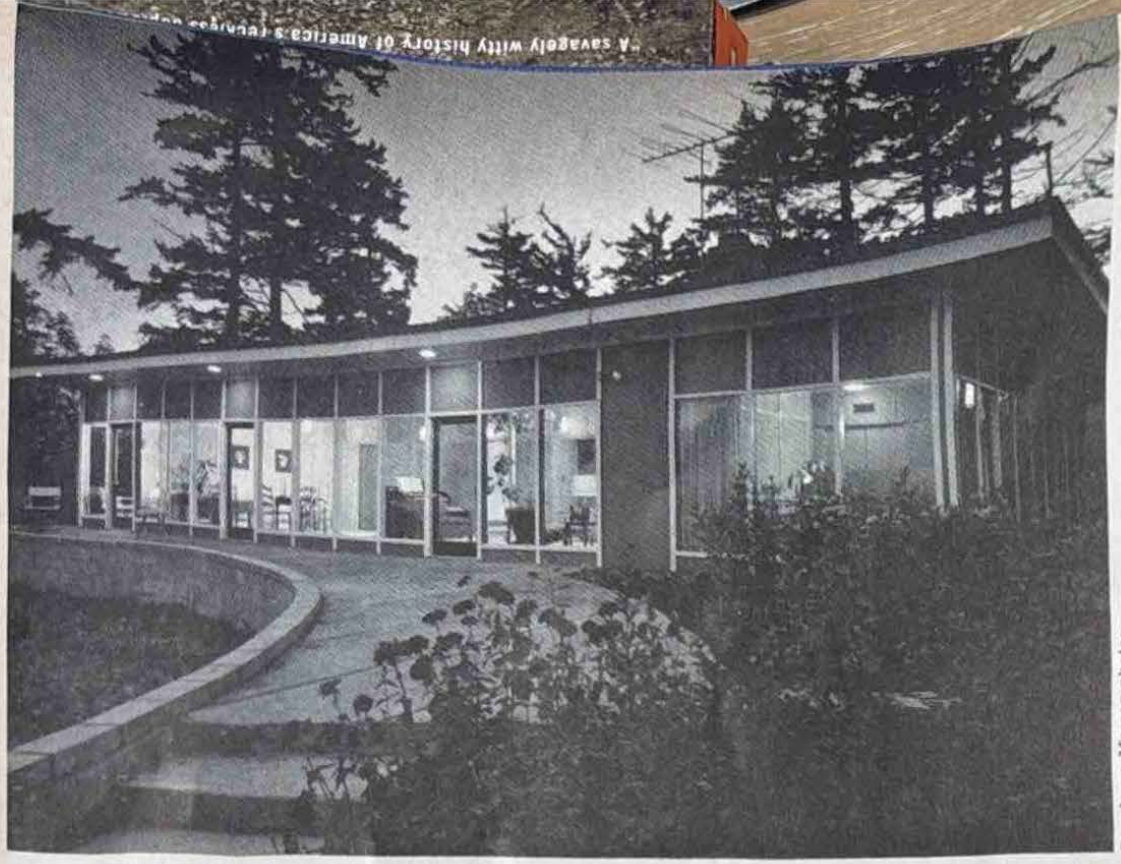
Because the major rooms face the northeast view, the long clerestory along the living-dining room was introduced to bring sunlight into the area and to permit a view up into the treetops, countering the long view down and across the strait.

These rooms are paneled with natural mahogany plywood, repeating the pattern and scale of the exterior. Two study-work spaces are provided. Mrs. Helander's is located adjoining the kitchen. Mr. Helander's adjoins the entrance where it can serve as a part-time office. Both are designed to be used as guest rooms. (The two sons are grown, but often visit in Port Townsend.)

Interior color schemes complement the cork floors and mahogany walls. Gray tile has been used across the living-dining room and on the entry floor and is repeated in the fireplace face and the bathroom. Carpeting in the living-dining room and master bedroom is rich gold. Ceilings are all white.

Curved northeast terrace swings away from the house toward the edge of the bluff, leading to two lookout points and permitting afternoon sun to reach the terrace's two ends. Small lawn areas are maintained along each of the two faces of the house.

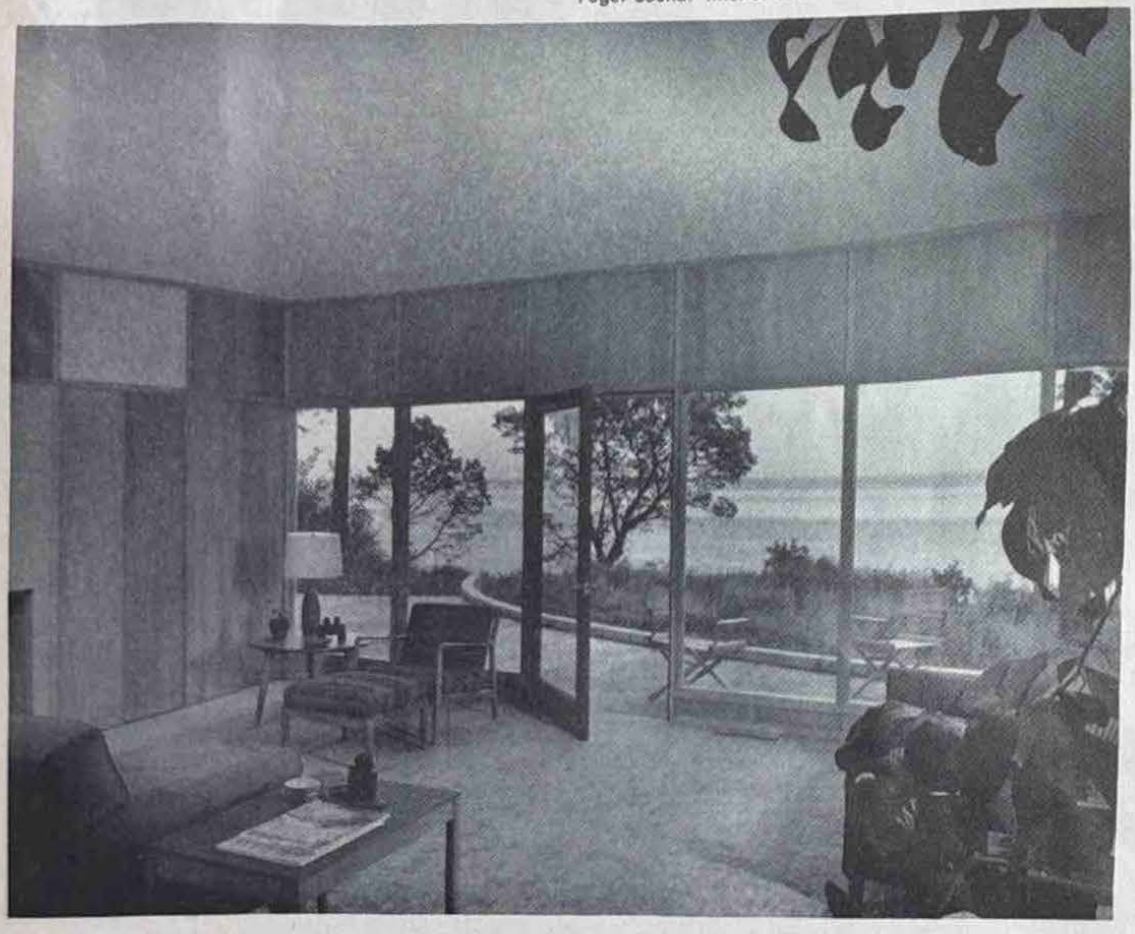
Mechanical engineers: Stern & Towne; landscape designer: Esther Pearson; interior consultant: Walter Kerr.



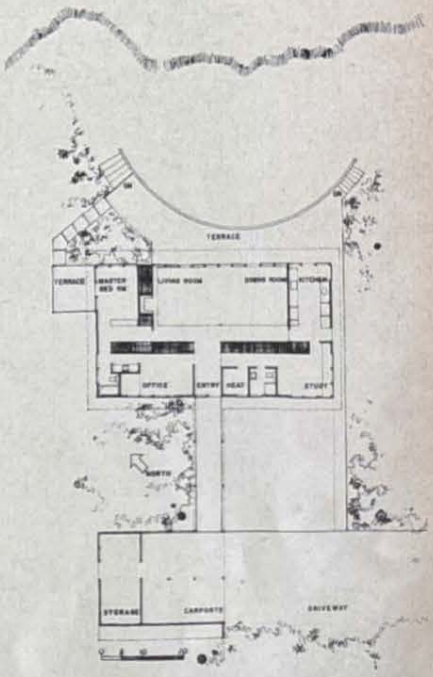
Dearborn-Massar photos

NEWLY GARDENED AREAS—one is maintained along each of two faces of house—are small and merge with native cover.

MAJOR ROOMS face northeast, overlooking entrance to Puget Sound. Interior colors relate to natural mahogany walls.



HELANDER RESIDENCE



CLERESTORY along living-dining room brings in sunlight and permits view into treetops.



OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: 3x4 posts spaced 40 in. o.c.; roof: 2x8 rafters at 20 in. o.c.; interior bearing walls: 3x4-in. posts spaced 40 in. o.c. with 2x4 studs at mid point of bay; floors: 4-in. concrete slab.

Exterior Finish: plywood—United States Plywood Corp.

Roof Surfacing: three-ply hot asphalt—Pabco Division, Fibreboard Paper Products Corp.

Windows: multipane insulating glass in wood stops — (Theropane) Libbey-Owens-Ford Glass Co., aluminum operating sash.

Doors: exterior: glazed, fir stiles and rails; interior: hollow core flush Philippine mahogany.

Floor Surfacing: ceramic tile at entry, baths and beneath clerestory in living-dining room —(Velvetex) Mosaic Tile Co.; carpeting in living-dining room and master bedroom; all other floors cork—(Kencork) Kentile, Inc.

Insulation: balsam wool in walls; aluminum in ceilings—Aluminum Company of America.

Interior Finish: Philippine mahogany and painted gypsum board—United States Gypsum Co.

Lighting Fixtures: recessed ceiling—Lightolier, Inc.; wall mounted spotlights—General Lighting; special bracketed fixtures beneath clerestory, opal glass cones—Raymor Manufacturing Co. (mounted on brackets fabricated by Irene McGowan).

Heating: oil fired forced warm air distributed through flues cast in concrete floor slab to perimeter warm air main—Lennox Industries, Inc.

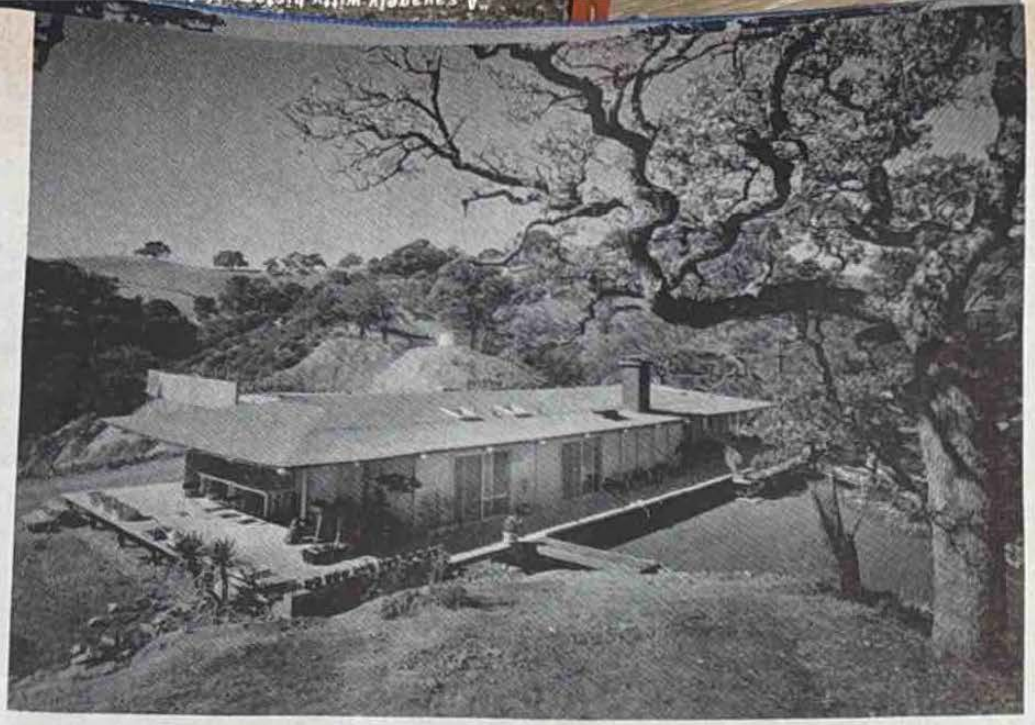
Plumbing and Sanitary: Kohler Co.

Total Area: 1,875 sq. ft. (exclusive of overhangs, covered walk, carport and shop).

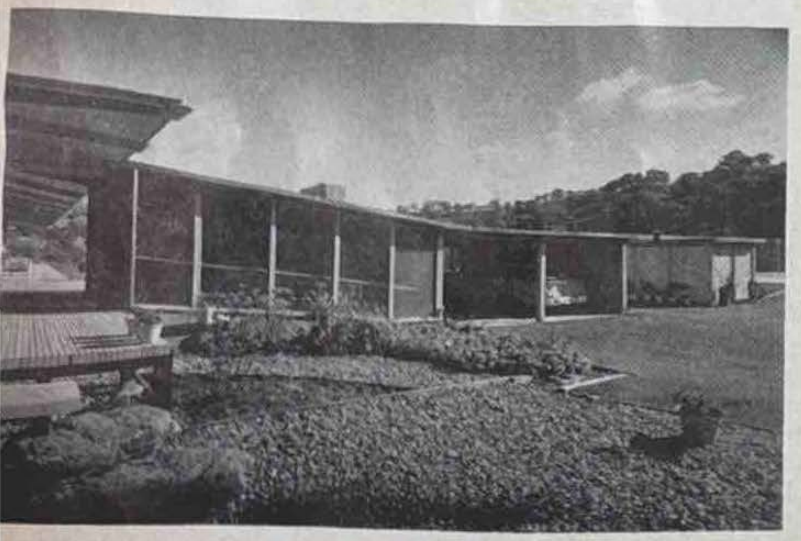
Total Cost: $22,500 (exclusive of Mrs. Helander's labor).

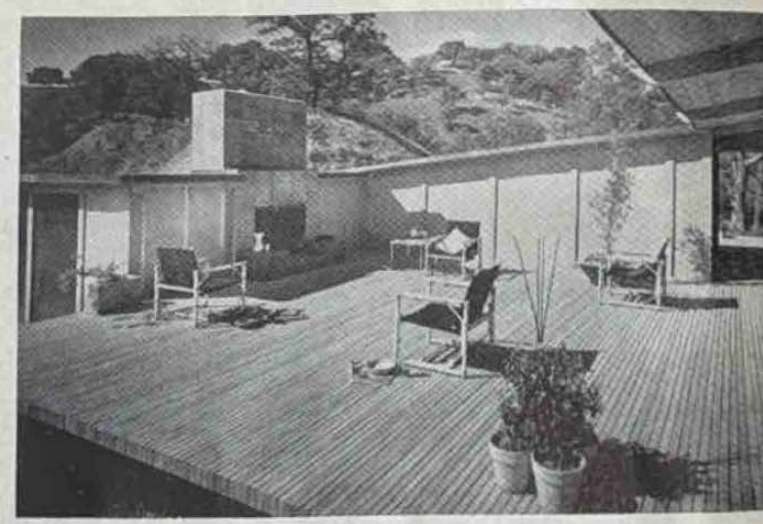
Cost Per Square Foot: $12.

Date of Completion: July 1956.



PORTIONS OF SITE, bulldozed with care to save it from barrenness, remain as sculptured mounds complete with trees. Glass enclosed ramp connects with carport to provide shelter for carrying in supplies. Major sun deck area has concrete block fireplace and barbecue.





Sympathetic embrace of the landscape

6. Doctor's Residence
Walnut Creek, California

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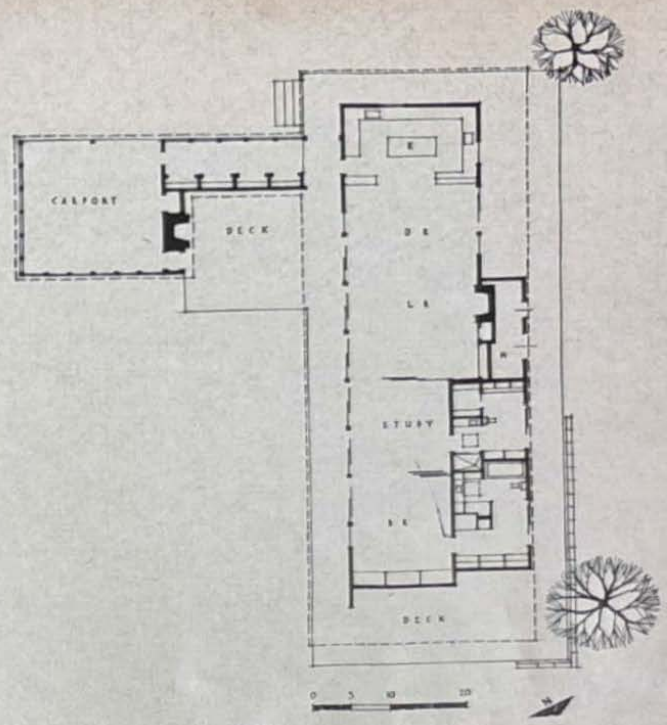
WURSTER, BERNARDI & EMMONS
Architects

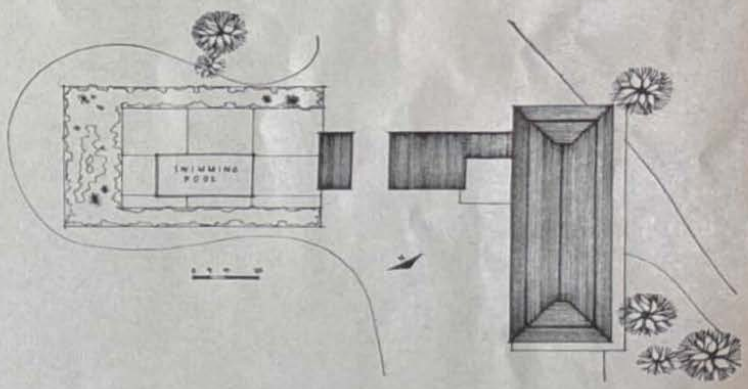
WILLIAM B. GILBERT
Structural Engineer

HAROLD PAIGE
Contractor

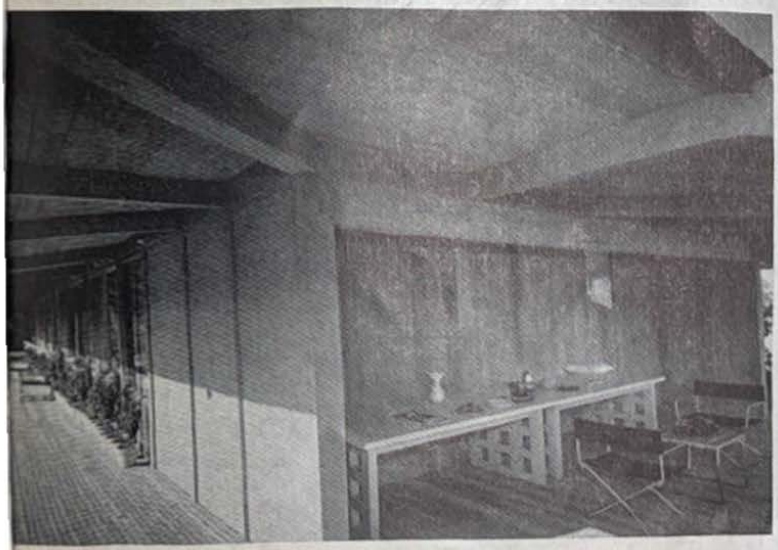
A HILLY, WOODED SITE affording complete privacy and wonderful views in all directions is the setting for this Japanese influenced house. It is essentially one large room—18½x78 ft.—divided only by sliding shoji screens into zones for living, eating, cooking, writing and sleeping for a doctor and his wife who requested lots of space. Sliding doors in every area lead out to a 6-ft. deck (wider in certain places) which surrounds the house at 30 in. above ground level. As the architects say: "Outdoors one *lives* on the wood deck choosing the particular exposure suited to the day and hour and *looks* at the adjacent spare landscape or distant view."

A wide, pagoda-like overhang adds to the Oriental flavor and protects the deck on all sides. A series of wood trusses span the big room, extending to the overhang and supporting exposed planking, insulation and built-up roofing. Exterior wall finish and asbestos-cement sheets with redwood battens over the joints is repeated in the breezeway. Inside walls are flush joint t&g Douglas fir with light gray stain and satin varnish finish. The light tone is carried out in the furnishings of bleached and lacquered white woods.

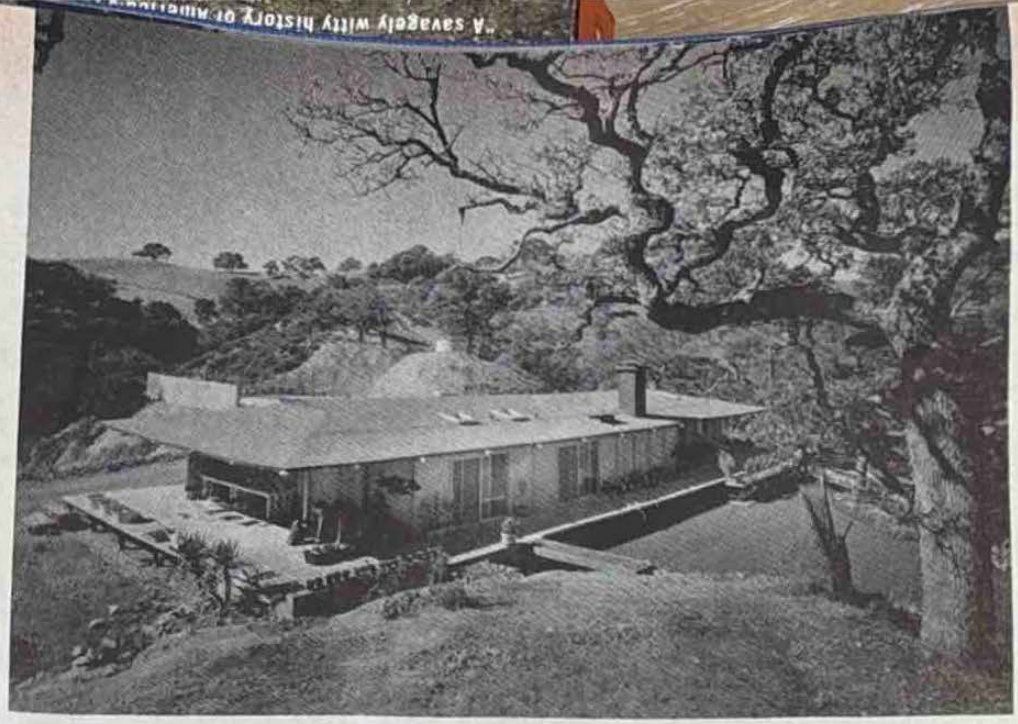




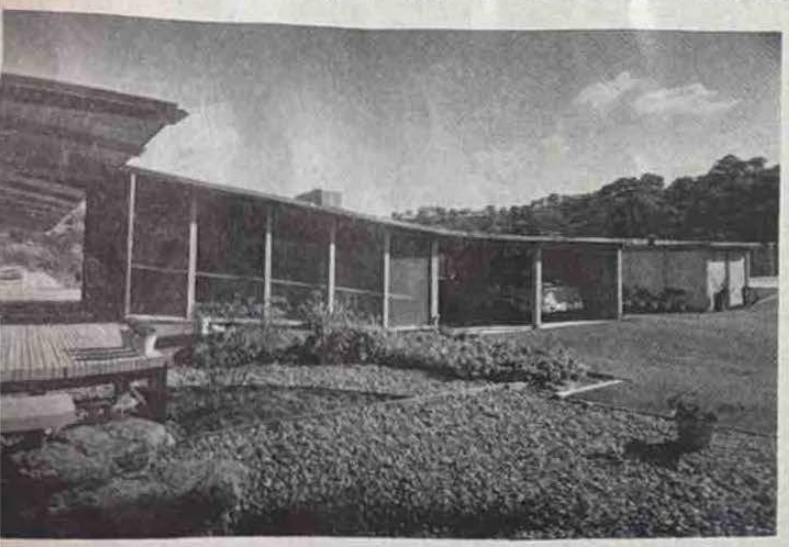
WOOD TRUSSES spanning main room extend to wide overhangs and support exposed roof planking. Exterior wall finish consists of asbestos-cement sheets with redwood battens over joints.



Phil Palmer photos



PORTIONS OF SITE, bulldozed with care to save it from barrenness, remain as sculptured mounds complete with trees. Glass enclosed ramp connects with carport to provide shelter for carrying in supplies. Major sun deck area has concrete block fireplace and barbecue.





Sympathetic embrace of the landscape

6. Doctor's Residence
Walnut Creek, California

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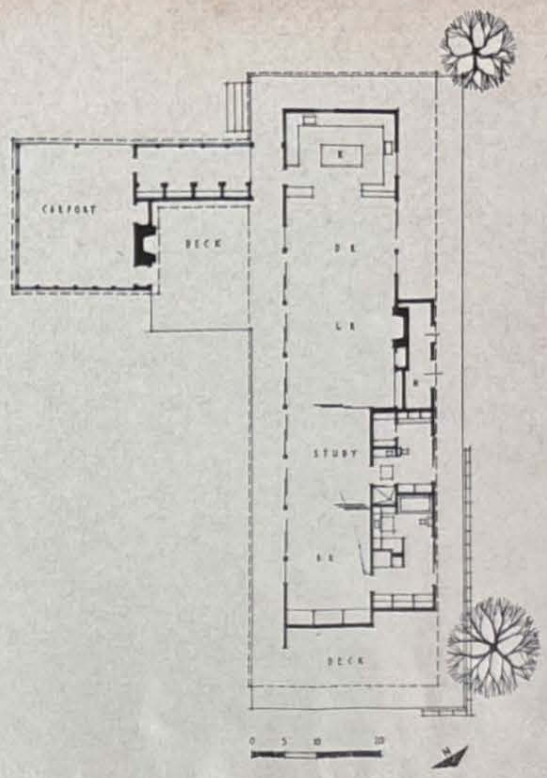
WURSTER, BERNARDI & EMMONS
Architects

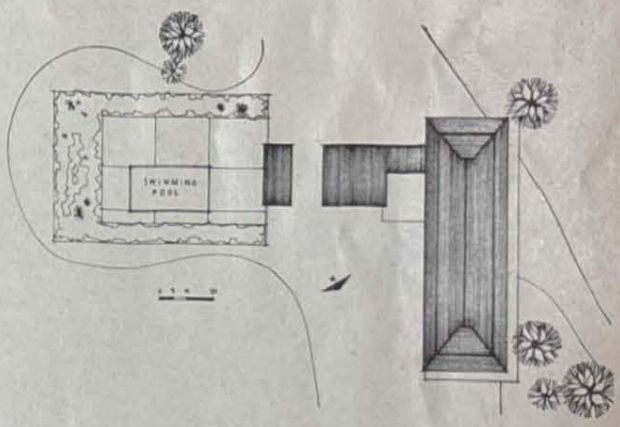
WILLIAM B. GILBERT
Structural Engineer

HAROLD PAIGE
Contractor

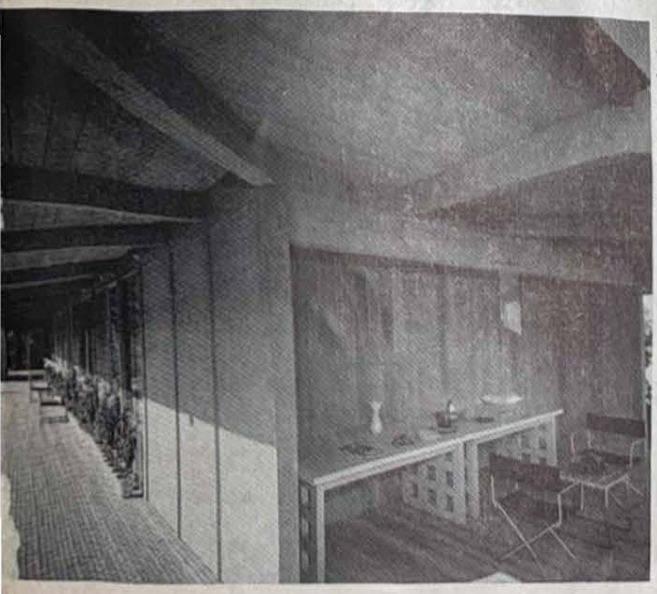
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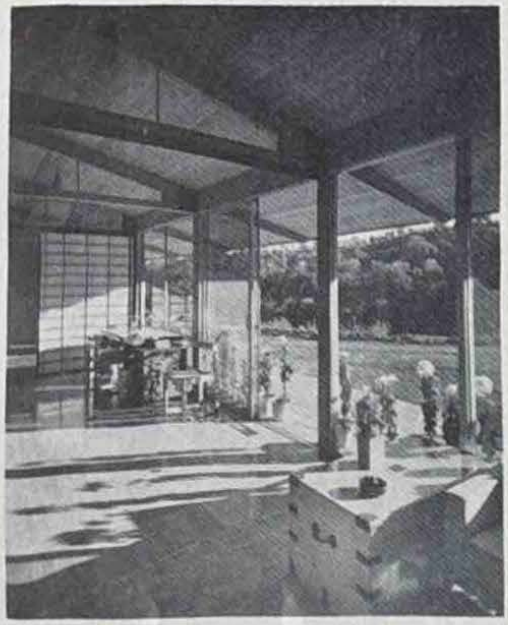




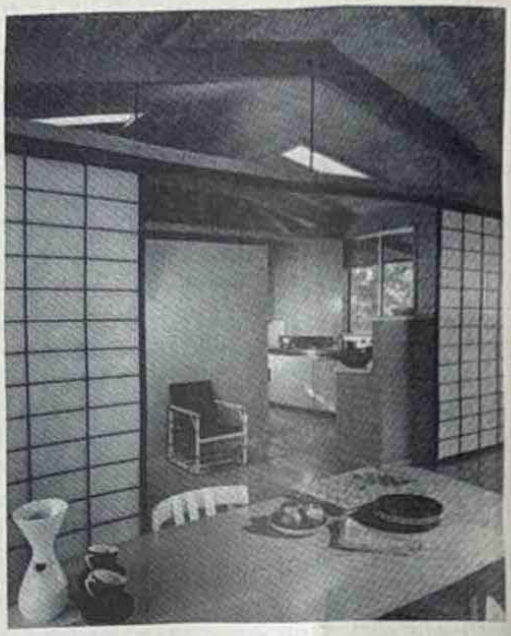
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Phil Palmer photos

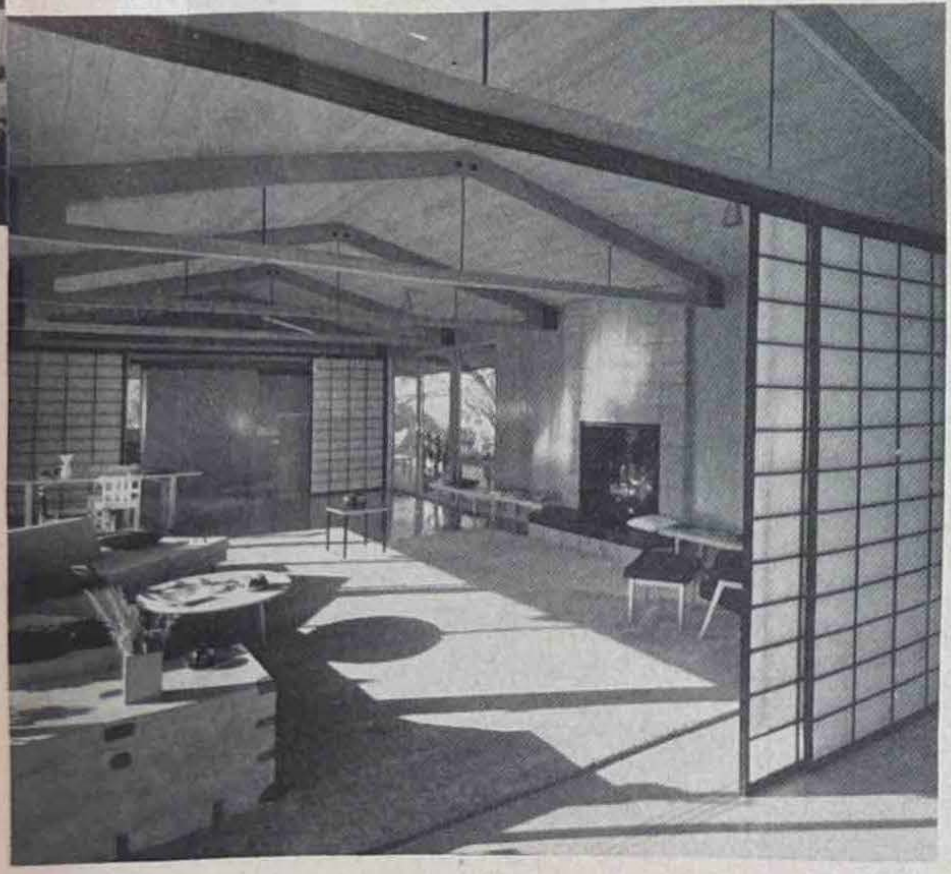


STUDY seen in background is zoned only by sliding shoji screens, as are all areas in big room.



KITCHEN features two large skylights and island divider which houses deck and work space on one side.

CONCRETE BLOCK FIREPLACE has raised hearth of black concrete. Storage wall on one side conceals TV and books. Light tone of structural materials is reiterated in furnishings.



OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: wood; roof: wood trusses with 2x6 flush joint t&g Douglas fir; floors: 2x6 plank subfloor on 6x6 wood posts.

Exterior Finish: asbestos-cement sheets—Johns-Manville Corp.; redwood battens.

Roof Surfacing: tar and gravel built-up—Pioneer-Flintkote.

Windows: sliding and fixed aluminum.

Doors: exterior: 1¾-in. v.g. Douglas fir flush veneer; sliding; interior: 1⅜-in. v.g. Douglas fir flush veneer.

Floor Surfacing: 1x2 v.g. Douglas fir stained, shellacked and waxed.

Insulation: rock wool batts .

Interior Finish: 1x6 flush joint t&g Douglas fir.

Ceilings: exposed roof planking.

Lighting Fixtures: flush mounted—Prescolite Manufacturing Co.

Heating: radiant copper ceiling panels.

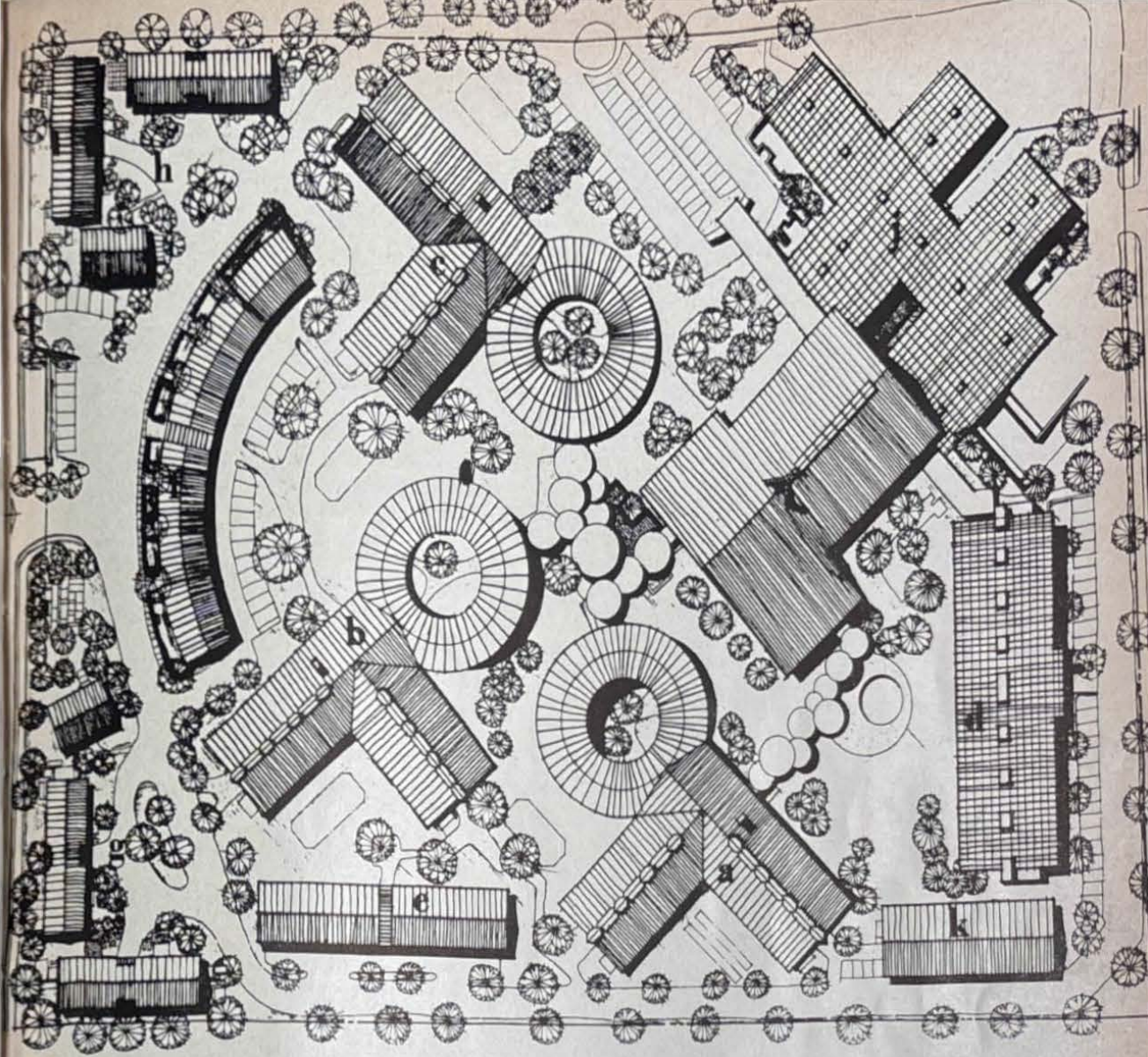
Plumbing and Sanitary: American-Standard.

Total Area: 2,634 sq. ft.

Total Cost: $52,178.

Cost per Square Foot: $19.50.

Date of Completion: March 1957.



Preliminary report

Housing the aged: new horizons

PLANS are nearing completion for what promises to be the most comprehensive home for the aged in the country, allowing 300 residents much more individual privacy and freedom than is customary in this kind of project. Designed by Kenneth Lind Associates, Mt. San Antonio Gardens of Congregational Homes will be located on 13½ acres in the Pomona-Claremont section of eastern Los Angeles County.

Utilizing the village approach to the $4 million development, the architects have planned standardized units of various types ranging from cottages, efficiency apartments, apartments, semi-suites and suites. The facade of each unit will have a personality of its own. Each congregate unit will offer a central lounge with circular fireplace, fully equipped snack kitchens, laundry and workrooms.

Central facilities complex will include the main lounge and dining area planned to accommodate 275, special service building (three stories raised on stilts to provide an open vista), medical unit and project and hobby rooms. The recreation building will house a variety of activities ranging from prayer and meditation rooms to a separate kitchen for serving refreshments.

Extensive landscaping has been planned, with planting and trees employed for the reduction of harsh sunlight and noise. Walkways are to be covered and parking adjacent to the units will be accomplished by a number of small areas rather than one ocean of cars.

The architects comment: "We feel that this program clearly shows the progress the West is making in meeting the needs of our senior citizens who must be provided with habitation which allows the individual dignity and continued usefulness to the community.

"In developing the plans, we have carried our research beyond the normal architectural investigation in an effort to make a lasting and outstanding contribution. We believe that we have achieved a definite advancement by our solution."

New leaf from an old book for suburbia

MASTER PLAN for this award-winning church was developed to provide orderly and integrated expansion looking toward eventual needs of double the present congregation in this rapidly growing residential district of Seattle. The scheme envisions the church as a social center as well as a house of worship, a full circle return to its pioneer role as a hub in community life which has been especially marked, and needed, in the mushrooming, rootless suburbs.

Since it was not feasible to remodel or rebuild on the old site, the architects were able to start from scratch, working with a new four-acre site offering a natural setting of native trees and a gentle slope. A long-range survey indicated that church membership would grow from 500 to 1,000 with a church school of 800. This formed the basis for the master plan which provides for a sanctuary seating 350, a chapel for 100, a fellowship hall accommodating 300 for dinner and a religious educational plant handling 400. It was planned that a large portion of the site would be set aside for recreational development and for 100-car parking area.

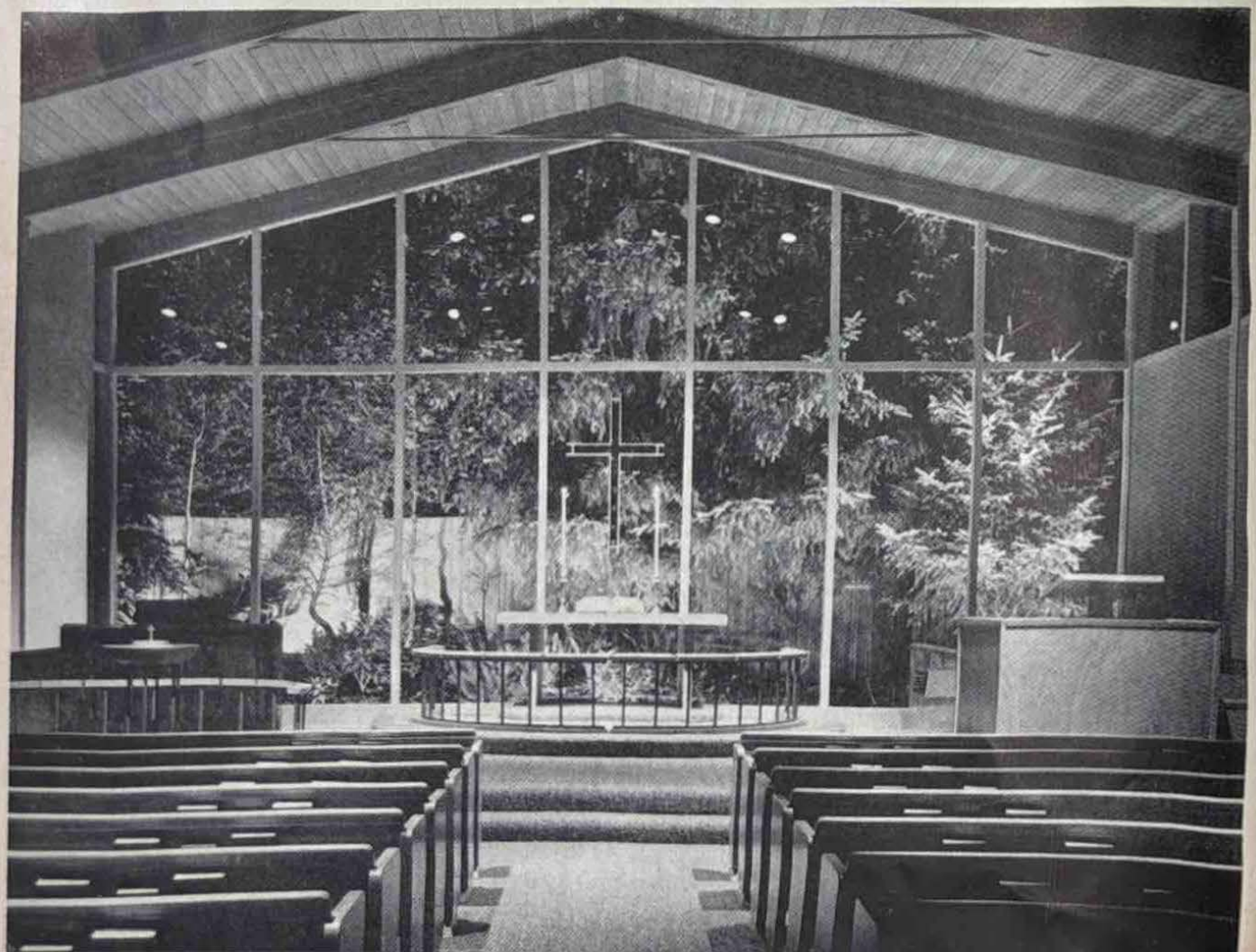
In order to take care of the initial needs, the chapel was expanded into the narthex area and one-half of the fellowship hall constructed, plus one-half of the educational plant. Future sanctuary and additions to the social and educational departments can be made without any structural change to the present building.

Because of the trees on the site, the chapel was designed to provide a glass end wall facing north to a small garden surrounded by a split cedar fence. Flowering shrubs have been added to the natural foliage, presenting a green background both in the daytime and under floodlights at night.

The predominate center of the chancel is a communion table surrounded by a semicircular altar rail. Space for a small choir is placed at one side of the chancel, with the pulpit on the opposite side. Side walls of the chapel are splayed louvers, floating between clear panels at top and bottom, providing a continuous glass wall with all attention focused toward the chancel.

A church parlor opens up with sliding doors into the narthex, allowing flexible space arrangements. A covered walkway serves as a porch off the social area. Other facilities at present include nursery and kindergarten space, a youth room and administration area.

Heating and ventilation is zoned for various activity areas. Incandescent downlight fixtures are mounted behind the beams in the chapel. Mechanical engineers: Stern & Towne; electrical engineers: Beverly A. Travis.







BELL FROM ORIGINAL CHURCH, built in 1889, hangs over walkway to parking lot. Floodlights turn small garden behind chancel into equally important design element at night, as indicated in photo at left. Below is glass enclosed reception area which doubles as library.



Art Hupy photos

Bothell Methodist Church
Bothell, Washington

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DURHAM, ANDERSON & FREED
Architects

HAROLD K. ROE
Structural Engineer

PARSELL & RACE
General Contractors

OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete; roof: wood glued laminated arches and beams, exposed t&g decking; walls: post and beam; floors: concrete on grade, wood joists above lower level.

Exterior Finish: stained rough sawn cedar siding and cement - asbestos spandrel panels.

Roof Surfacing: three-ply built-up with marble chip surfacing.

Windows: glass stopped in wood frames with aluminum vents; amber cathedral glass in chapel lower wall.

Doors: exterior: aluminum sliding doors and solid core oak with amber relights; interior: vertical grain mahogany.

Floor Surfacing: asphalt tile, vinyl asbestos tile, cut sandstone and carpeting.

Insulation: rock wool batts, asphalt impregnated rigid fiberboard and gypsum wallboard.

Interior Finish: plasterboard.

Ceilings: acoustical tile, plasterboard and exposed wood decking.

Lighting Fixtures: incandescent, pendant and recessed.

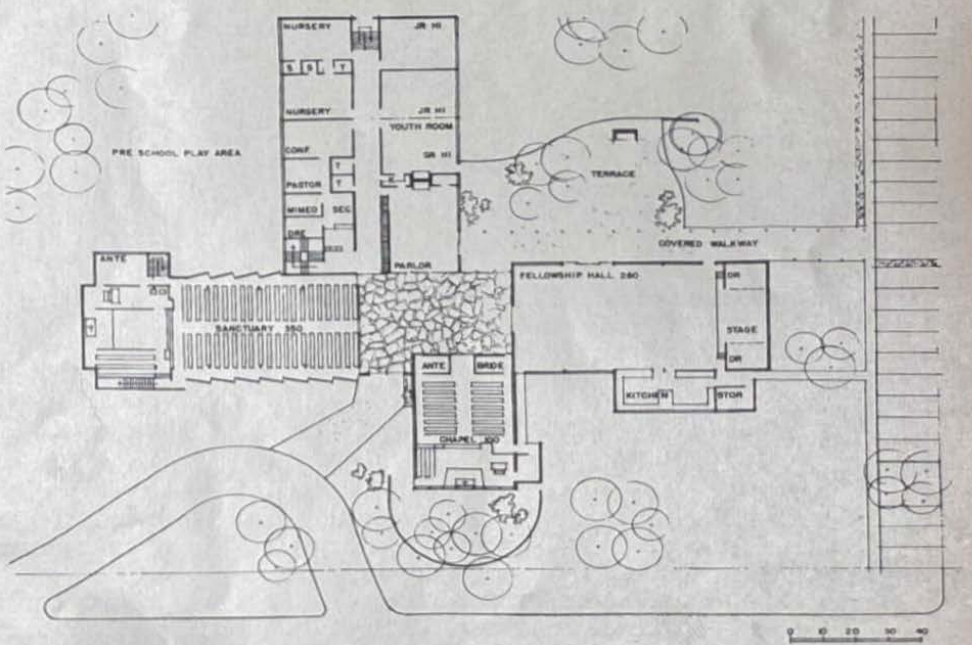
Heating and Ventilating: oil fired furnace zoned to each activity area.

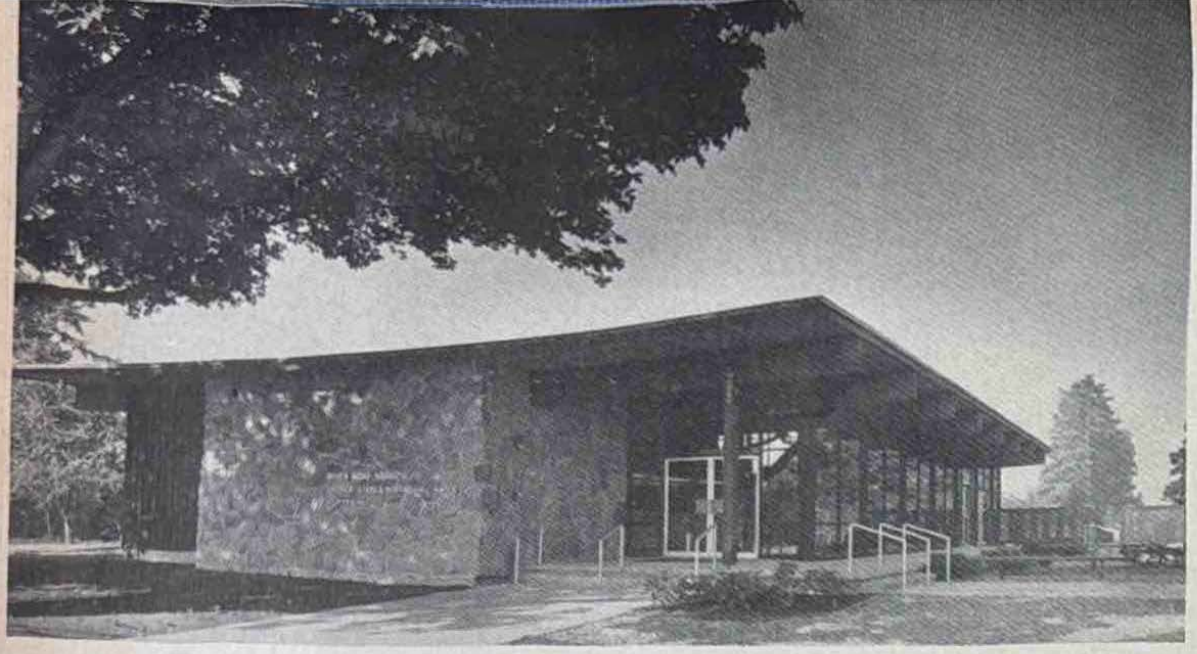
Total Area: 11,747 sq. ft.

Total Cost: $137,800 (initial unit).

Cost Per Sq. Ft.: $11.70

Date of Completion: June 1958.







Tom Burns photos

Rectangular wood box for a lumber community

THE COMMUNITY'S basic industry—lumber—is expressed and effectively displayed in this branch bank serving a suburban district just out of the Eugene city limits. It provides all the facilities of the downtown bank plus a drive-in window and parking. The glued laminated beams, cedar boards and battens and native stone feel right at home in the residential setting. The warm, neighborhood quality is further enhanced by a huge Oregon maple immediately in front of the structure which was preserved and incorporated into the landscaping; and in the interior by the open plan of teller and officer areas.

Basically, the building is a rectangular wood box pierced with an expanse of glass and spanned with concave beams set into position upside down. Design of the dished roof required only two drains, both concealed in end walls, due to the fact that beam ends do not deflect and permit roof water to overflow. All water drains toward the middle of the roof and is then deflected by gravity and roof saddles toward each end. Between the beams spaced 12 ft. on centers, cedar 2x4s, with $\frac{1}{4}$-in. wide saw cut $\frac{3}{8}$ in. deep on one side of the bottom edge, are spiked and laminated. Beams are stained dark brown and the cedar, a light, clear stain.

Over the teller cages a dropped ceiling of acoustical tile and recessed fluorescent lighting fixtures is suspended by steel rods from the beams. The suspended ceiling conceals the main duct run from the air-to-air heat pump and serves as a light reflective surface, acoustical surface and shield for the air conditioning system. A series of radiant hot water panel coils are found under the teller booths for auxiliary heat and to warm the cold feet of the women employees. Architect designed bank fixtures, cabinetwork and doors are finished in walnut veneers and plastic laminated faces and tops.

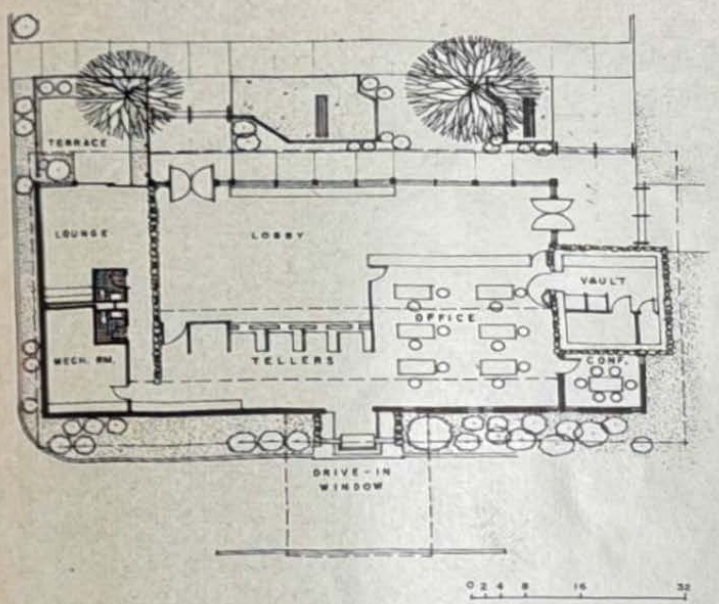
Marquess & Marquess: mechanical engineers; Lloyd M. Bond: landscape architect; Lila Colwell: interior consultant.

River Road Branch
United States National Bank of Portland
Eugene, Oregon

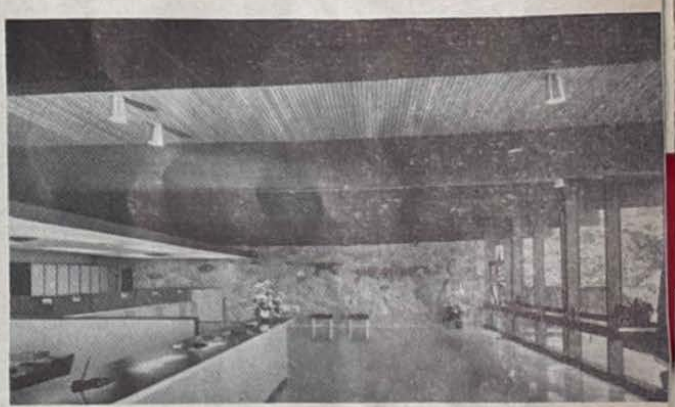
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WILMSEN & ENDICOTT
Architects

YOUEL & HOFFMAN
General Contractors







STONE VAULT WALL (upper right) is faced with native Mapleton sandstone, beige colored with shades of red and brown. It features clock designed and constructed by Will Martin of architectural firm. Second interior stone wall (lower right) has piece of metal sculpture by Tom Hardy, resident artist at Reed College. Employee lounge (below), complete with kitchenette, is open to community for civic meetings.



OUTLINE SPECIFICATIONS

Structure: frame: wood; roof: concave with glued laminated fir beams and laminated 2x4 cedar decking; floors: concrete slab.

Exterior Finish: Mapleton sandstone, cedar and glass.

Roof Surfacing, laminated 2x4 cedar decking.

Floor Surfacing: vinyl tile; carpeting in conference room.

Interior Finish: $\frac{5}{8}$-in. gypsum board surfaced with German vinyl fabric sheet (grass cloth in employee lounge); Mapleton sandstone.

Ceilings: exposed cedar decking; suspended acoustical tile over teller cages.

Heating and Air Conditioning: air-to-air heat pump with electrical standby for abnormally cold weather; auxiliary radiant panel hot water coils under work areas.

Lighting Fixtures: flourescent with supplementary incandescent spots.

Total Area: 3,850 sq. ft.

Total Cost: $78,249 (including fixtures and landscaping).

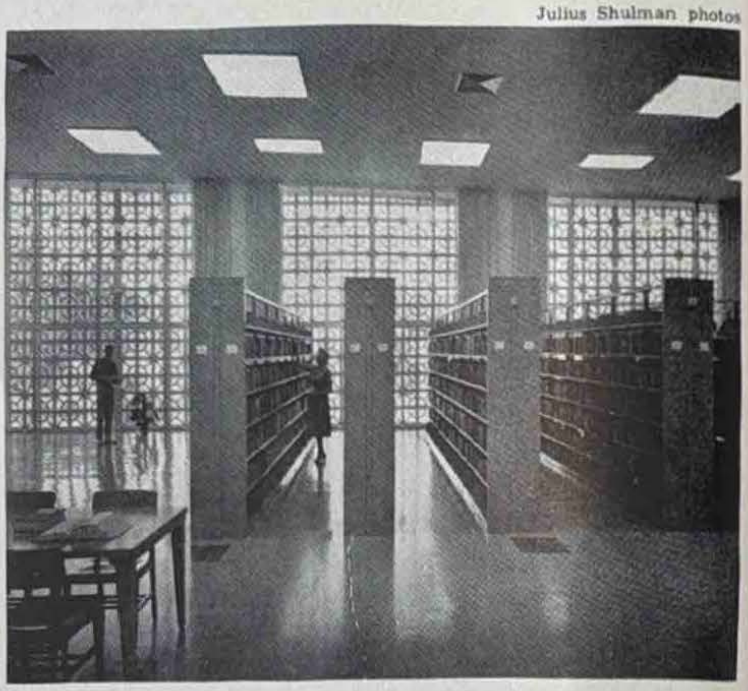
Date of Completion: August 1958.



Project roundup

Two library buildings with built-in expansion

Julius Shulman photos



WHITTIER (CALIF.) PUBLIC LIBRARY: An entrance overhang and a concrete screen help to control the sun problem for the 25,332-sq. ft. reinforced concrete building, expandable to 34,543 sq. ft. All public services are located on the ground level, with an unfinished lower level connected by elevator and stairway for future accommodation of technical processes, bookmobile loading and branch library operation. Provision also has been made for mezzanine to be added later.

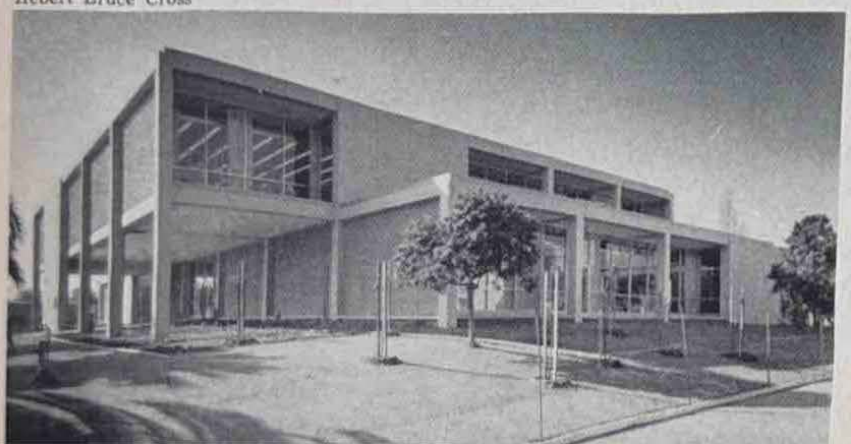
Free-standing stacks shelve about 110,000 volumes. Interior space is divided into four main areas for children, young people, adults and staff. Other facilities: a multipurpose room for story hours, puppet shows, etc., and another room to house local history and a John Greenleaf Whittier collection. Construction cost was $538,350. Architect: William H. Harrison; general contractors: Collins & McPherson.

CHARLES VON DER AHE MEMORIAL LIBRARY, LOYOLA UNIVERSITY, LOS ANGELES: Sitting on a slight rise above the future mall, this $800,000 reinforced concrete and brick structure reiterates the materials and color scheme dominant on the campus. The two stories and basement total 42,000 sq. ft., with a stack capacity of 150,000 volumes.

The library has been designed for ultimate expansion to double its present capacity and area through a building program projected to 1970. Walls, columns, beams and sunshades on the west side are demountable to permit relocation of a reading garden when the library expands in that direction.

Inside, the three levels are connected by free-standing stairways finished with walnut panels and stained wood and aluminum railings. Restful colors are relieved by occasional accents. The light tan brickwork is exposed inside and out; concrete and plaster surfaces are painted. Architects-engineers: Albert C. Martin & Associates; landscape architect: Prentice French; general contractor: McNeil Construction Co.

Hebert Bruce Cross



Preparing the building estimate

Seventh in a series: Roofing & Sheet Metal, etc.

Subs need clarification

by GLENN M. CANADAY

18. ROOFING & SHEET METAL

The roofing and sheet metal division may be bid complete by one subcontractor or may consist of an accumulation of several subcontract bids, material quotations and general contractor's labor estimates. Examine the plans and specifications carefully to avoid omitting or doubling up of items. On complicated or unusual structures, this can be one of the most difficult divisions for the estimator to assemble. The following subdivisions are adequate for an average job.

18.01: Roof Insulation. This is usually a subcontract item. If you make the installation yourself, include costs of insulation materials, asphalt, priming, membrane and labor.

18.02: Built-up Roofing. This is usually a subcontract item. However, in isolated areas you may be forced to do your own roofing. Include cost of felts, asphalt, fabric and felt flashings, gravel and bond (if required).

18.03: Composition Roofing—Roll, Strip, Shingles. Include all costs of felt underlayment, starting strips, composition valleys, roofing material, cement and nails. Allow for waste at valleys, hips and ridges.

18.04: Wood Shingles and Shakes. Include all cost of shingles, felt underlayment, starting strips, nails and installation labor.

18.05: Tile and Slate Roofing. Include all costs of material and labor. Add proper waste allowances for breakage.

18.06: Sheet Metal Roofing—Corrugated, Soldered and Standing Seam. This is usually a subcontract item. Clarify installation of felt underlayment, furring strips and calking.

18.07: General Sheet Metal: Usually a subcontract item except in isolated areas, this division should include all material and labor costs for sheet metal items generally classified as general sheet metal flashing, counter flashing, coping gutter, downspouts, etc.

18.08: Metal Roof Deck. Include costs of roof deck material, closures, sumps, fasteners, welding materials and installation labor. Price installation by the square.

18.09: Metal Siding. Include all costs of materials, closures, fasteners, membrane, and calking. Price installation by the square. Review scaffolding and staging requirements carefully.

18.10: Skydomes and Skylights. Price by the unit. Include costs of material, miscellaneous blocking and framing, calking and installation labor.

18.11: Louvers. Include material and installation costs for all louvers not furnished and installed by the ventilating contractor. Review general sheet metal specifications and bids for possible inclusion of both sheet metal and extruded type louvers.

18.12: Grills and Vents. Review ventilating and heating specifications to determine responsibility. Include all cost of material and installation labor.

18.13: Roof Hatches. Include roof hatch quotations, costs of miscellaneous installation materials and installation labor.

18.14: Plastic Roofing—Sunshades, etc. Include all material costs, plastic closures, accessories and calking. Price installation by the square or square foot.

19. DAMPPROOFING, WATERPROOFING & CALKING

Specifications often divide responsibility for items listed in this division. Study carefully the plans and the specifications for the masonry, roofing, ceramic tile, millwork, window and door divisions. The following subdivisions may be used.

19.01: Membrane Waterproofing. Include membrane waterproofing for basement floors and walls, plenum chambers, toilet rooms, kitchens, laundries, sidewalks over basement areas, etc.

19.02: Asphaltic Dampproofing. Include material and labor costs of spray gun or brush applied asphaltic type materials.

19.03: Parging. Review the masonry division for possible inclusion of this item. Include costs of sand, cement, additives and labor. Price by the square yard or square foot.

19.04: Calking. Study the plans and specifications (particularly sections for sheet metal windows, doors and millwork) to determine requirements. Make the takeoff in linear feet according to type and location. Cost of materials and installation labor vary greatly. Separate mastic type calking compounds and rubber type compound materials.

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Rosboro's fabrication crew has almost two decades of experience in engineered timber fabrication. The department is a unit of our mill at Springfield, Oregon, taking advantage of a large inventory, storage and shipping facilities. Rosboro can fabricate all types of solid sawn trusses and roof structures to meet your needs for modern engineering in wood.

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SPRINGFIELD, OREGON

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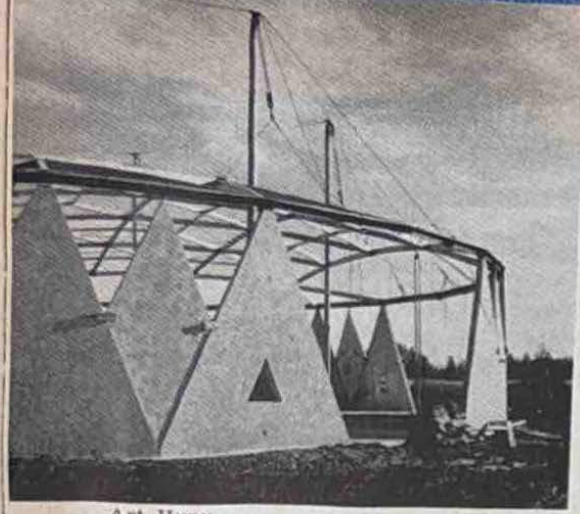
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Firm_____

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Art Hupy

Six gin poles raise gym in the round

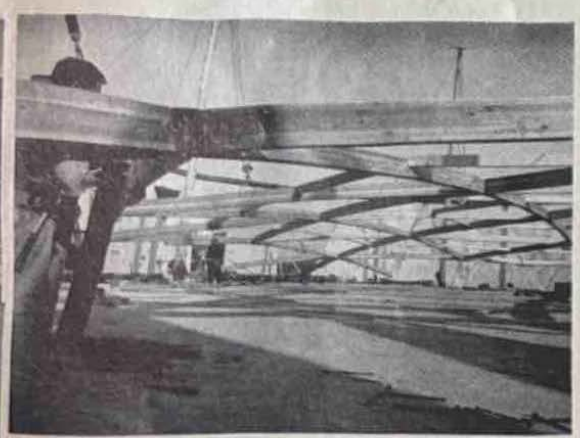
Laminated timber is used in pattern resembling geodesic dome

Timber framed dome for the gymnasium unit of the Mountlake Terrace (Wash.) Senior High School was selected by architect Ralph Burkhard and consulting engineers Andersen, Bjornstad & Kane for both economical reasons and the eye appeal of the resulting geometric design.

Built by Brazier Construction Co., the dome provides the greatest amount of space with the least wall area. Inside are a court for boys and one for girls, plus a varsity court, seating and space for storage. The building also can be used as an auditorium for the school and for the city which does not have a meeting hall.

This is the first major use in the West of glued laminated timber in a triangular pattern similar to the geodesic dome. Employment of the timber framed dome, whose members were assembled as they were erected with gin poles, proved to be highly economical as huge beams and trusses were eliminated. The contract held by Timber Structures, Inc., called for furnishing and installing all glued laminated and sawn timber framing, all steel assemblies and hardware, including tension ring, plus 2-in. kiln dried Douglas fir t&g roof sheathing for the entire roof at a price amounting to less than $2.30 per square foot of area covered.

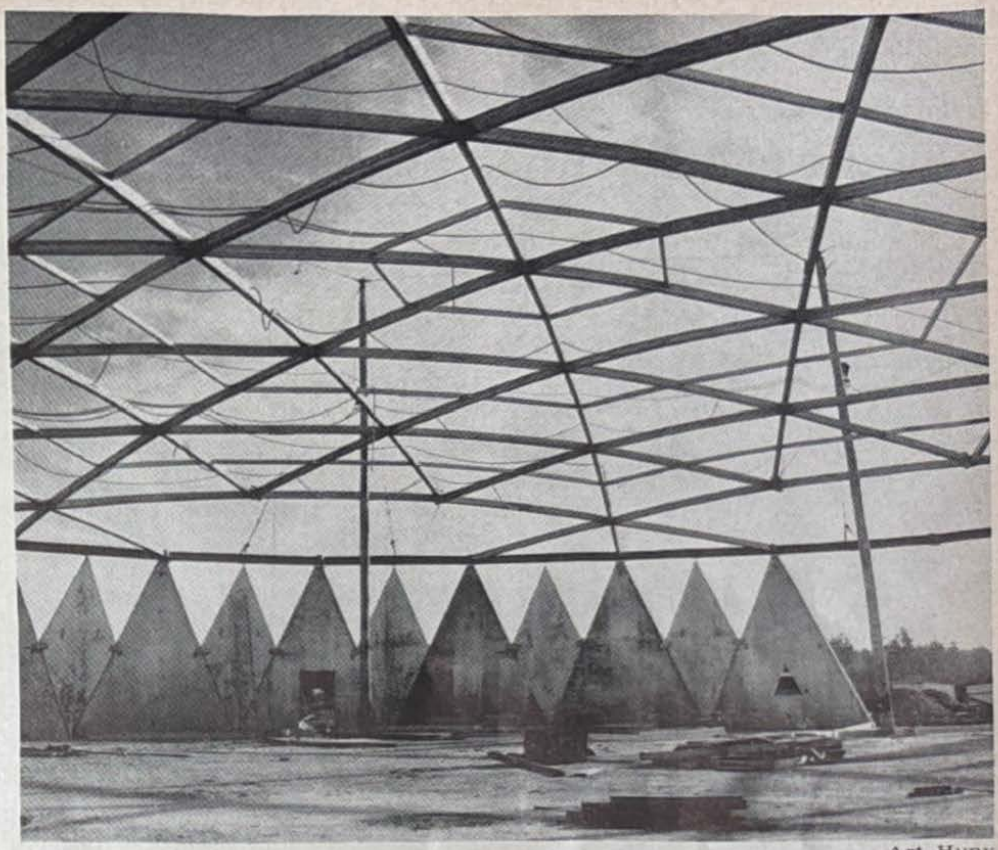
Dome has a diameter of 123 ft. 9¼ in., plus a 6-ft. canopy around the entire perimeter. It was constructed to a radius of 171 ft. 10⅛ in., resulting in a rise at the center of approximately 12 ft. Framework consisted of glued laminated members 5¼x9¾ in. in sections approximately 18 ft. long arranged in a triangular pattern with sawn 4x6-in. purlins hung between the glued laminated members for support of the roof sheathing. Horizontal thrust of the dome is resisted by a 10-in. wide flange 49-lb. tension ring around the top of the tilt-up pyramid shaped concrete wall panels. All glued laminated members, sawn purlins and roof sheathing were manufactured and selected for appearance as the entire framework will be left exposed in the finished building.



DOME FRAMEWORK is assembled by working at floor level and raising dome as members are added around perimeter. Dome is shown above about one-third assembled. Typical connection at intersection of glued laminated framing members is short section of round steel pipe which members butt against. Steel plates are placed top and bottom on members and are bolted to round steel section. Note light galvanized steel hangers used for supporting sawn purlins between members.

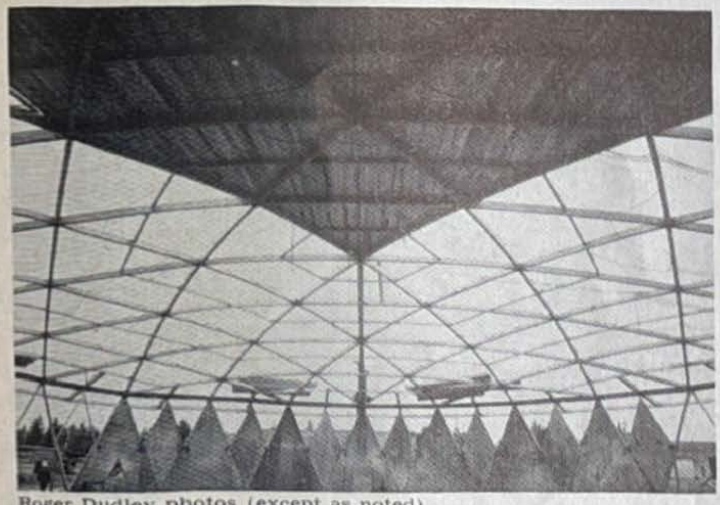


ENTIRE FRAMEWORK is raised by six gin poles equally spaced around structure. Photo at right shows one gin pole with its winch and ¾-in. heavy duty electric drill which was only power needed to raise entire framework. Additional members are ready for installation with top and bottom plates attached.



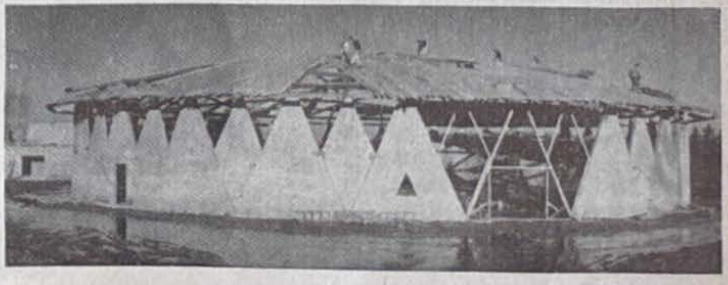
ON TOP of tilt-up concrete wall panels rests wide flange tension ring which supports complete framework. Pyramid and triangular shaped openings in wall structure will be covered with fiberglass material. Roof sheathing also will be cut to provide diamond shaped plastic covered skylights.

Art Hupy



Roger Dudley photos (except as noted)

FOR PLACING roof sheathing, dome is divided into six equal segments. Photo shows one segment in place. Conduit seen throughout framework was placed by electrical contractor while framework was still at ground level, eliminating cost and time-consuming method of placing conduit and drilling members in air.



EXTERIOR with sheathing two-thirds completed. Note 6-ft. wide canopy which extends beyond walls in continuation of dome shape. Framing member and sheathing as utilized here result in true smooth curve dome surface. In center of photo is typical splice in wide flange tension ring. This joint is made with high tensile strength steel bolts, also used for final adjustment of tension in ring.

colorful fiberglass door

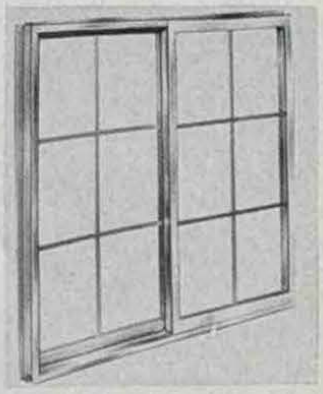
That versatile material, fiberglass, has popped up in a new application as an exterior door offering colorful and unusual design possibilities for both residential and commercial installations. Both ring and honeycomb designs are available. Color can be added inside rings; in the honeycomb door, it can be added in custom design. Fiberglass is laminated in a wood frame with hollow core except for rings and honeycomb. It is strong and durable, has high insulating value, no warpage and offers light transmission without danger of breakage. Door is 1¾ in. thick and uses standard locks and hinges. Other thicknesses are available for wall or room dividers, sliding window walls, interior doors, etc. — Evergreen States Forest Products. (Item No. 1)

heavy duty hardware

Installation of multifold doors or panels weighing up to 100 lb. each is possible with a line of heavy duty hardware which will handle panels from 1 to 2½ in. thick. With the hardware, doors may be edge hung to collect at either end of the track; edge hung and collected at both ends; or center hung and collected at either end or both ends. Separate access doors also are possible. Hardware includes heavy gage aluminum track, heavy duty hangers riding on lubrication-free nylon wheels, adjustable pivots and pivot brackets for the end door or panel and full gauge 3½x3-in. mortise hinges.—McKinney Manufacturing Co. (Item No. 2)

decorative window bars

Aluminum muntin bars are sealed between panes of glass in Glidorama's



prime horizontal gliding aluminum window. A ¼-in. moisture controlled air space between the panes acts as insulation and provides spaces for diagonal bar designs or vertical and horizontal patterns. It also eliminates the aggravating corner dirt accumulation and small pane cleaning that has made leaded windows a plague to housewives. Window has double I-beam sills and stainless steel axles and roller bearings; is available in all standard sizes.—Glidorama Division, Whizzer Industries, Inc. (Item No. 3)

colorful calking compound

A calking compound that comes in 10 colors as well as white and aluminum is being marketed under the tradename Maintz. Based on DuPont Hypalon (chlorosulfonated polyethylene), it cures into a resilient rubber-like material resistant to weather, mold, bacteria, etc. Product is a one-part compound requiring no jobsite measuring or mixing.—West Chester Chemical Co. (Item No. 4)

teakwood kitchen floors

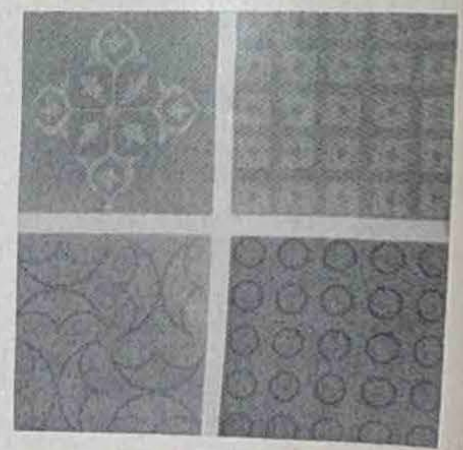
Ancient teakwood, for centuries used for ship's decking because of its resistance to water and wear, has been experimentally installed in several kitchens and bathrooms in eastern homes. Distributor of the hardwood flooring, which comes from Thailand, reports that Thai-Teak provides a hard, watertight surface resistant to scuff marks and requiring a minimum of cleaning. Natural oils in the wood act as a preservative, protecting it from heat, moisture and termites. Thai-Teak parquetry is available in variegated sizes of prefabricated, prefinished squares. The flooring also is offered in end-matched t&g strips. It is produced in Bangkok, Thailand, in a modern factory.—Bangkok Industries, Inc. (Item No. 5)

thin redwood paneling

To provide a low cost redwood paneling without sacrificing quality, Simpson has developed the La Honda line of thin panels which may be glued or nailed to walls. Panels have a smooth milled finish on one side and a resawn surface on the reverse so that either textured or smooth surface may be left exposed. They have been used in residences, offices and commercial buildings, including curved walls, on the West Coast. La Honada panels are ⅜-in. thick, precut to 8-ft. lengths with 4-, 6- and 8-in. widths. Tongue and groove joints speed installation.—Simpson Redwood Co. (Item No. 6)

home acoustical ceilings

To produce an acoustical ceiling specifically for the home and without trace of institutional or commercial look, Kaiser Gypsum turned to Emily Novak, San Francisco interior decorator-designer. The result consists of six distinctive designs in soft, pastel colors matched with a national paint line to blend in with any room decor. Sound absorption of the casually scattered pinhole-sized perforations of the Fir-Tex is up to 70%. Ceiling comes in all standard sizes with either a fir-lock joint for stapling or a butt joint for adhesion.—Kaiser Gypsum Co., Inc. (Item No.7)



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suspended ceiling

Infinilite, a translucent suspended ceiling, stretches from wall to wall without showing any supporting grid, seams, overlapping double edges or visible means of support. The lightweight, structural panels of polystyrene plastic are suspended on wires with adjustable clip hangers. Panels cut easily to fit any shape desired. Circular louver design incorporates a brightness control ring to throw the lower half of each cell into shadow. Estimated light transmission value is 80%. Sprinkling, heating and cooling systems can be introduced above the panel. Infinilite provides acoustical correction due to the circular louver configuration. Elimination of the need for T-bar grid work substantially reduces installation cost.—Integrated Ceilings, Inc. **(Item No. 8)**

brick discoloration preventive

To protect brick from staining and discoloration, Dow Corning has developed a dilute siliconate solution called Silaneal which is applied to the bricks as they come from the kiln. Drying to a colorless, odorless coating, the solution reduces the rate of initial water absorption which in turn reduces the amount of dirt carried into brick when water is absorbed and the amount of dissolved salts carried to the surface of brick when absorbed water evaporates. Treatment also aids in actual construction as the lower water absorption rate allows the mortar to stay plastic longer, assuring that proper hydration will take place.—Dow Corning Corp.

(Item No. 9)

embossed porcelain enamel

Adding to design possibilities with architectural porcelain enamel steel panels is an embossed line tradenamed Sculpturama. Panels are available in single colors or with the raised surface and background in different colors. Sizes are up to 40x60 in. A basic line of embossed shapes is now available and others are under development.—Davidson Enamel Products, Inc.

(Item No. 10)

colorful metal fence

To provide privacy and a more attractive appearance for chain link fencing, a California firm has developed a vinyl coated aluminum material which is installed rigidly between the conventional chain link construction. Tie-in slats woven diagonally at regular intervals further anchor the strips and permit colorful patterns. Called Colorweve, the strips are weatherproof and durable; come in five colors plus white. Material also supplies an added safety feature for swimming pool owners. It leaves no toehold for climbing-prone children.—Plastic Lume, Inc. **(Item No. 11)**

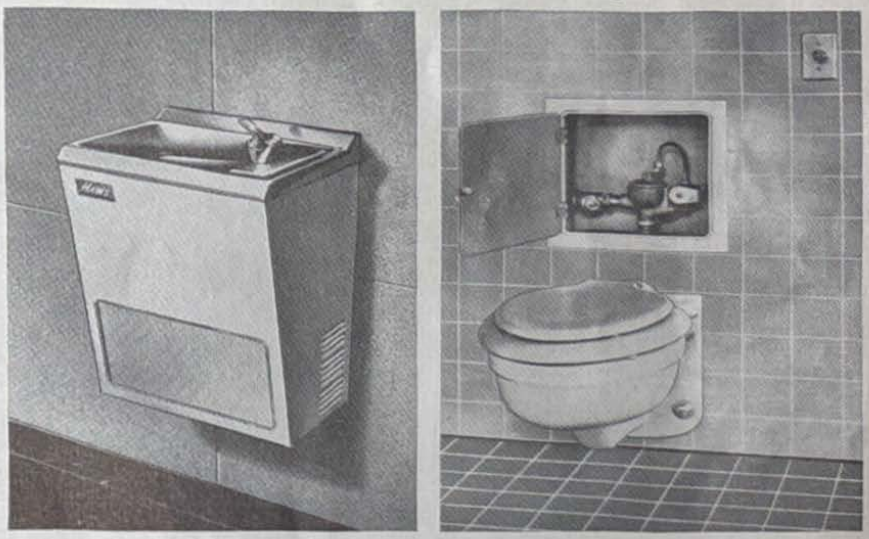
lightweight beam

For low cost apartment house construction where slab thicknesses generally do not exceed 6 in., this lightweight beam is expected to decrease material and labor costs in many applications. The L7-P9 weighs 100 lb., has a maximum allowable bending moment of 8,680 ft. per pound and allowable end reaction of 2,860 lb. It adjusts from 9 ft. 7 in. to 15 ft. 4 in. as a two-member girder or to 21 ft. 2 in. as a three-member girder. The beam is designed for 2-ft. to 2-ft. 8-in. center to center spacing with 5/8-in. or 3/4-in. plywood applied directly on girder for slabs up to 8 in. and at clear spans to 15 ft. 4 in., thus eliminating the use of stringers.—American Pecco Corp. **(Item No. 12)**

HAWS

BEST FOR NEW IDEAS

in water coolers . . . and flush valves



Haws Wall Mounted "Off the Floor" Water Coolers break with tradition to "clear the deck" for uncluttered maintenance ease. Crisp styling and the completely enclosed plumbing-electrical unit make this distinctive cooler a Haws "first"—in beauty *and* engineering!

Haws-Kramer Residential Flush Valve System utilizes the newly-developed Nyla-Phragm valve to reduce bathroom flushing noises and eliminate long, noisy tank refill. And here's another "first": out-of-sight H-K "Silent Service" operates with *conventional residential pipe sizes!*

Specify these new Haws items. See them in Sweet's Architectural File or write for complete Haws catalog—today!

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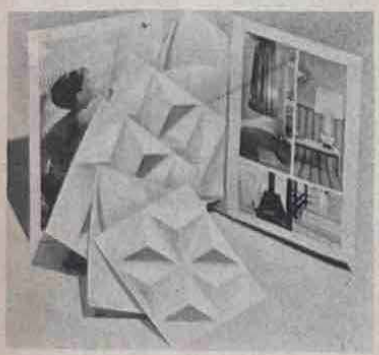
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EXPORT DEPARTMENT: 19 Columbus Avenue • San Francisco 11, California • U.S.A.



pa&b pick of the month

"Fire Safe Schools" is packed with basic rules and information for the designing or remodeling of buildings to forestall tragedy. Photographs are liberally used to illustrate points of the text in the 22-page publication. Prepared by the National Board of Fire Underwriters, it should prove a particularly valuable brochure for presentation to school boards. A companion publication, "Fire Safe Hotels," 25 pages, emphasizes similar rules in regard to unprotected vertical openings and other unsafe practices.—National Board of Fire Underwriters, 85 John St., New York 38, N. Y.



pa&b pick of the month

Pomona Tile has come up with a handy little package to help the architect and decorator check color schemes and overall installation layouts. The packet contains true-color, actual-size photo reproductions on glossy cardboard paper of nearly two dozen designs in decorative tiles. On the reverse side of each "photo tile" is the name of the design, other sizes, colors and glazes available.—Pomona Tile Manufacturing Co., 629 N. La Brea Ave., Los Angeles 36, Calif.

Sidewalk Canopies: introduces new 6-ft. wide frames for pedestrian safety during overhead construction; 4 pp.—The Patent Scaffolding Co., Inc., 38-21 12th St., Long Island City 1, N. Y.

Color Guide for Architectural Porcelain Enamel (AIA 15-M-1): includes swatches for 47 widely used colors; 4 pp.—Architectural Division, Porcelain Enamel Institute, 1145 19th St. N.W., Washington 6, D. C.

Building Construction and Maintenance Handbook: catalogs line of concrete floor treatments, admixtures, protective coating, etc., with weights and measures tables; 128 pp. — L. Sonneborn Sons, Inc., Building Products Division, 404 Fourth Ave., New York 16, N. Y.

Ceramic Veneer: introduces ⅜ in. thick 12x16-in. modules for interior and exterior facings; 6 pp.—The Robinson Brick and Tile Co., 400 S. Santa Fe Drive, Denver 23, Colo.

Bonds of Suretyship: outlines nature and functions of construction contract bonds and reproduces the bid, performance and payment bonds recently approved by the AIA as its official forms and the performance and payment bonds of the GSA; 44 pp.—Educational Department, Surety Association of America, 60 John St., New York 38, N. Y.

Insulation for Modern Roof Decks: lists advantages, gives design and performance data on a variety of systems, cost data and insurance ratings; 32 pp.—The Celotex Corp., 120 S. La Salle St., Chicago 3, Ill.

Reinforced Brick Masonry Details (AIA 5-F): contains information and typical details for common types of construction in California using reinforced grouted brick masonry; 16 pp.—Brick Institute of California, 553 S. Western Ave., Los Angeles 5, Calif.

Inlock Neoprene Structural Gasket (AIA 17-J): includes cross section and architectural drawing and installation photos of this setting member for curtain walls, ribbon windows and other installations; 28 pp.—Wm. A. Reynolds & Co., Inc., 4500 Euclid Ave., Cleveland 3, Ohio.

Kitchenmaid School Room Cabinets (AIA 35-C-12): catalogs line for domestic science, home economic classrooms and the like with typical classroom layouts; 18 pp.—School Room Cabinet Division, The Kitchen Maid Corp., Andrews, Ind.

Motels, Hotels and Restaurants: illustrates eye-catching uses of Weldwood paneling; 8 pp.—United States Plywood Corp., 55 W. 44th St., New York 36, N. Y.

Northern Hard Maple Flooring (AIA 19-E-9): gives latest grading rules for maple, beech and birch flooring, plus complete outline specifications and directions for installation; 8 pp.—Maple Flooring Manufacturers Association, 35 E. Wacker Drive, Chicago 1, Ill.

Construction Systems: illustrates in photos and drawings the functions of four systems — membrane fireproofing; Trussteel stud partition; 2-in. solid lath and plaster partition; and Brace-tite lathing system for suspended ceilings; in four booklets; 8 and 12 pp.— United States Gypsum Co., 300 W. Adams St., Chicago 6, Ill.

Architectural Letters and Tablets: catalogs line with data on finishes and recommended mounting procedures; 12 pp.—Oregon Brass Works, 1133 S.E. 10th Ave., Portland 14, Ore.

Marble and Granite Source Book: gives brief specifications, strength ratios and other information with color photos of many varieties in three-ring binder for addition of sheets to be published later; offered only to architects and specification writers; 21 pp.—Vermont Marble Co., Proctor, Vt.

Engineering Symbols: lists special symbols and equations available as interchangeable type heads inserted quickly and easily on electric typewriters; 12 pp.—Remington Rand, 315 Park Ave. S., New York 10, N.Y.

Installation of Aluminum and Steel Windows (AIA 16-E): offers detail drawings specifically picked for Pacific Coast application for frame, stucco, concrete block and brick; 4 pp.—Ceco Steel Products Corp., 1450 Mirasol St., Los Angeles 23, Calif.

Mosaic Medley Patterns (AIA 23-A): shows color reproductions of ceramic tile that are almost as good as seeing the real thing; also has handsome installation photos of both interiors and exteriors; 12 pp.—The Mosaic Tile Co., Zanesville, Ohio.

Aluminum Construction Manual. The Aluminum Association, 420 Lexington Ave., New York 17, N.Y. 1959. 392 pp. $3.

Prepared primarily as a reference work for architects and engineers concerned with stressed aluminum structures. Information includes computations of allowable loads for beams and columns of aluminum alloy 6061-T6, a widely used structural alloy; data on riveted and bolted connections; standard tolerances and other data on structural shapes; and material on nine alloys which fulfill most structural needs.

Noise Control in Buildings. Building Research Institute, 2101 Constitution Ave., Washington 25, D.C. 1959. 150 pp. $5.

Last January the BRI called a conference of architects, engineers, building contractors, acoustic experts and building scientists to discuss the increasing problems and possible solutions of noise in all types of buildings. Their experiences, opinions and suggestions for future research make up this book.

Metal Stairs. National Association of Architectural Metal Manufacturers, 280 N. LaSalle St., Chicago 1, Ill. 1959. 72 pp. $3. No charge to architects.

A comprehensive manual containing design data covering all component parts for circular, monumental and conventional stairs of all types in modern architectural metal with typical details, photographs and load tables.

Guide to Incandescent and Fluorescent Lamps for Commercial Applications. Westinghouse Electric Corp., Lamp Division, Box 388, Bloomfield, N.J. 1959. 5 cents.

Common lighting applications for various types of commercial establishments are listed along with suggestions for specific lamps and descriptions of the effects which can be expected. Also included is table of popular white fluorescent lamp colors and effect of each shade and reflectance values of 11 common wall and trim colors.

Primer of Lamps and Lighting. By Willard Allphin. Chilton Co., Book Division, 56th & Chestnut Sts., Philadelphia 39, Pa. 1959. 224 pp. $10.

Basic information on lamps and lighting layouts is presented in understandable style for the electrical contractor, foreman, building maintenance superintendent and the architect seeking up-to-date information on currently available lamps. A calculation slide rule in the back pocket cover simplifies application of the Lumen formula. Author is connected with illumination research at Sylvania Electric Products.

Packaged Firetube Boiler Ratings. American Boiler & Affiliated Industries, 15 Park Row, New York 38, N.Y. 1959. 19 pp. $1.

Written for consulting engineers, architects and governmental agencies interested in housing and construction, the publication discusses five general recommendations covering the sizing of boiler equipment for heating installations: 1) the hourly heat loss (Btu. per hour) of the given building; 2) the pickup factor; 3) the piping factor; 4) allowance for future expansion of building heating load; 5) allowance for any process steam loads, including hot water heaters.

Bar Placement Manual. Concrete Reinforcing Steel Institute, 38 S. Dearborn St., Chicago, Ill. 1959. 281 pp. $3.

Illustrated with photographs and detailed drawings, this pocket-size handbook contains detailed instructions on how and where to place reinforcing bars in concrete construction. Sections also cover welded wire fabric, descriptions of individual structural members and bar specifications.

Selected Reprints of Articles on Physics Buildings. American Institute of Physics, 335 E. 45th St., New York 17, N. Y. 1959. 183 pp. $2.

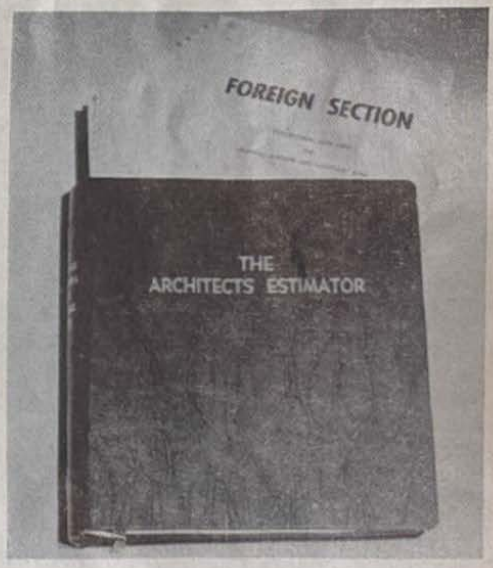
Compiled from a number of national magazines, this volume of reprints offers information on the latest ideas in planning and building facilities for physics instruction. Contents includes reprints of articles of nine physics buildings constructed between 1940 and 1957 on college campuses; four science buildings; seven special facilities like the nuclear studies laboratory at Cornell; and five articles on general planning. Book was published as a stopgap measure, to help those now designing such structures. It is part of a project on design of physics buildings being conducted by the American Association of Physics Teachers and the American Institute of Physics which will provide more comprehensive information when completed next year.

Predicting Daylight as Interior Illumination. Libbey-Owens-Ford Glass Co., 6-8 Madison Ave., Toledo 3, Ohio. 1959. 28 pp. 50 cents.

Offers an easy-to-use prediction technique to enable architects and illuminating engineers to evaluate interior daylighting while building plans are still on the drawing table. Method is



the result of a 10-year research study at Southern Methodist University in which more than 2,000 tests were conducted with an artificial sky after extensive surveys were made of daylight conditions and distribution throughout the U.S. Includes short review of terminology and fundamentals of daylighting and demonstration of the technique as applied to nine typical situations.



The Architect's Estimator. Edited by Jacques Ing Cramer Priest. Professional Publishing Company of Pasadena, Box 5205, Pasadena, Calif. 1959. 164 pp. $35.

Current edition contains a new section on foreign construction costs that will be of interest to builders engaged in or anticipating projects in Alaska, Greenland or Iceland. Hard cover ring binder makes it simple to insert periodic supplements and changes which are sent out during the year free of charge.

new offices, partnerships

Warren Gilbert has established his own practice of architecture in Santa Clara, with offices in the Cedar Tree Shopping Center, Prune Ridge Avenue. Associated with the building-development firm of Gilbert & Mitchell since 1955, he earlier was a supervising architect in Pennsylvania for six years.

Peter M. A. Moyes and Roger Merrill Van Frank have formed an architectural partnership with offices at 336 S. Third East, Salt Lake City.

E. W. F. Peterson has opened a consulting engineering office at 9635 W. Colfax Ave., Lakewood, Colo.

new addresses

Walker, McGough & Trogdon, architects, to N. 9 Post St., Spokane.

Duncan & Conroy, Paul J. Duncan, architect, to 13605 Ventura Blvd., Sherman Oaks, Calif.

Pierre Lafond, architect, to 1101 Alston Road, Santa Barbara, Calif.

Harold Johnson, architect to 6175 York Blvd., Los Angeles.

Warren C. T. Wong, architects, engineers, to 414 E. Fremont St., Stockton, Calif.

William E. Ricker, architect, to 847 Arbrego St., Monterey, Calif.

Furukawa & Yamasaki Associates, architects, to 1420 W. Redondo Beach Blvd., Gardena, Calif.

Duffy & Dreher, architects, to 2631 Atlantic Ave., Long Beach, Calif.

William L. Rudolph & Associates to 131 N. Hudson Ave., Pasadena.

Southern California craftsmen, draftsmen honored by architects

The 1959 Craftsmanship Awards, instituted by the Southern California Chapter, AIA, six years ago, were presented December 8 at the Sportman's Lodge in the San Fernando Valley. In addition, the chapter introduced Draftsmanship Awards at this dinner meeting because "good draftsmanship in the way an architect communicates his ideas."

Two top honors—Awards of Merit—went to the Roger Darricarrere Studio for the stained glass in the Good Shepherd Lutheran Church and to Bernard Rosenthal for his sculpture on the IBM Western Headquarters Building, both Los Angeles projects.

Certificates of Craftsmanship went to Tom Van Sant for his mosaic in natural colored stone for the American Pipe & Construction Co. Building, South Gate; to Perli Pelzig for his mosaic panel on Temple Emanuel, Los Angeles; to Scandanavian Arts Metals Co. for metalwork on the fireplaces in the Alex Gottlieb Residence, Beverly Hills; and to Standard Cabinet Works, Inc., for metalwork on the screen in the Gibraltar Savings & Loan Building, Los Angeles.

Certificates of Draftsmanship were presented to Tom Woo of Smith, Powell & Morgridge; to Robert Edmiston of the office of H. L. Gogerty; and to George Nelson of Welton Becket & Associates.

The jury consisted of Carl Maston, Craftsmanship Awards program chairman, Allen Siple and Don Hensman, who visited all of the jobs which chapter architects had nominated.



TOP HONORS in Craftsmanship Awards go to Roger Darricarrere (left) and Bernard Rosenthal (right) shown with President Maynard Lyndon.



DRAFTSMANSHIP AWARD WINNERS Robert Edmiston, Tom Woo and George Nelson hold certificates as Carl Maston, architect in charge of program, looks on.

firm changes

Woo & Jackson, Seattle architects, have added a third partner, Donald M. Edwards, practicing under the name of Woo, Jackson & Edwards.

appointments, elections

Lewis Crutcher has been retained as staff architect by Downtown Portland, Inc., a group organized to unite all segments of the business and financial community to speak for that area. A former faculty member of the University of Oregon, Crutcher recently opened his own architectural office in Portland.

Albert C. Martin Jr., Los Angeles architect, has been named one of three co-chairman for the first Industrial Building Exposition and Congress, scheduled for December 12-15, 1960, at the New York Coliseum. Three other West Coast architects are on the sponsoring committee: Welton Becket and George Vernon Russell, both of Los Angeles, and John S. Bolles of San Francisco.

Dayton N. Holloway has been named manager of the newly organized architectural division of E. D. McCarthy & Associates, Spokane realty firm. He received his degree from Washington State University and has worked in the architectural firms of Eddy, Carlson & James and Culler, Gale, Martell & Norrie.

Omer J. De Bever, formerly chief electrical engineer for Charles Luckman Associates, has established a consulting electrical engineering office at 2372 Rowena Ave., Los Angeles, to be known as Omer J. De Bever & Associates.

Two civil engineers — James A. Willis and Arthur C. Beard—have been appointed to the staff of the Portland Cement Association, working under the direction of the Los Angeles district office. Willis is the new representative in San Diego and Imperial counties; Beard in the city of Long Beach and Orange County.

Fred Rochlin of Los Angeles has been named to the California State Board of Landscape Architects.

miscellany

Clifford Young, Honolulu architect, addressed the annual convention of the Furniture Manufacturers Association held at the Hawaiian Village Hotel in November. He underlined a

feeling among many prominent architects: "Why should we live like everyone else when our climate and relaxed spirit of living is completely different from anywhere else in the world?"

Edward Fickett of Los Angeles, chairman of the AIA's committee on the home building industry, participated in the first joint "Design Clinic" sponsored by the Institute and the NAHB at the University of Florida early in November. Its objectives: to further the home builders' appreciation of design and to give architects an opportunity to consider the home builders' problems of costs.

Representing the West at an invitational architectural conference on "New Schools for New Education" at the University of Michigan in October were John Lyon Reid of San Francisco and Philip J. Daniel of Los Angeles.

The firm of Welton Becket & Associates will award an annual working fellowship to a Japanese architect, the recipient to join the Los Angeles home office design staff for a one-year period. Initial winner is Masami Tanaka, designer in the office of Kameki Tsuchiura, Tokyo architect.

Architect Gordon W. Bradley is writing a question and answer column entitled "Your Home" for the Sunday Advertiser, Honolulu newspaper. Among the questions presented by readers: compare the cost of flooring; why choose an AIA architect?

Gordon W. Fuller has made available a construction inspection service to architects and owners in the Denver area, to be known as Fuller's Construction Inspection Service, 1003 Adams St.

Orange County AIA hears artist discuss leisure

Creative use of leisure time was the problem presented to members of the Orange County Chapter, AIA, by Esther Dendel, artist, writer, lecturer and traveler, during its December 10 dinner meeting at the Hurley Bell restaurant in Corona Del Mar.

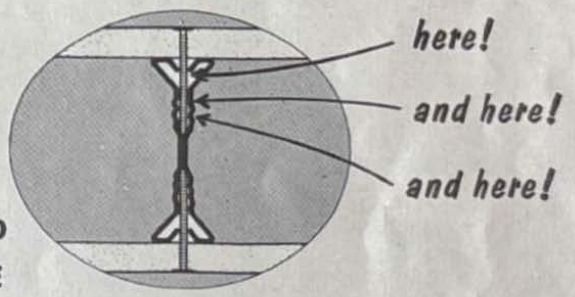
Artist Dendel noted that more and more leisure time will be made available to people who are not equipped to handle or use it. She quoted economists, sociologists and authors who have studied this problem and likened the near future with the fall of the Roman Empire which she attributed in part to the poor use of leisure time by a highly developed culture. She called on the architects to help encourage the layman in an interest in the arts saying that "art is not sacred but the province of every human being."

Architects will not have to worry about having too much leisure, the artist prophesied, saying that more and more people will want architect designed homes in order to seek a higher status within their society and one home will not be enough for some status seekers who will want two architect designed homes to elevate their position in the community.

AIA board meets in Portland

National AIA directors, their wives and Octagon staff members were guests of the Oregon Chapter November 9-13 for their fall meeting, with sessions held in the new Sheraton-Portland Hotel. Entertainment included a reception and dinner at the Benson Hotel, a tour of the Columbia Gorge and a luncheon hosted by Reynolds Aluminum Co. En route home, Octagon staff members met with committees for the 1960 national convention in San Francisco.

DRYCO
NAILABLE SYSTEM
(non-bearing)
STEEL STUDDING • TRACKS • SPACERS • FASTENERS



PATENTED MULTIPLE GRIP ... *Minimizes "Nail Pops"*
Secure steel fastening . . . no welding

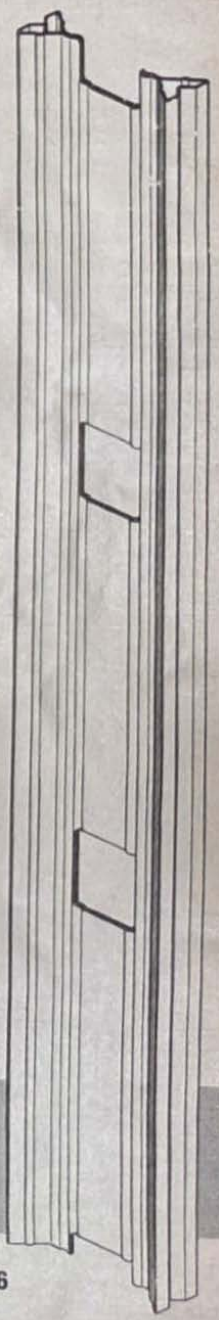
Roll formed steel studs form partitions with uniform straight line surfaces.

Dryco System is economical . . .
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- No waiting . . . manufactured in Southern California.

Construction Proven . . . used in many of the Southland's noted structures.

Laboratory Tested...for nail pull-out, vibration, deflection, fire resistance.

(SEND FOR OUR 8-PAGE BROCHURE)



WESTERN STATES A-E-C CATALOG FILE
DRYCO, INC.
NAILABLE SYSTEMS dryco

manufactured by Atlas Steel Stud Co., Inc.
2122 E. FLORENCE AVE., HUNTINGTON PARK, CALIF. • LUdlow 5-2186

• **Capitol Products Corp.** has appointed Seaboard Glass Corp. of Long Beach, Calif., as southern California distributor for its line of sliding single and double windows.

• **Ajax Hardware Corp.** has started construction of a plant in the new City of Industry area, 20 miles east of Los Angeles. Completion of the plant, which will house all manufacturing and warehousing facilities and administrative offices, is scheduled for December.

• **United States Gypsum Co.** is building a 50,000-sq. ft. warehouse on an eight-acre site in Fremont, Calif., to serve the San Francisco-Oakland area.

• **Kaiser Aluminum & Chemical Sales, Inc.,** has appointed Custom Rolled Corrugated Metals Co. of Albany, Calif., as distributor for industrial siding and roofing in north and central California.

• **Monsanto Chemical Co.,** plastics division, has appointed David M. Williamson, former assistant director of manufacturing, to the newly created post of director of manufacturing for the West Coast. Roland H. Dunlop has been named plant manager at Santa Clara, Calif., and John F. Fincke will be in charge of the laboratories there.

• **The Trane Co.** has promoted Charles E. Warren from salesman to manager of the Salt Lake City office.

• **Utility Appliance Corp.** has moved into a new, $500,000 headquarters building in Los Angeles. All executive and sales personnel for the parent firm, its Gaffers & Sattler product divisions, and the Mission Appliance Corp. subsidiary will be housed in the new building.

• **Goodyear Tire & Rubber Co.** has transferred William T. Delcour from Buffalo, N.Y., to Denver where he will be manager of the industrial products district office. He succeeds J. L. Reid, who has resigned. R. J. Thomas has been transferred from Akron to the Seattle sales staff of the films and flooring division.

• **A. O. Smith Corp.** has begun production of Permaglas water heaters at new West Coast facilities in Newark, 18 miles south of Oakland. The 250,000-sq. ft. plant was extensively remodeled following its purchase recently by Smith.

• **Van-Evan Co.** is building a $2½ million plant in Missoula, Mont., initially for the manufacture of larch, ponderosa pine and Douglas fir plywood. Other wood products may be produced later. Partners in the venture are Evans Products Co. of Plymouth, Mich., and Vancouver Plywood Co. of Vancouver, Wash. Frost Snyder, head of the Vancouver firm, will be president of Van-Evan; Edward S. Evans Jr., president of Evans, will be executive vice president.

• **Ekco Products Co.** will acquire all outstanding stock of Washington Steel Products Co. of Tacoma, subject to stockholder approval. Washington manufactures builders' hardware for distribution in Washington and Oregon. Ekco, a Chicago firm, is engaged in the builders' hardware field through its subsidiary, Kennatrack Corp.

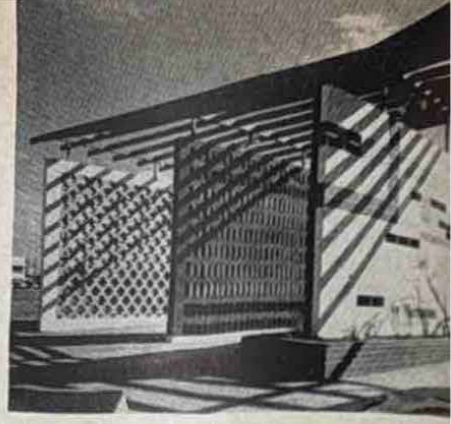
• **Perfection Industries** has named several wholesale distributors for its furnace, air conditioning and heat pump products. They are Appliance Distributors, Tucson, with a branch in Phoenix; Temperature Supply Co., Billings; Thompson & Holmes, Ltd., San Francisco; and Payne Manufacturing Co., a division of Thompson & Holmes, North Sacramento.

• **Bemis Manufacturing Co.** has assigned the territory of Arizona and New Mexico to Joel C. Edison Co. of Phoenix.

• **Pawling Rubber Corp.** has licensed the Griffith Rubber Mills of Portland to produce construction and consumer rubber products for distribution in the 17 western states. Pawling products to be manufactured and marketed by Griffith include curtain wall extrusions and Parco-Link entrance mats.

• **Weyerhaeuser Co.** announced two new panel products distributors for the Silvatek Division, Neiman-Reed Lumber Co., Inc., Van Nuys, Calif., and Goldenberg Plywood & Lumber Co., Inc., Los Angeles.

• **Western Engineering and Manufacturing Co.** of Venice, Calif., has appointed three factory representatives on the West Coast for the firm's roof ventilator line: Foster-Bray Co., Inc., Seattle; George D. Montag, Portland; and General Equipment Co., Spokane.



DISPLAY CENTER

has been opened by Robinson Brick and Tile Co., at 400 S. Santa Fe Drive in Denver, where architects, contractors and clients may browse among large panels of firm's products. Design by Gene Kramer incorporates open air roof and pillared supports of brick and tile. Parking facilities are available and center, which doubles as Colorado sales office, is lighted at night. Robco has 80th anniversary in 1960.

• **Keuffel & Esser Co.** has established Keuffel & Esser of Colorado, Inc., a subsidiary branch in Denver. John Harvey has been appointed branch manager. The company's products formerly were distributed by Kendrick Bellamy Co. in Denver. The new firm will be at the same address.

• **Washington Steel Products** has promoted James C. Picha to the post of general sales manager. He succeeds Lowell L. O'Connor. Picha has been serving as general plant superintendent and import manager.

• **Zolatone Process Inc.** has named Terry Leal as paint sales representative with headquarters at the San Francisco factory office and warehouse.

• **King Anodizing** of Burbank, Calif., has appointed Frank Conway as sales manager. He formerly was a construction representative for Reynolds Metals Co.

• **Bethlehem Steel Co.** has named John G. White, district sales manager in Seattle the past three years, as assistant general manager of sales for the Pacific Coast Division. He will move to San Francisco where he first started to work with the firm in 1939. J. L. Humphrey, manager of industrial fastener sales for the division, will succeed White in Seattle.

• **Dow Chemical Co.** plans to construct a phenol plant costing several million dollars in the Pacific Northwest this year. Site has not yet been selected.

ASSOCIATIONS

• **National Hardboard Association** has elected F. M. (Tom) Hughes as president. He is general manager of Forest Fiber Products Co. of Forest Grove, Ore.

• **National Lumber Manufacturers Association** has appointed Neal I. Pinson as assistant regional manager of building code services in the San Francisco office. Pinson has served with Timber Structures, Inc., and Summerbell Roof Structures, Inc.

• **Gypsum Drywall Contractors of California** have elected Edward J. Fliegle of Stanton as president. Other new officers are R. C. Powell, Sacramento, vice president; Joseph M. Marshall, Van Nuys, secretary; and E. C. Larson, San Francisco, treasurer.

• **Red Cedar Shingle Bureau** annual meeting was held early in December in Seattle with Norman English, Northwest Cedar Products, Ltd., of Vancouver, B. C., elected president. R. H. Farrington, Super Mill Co., Everett, Wash., was reelected vice president; and Virgil G. Peterson, was named to continue as secretary-manager. The new board of trustees include the following representatives for Washington and Oregon: John Anderson, Olympic Stained Products Co., Seattle; Frank S. Barker, Shakertown Corp., Winlock, Wash.; Dale Craft, Willapa Cedar Sales Co., Raymond, Wash.; R. D. Mackie, Mackie Mill Co., Aberdeen, Wash.; J. A. McCrory, Seattle Cedar Lumber Manufacturing Co.; Seattle; Paul R. Smith, M. R. Smith Shingle Co., Seattle; Walter Huntington, Huntington Shingle Co., Springfield, Ore.; and Mel Lester, Lester Shingle Co., Sweet Home, Ore.

• **Producers' Council, Inc.,** recently reelected its entire slate of national officers for a second term, including Henry E. North Jr. of Arcadia Metal Products, Fullerton, Calif., second vice president. Others are H. Dorn Steward, Barrett Division, Allied Chemical Corp., president; Elmer A. Lundberg, Pittsburgh Plate Glass Co., first vice president; T. D. Wakefield, The Wakefield Co., secretary; and H. L. Cramer, Westinghouse Electric Corp., treasurer.

• **Structural Clay Products Institute** reports that Ralph Yoder, former Pacific Northwest representative, is editing a news letter for the Arizona Masonry Guild at Phoenix while attending Arizona State College at Tempe.

pacific architect & builder

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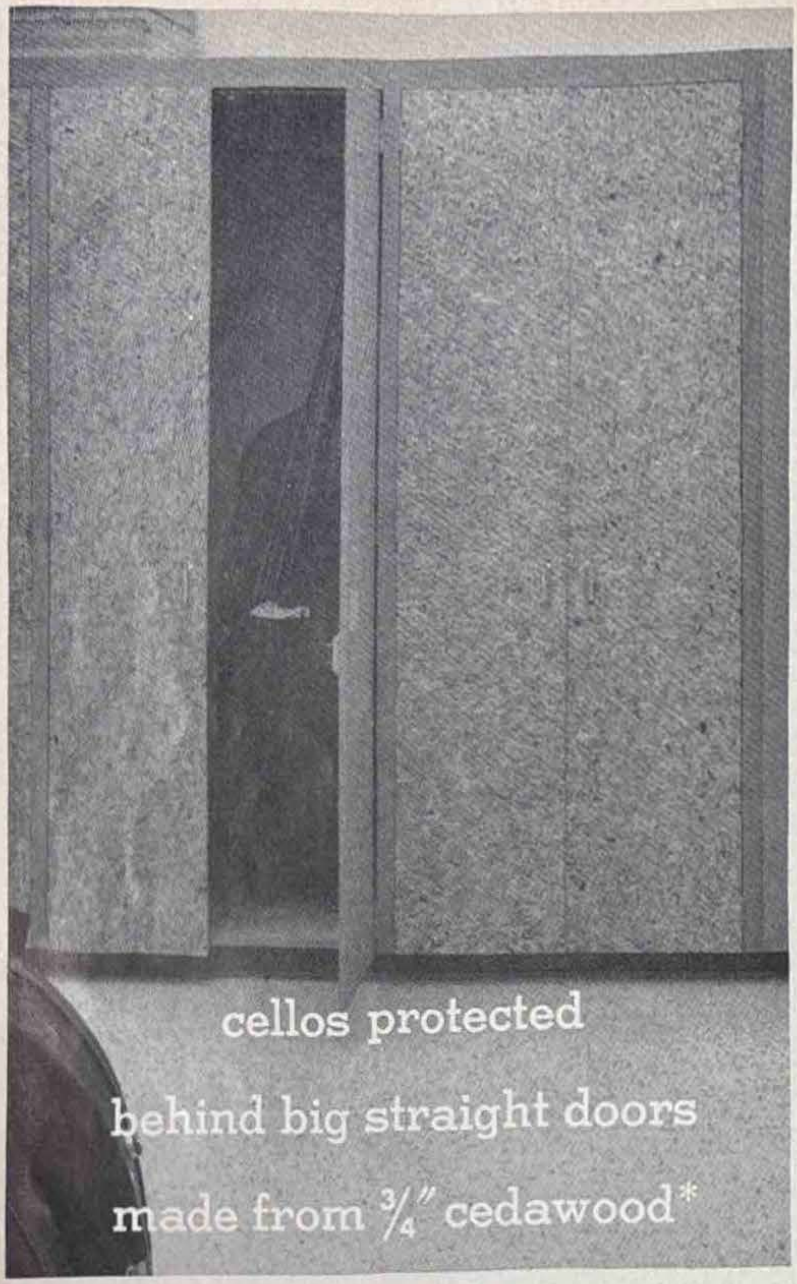
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Our February issue will present a variety of projects located in four different states: California, Oregon, Washington and Colorado. They will include a juvenile institution, an elementary school, a factory, an office building, a retail store and a ski lodge (rescheduled from January). We'll have a roundup of some new methods and interesting applications of materials in the 13-state West.

more frequent huddles

Members of the Washington State Chapter, AIA, and the Structural Engineers Association of Washington broke bread together in November, the first of what is to become an annual affair. In some other states, notably California, this sort of rapport has been going on for quite a spell and it's good to know that the idea is spreading elsewhere. T. Y. Lin, who gave the Seattle audience a fine talk on prestressed concrete, encouraging "freedom of thinking," also suggested "more frequent huddles" on the part of both professions.

why don't the english?

An editor's mail doesn't bring a chuckle very often but a memorandum from the local field office of the U.S. Department of Commerce produced a good belly laugh the other day. The subject: "Ruly English," an unambiguous language.

"You are all familiar with the oft-encountered problem of ambiguity of our English words," the memo began, "such as the difference between the spoken words 'unlawful' and 'illegal'—unlawful meaning against the law, the other meaning a sick bird.

"Well, the Patent Office has done something about it, partly because uniform and unambiguous terminology is necessary in developing systems for 'mechanized information retrieval and mechanical translation.'"

What the Patent Office has done is to issue a report entitled "Analysis of Prepositionals for Interrelation Concepts—Preliminary Study." For example, the word "around" specifies a relationship. In the expression "traveling around the world," it has a meaning close to circuit-around; in "getting around a difficulty," it has a meaning like avoid-around; while in "dangerous intersections around the city," it has the meaning of scattered-around. Any questions? R.E.K.

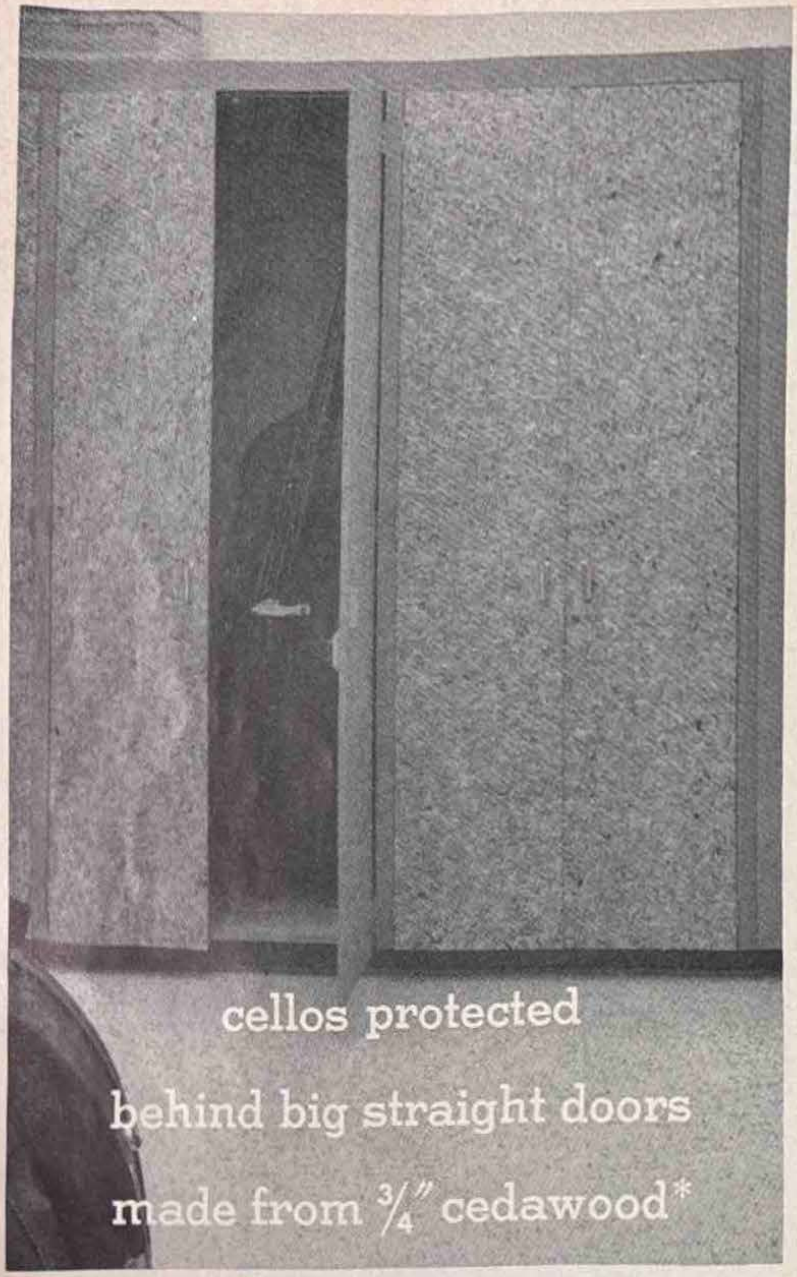
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FEBRUARY 1960





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pacific architect & builder

february 1960

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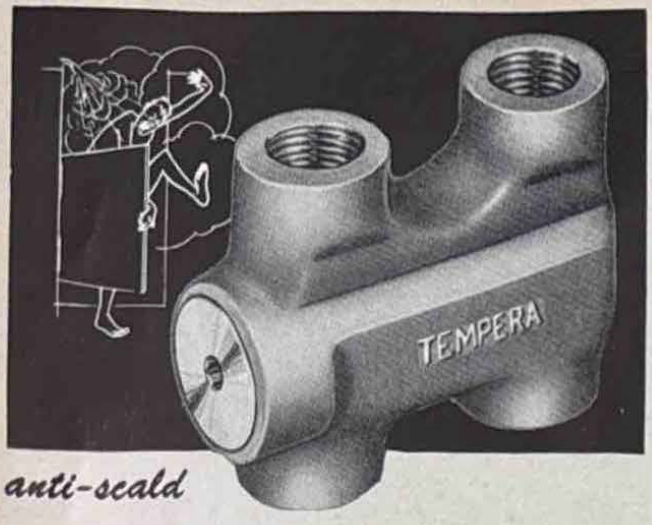
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COVER: Crown Zellerbach Building, San Francisco (p. 22)—Hertzka & Knowles and Skidmore, Owings & Merrill, Associated Architects; Karl H. Riek photo.



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AND PLEASANT BATHING FOR THE BEST OF YOUR LIFE . . .

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You'll step from your shower convinced that Tempera is the answer to a SAFE, COMFORTABLE, bath—free from accidental scalding, painful burns, or uncomfortable chills!

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$206 million increase for six months

Dollar volume of building permits reported by 155 key agencies in the 13 western states totals $1,856,320,995 for the last six months of 1959. This is an increase of $206.3 million over the July-December period in 1958 for the area. While a good chunk of it, $115.5 million, represents California alone, the general upward trend is fairly widespread. Other states with dollar volume of increase for the six-month period are Arizona, $34.8 million; Hawaii, $26.2 million; Oregon, $11.3 million; New Mexico, $10.8 million; Utah, $9.6 million; Alaska, $6.3 million; Montana $5.7 million; Nevada, $4.4 million; and Wyoming, $3.4 million.

Three states record decreases for the period. Colorado has dropped $15.2 million; Washington, $5.7 million; and Idaho, $1.1 million. (For a complete tabulation see p. 6.)

Top 15 agencies

The following tabulation lists the top 15 agencies for the six months. Not unexpectedly, Los Angeles leads the list. Seven other agencies are in California, two each in Washington and Arizona and one each in New Mexico, Hawaii and Colorado. Maricopa County, Ariz., probably would rate much higher, but building permit activities have been suspended there as of November 25 due to a Supreme Court decision declaring its zoning ordinance invalid. A new one becomes effective February 25.

	July-Dec. 1959	July-Dec. 1958
1. Los Angeles	$310,213,516	$255,873,995
2. Los Angeles County	122,578,049	121,562,909
3. San Diego	94,633,003	75,571,276
4. San Diego County	70,425,100	43,898,600
5. Honolulu	66,481,859	42,131,772
6. Sacramento County	64,406,158	62,880,155
7. San Jose	59,487,642	60,269,637
8. San Francisco	56,194,310	38,508,255
9. King County	53,312,755	51,267,935
10. Seattle	49,114,711	60,640,349
11. Phoenix	48,441,504	29,063,350
12. Denver	44,913,445	60,304,875
13. Maricopa County	44,895,827	45,034,887
14. Albuquerque	33,386,026	30,828,464
15. San Bernardino County	31,824,968	33,821,461

December gains $40.5 million

Dollar volume for the month of December totals $272,207,089, an increase of $40.5 million over the same period in 1958. Most of the states report increases, ranging from $28,000 in Alaska to $18.6 million in California. Other states with increases over the previous December are Arizona, $12.1 million; New Mexico, $6.8 million; Hawaii, $4.6 million; Utah, $2.3 million; Oregon, $1.5 million; Wyoming, $866,000; Montana, $770,000; and Nevada, $379,000.

Analysis of typical areas—December

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$11,422,558	$3,689,077	*$1,906,296
Orange County	3,879,170	356,120	160,000
Sacramento County	6,897,916	1,140,928	258,772
Las Vegas	779,822	287,750	.....
Denver	1,511,675	875,270	45,000
Portland	1,569,510	416,030	.....
Seattle	2,390,592	2,443,300	.....
King County	3,745,267	1,209,450	505,000
Honolulu	6,863,607	2,576,910	1,265,961

*Does not include $664,700 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for December

CALIFORNIA	Dec. 1959	Dec. 1958
Alameda County	$ 1,046,000	$ 1,047,900
Anaheim	6,284,348	3,889,495
Bakersfield	1,409,778	1,152,100
Burbank	772,944	719,057
Contra Costa County	2,011,883	2,507,669
Fresno	1,918,142	4,805,401
Fullerton	467,193	1,779,540
Glendale	1,753,728	2,078,442
Inglewood	1,138,998	1,343,885
Long Beach	4,086,170	5,574,355
Los Angeles	42,703,522	30,901,815
Los Angeles County	17,561,369	19,968,009
Oakland	2,823,638	5,812,906
Ontario	257,314	549,008
Orange County	4,622,075	3,172,169
Palo Alto	912,794	1,803,623
Pasadena	1,862,695	2,335,316
Pomona	1,565,165	1,316,682
Richmond	471,169	610,099
Riverside	1,188,199	900,315
Sacramento	4,156,984	2,666,223
Sacramento County	8,411,945	12,818,523
San Bernardino	2,204,248	1,109,720
San Bernardino County	5,088,012	6,489,040
San Diego	15,961,420	11,324,914
San Diego County	10,771,700	7,881,600
San Francisco	17,049,432	6,097,824
San Jose	7,432,069	6,819,669
San Mateo	612,221	760,009
San Mateo County	1,253,759	1,030,552
Santa Ana	1,245,223	590,532
Santa Monica	2,062,224	2,123,239
Stockton	725,012	979,644
Sunnyvale	1,733,722	1,029,025
Torrance	1,717,024	1,849,554
West Covina	610,691	666,646
TOTAL	**$175,167,798**	**$156,504,500**

OREGON	Dec. 1959	Dec. 1958
Albany	$ 97,830	$ 456,900
Astoria	6,119	16,642
Baker	95,775	96,525
Bend	116,725	100,195
Coos Bay	349,760	68,224
Corvallis	187,640	450,525
Eugene	589,625	341,172
Grants Pass	53,200	86,450
Gresham	40,000	17,300
Hillsboro	95,300	43,557
Klamath Falls	33,282	50,821
LaGrande	20,625	37,480
Lane County	601,351	597,396
Medford	697,203	238,661
Multnomah County	2,253,915	1,533,930
North Bend	221,378	57,778
Oregon City	46,640	285,599
Portland	4,562,980	3,700,100
Roseburg	172,116	51,600
Salem	274,120	465,890
Springfield	33,516	209,429
The Dalles	55,575	118,478
TOTAL	**$ 10,600,720**	**$ 9,024,662**

WASHINGTON	Dec. 1959	Dec. 1958
Aberdeen	$ 16,825	$ 40,586
Anacortes	31,283	142,700
Auburn	455,600	133,660
Bellingham	870,950	149,768
Bremerton	81,075	226,240
Centralia	63,227	48,851
Chehalis	96,906	2,079
Ellensburg	32,630	7,428
Ephrata	300	1,800
Everett	114,888	1,505,130
Kelso	223,300	4,000
Kennewick	35,810	101,840
King County	5,596,538	7,050,075
Kirkland	167,200	84,600
Longview	230,200	1,422,572
Moses Lake	9,175	28,534
Olympia	70,750	115,443
Pasco	15,120	368,220
Pierce County	931,120	1,360,523
Port Angeles	41,750	3,700
Puyallup	84,700	272,850
Seattle	4,913,742	5,224,758
Spokane	3,729,896	2,140,698
Spokane County	637,623	1,095,178
Tacoma	1,610,402	1,103,965
Vancouver	1,052,292	309,587
Walla Walla	90,325	25,300
Wenatchee	51,950	66,789
Yakima	513,836	175,945
TOTAL	**$ 21,769,413**	**$ 23,163,968**

ALASKA	Dec. 1959	Dec. 1958
Anchorage	$ 83,385	$ 239,782
Fairbanks	46,000	20,600
Juneau	192,125	1,500
Ketchikan	3,000	34,500
TOTAL	**$ 324,510**	**$ 296,382**

IDAHO	Dec. 1959	Dec. 1958
Boise	$ 664,714	$ 217,713
Caldwell	66,575	56,865
Coeur d'Alene	51,225	105,296
Idaho Falls	422,732	139,650
Jerome	19,100	31,550
Lewiston	104,548	824,564
Nampa	21,750	70,710
Payette	24,525	27,875
Pocatello	234,950	104,360
Sandpoint	Nil	6,000
St. Maries	1,500	15,000
Twin Falls	181,350	251,050
TOTAL	**$ 1,792,969**	**$ 1,850,633**

MONTANA	Dec. 1959	Dec. 1958
Billings	$ 321,400	$ 129,000
Bozeman	62,500	121,000
Butte	Nil	46,822
Glasgow	450,400	130,000
Glendive	4,290	6,400
Great Falls	388,282	547,815
Helena	548,215	79,000
Kalispell	5,960	24,300
Lewistown	16,000	22,500
Livingston	34,800	1,000
Miles City	38,600	59,275
Missoula	102,900	35,700
TOTAL	**$ 1,972,947**	**$ 1,202,912**

WYOMING	Dec. 1959	Dec. 1958
Casper	$ 901,485	$ 322,550
Cheyenne	569,718	300,214
Sheridan	50,095	32,357
TOTAL	**$ 1,521,298**	**$ 655,121**

COLORADO	Dec. 1959	Dec. 1958
Aurora	$ 282,552	$ 979,204
Boulder	538,120	3,492,356
Denver	4,797,745	7,355,530
Englewood	100,987	175,057
Fort Collins	444,650	268,300
Grand Junction	80,628	103,800
Greeley	273,787	173,249
Pueblo	343,842	468,950
Trinidad	9,789	22,328
TOTAL	**$ 6,872,100**	**$ 13,038,774**

UTAH	Dec. 1959	Dec. 1958
Logan	$ 113,800	$ 210,700
Murray	63,900	95,573
Ogden	999,000	671,700
Provo	200,900	332,500
Salt Lake City	3,168,172	859,406
TOTAL	**$ 4,545,772**	**$ 2,169,879**

NEVADA	Dec. 1959	Dec. 1958
Elko	$	$
Las Vegas	1,080,022	1,228,361
Reno	1,421,422	1,131,498
Sparks	410,621	172,219
TOTAL	**$ 2,912,065**	**$ 2,532,078**

ARIZONA	Dec. 1959	Dec. 1958
Douglas	$ 300,420	$ 175,355
Flagstaff	96,958	76,290
Glendale	535,327	136,554
Maricopa County		
Mesa	1,194,208	1,325,377
Phoenix	12,188,121	3,511,527
Tucson	5,473,681	1,387,300
Yuma	89,195	76,450
TOTAL	**$ 18,877,910**	**$ 6,688,853**

NEW MEXICO	Dec. 1959	Dec. 1958
Albuquerque	$ 10,727,352	$ 5,267,993
Carlsbad	143,818	113,250
Clovis	372,672	1,629
Gallup	83,978	113,590
Hobbs	358,834	436,600
Las Cruces	460,000	509,000
Roswell	578,565	610,902
Santa Fe	1,286,319	108,778
TOTAL	**$ 14,011,538**	**$ 7,161,742**

HAWAII	Dec. 1959	Dec. 1958
Hawaii County	$ 363,504	$ 617,150
Honolulu (city-county)	10,878,702	6,644,053
Maui County	786,968	99,038
TOTAL	**$ 12,029,174**	**$ 7,360,241**
GRAND TOTAL	**$272,207,089**	**$231,648,245**

Building Permit Totals for 155 Western Agencies for July-December 1959

CALIFORNIA	July-Dec. 1959	July-Dec. 1958
Alameda County	$ 6,517,375	$ 8,402,125
Anaheim	27,329,809	22,818,857
Bakersfield	5,365,726	6,017,635
Burbank	4,998,921	5,768,553
Contra Costa County	24,799,579	18,808,109
Fresno	11,029,262	11,274,932
Fullerton	8,603,449	9,899,575
Glendale	9,042,936	11,858,364
Inglewood	4,779,428	5,304,291
Long Beach	21,565,860	41,940,085
Los Angeles	310,213,516	255,873,995
Los Angeles County	122,578,049	121,562,909
Oakland	22,400,990	25,440,164
Ontario	3,544,928	3,653,830
Orange County	30,558,830	26,843,560
Palo Alto	12,642,255	7,368,325
Pasadena	11,148,095	10,288,533
Pomona	6,499,660	5,015,586
Richmond	4,529,385	4,082,181
Riverside	7,451,988	10,997,149
Sacramento	24,349,197	20,266,369
Sacramento County	64,406,158	62,880,155
San Bernardino	9,518,557	8,600,576
San Bernardino County	31,824,968	33,821,461
San Diego	94,633,003	75,571,276
San Diego County	70,425,100	43,898,600
San Francisco	56,194,310	38,508,253
San Jose	59,487,642	60,269,637
San Mateo	11,282,107	6,733,061
San Mateo County	8,595,708	11,609,089
Santa Ana	15,920,647	10,026,931
Santa Monica	7,673,553	8,880,617
Stockton	6,641,456	6,815,743
Sunnyvale	10,883,564	17,333,974
Torrance	14,959,507	9,175,331
West Covina	6,872,130	6,128,411
TOTAL	**$1,149,331,648**	**$1,033,738,844**

OREGON	July-Dec. 1959	July-Dec. 1958
Albany	$ 1,069,684	$ 1,382,600
Astoria	115,381	141,199
Baker	892,635	577,775
Bend	604,524	568,270
Coos Bay	991,218	570,755
Corvallis	2,977,133	2,328,825
Eugene	4,201,157	3,144,807
Grants Pass	563,010	660,580
Gresham	461,850	288,445
Hillsboro	2,073,495	439,740
Klamath Falls	1,109,717	836,391
La Grande	872,082	445,907
Lane County	7,068,886	4,977,118
Medford	7,364,310	2,931,672
Multnomah County	20,209,917	19,433,247
North Bend	750,753	509,558
Oregon City	584,230	547,232
Portland	24,883,025	30,013,285
Roseburg	2,111,206	482,782
Salem	5,781,026	2,943,923
Springfield	929,330	853,010
The Dalles	349,494	539,371
TOTAL	**$ 85,974,063**	**$ 74,616,492**

WASHINGTON	July-Dec. 1959	July-Dec. 1958
Aberdeen	$ 471,142	$ 1,577,540
Anacortes	302,229	914,072
Auburn	1,122,850	1,556,773
Bellingham	2,556,738	3,027,783
Bremerton	1,818,065	995,055
Centralia	464,556	404,247
Chehalis	492,398	142,076
Ellensburg	241,007	312,645
Ephrata	393,107	157,838
Everett	1,317,609	4,095,710
Kelso	906,050	472,000
Kennewick	1,164,570	594,476
King County	53,312,755	51,267,935
Kirkland	624,125	417,826
Longview	1,766,186	2,492,217
Moses Lake	590,101	719,031
Olympia	2,459,179	953,021
Pasco	948,385	988,506
Pierce County	9,618,848	9,711,509
Port Angeles	319,725	255,325
Puyallup	702,175	986,240
Seattle	49,114,711	60,640,349
Spokane	11,592,680	11,358,445
Spokane County	9,562,054	9,614,203
Tacoma	12,243,288	7,641,724
Vancouver	3,910,261	2,732,550
Walla Walla	946,768	1,568,566
Wenatchee	1,190,745	1,735,422
Yakima	3,125,437	1,685,653
TOTAL	**$ 173,277,744**	**$ 179,018,737**

ALASKA	July-Dec. 1959	July-Dec. 1958
Anchorage	$ 9,174,958	$ 5,340,944
Fairbanks	3,347,220	713,614
Juneau	465,525	286,970
Ketchikan	79,000	334,450
TOTAL	**$ 13,066,703**	**$ 6,675,978**

IDAHO	July-Dec. 1959	July-Dec. 1958
Boise	$ 4,594,114	$ 4,774,714
Caldwell	722,275	839,866
Coeur d'Alene	638,437	491,875
Idaho Falls	4,300,100	4,718,707
Jerome	183,850	410,050
Lewiston	664,027	1,823,189
Nampa	1,229,025	889,491
Payette	216,122	210,885
Pocatello	1,641,717	1,391,747
Sandpoint	212,800	163,625
St. Maries	41,800	93,900
Twin Falls	1,146,150	939,840
TOTAL	**$ 15,590,416**	**$ 16,747,889**

MONTANA	July-Dec. 1959	July-Dec. 1958
Billings	$ 6,912,300	$ 3,022,025
Bozeman	3,165,008	2,225,585
Butte	236,575	517,135
Glasgow	686,975	530,000
Glendive	861,940	199,250
Great Falls	5,938,845	6,633,837
Helena	2,184,069	1,692,143
Kalispell	349,372	386,594
Lewistown	516,725	451,825
Livingston	195,930	224,915
Miles City	601,280	442,552
Missoula	1,070,165	593,790
TOTAL	**$ 22,719,184**	**$ 16,919,651**

WYOMING	July-Dec. 1959	July-Dec. 1958
Casper	$ 4,071,262	$ 3,632,372
Cheyenne	5,859,682	2,693,778
Sheridan	483,635	661,181
TOTAL	**$ 10,414,579**	**$ 6,987,331**

COLORADO	July-Dec. 1959	July-Dec. 1958
Aurora	$ 4,253,195	$ 6,297,036
Boulder	4,317,876	6,721,533
Denver	44,913,445	60,304,875
Englewood	2,217,129	2,941,765
Fort Collins	5,258,298	3,038,627
Grand Junction	1,405,262	1,221,590
Greeley	3,047,301	2,324,920
Pueblo	7,938,869	6,449,249
Trinidad	759,861	84,787
TOTAL	**$ 74,111,236**	**$ 89,385,082**

UTAH	July-Dec. 1959	July-Dec. 1958
Logan	$ 1,085,880	$ 1,317,650
Murray	864,500	1,484,657
Ogden	4,965,900	5,327,700
Provo	5,288,000	2,959,990
Salt Lake City	17,366,406	8,859,998
TOTAL	**$ 29,570,686**	**$ 19,949,995**

NEVADA	July-Dec. 1959	July-Dec. 1958
Elko	$ 254,221	$ 1,151,891
Las Vegas	10,788,147	5,986,866
Reno	7,979,703	7,972,227
Sparks	2,484,974	1,951,476
TOTAL	**$ 21,507,045**	**$ 17,062,460**

ARIZONA	July-Dec. 1959	July-Dec. 1958
Douglas	$ 824,677	$ 859,720
Flagstaff	2,897,679	1,718,117
Glendale	2,321,837	897,347
Maricopa County	44,895,827	53,112,569
Mesa	6,438,559	4,175,034
Phoenix	48,441,504	29,063,350
Tucson	26,330,399	7,149,606
Yuma	703,469	1,036,775
TOTAL	**$ 132,853,951**	**$ 98,012,518**

NEW MEXICO	July-Dec. 1959	July-Dec. 1958
Albuquerque	$ 33,386,026	$ 30,828,464
Carlsbad	963,465	744,620
Clovis	1,947,727	1,859,578
Gallup	1,516,033	1,635,259
Hobbs	1,192,354	2,890,005
Las Cruces	3,382,000	4,583,000
Roswell	12,564,230	1,249,021
Santa Fe	1,244,927	1,599,967
TOTAL	**$ 56,196,762**	**$ 45,389,914**

HAWAII	July-Dec. 1959	July-Dec. 1958
Hawaii County	$ 3,454,651	$ 2,492,152
Honolulu (city-county)	66,481,859	42,131,772
Maui County	1,770,468	910,064
TOTAL	**$ 71,706,978**	**$ 45,433,988**
GRAND TOTAL	**$1,856,320,995**	**$1,649,938,879**



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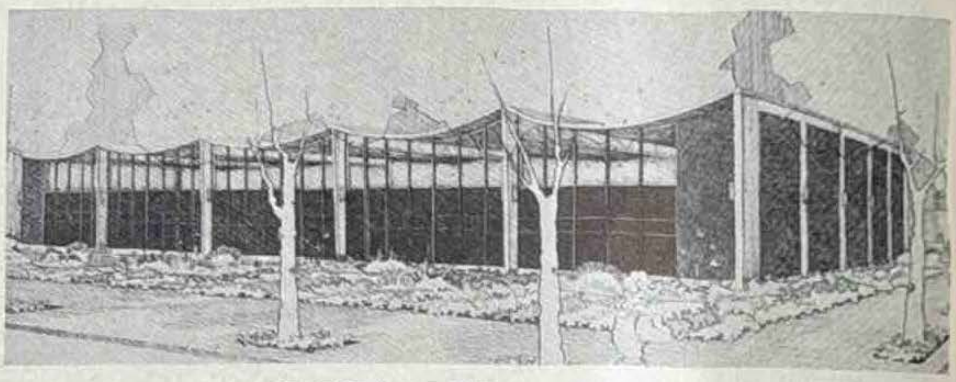
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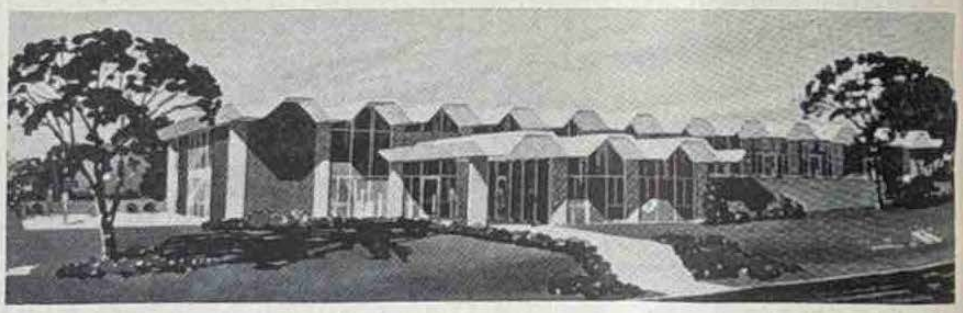
22-STORY OFFICE BUILDING

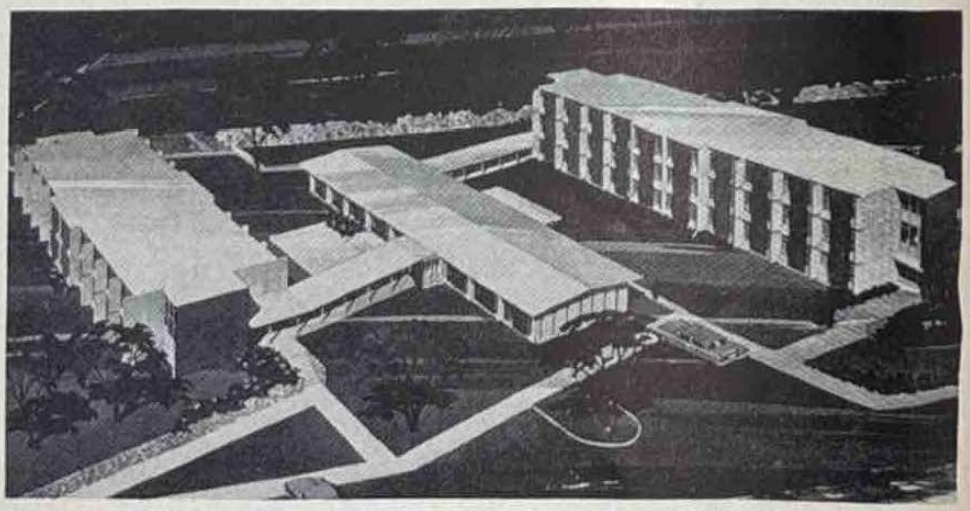
now under construction in downtown San Francisco will headquarter American President Lines and Natomas Co. Upper area of $10 million structure will be cantilevered 15 ft. on all four sides. At fourth floor level, terrace will extend around building and overhang garage's roof deck, continuing openness of adjacent St. Mary's Square Park. Recessed L-shape design will allow for eight instead of four corner offices. Free-standing steel frame tower will be faced with white quartz, while Sierra granite will be used on all walls of ground floor and at entrance stairway. Architects: Anshen & Allen.



STATION B CONTROL BUILDING

for Sacramento Municipal Utility District will have suspended fiberglass and tar roof and tilt-up, pebble grained concrete panels. Costing $1.5 million, it will be erected in three stages during next 10 years, initial unit to be in operation this fall. Architects: Barovetto & Thomas.





CAMPUS DEVELOPMENT

at Colorado's Trinidad Junior College will include student union building (top) and two dormitories, whose total cost will be $732,851. Dining hall of former structure will accommodate 250 normally — twice as many for banquet functions — and 350 couples when used as a dance floor. Housing 176 students (112 men in three stories and 64 women in two stories), dormitories will be linked by student lounge, with apartment for faculty director. Architect: Joseph T. Wilson.



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Graceful beauty goes hand in hand with practicality in the new concrete Civic Auditorium at Santa Monica, California.

72-foot concrete pylons are combined with an ornamental grille rising from mezzanine floor to roof. The concrete grillwork was precast at the site. And this dramatic facade will *keep* its beauty.

Inside, the concrete floor is flat for sports events—and tilts to "full auditorium" position with 2,750 seating for stage shows and concerts. The sidewalls and loft structure of the building are cast-in-place concrete. So is the upper level concourse, while the grand stairways leading to it are of precast concrete.

The auditorium is an impressive example of both excellent design and imaginative uses of concrete in new and exciting forms. And because it's *concrete*, upkeep will be outstandingly low... and fire-resistance uniformly high.

Architects & Engineers: Welton Becket, F.A.I.A., and Associates, Los Angeles. General Contractor: C. L. Peck and Millie and Severson, Inc., Los Angeles.

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Australian firm wins Pan-Pacific design citation

A Melbourne firm noted for its breaking away from the older and more formalized concepts of building design —Grounds, Romberg & Boyd—is the winner of the second annual Pan-Pacific Architectural Citation for "work of exceptional merit in the Pacific area." Senior partner Roy Grounds was scheduled to receive the honor from the Hawaii Chapter, AIA, at a dinner in Honolulu January 29.



GROUNDS

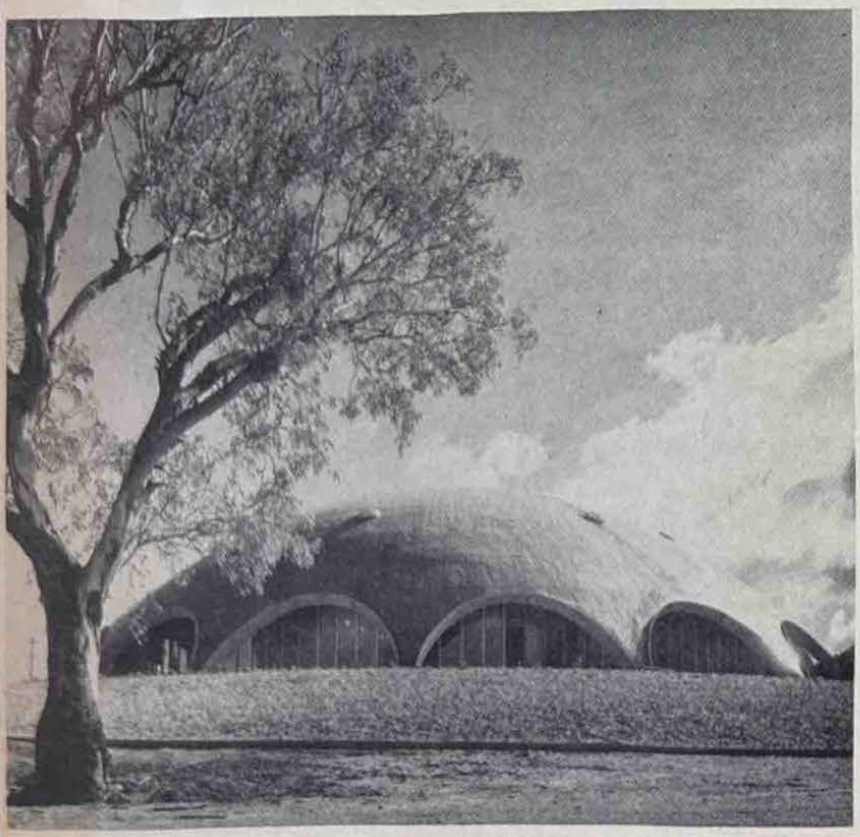
Photographs and plans of the various works of the firm will be displayed at the Honolulu Academy of Arts following the award presentation.

In choosing the award recipient, a different nation bordering on the Pacific is considered each year and the work of all its architects is evaluated by the selection committee. Initial winner in 1957 was Kenzo Tange of Tokyo. There was no award in 1958.

Grounds, Frederick Romberg and Robin Boyd, who participated in the first Pacific Rim Conference in Honolulu last October, formed their partnership in 1953, but had been friends and collaborators for many years previously. They have won several citations from the Royal Australian Institute of Architects. Among their projects: a house in Toorak which hangs suspended from a steel arch across a chasm, university and college buildings, churches, scientific structures and laboratories and numerous civic projects, including fountains, in Melbourne and elsewhere.

Among the pupils of Grounds while teaching at the University of Melbourne was Boyd, who has since pioneered architectural criticism in Australia. His articles in American journals led to his appointment as a visiting professor at the Massachusetts Institute of Technology in 1956-57. Known as the bold experimentalist among the three partners, Boyd is the author of the book, "Australia's Home," which is used as a university textbook.

Romberg, who was born in China and came to Australia in 1938 from the University of Zurich on a traveling scholarship, also has taught at the university.



ACADEMY OF SCIENCE BUILDING in Canberra, called "first great public building erected in Australia in the 20th century," is among score of noteworthy structures designed by Grounds, Boyd & Romberg of Melbourne, cited by Hawaii AIA for Pan-Pacific award.

Luckman suggests credo for today's architect

Speaking before 900 members and guests of the 39th Massachusetts Building Congress dinner in Boston last month, Los Angeles architect Charles Luckman predicted that the "United States will this year embark upon the greatest building boom the world has ever seen." But before he finished his address, he suggested five precepts that might be included in a contemporary credo for the American architect. These are:

1. We will be tithers of our time, giving 10% of our years to active participation in community affairs—whether civic, cultural or charitable, whether local, regional or national.

2. We will seek the mutually beneficial balance of interests between the client and the community by combining planning ability with aesthetic sensibility.

3. We will make a lifelong quest for knowledge an act of faith in architecture as a learned profession capable of giving form and meaning to the ideas and ideals of our civiliziation.

4. We will strive to qualify ourselves as leader of the team by being sympathetic to and knowledgeable of all the disciplines which are required for the total concept in architecture.

5. We will nurture in our profession a deep and mature concern for human beings by heeding the aspirations of all people who want to work in concert, walk in dignity and live in freedom.

Luckman stated that "given progress toward peace, the building industry can plan for an unprecedented future" in responding to three major challenges: the population explosion; the surge of economic expansion; and the accelerating rate of change in building needs that will mark the 1960s.

If architects are to meet these challenges successfully, he asserted, they will have to qualify themselves more effectively to act as leaders of the building team with its many specialists. He affirmed that today's architect has to approach his task from the standpoint of what he described the "total concept."

Thus, the architect has to be a combination of planner, artist, engineer, businessman, administrator and sociologist. He added that this does not suggest that the architect must be a universal genius, but rather that he should be familiar with all fields of knowledge which pertain to his profession.



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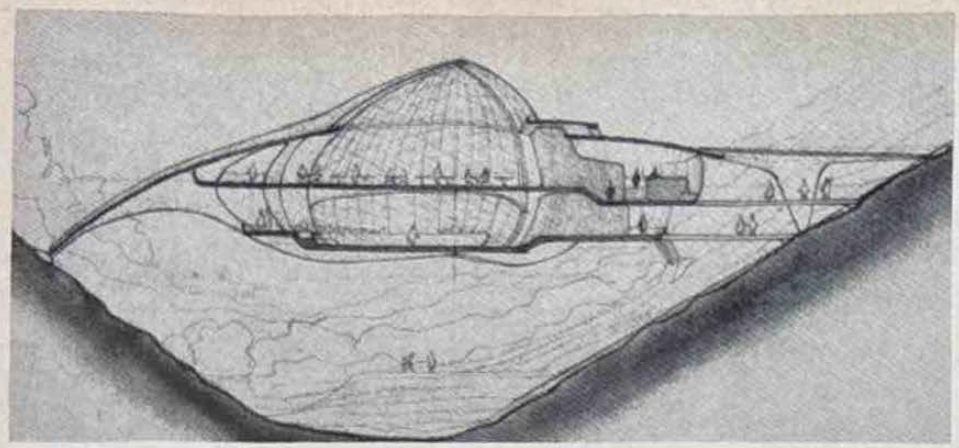


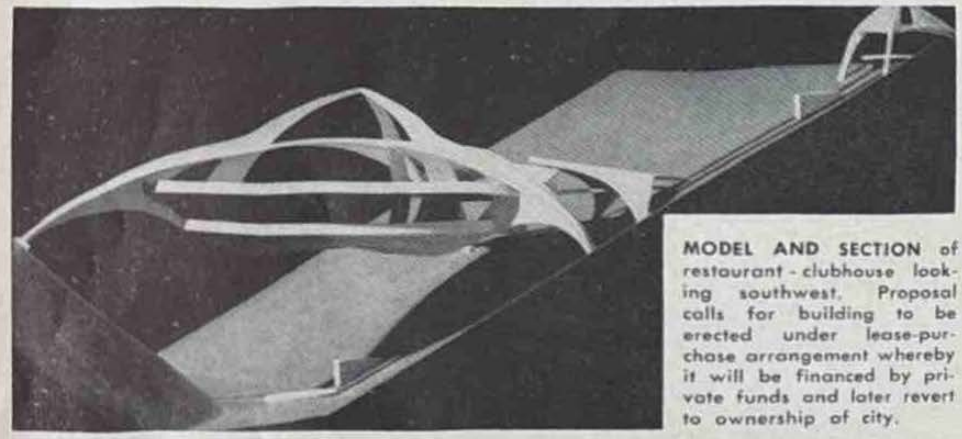
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MODEL AND SECTION of restaurant - clubhouse looking southwest. Proposal calls for building to be erected under lease-purchase arrangement whereby it will be financed by private funds and later revert to ownership of city.

Restaurant would bridge canyon in Oakland park

Proposal for a glass domed restaurant-clubhouse that would bridge a 150-ft. deep canyon in an Oakland park area indicates that if and when the project is constructed it is certain to become a conversational piece in the building industry on the coast. Preliminary design has been completed by Oakland architects Luckman & Cadwalader. Estimated cost: $600,000.

Site is lushly lined with native oaks in Dimond Park, a 10-minute drive from downtown. The restaurant would span the canyon—a pitch-and-putt golf course and driving range are being developed at the bottom—at a height where it would be protected from the wind, be removed from traffic and parking areas and still be high enough for a distant view of San Francisco Bay.

Parking would be at the upper edge of the canyon. Under present plans, passengers may be deposited at the entrance structure where protection will be afforded from wind and rain. A dramatic view of the entire canyon area and the building will be available from here and it will also be possible to see through the glass dome into the main dining room. Glass enclosed funicular cars will carry passengers to the protected bridges at each level or down to a terraced promenade area below the building.

Upper floor of the building will provide a cocktail lounge in conjunction with the main dining room and extensive decks for serving outdoors. Lower floor is to house a banquet room, decks and golf pro shop. A snack bar and cocktail lounge for the golfers are to be placed in close relationship to locker facilities and a golf deck. The golfers will have a choice of driving off this deck, some 50 ft. above the driving range, or from the ground below. Kitchen facilities are divided between the two floors.

The multifaceted glass dome will rise 30 ft. above the dining room floor. It will be a mixture of clear, tinted and heat-absorbent glass, arranged for color, pattern and view and for sun control.

The structure is to be of reinforced concrete with precasting and prestressing employed wherever practicable. The tripod form of the main bents will allow for vertical displacement of the canyon walls due to earthquake action and roller connections of the three bearing points will absorb unsynchronized horizontal movement.

$17 million building program for Sacramento County

Sacramento County has begun a $17,239,500 five-year building program, financed in part by a $9.7 million bond issue, largest in its history, which voters approved last year. Remainder of the money will come from annual general fund appropriations and other sources.

The bond issue will finance the following five projects to be constructed in Sacramento: a new courthouse expected to cost $5,564,915; a welfare building ($1,789,780) and a garage ($980,300) to be built on the old courthouse site, all being designed by Starks, Jozens & Nacht; a branch county jail building ($908,205) by Rickey & Brooks; and a juvenile hall ($2,032,800) by Ray Franceschi & Associates.

The five-year plan also provides for a branch county building, estimated at $1,387,000, to serve outlying areas and to be started in 1961. Rest of the funds are earmarked for improvements to the county hospital ($1,250,000); regional parks site acquisition and development ($1,620,000); dog pound ($77,300); and a corporation yard ($561,000).

Serial bonds totaling $2,475,000 have been issued to date.

Another major building program the Capitol Mall redevelopment, also is underway in Sacramento. (For sketch of U.S. Courthouse see PA&B for Aug. '59.)

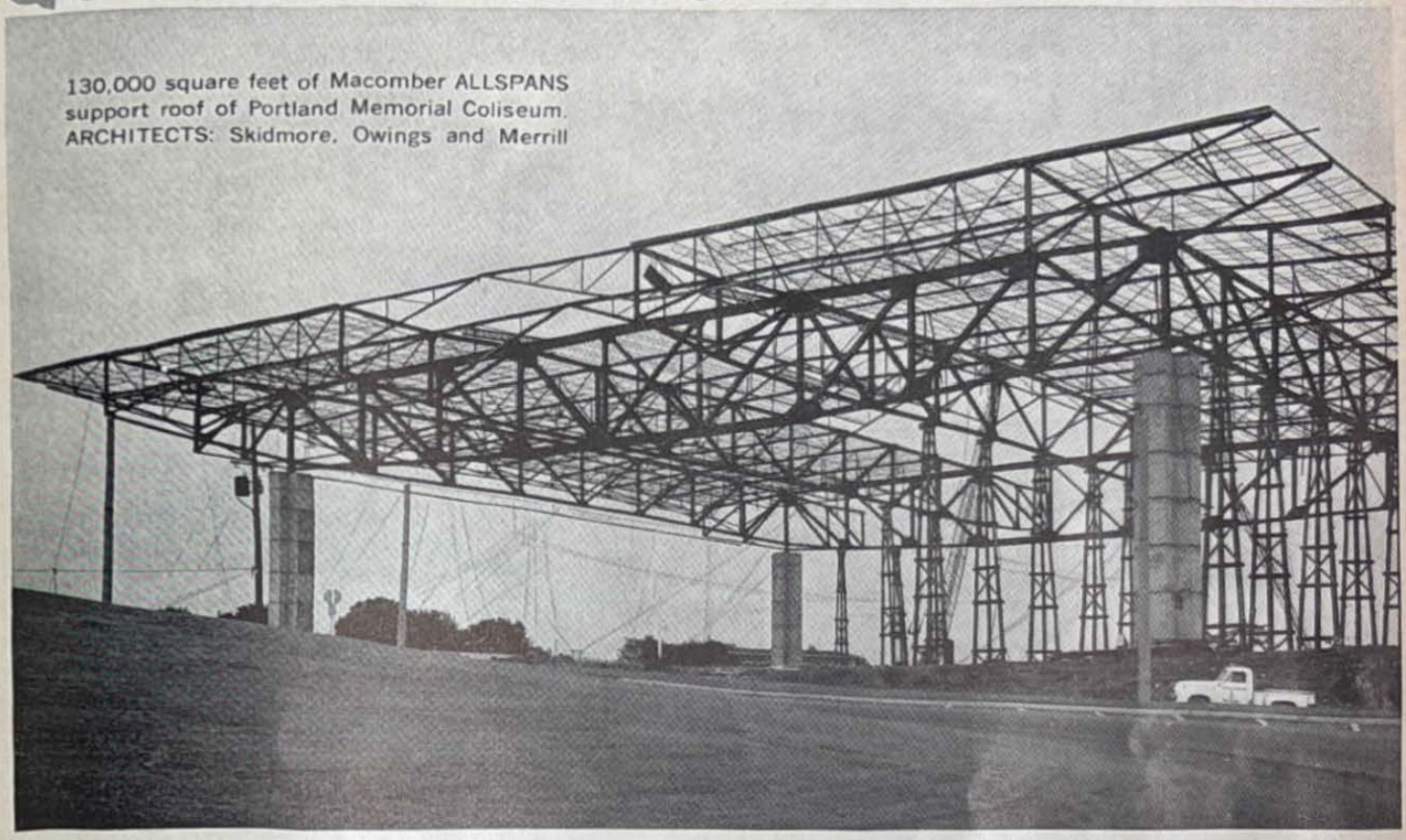
Oregon engineers conduct contest for state press

The Consulting Engineers Association of Oregon is sponsoring a merit awards contest for Oregon newspapers, excluding Portland dailies, which in 1959 did the most outstanding job in promoting a public improvement project.

First prize will be $250 cash honorarium and plaque, with plaques going to second and third place winners. Awards may go to reporters, photographers, writers, editors or publishers of daily or weekly newspapers who in 1959 promoted a public improvement by one or more stories, pictures or editorials.

Contest judges are Arden X. Pangborn, editor of the Oregon Journal; Lew Evans, editor of the Daily Journal of Commerce and Jalmar Johnson, associate editor of the Oregonian. Entries must be submitted to Guy H. Taylor, association president, at 1845 N.E. Couch St., Portland, by March 15. Winners will be announced on or before April 15.

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Seattle's 'Home of the Month' award goes to Lovett

A compact two-story house designed by Wendell Lovett for Mr. and Mrs. Gordon Giovanelli of Mercer Island won the 1959 "Home of the Month" competition co-sponsored by the Seattle Times and the Washington State Chapter, AIA.

The Times presented a check for $500 to the clients, a stone mosaic executed by sculptor Jean Johanson to the architect and a special certificate to the contractor, John Bodle.

The clients, architects and contractors of the 11 other houses which were featured throughout the year in the newspaper's real estate section and then opened to the public for Sunday afternoon viewing also were recognized at the awards banquet January 7 in the Olympic Hotel. Speaker for the evening was Richard Gump who, with slides and anecdotes, illustrated the story of his family's firm, Gump's of San Francisco, which has long been famed for its Oriental art and unrivaled jade collection.

The 1959 jury consisted of Nancy Davidson, Northwest editor of Sunset, and architects Alan Liddle of Tacoma and Henry Klein of Mount Vernon. After visiting each of the 12 entries, they wrote these comments about their unanimous choice:

"The variety of livability this small house offers is most impressive. It is a house which works from the inside out, though its simple exterior takes advantage of a level lake site.



STONE MOSAIC is presented by Lawrence G. Waldron (right), AIA chapter president, to Mr. and Mrs. W. H. Lovett on behalf of son Wendell, who currently is teaching in Stuttgart, Germany, as Fulbright scholar.

The architect concerned himself with every design aspect, even including wardrobe door pulls. The result is an easy, comfortable unity and a fluid relationship of living spaces."

"An elegant house without pretense. The economical use of space and structure and the precise detailing recall the snug pleasure and fitness of the interior of ships. Judicious planting could perhaps soften a stark exterior and approach."

. . . "an extremely imaginative, yet quiet and unassuming solution to the small house problem. To me it is a thorough design job, from the total concept to the detail of the cabinets and placement of light switches. It is a compact house with each square foot of space doing its job, yet every room is an exciting space. I consider it a design classic."

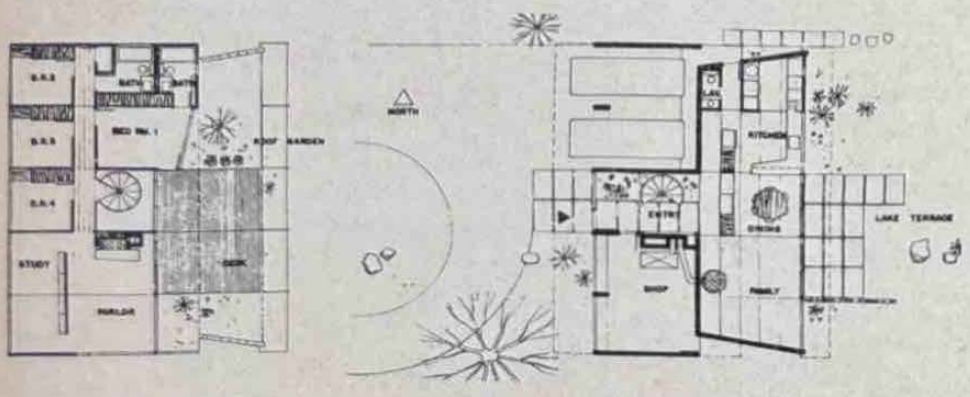
Panels illustrating the twelve homes in the 1959 series were exhibited at the hotel preceding the awards banquet and later at Frederick & Nelson, leading Seattle department store. The Johanson mosaic and a panel illustrating the Giovanelli house was shown at the Seattle Art Museum during January.

A scrapbook which includes the articles on each house and other coverage related to the program is prepared by the Times each year for presentation to the chapter. This material is frequently studied by prospective clients, who numbered as many as 3,000 at a single open house inspection in 1959. Each of the houses shown in the continuing competition are complete except for final paint and floor covering.

In addition to Levett, architects participating in the 1959 competition were Seth M. Fulcher, Bystrom & Greco, Lawrence & Hazen, Joseph L. Williams, Earl D. Morris, Ibsen A. Nelson & Russell B. Sabin, A. O. Bumgardner (two entries), Wilkins & Ellison, Francis E. Huggard and Charles H. Schiff, who is project chairman this year, succeeding Gerald A. Williams.



WINNING HOUSE of wood beam and joist construction has lakeside setting. Designed for family of five, it features active ground level and quiet upper level.



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Lumber and tile research grants for WSU campus

Washington State University in Pullman, whose reputation as a building research center continues to grow each year, has another project underway in its Division of Industrial Research: a study to investigate promising new methods of wood floor construction.

Timber Engineering Co., an affiliate of the National Lumber Manufacturers' Association, has awarded a $20,000 contract for the first year of the study, part of a program to help recapture the market for an estimated one billion board feet of lumber a year now lost to other types of materials.

WSU also has been designated as one of eight architectural training centers in the nation to receive a three-year grant from the Tile Council of America, Inc. The grant will provide $500 each year toward scholarships for students and $250 each year to help pay for instructional construction material.

Californians win initial AIA-NAHB citation

A joint submission by architects Anshen & Allen of San Francisco and Jones & Emmons of Los Angeles and builder Joseph L. Eichler of Palo Alto has won the first annual AIA-NAHB Award of Honor.

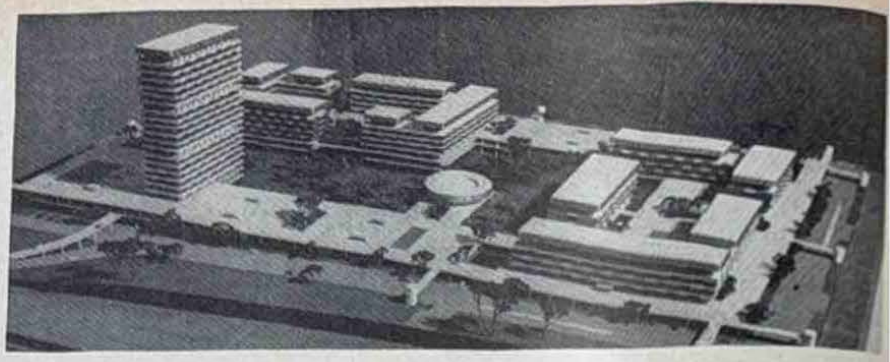
The award was initated this year by the two national organizations "to encourage the design and construction of the best communities and homes for the American people by promoting the collaboration between architects and builders."

Jury consisted of architects Edward H. Fickett of Los Angeles, Victor Lundy of Sarasota, Fla., and Arthur H. Keyes Jr. of Washington, D.C., and builders William E. Witt of Virginia Beach, Va., and Edward H. Bennett Jr. of Bethesda, Md.

Eichler received his award at the NAHB convention in Chicago in January; the architects will receive theirs at the AIA convention in San Francisco in April.

Bonus for school architects

The Board of Education in Jefferson County, Colo., has initiated a new bonus plan under which architects will get 5% of any money saved from the budgeted cost of the building project. But the architects must redesign any buildings on which bids exceed the budget by more than 5%.



SPOKANE CIVIC CENTER MODEL

designed and built by three architectural engineering students at Washington State University has done much to generate interest in proposed project. Walter Miller, Larry Fisher and John Corrier, under direction of Harry C. Weller, department head, and Donald Heil, assistant professor, developed possible solution as senior design problem. Since its public exhibition, group of Spokane businessmen has engaged Ebasco Services of New York to study entire matter of downtown redevelopment and civic center's role in program.

Volpe says teamwork essential in construction industry

Teamwork within the industry and active participation in civic affairs were the double-barreled themes urged by John A. Volpe, president-elect of the Associated General Contractors of America, during a recent tour of the West. He will succeed James W. Cawdrey of Seattle at the annual convention in San Francisco March 21-24.



VOLPE

In talks before a number of AGC chapters, Volpe stressed the importance of cooperation in an industry of such great size and complexity. At the same time he pointed out that contractors should use their leadership capabilities to promote civic welfare above and beyond the limits of the industry.

"This giant industry is made up of more components and is scattered more widely, reaching into every city and hamlet in the land, than any other form of industrial enterprise. In addition to the millions of workmen of many crafts involved, construction depends upon hundreds of thousands of others, including architects and engineers who design the structures; general contractors and mechanical and specialty contractors of many types whose responsibility it is to build and equip the structures; the manufacturers, distributors and dealers in many kinds of equipment and materials; and still others allied in construction, such as the surety industry.

"These two facts — construction's bigness and its many loosely connected segments — are among the keys to its fortunes and its difficulties. These facts make cooperation among all groups in the construction industry essential to the common objective of more efficient operation and practices."

Volpe particularly stressed the importance of unity and teamwork in combatting what he called the increasing erosion of our markets. "This is occurring especially in plant maintenance and repair work and to some extent in new construction through the use of industrial union forces on such projects rather than contracting out the work.

"The industry must overcome this threat and other types of force-account operation by convincing owners, public officials and the public itself that the contract method is more efficient, more economical and more satisfactory in terms of the quality and reliability of work put in place."

Volpe pointed out that the Construction Industry Joint Conference, of which the AGC is one of the sponsors, is already hitting hard at this practice and can be expected to hit still harder. "If it is to be effective, however, the effort must have the unflagging support and cooperation of all segments of the construction industry."

Turning to the contractor's responsibility in civic and political activities, Volpe commented: "I believe that our sphere of influence extends beyond the confines of our industry. The construction work which we do is tangible evidence of our contributions as builders, but we have a responsibility to make a contribution to build up the community, be it town, city, county, state or nation. Our participation in the affairs of the com-

munity should be as limited as being concerned with whether the garbage is collected efficiently and economically and as wide as whether legislation proposed in the Congress or approved by the President will best serve the interests of the people.

"Your participation in public affairs should not be confined to lip service nor to the mere mechanics of recording your vote for this or that candidate, or this or that public referendum. Instead, it should be a wholehearted and vigorous display of that leadership you possess. This involves constructive participation in debate—even running for public office if we think there is no other course for the achievement of our goals for the common good. You need to be willing to devote time and energy for these things if we are to have the kind of country our forebears laid out for us and not have the country run by pressure groups."

Striking an optimistic note, Volpe said that the continued growth of construction is as inevitable as the growth of our country and its population. In every year since the end of the Second World War, the dollar volume of construction activity has risen to a new record. In 1959, despite the long steel strike, the total volume of construction surpassed $73 billion, as compared with $66.6 billion in 1958. The outlook is for another increase, he predicted, to about $76 billion in 1960.

Coupled with this growth, Volpe called attention to built-in stability factors that help to keep the economy from suffering sharp ups and downs and better advance planning by business and by federal, state and local governments, which in turn aid the contractor in his planning. "Orderly programming is a highly important ingredient of public works expenditures, in particular," he said. "If a construction program is set up in an orderly manner, its execution is likely to go along very efficiently, with consequent savings to the taxpayers and satisfactory returns to the contractor, who is able to organize his working forces and the use of materials and equipment to the best advantage. If, on the other hand, public works projects are authorized on a haphazard, stop-and-go basis because of poor planning or budgeting, their execution will not be so successful and both the public purse and the contractor's purse will suffer."

Volpe explained that one of the most valuable accomplishments of the AGC and its member firms has been the promotion of orderly planning and programming of public works by government agencies, but he warned that "you have to keep your eye on a public works program constantly or else the programming may backslide on you." He was referring in particular to the federal highway program.

Briefly commenting on the Landrum-Griffin Labor-Management Reporting and Disclosure Act of 1959, Volpe said he felt is was a mistake for employers to think of the new labor law as pro-management, or for union members to think of it as anti-labor. "As I see it, it is neither. As dignified human beings, I trust contractors will treat labor with the respect and dignity to which they are entitled and we have reason to expect the same consideration from both our employees and the men who represent them."

"Unfortunately," he commented, "some contractors don't seem to realize that they must have a reasonable price in order to do a reasonable and decent job. We have too many who are willing to cut corners in order to cut the price of a job."

Volpe, who is a contractor in Massachusetts, served as acting federal highway administrator during the first few months of the new federal highway program. He also served for a number of years as commissioner of public works in Massachusetts.

Memorial to be constructed over USS Arizona

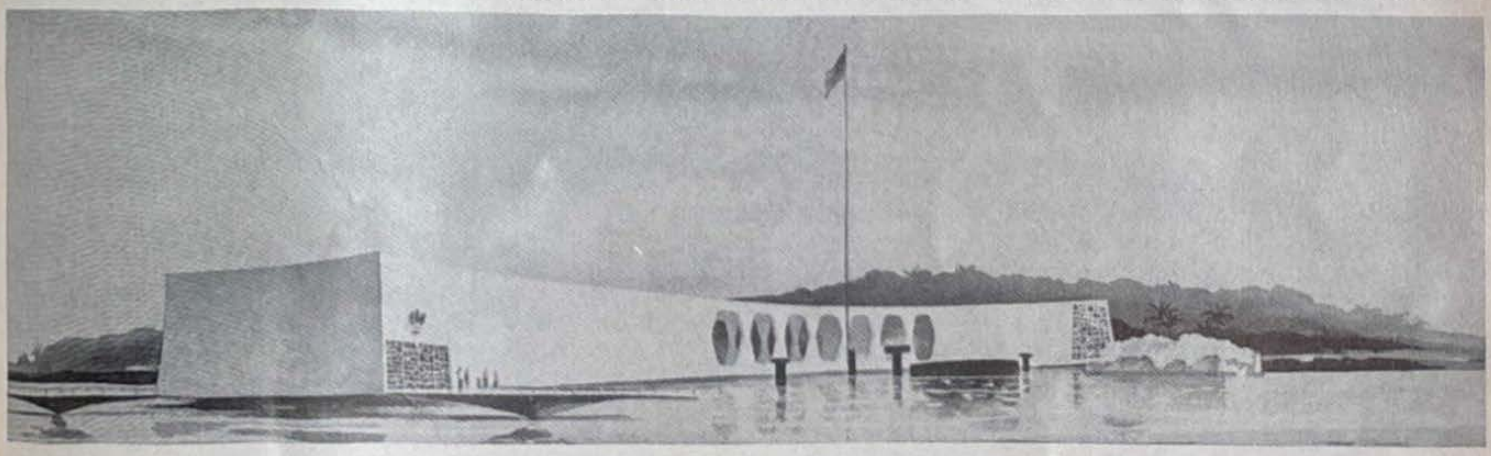
Plans for building a memorial upon, but not touching, the USS Arizona at Pearl Harbor are now in the hands of architects Johnson & Perkins-Pries & Associates of Honolulu. Design contract was awarded by the War Memorial Commission of Hawaii.

Administration and construction work will be handled by the public works department of the U.S. Navy which is now driving piles and making borings at the site, 400 ft. off Ford Island. Piles on each side of the vessel, which lies in a channel some 40 ft. deep, will carry the memorial. Two huge, precast, prestressed concrete beams 186x4x4-ft. will be barged out and lowered onto the pile caps.

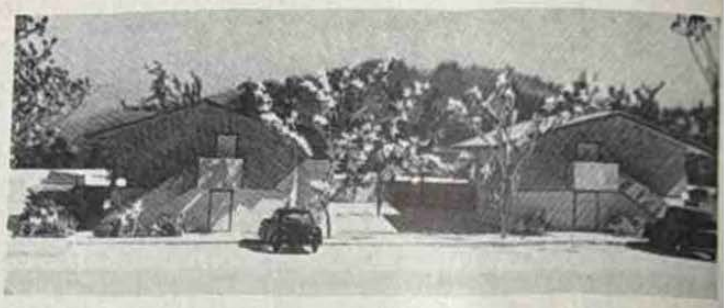
The memorial will be centered over the tripod of the mainmast of the Arizona which has never been decommissioned, with its 1,102 men entombed there. Existing flagpole on the center stub of the tripod will be retained.

Building will house a museum containing mementos of the battleship. It will be approximately 186 ft. long, 36 ft. wide at the end and 32 ft. wide at the middle. An 18-ft. round opening with underwater lighting will be set in the deck for viewing of sunken portions of the Arizona. Plans also include a ceremonial bridge accommodating 200 persons. Entrance will be made from two boat landings projecting from both ends of the memorial on the outboard side.

AT PEARL HARBOR this memorial housing museum and ceremonial bridge will be built over USS Arizona. It is expected that bids will be called in April. Dedication is set for December 7.

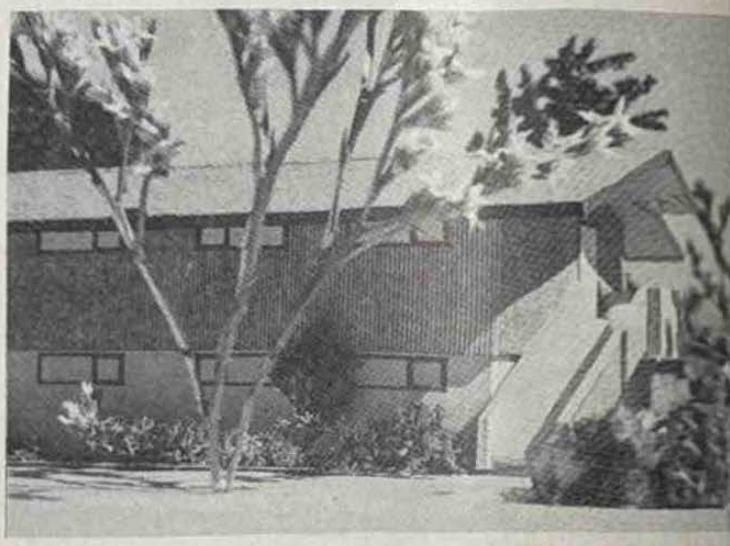


JOB OF THE MONTH



ENTRANCES are between units under connected or overhanging roofs. Second-story quarters are reached via exterior stairways to balconies between units. Landscaped courts will include fenced play areas.





Some design amenities at minimum rental for married students

WESTMORELAND VILLAGE, EUGENE: Adequate, well-designed family housing for a minimum rental is the goal of this project which will eventually provide 392 units at a cost of $3,079,000 for married students at the University of Oregon. One- and two-story buildings will be grouped around courts with living areas facing these open spaces and service entrances on the street side. Materials have been selected both for reasons of economy and for the color possibilities that will relieve the monotony of similar building design.

Housing for married students at present is in three scattered locations, inadequate to meet the needs and unwieldy from an administrative viewpoint. Westmoreland Village has been designed to provide the needed housing, not as a temporary solution, but as a long-range program under a comprehensive master plan. Units have been designed as attractively as a minimum rental basis would allow and with an eye to the possibility that the situation may eventually change and the units be occupied by faculty or nonstudents.

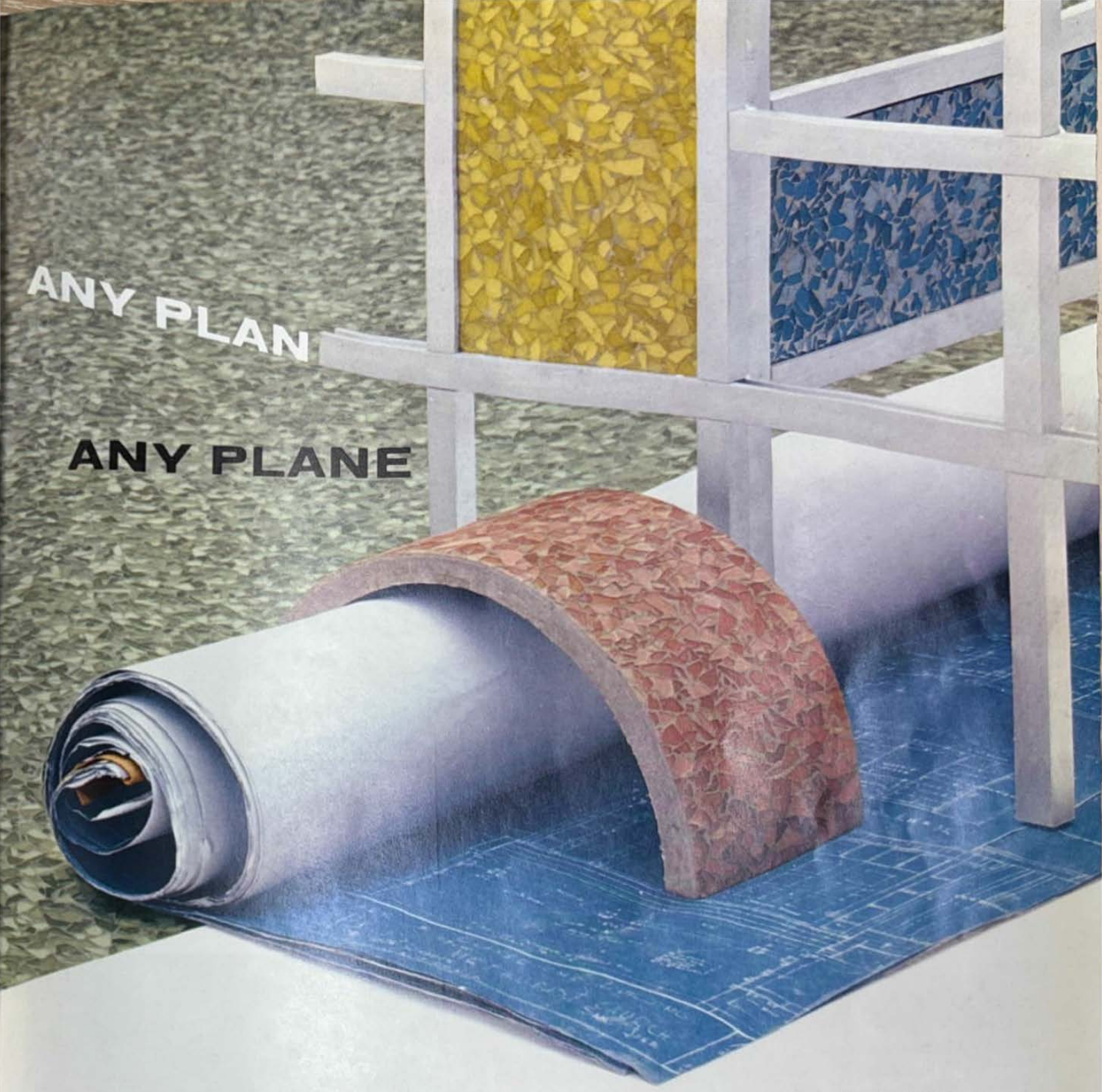
The 20-acre site was selected because of its proximity to schools, churches, shopping centers and the like, easy transportation to the campus and its location in a residential area of the city. Two-bedroom units are concentrated in a section that will provide for safe and easy access to school and are arranged in one-story duplexes and two-story fourplexes. One-bedroom units are in similar two-story fourplexes or in single units over wash houses.

Extensive use has been made of wood, a native material that will be readily available. The 4-ft. module was used to take advantage of sheet materials and prefabrication techniques. The frame structures will have stucco on ground floor levels and wood siding with varying color of stain on second floor levels. Other features include preglazed aluminum window sash and asphalt shingle roofing of varying colors. Inside walls and ceilings will be plaster. Floors will be finished with tile. Bedrooms will have built-in drawers.

In cooperation with the city, a coordinated plan for all utilities was developed. It was found, for example, that all electric service could be placed underground for 55 cents extra per month rental charge. Telephone cable service also will be underground and a complete television cable system will be installed at construction time. All of this will eliminate unsightly overhead wires and a haphazard forest of antennas.

Project will be built in stages. First phase of 48 units will cost $350,000. Construction of the project, like dormitory housing on the campus, will be self-supporting through rental fees.

Architects: Lutes & Amundson; engineers, Marquess & Marquess; landscape architect, Wallace M. Ruff.



Outside or inside, on curved or flat surfaces, Mosaica imparts an enduring finish with intrinsic color, pattern and texture. Design Mosaica into window and curtain wall panels, facings, door surrounds, wainscots and ceilings, in solid areas or as decorative accents. Composed of random size and shape glass tesserae set in an inorganic matrix, laminated to 3/16" cement-asbestos board, Mosaica is scratch proof and impervious to stain. Carpenters install Mosaica in sheets up to 4' by 10', with 100 sq. ft. of Mosaica going up in just 1 1/2 hours! Contact Soulé for the name of the representative near you.

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One of 4 schools in the Ontario School District, Cal. for which Rilco supplied laminated pitched and tapered beams. Architect: Jay Dewey Harnish; Contractor: Hoefer Construction Company.

Schools with RILCO are Beautiful Fire Safe Economical

One of the schools shown here was built for $7.75 per sq. ft., one cost $10.24, another $7.30, that's economy. The beauty of Rilco laminated wood members is a plus — a beauty only wood can offer. There is no institutional chill — warmth of wood that mellows with age makes youngsters feel at home.

Rilco arches, beams and trusses help reduce erection time and costs — delivered carefully wrapped for protection—drilled for furnished hardware, they go up *fast* with regular job-site labor. Maintenance free — laminated wood is not subject to chemical change, rust, corrosion, splitting or warping.

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Rilco laminated wood members bring all three *Beauty*, *Fire Safety*, *Economy* to any school. For more information on building *bigger* and *better* for *less* contact your closest Rilco office.

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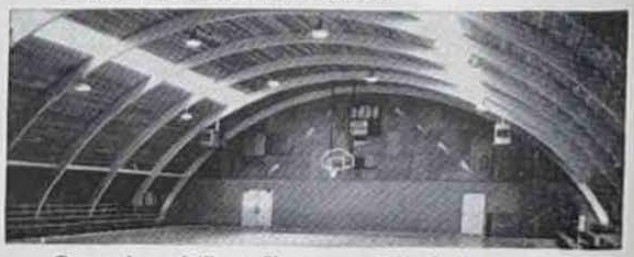
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Banner County High School, Harrisburg, Nebraska was built for $10.24 sq. ft. including all fixed equipment. Architect: Robert Ditzen; Contractor: Fullen Construction Co.



Total cost was $7.75 sq. ft. to construct St. Joseph's School, McPherson, Kansas. Architect: Robert E. Marr; General Contractor: Frank Jackson.



Gymnasium of Kiowa Elementary School, Kiowa, Colorado. School was built at a cost of $7.30 sq. ft. Architect: Robert W. Ditzen; Contractor: Broadway Construction Co.

Humanizing the skyscraper: two current examples



Karl H. Riek

SAN FRANCISCO'S CROWN ZELLERBACH BUILDING: from plaza to lobby across concrete bridge.

Much already has been published in both the popular and professional press about the 20-story Crown Zellerbach Building in San Francisco and the 21-story Norton Building in Seattle shown here and on the following six pages. Each has been a newsmaker long before its completion, for structural and other reasons; each is a handsome addition to its downtown area. But another quality which had to be intimated before has become a reality, now that the buildings are in operation—a quality which attempts to humanize the skyscraper (both qualify as such by West Coast standards) through the generous use of plazas, enhanced by landscaping and pieces of art. While Crown Zellerbach is unquestionably the more successful from this point of view, Norton too is to be commended for a giant step in the right direction.

SEATTLE'S NORTON BUILDING: abstract form executed by Harold Balazs before reflecting pool.

Art Hupy





Karl H. Riek photos (except as noted)

Crown Zellerbach Building
San Francisco, California

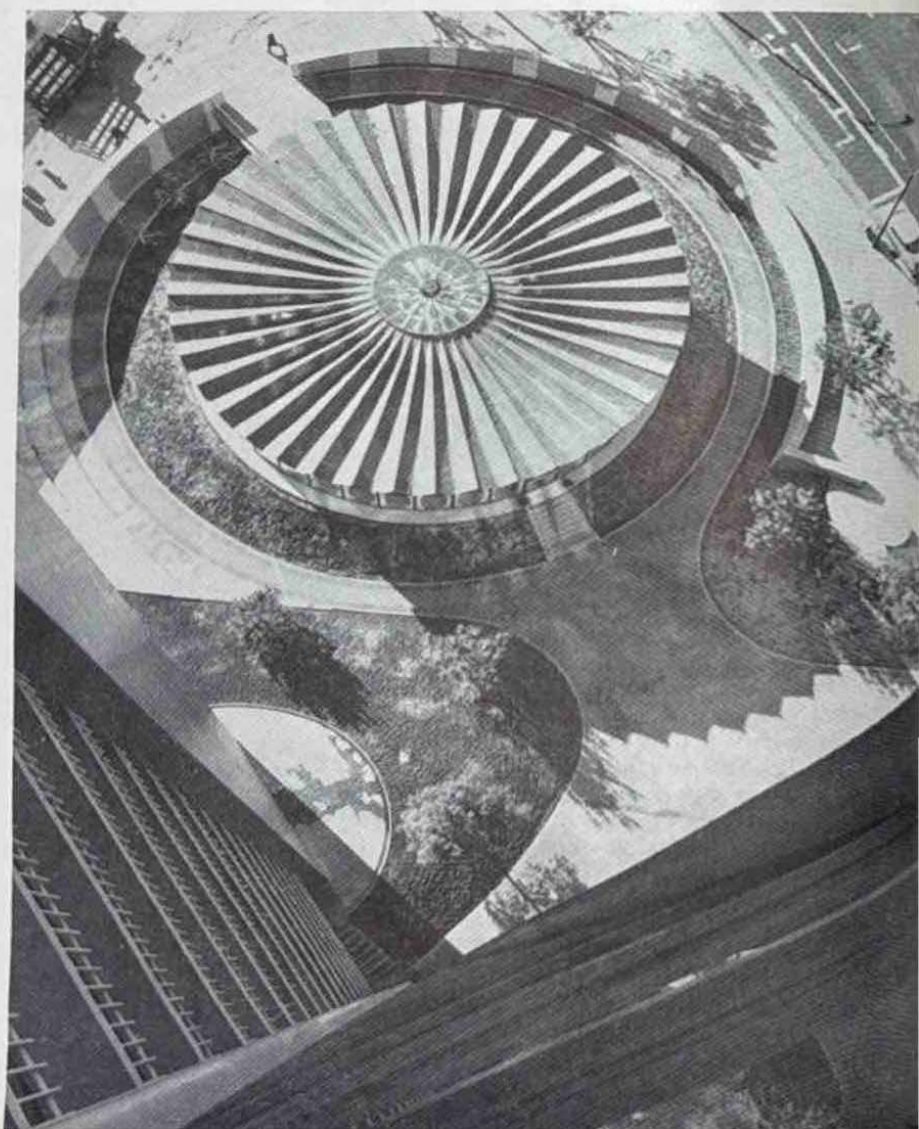
•

HERTZKA & KNOWLES
SKIDMORE, OWINGS & MERRILL
Associated Architects

H. J. BRUNNIER
Structural Engineer

HAAS & HAYNIE
General Contractors

VARYING ELEVATIONS thoughout plaza are designed to add contour and perspective to site. English ivy surrounds bank pavilion, while wild strawberry envelops service core. Six inches of crushed rock covered by foot of topsoil support this growth.



CROWN ZELLERBACH is a building stripped to the bare essentials—steel and concrete—and then cloaked in glass. Entire load of the rectangular office tower is concentrated on 18 steel columns, nine on each side, which ascend the 20 stories. (There are two floors underground for parking and service.) The glass walls provide unobstructed vision, while acting as curtains for protection against the elements. The service core, on the other hand, is placed outside the tower in a T-plan, solidly faced with mosaic tile.

But above and beyond all this is the lavish allocation of land for open space—a 5:1 height-to-ground ratio, believed to be a record for this type of project. Only about one-third of the 1⅓-acre wedge shaped site is occupied by Crown Zellerbach and its pavilion companion: American Trust Co.'s one-story branch office (PA&B for Nov. '59).

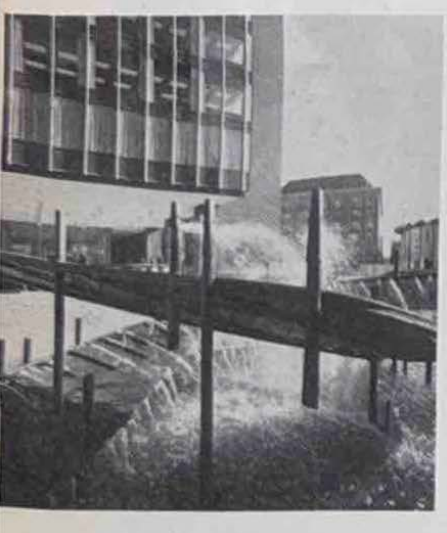
Nor does this enlightened approach, indicative perhaps of the new corporation client, end with the plaza, its landscaping and abstract fountain. Besides the works of art shown on page 25, original paintings by Bay area artists are an integral part of the interior design of the 18th floor executive offices where the space has been planned with permanent partitions.



MORE THAN HALF MILLION COBBLESTONES, individually selected in Mexico, cover 25,000 sq. ft. of plaza. Ranging from 2 to 3 in. in diameter, these smooth blue stones were hand mortared into place. Site has 23 trees, most full grown. Special sunken concrete planters insure adequate soil and drainage.



CONCRETE BRIDGE with brown ceramic tile flooring leads to teak railed outer lobby. Garden wall rises to height of 13 ft. above plaza, surrounding western half of site.



BRONZE FOUNTAIN, 25 ft. long and 8 ft. high, consists of two opposing curved flat planes supported by vertical reeds. Designed and fabricated by David Tolerton, it is first major piece of outdoor sculpture introduced in downtown San Francisco since Second World War.



CROWN ZELLERBACH BUILDING



Morley Bear

LOBBY STATUE of draped female figure called "Woman in Bronze" stands 12 ft. tall and balances on 2-ft. base of Verona red marble. It weighs about 1,200 lb. and was cast in one piece by Marcello Mascherini of Trieste, Italy.

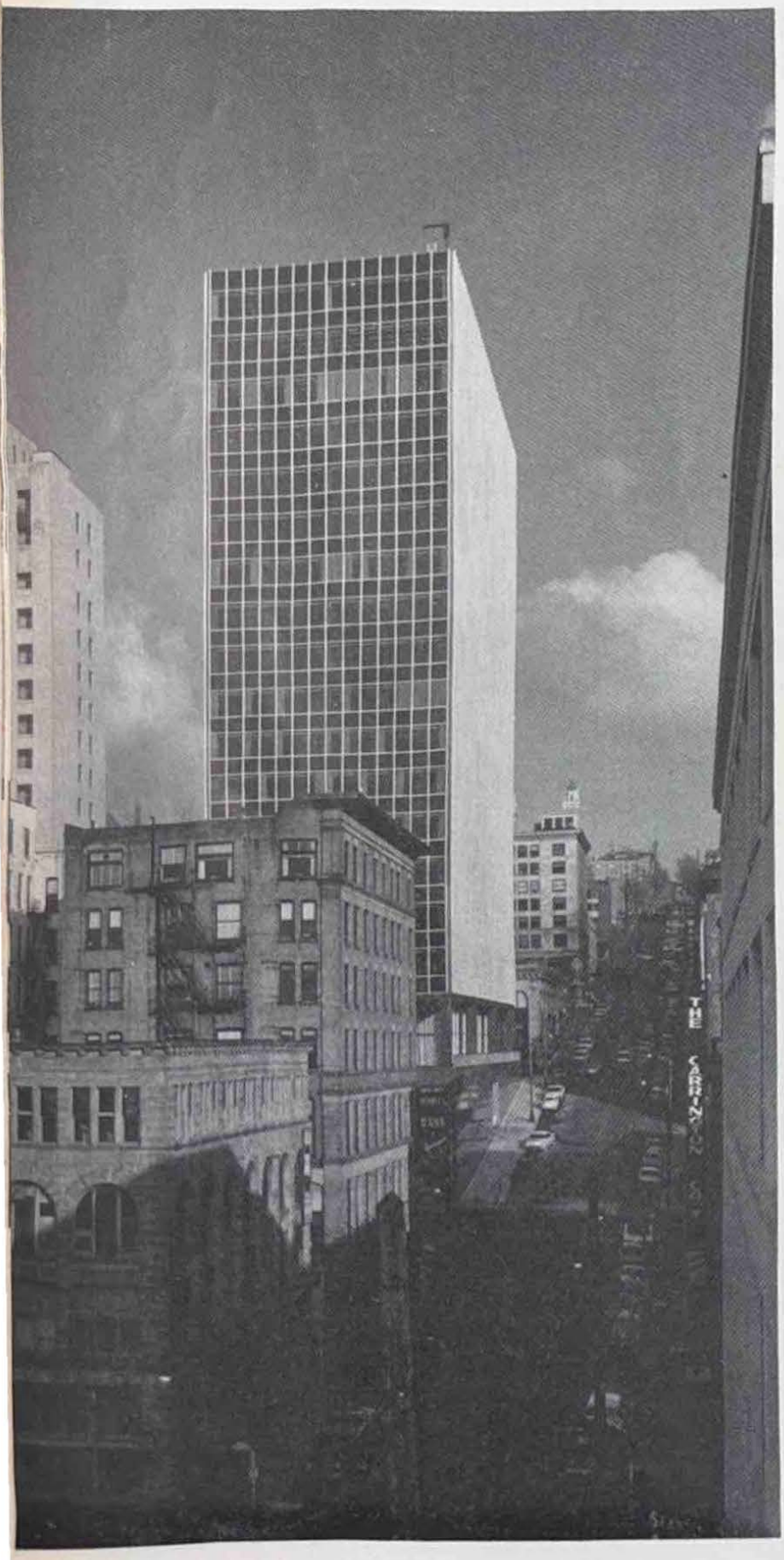


COLORFUL ABSTRACT MURAL is 44 ft. long, 9 ft. high and covers curved inside wall along west side of cafeteria on second floor. It was done on washable canvas by Mark Adams.



HOLLOW WOODEN HORSE standing at entrance to 18th floor executive offices is 5 ft. high and weighs 40 lb. Emile Norman used new process for which patents are pending. Only ¼-in. thick, horse is composed of thousands of pieces of ebony, benin (black walnut) and mahogany.

GLEAMING STRUCTURE towers above its stone and ceramic neighbors. Building base (right) on low side of sloping site houses three garage floors of parking for about 300 cars, is served by elevators and escalator, longest west of New York, up to spacious lobby.





NORTON, as one observer has said of the aluminum and glass structure, is "probably the ultimate in modular planning and in the development of the exterior curtain wall sheath." In view of the 100% rental criterion, a 5-ft. module was established to permit a minimum office unit of 10x10 ft. with lighting and air conditioning. And it is the first high rise building in the nation to be constructed with curtain wall units insulated and glazed at the factory before erection.

A combination of structural steel and prestressed concrete floor beams spanning 70 ft. was employed for the framing system, used in conjunction with a heavily reinforced concrete core. Extending the full 21-story height and accommodating eight elevator shafts, stairways, air ducts and electrical shafts, this core incorporates the main shear walls designed to resist approximately 95% of the earthquake and wind loads. Dr. T. Y. Lin and Dr. Arthur Anderson were consultants on the design and testing of the beams; Bouillon, Griffith & Christofferson were mechanical-electrical engineers.

Norton too is more than a structural landmark. The main level on the site's high side provides for a landscaped plaza with sculpture and reflecting pool. One might have hoped that the plantings had been on a somewhat grander scale and might question the positioning of the cast concrete piece which stands to the right of the lobby's principal entrance. But as Seattle's first major high rise building to be constructed since the 1920s, Norton's luxury of space in indeed a notable achievement in itself.



Art Hupy photos

Norton Building
Seattle, Washington

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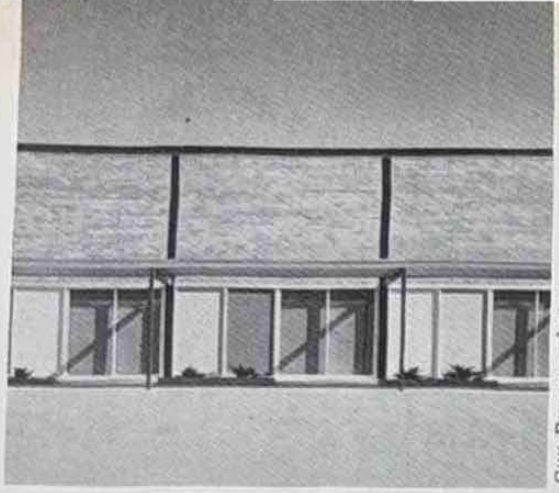
BINDON & WRIGHT
Architects

SKIDMORE, OWINGS & MERRILL
Consultants

HOWARD S. WRIGHT CONSTRUCTION CO.
General Contractor

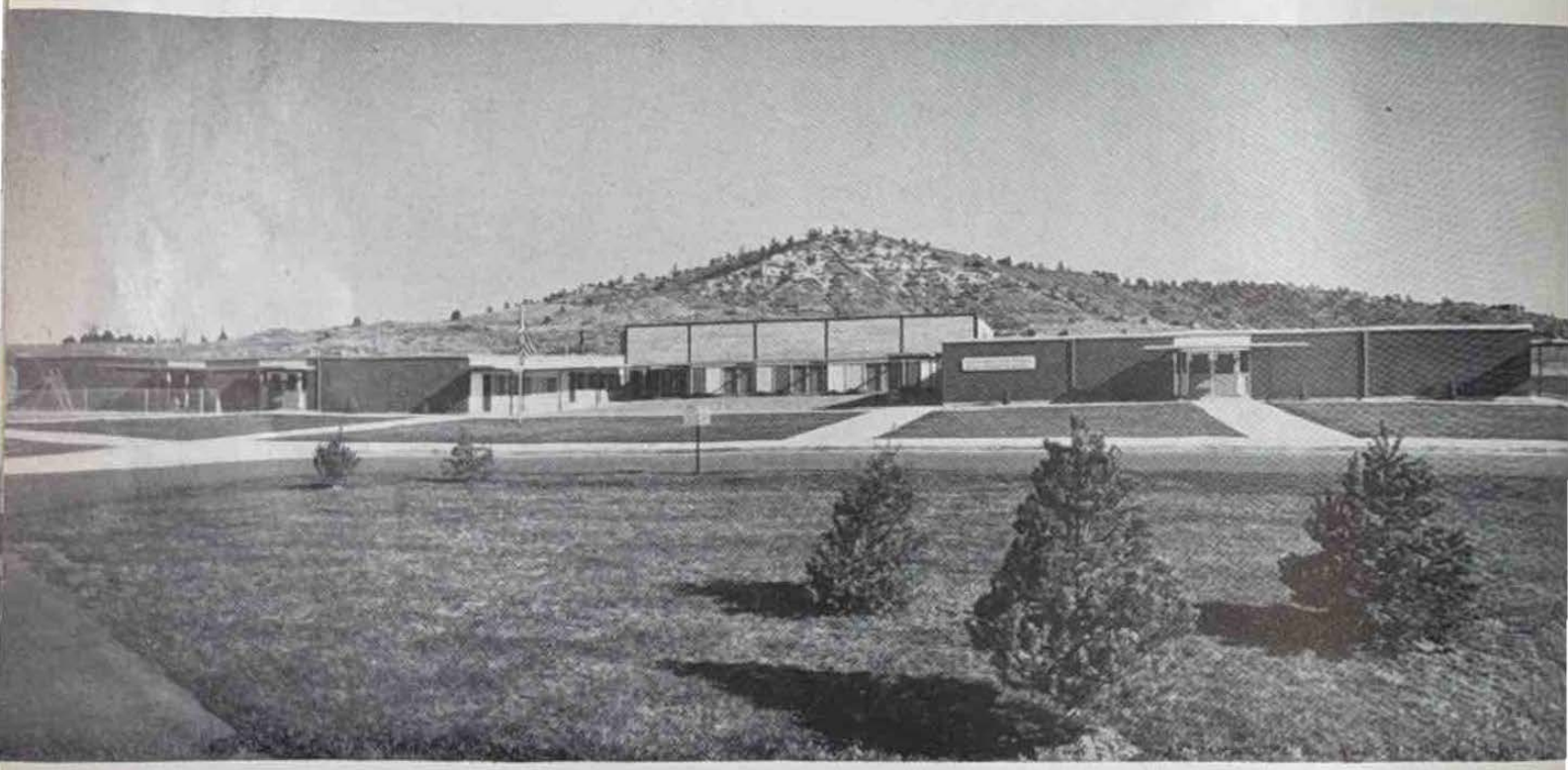


CAST CONCRETE SCULPTURE of "The Restless Bird" is work of Philip McCracken and is mounted directly on plaza's ceramic tile floor. Reflecting pool is beyond glass walled lobby entrance.



Guy Burgess photos

UPPER PORTION of all-purpose room section is blue glazed brick, with exposed columns and fascia painted charcoal. Lower portion consists of glass and porcelain enamel panels in butterscotch, yellow and white. Ends of classroom wings are brown brick, while sides repeat panels of all-purpose room. Trim is white.



Steep slope turned into economical advantage

Katharine Lee Bates Elementary School
Colorado Springs, Colorado

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LUSK & WALLACE
Architects

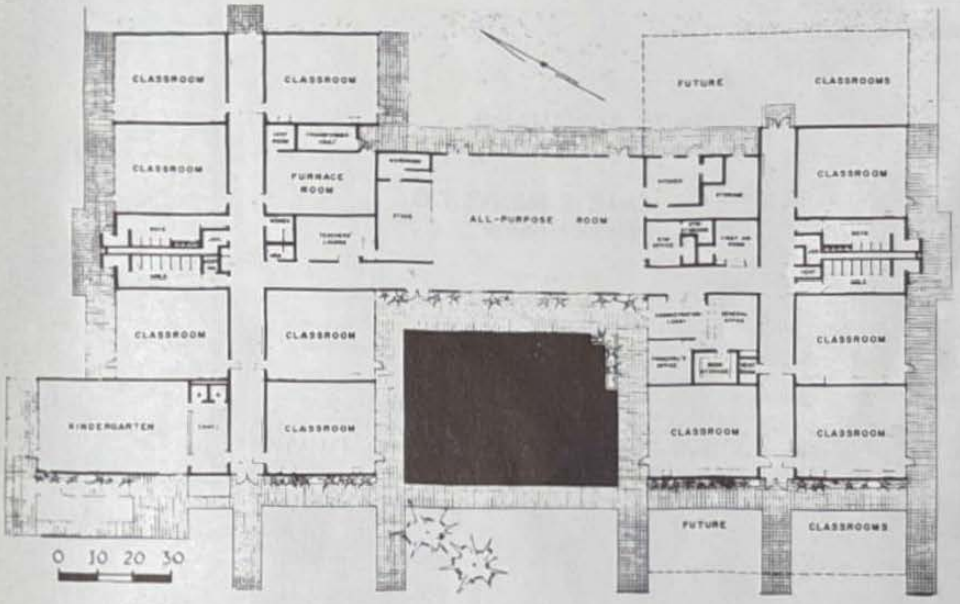
HOLMGREN & LARSON CONSTRUCTION CO.
General Contractor

TURNING a steep slope into an asset, architects for this elementary school utilized an H-shape that effectively segregated age levels and reduced construction costs. Site is on a subdivision track with a grade rise of 34 ft. In order to take advantage of the extreme slope, there is a grade separation between each classroom of about 16 in., permitting each wing to approach the slope of the terrain. Corridors, gently sloped, overcome the change in elevation between classrooms. By fitting the building to the terrain, excessive excavation and grading were eliminated. Playgrounds were graded to a 3% slope to insure proper drainage and simplify the grading problem.

The H-form allows a zone plan that separates the primary and elementary areas and also segregates the playgrounds which are located adjacent to the respective classroom sections. This shape also provides an attractive courtyard entrance which can be used as a protected play area. It is accessible from the all-purpose room through sliding doors. Covered walk doubles as a protective sunshade for exposed classrooms. All windows and openings were designed to be easily blacked out for visual education programs.

Construction economies were achieved by using module dimensions which reduce cutting and waste in masonry work, by sloping the roof on continuous planes to eliminate flashing and parapets and by designing the roof structure in repetitive bays to simplify framing. For economical maintenance, metal and aluminum door frames and plastic paint on interior wearing surfaces were used.

School has 10 primary and intermediate classrooms, the all-purpose room with stage and wardrobe, four toilet rooms, one kindergarten with toilets, administration unit, teacher's lounge and kitchen. It was designed so that future additions (five classrooms and a music room are anticipated) could be made without interrupting normal operation. Mechanical engineers: Harmon & Beckett; electrical engineers: Albert E. McKittrick.

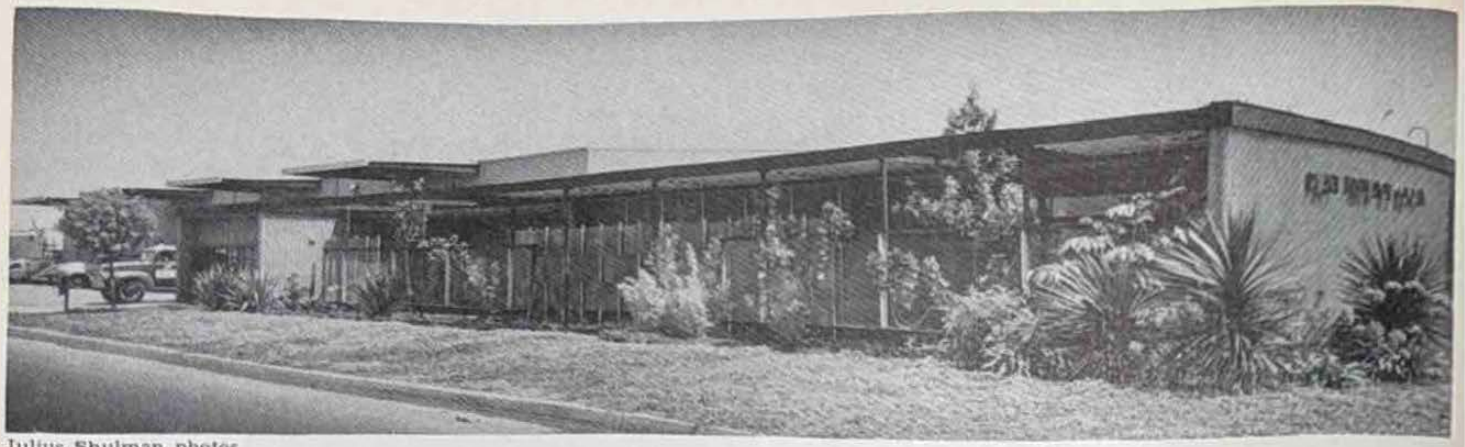




ADMINISTRATION LOBBY and general office as seen from court. Unit includes quarters for principal, nurse, gym instructor, as well as book and general storage.

OUTLINE SPECIFICATIONS

Structures: poured reinforced concrete spread footings and foundation walls; frame: steel joists—Macomber, Inc.; laminated beams—MacIntosh & Truman; roof: insulating concrete slab—Zonolite Co.; steel base—(Corruform) Granco Steel Products; floors: concrete slab.
Exterior Walls: glazed brick—Robinson Brick & Tile Co.; clay brick—Summit Pressed Brick & Tile Co.; painted wood surfaces.
Roof Surfacing: built-up—Lloyd A. Fry Roofing Co.
Windows: aluminum—Cupples Products Corp.
Doors: exterior: aluminum sliding—Miller Sliding Glass Door Co., Inc.; solid core wood; interior: wood.
Floor Surfacing: quarry tile—Murray Tile Co.; asphalt tile—(Matico) Mastic Tile Corporation of America; terrazzo; northern hard maple.
Interior Finish: plastic paint—Zolatone Process, Inc.
Ceilings: acoustical—Celotex Corp.
Lighting Fixtures: Edwin F. Guth Co.
Heating: radiant slab and convector fin tube system.
Plumbing and Sanitary: Crane Co.
Total Area: 19,279 sq. ft. (enclosed).
Total Cost: $247,836 (including site improvement).
Cost per Square Foot: $12.84.
Date of Completion: August 1957.



Julius Shulman photos

Thorpe Insulation Co.
Los Angeles, California

•

SMITH & WILLIAMS
Architects-Engineers

MacISAAC & MENKE CO.
General Contractor



CORRUGATED ASBESTOS PANELS form wall of covered walkway leading to reception room (right). Office wing looks out on garden area (below). Project was cited for award in 1958 by Los Angeles Beautiful Committee. Landscape architect: Warren Jones.

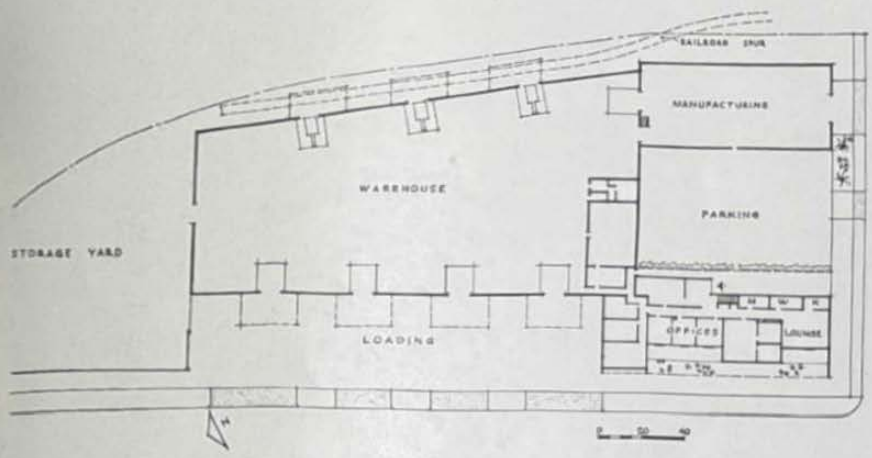


Structure is showcase for client's products

THIS COMBINATION office-industrial building houses a growing firm (formerly known as Plant Insulation Co.) devoted principally to the warehousing and distribution of insulating materials and to the performance of contracting services over a four-state area. Three main elements—an office wing, a warehouse and a small manufacturing facility—connect only as function requires and their organization results in a clear expression of use, good visual screening to separate various activities and a well-organized traffic pattern.

Since the site is hot and dry, the entire office wing is air conditioned and is insulated by a complete (floor, walls and roof) sheath of glass foam 2 in. thick. Finished ceilings are of the company's insulating cork and both flat and corrugated asbestos panels (also handled by the firm) are used for exterior and interior finish. Thus the building becomes, in effect, a showcase for the display of the client's products in use.

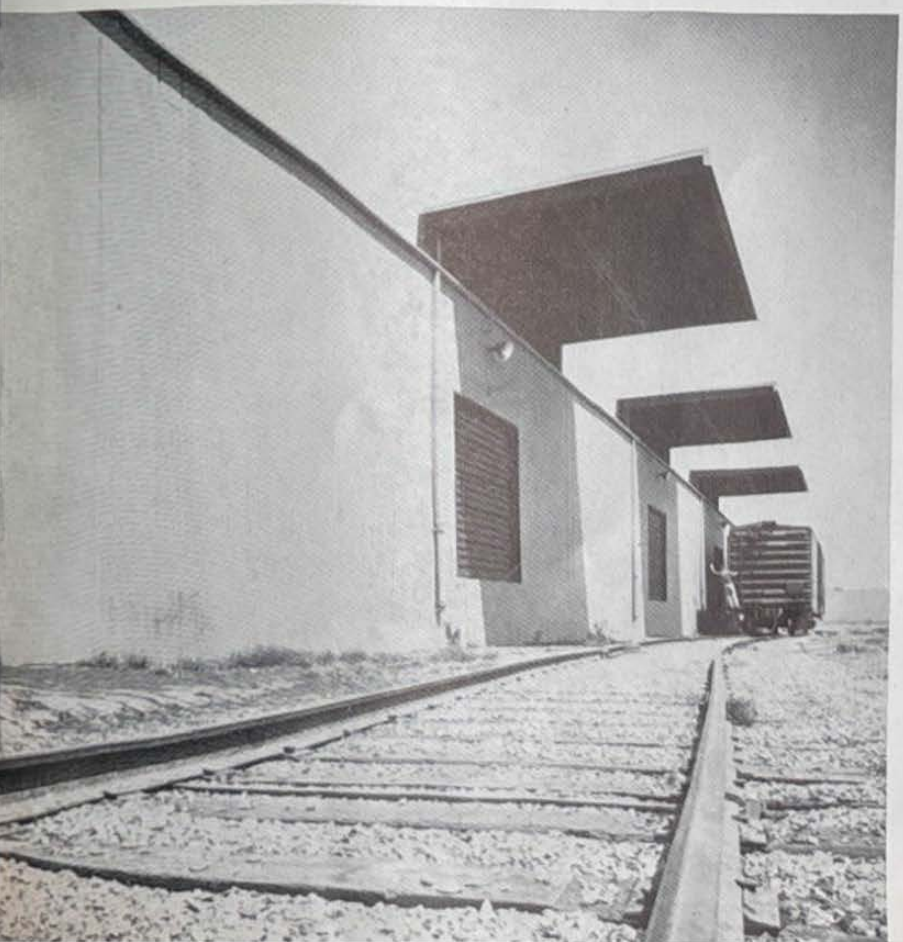
The structure is located in the central manufacturing district of Los Angeles, an area of 3,400 acres which contains over 600 industrial buildings. The district offers wide streets, adequate rail spurs, setback regulations, restrictions on the use of materials, etc.



ALL MATERIAL arrives by rail and is unloaded into warehouse area for straight line handling to truck docks opposite for distribution.



INFORMAL WAITING ROOM continues use of asbestos panels as main decorative element, has close visual relationship to outdoors.



OUTLINE SPECIFICATIONS

Structure: foundation: concrete slab; frame: tilt-up concrete; roof: (Foamglass block) Thorpe Insulation Co.; floors: concrete slab.

Exterior Walls: asbestos-cement board—(Careystone) Philip Carey Mfg. Co.

Roof Surfacing: built-up gravel.

Windows: stainless steel—Louvre Leader, Inc.

Doors: exterior: metal Overly Mfg. Co. of California; overhead—Ferguson Door Co.; interior: aluminum sliding—Arcadia Metal Products; fabric sliding (Modernfold) New Castle Products, Inc.

Insulation: cellular glass block — Pittsburgh Corning Corp.

Interior Finish: asbestos-cement board—(Careystone) Philip Carey Mfg. Co.; hardwood paneling—United States Plywood Corp.

Ceilings: asbestos-cement board—(Careystone) Philip Carey Mfg. Co.; insulating cork—Thorpe Insulation Co.

Lighting Fixtures: (Marco) Marvin Electric Mfg. Co.

Heating: forced air, central unit.

Plumbing and Sanitary: American-Standard.

Total Area: 25,575 sq. ft. (warehouse, 18,000 sq. ft.; manufacturing, 4,050 sq. ft.; office, 3,325 sq. ft.).

Total Cost: $190,000.

Date of Completion: March 1955.

Mosaic sets tone for merchandising shoes



Nordstrom's, Inc.
Seattle, Washington

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McCLELLAND & OSTERMAN
Architects

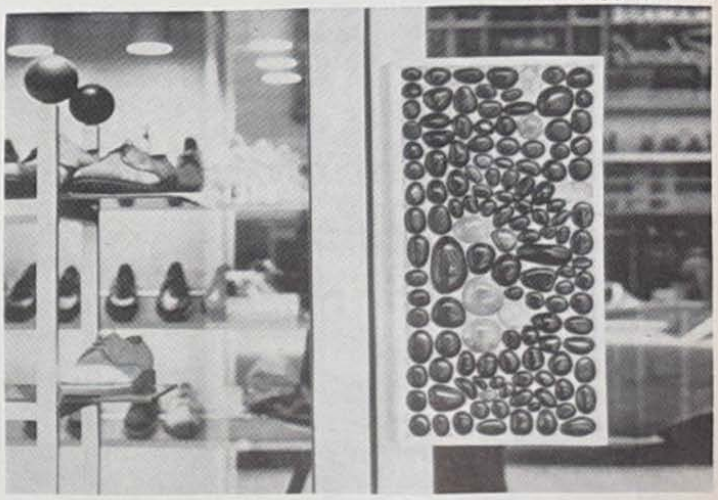
ALLEN VANCE SALSBURY
Interior Designer

Art Hupy photos

IN REMODELING this downtown shoestore, the architects sought to create the effect of one large room, while providing effective identification of separate departments for fashion shoes, special fittings, hand bags and the like. In addition, an expansion made it possible to provide a separate men's store with its own entrance, but partially connected from the inside.

Dominating one wall on the main floor is a striking pebble mosaic (see photo at left), the work of Jean Johanson. Both artistically and in its amber, gold, bamboo and gray colors, it sets the theme for this section of the store display area for the women's fashion department. Wallpaper here is silk in gray-gold. Furniture and rugs pick up the colors of the mosaic and the wallpaper.

Lighting fixtures on posts and over display tables were custom designed by Irene McGowan who used amber beads to pick up wall and furniture tones. Ceiling lighting fixtures are fluorescent in grids with some incandescent spots. Bulk of the structural fixtures are oil finished teak and brushed chrome. Remodeling and expansion project also included the basement and three upper floors. Assistant designer for the interiors: William Overholt; consulting engineers: Beverly A. Travis, electrical; DeWitt C. Griffin, mechanical.



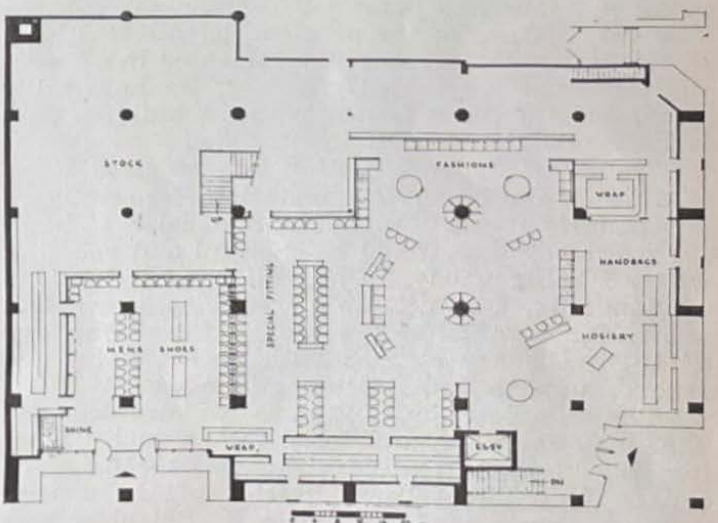
PEBBLE MOSAICS serve as door pulls at both main and men's entrances.



MEN'S DEPARTMENT is separated from other sections of main floor by glass wall shown in background.

BRUSHED CHROME RINGS divide stairway from display. Free form, wooden chandelier (not shown) designed by Norman Warsinske serves as lighting and sculpture piece at stairwell.





MAIN FLOOR

Lane County
Juvenile Court Center
Eugene, Oregon

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BALZHISER, SEDER & RHODES
Architects

JOHN M. STEINMULLER JR.
General Contractor

Institutional approach for rehabilitation and prevention

BECAUSE juvenile authorities throughout the nation have enthusiastically endorsed its functional character after 18 months of operation, this project deserves more than a second look. The building complex actually consists of two structures joined only by an enclosed corridor: Juvenile Department offices and court (6,000 sq. ft.) and Skipworth Juvenile Home with gymnasium (11,000 sq. ft.). The former accommodates all phases of court hearings and counseling services; the latter provides facilities necessary for housing youths who must be detained pending the hearings or other disposition of their cases. Prior to construction of the center, some children were of necessity detained at the jail, a practice which has since ceased. The detention home has its own lobby, a school room, a library and sleeping rooms for eight girls and 14 boys. A large outdoor play area opens off the living-dining room.

In explaining their design approach, the architects make these comments: "After considerable thought we abandoned the concept of trying to make the detention home self-consciously 'homey.' The very nature of the problem defeats this kind of treatment (a fact amply documented in some of the buildings we visited). Rather, we have tried to establish a warm feeling within a building that is necessarily somewhat institutional.

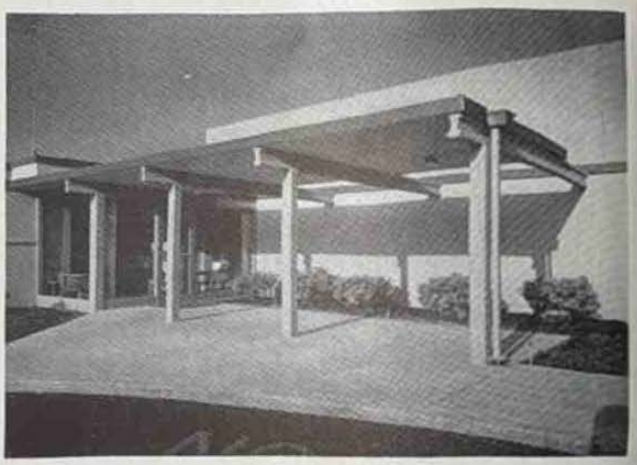
"Much of the construction was required to be of durable and impervious material. Here we were particularly attentive to the choice of color, striving for a scheme that would be cheerful and relaxing without being gaudy. In general, tans and beiges predominate, with accents of red, blue, green and brown for doors and a few wall surfaces. Majority of the walls are covered with plastic paint for ease of upkeep and resistance to abuse."

The concrete building was constructed for $283,000, excluding architects' fees, security fencing, blacktopping and furnishings, or $16.54 per square foot. Jack Glass, director of the center, was a major consultant; James K. Balzhiser was mechanical engineer.

Tom Burns Jr. photos



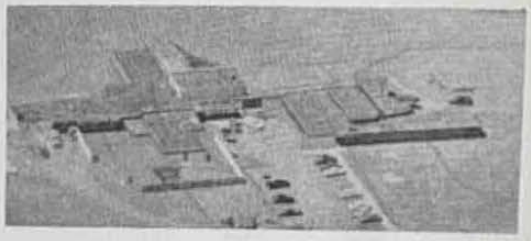
JUVENILE DEPARTMENT AND COURT ENTRANCE seen at right in aerial photo below.



DETENTION HOME ENTRANCE at left of lower photo.



LIVING-DINING AREA is used by both boys and girls. Office is control center for detention unit and contains intercom equipment (including radio-phonograph), fire alarm, electric locking system, etc. It is separated from living area by door-height partition of tempered glass, allowing supervision and separation without "control tower" appearance.



Mammoth Mountain Inn
Mammoth Lakes, California

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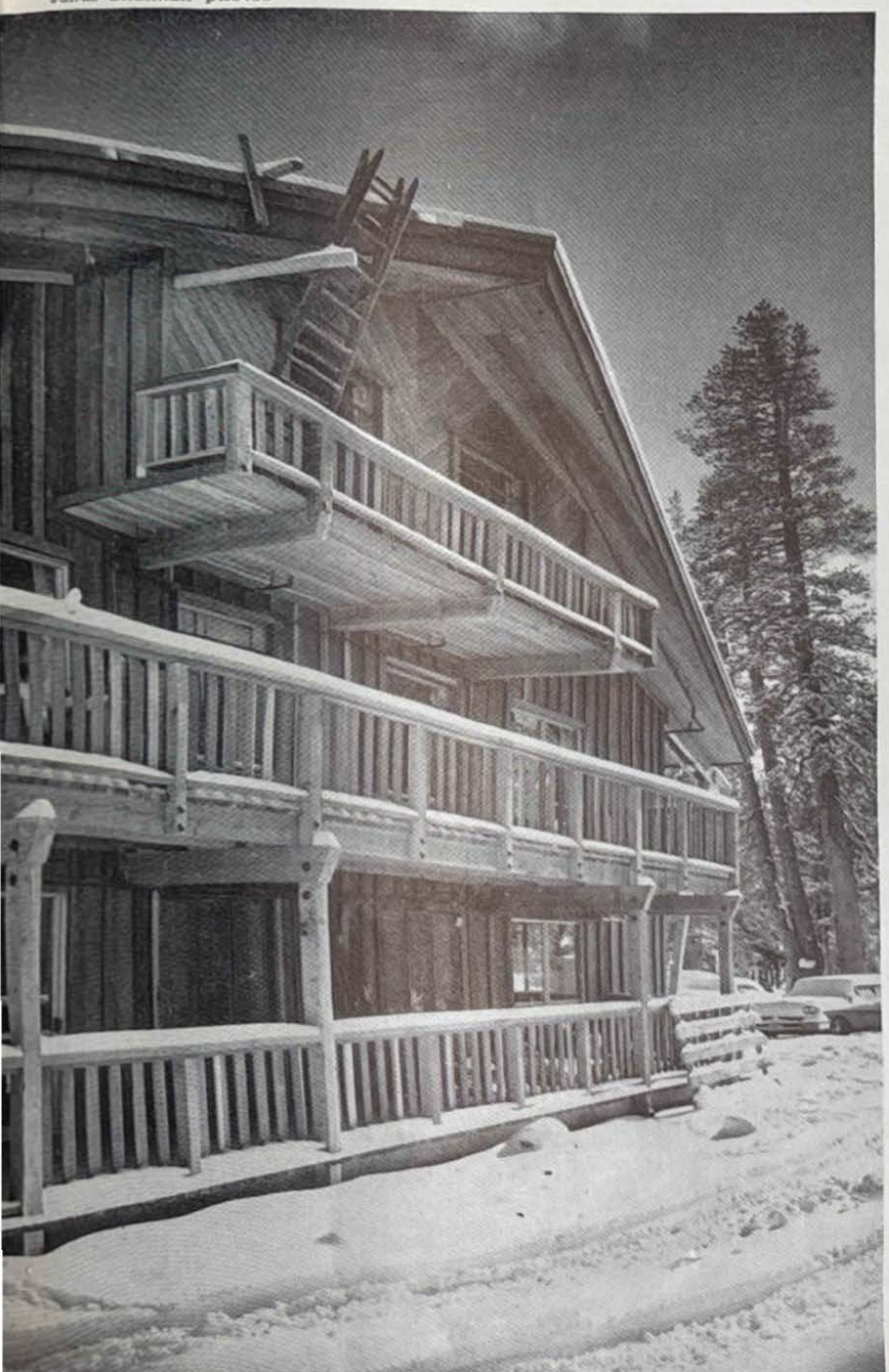
THEODORE T. BOUTMY
Architect

GEORGE KOSMAK
EVELYN KOSMAK
Associated Architects

JOHN E. BROWN
Structural Engineer

WEST AMERICA CONSTRUCTION CORP.
General Contractor

Julius Shulman photos



New world comfort with old world charm

MASSIVE vaulted beams, native stone and simple redwood boards and battens create a fitting appearance of rustic simplicity for this mountain resort facing Mammoth Mountain. Behind the old world facade are such new world touches as electric heating, wood, steel and aluminum sliding double glazed windows and a sprinkler system for fire protection. The resulting design, in the architect's words, "bridges the gap between old world alpine charm and modern convenience and comfort."

The hotel is designed to provide accommodations for nearby skiing from November until June and for hunting, fishing, hiking or just relaxing. It is located halfway between Los Angeles and San Francisco at an elevation of 8,800 ft. off U. S. Highway 395 between Yosemite and Kings Canyon national parks.

Basic design is a T-shape, with main axis facing south toward the 11,000-ft. mountain. A 40-ft. high A-frame forms the central core containing public areas, entrance lobby, lounge and bar, ski shop, etc. Main feature of the core is a series of wood laminated beams each 14½ in. thick by 39 in. deep, weighing 8,700 lb. The lobby extends two stories to these huge beams. On the second floor overlooking the lobby are the dining room with seating capacity of 150, cocktail lounge and small sitting rooms.

From the core extend the two wings containing 70 rooms: 35 chalet type, each with a loft accommodating four persons, and 35 doubles on the first floor. Dormitories sleep eight to a room for a total of 64. A separate 40-room dormitory for the staff is located behind the hotel.

Building is of wood frame and one-hour drywall construction. Foundations are of spread footing type to disperse loads over a large volcanic soil area. All



ENTIRE LODGE, including sundeck, is heated electrically since this proved to be most economical means from standpoint of installation, operation, and maintenance. Roof overhangs are heated to eliminate formation of ice dams.



interior bearing wall partitions are of stagger stud construction. Walls are solid sheathed with plywood to accommodate the great shear loads in heavy snow country. Native stone from the site was used in combination with Sierra slab granite and some pumice block. Total cost of the 60,000-sq. ft. structure was $2 million. Date of completion: December 1958.

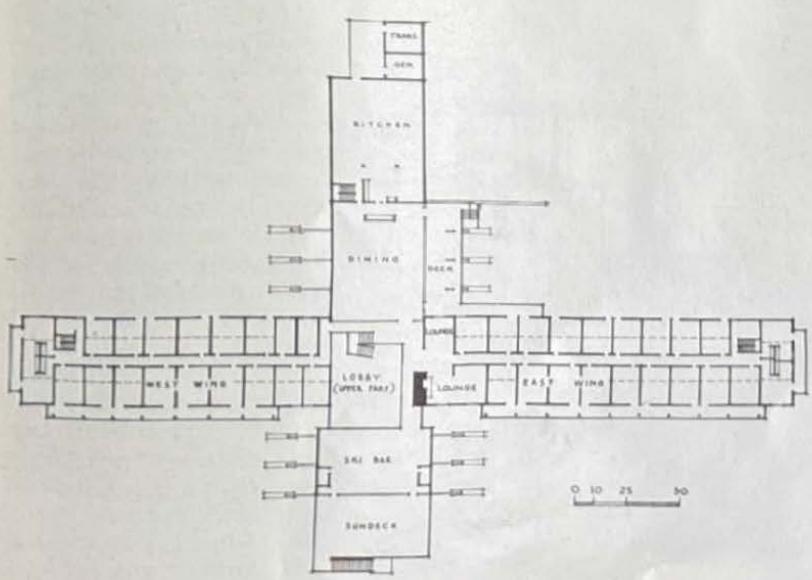
Electric engineers were Smith & Garthorne; heating and plumbing engineers, Kosta T. Belotelkin & Associates; interior decorator, Paul Palmer.



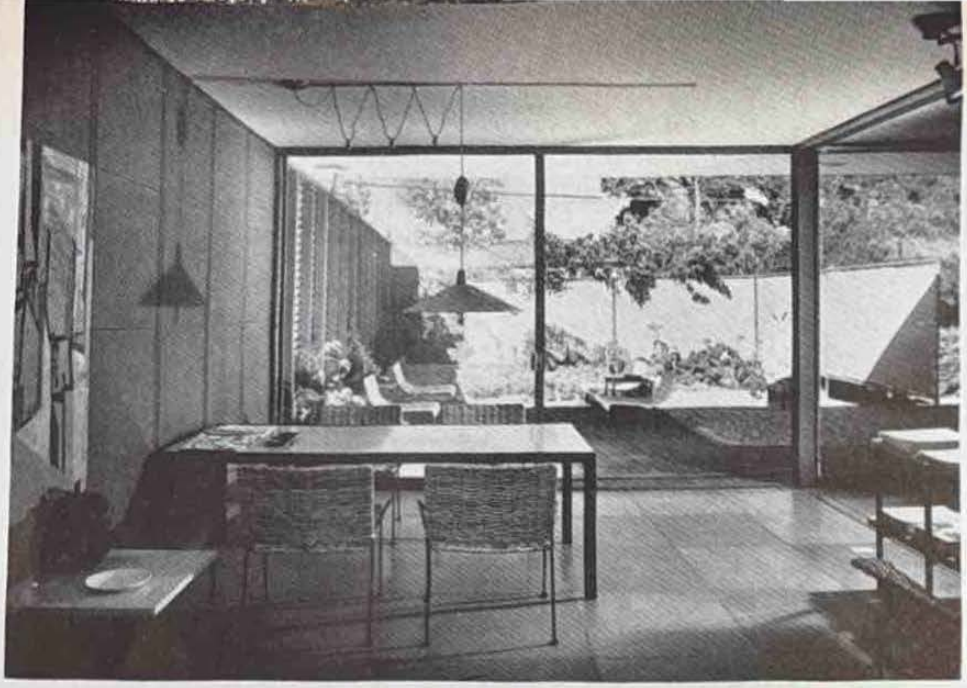
DINING ROOM CHAIRS are persimmon and dark brown; tables are covered in tan plastic laminate; floor is finished with reddish brown rubber tile. Coat hooks are Danish brass on redwood wall. Cove lighting is concealed behind 2x12 redwood beams.



BEDROOMS are comfortably appointed with Danish oak and teak furniture. Panel of steel sash and colored plastic (not shown) provides ventilation since large sliding aluminum doors, even if opened a hair, would pile snow in room in case of storm.

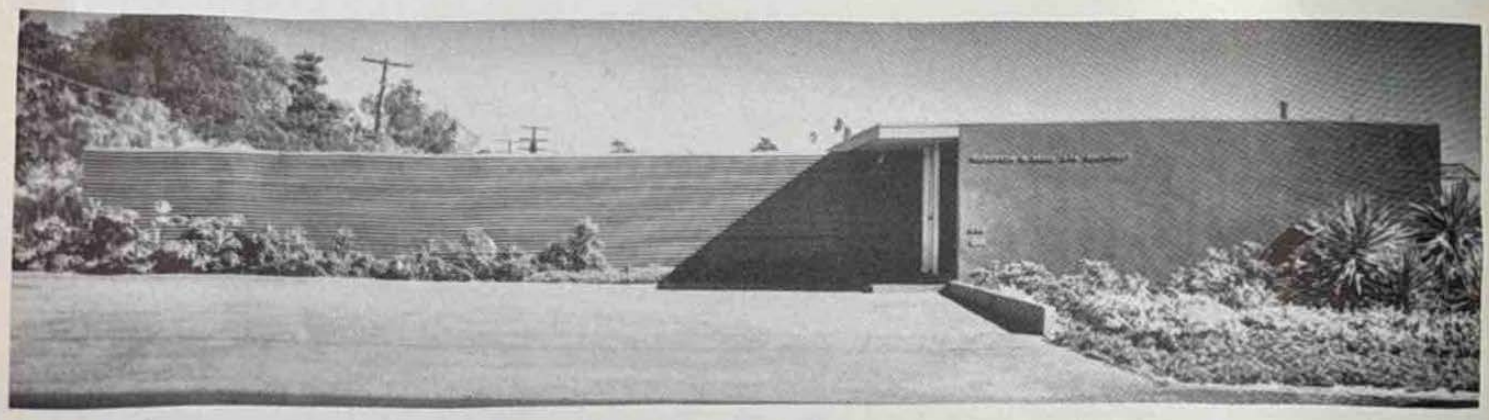


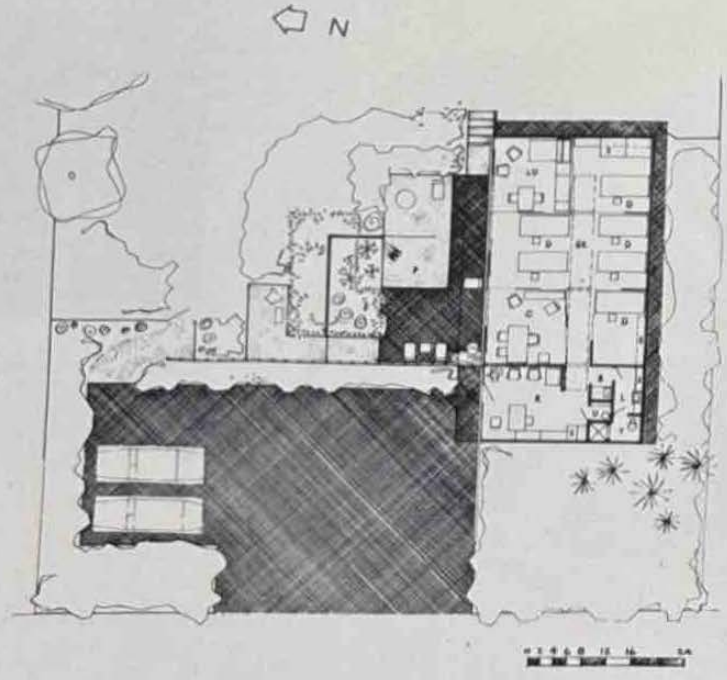
SECOND FLOOR



Julius Shulman photos

CONFERENCE ROOM employs violet blue to accent neutral colors used throughout interior. Wood screen is stained sagebrush green; exposed structural members and glass wall divisions are painted charcoal; entire underside of roof plane is light green oyster.





THORNTON M. ABELL
Los Angeles, California

MOVABILITY of the entire structure and flexibility of interior space dictated both the design and use of materials in this architect's office in a rapidly developing suburban business district. The owner-architect felt that the property required a fair-sized income building to develop it properly. Since funds were limited, it was decided to design an office building that could be removed eventually and replaced with a larger, more suitable income structure. Building was planned so that when moved it could remain an office building, become a display or sales building or even a house without too much alteration.

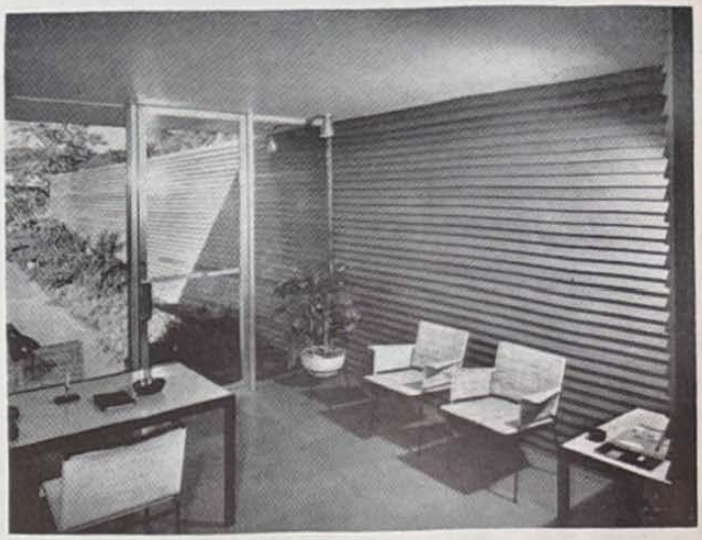
For economy and movability, the structure is a lightweight rectangular frame assembly, 24x48 ft., with a detachable redwood screen which penetrates the interior space and provides a division between public and private areas both inside and out. Screen also creates an illusion of greater space. Behind it is a patio area partially enclosed by a canvas and pipe screen.

Structural system is as light as possible. Floor is t&g plank on wood beams finished with tempered hardboard. Foundation walls occur on front and patio sides, with piers elsewhere. Roof construction is entirely flat with wood beams 12 ft. o.c. and joists hung with metal connectors to provide an unbroken roof plane, except for a skylight well running nearly the length of the building. North wall is entirely glass. A ribbon of glass extends along the south wall. East and west ends are closed. Exterior wall finish is cement plaster; interior wall and ceiling, drywall.

Structure is based on modules of 2, 6 and 12 ft. Front 12x24-ft. section includes a reception and secretary's office and utility core. Balance of the building, a space 24x36-ft., is actually one room with only two central posts. It is divided into 12x12-ft. bays by prefabricated sliding panels, some opaque and others translucent, permitting almost unlimited rearrangement.

Color scheme and finishing materials in the working areas were selected to remain in the background to permit uninhibited analysis of design problems. Neutral colors have been used for the most part: charcoal, grey, light green and light lemon yellow in the well of the skylight. Paintings by Richard Haines and Dale Owen act as points of focus for the color relations in the building.

Structural engineers were Hillman & Nowell; mechanical engineer, J. S. Hamel; landscape architect, Robert H. Forrey; and general contractor, H. E. Marks.



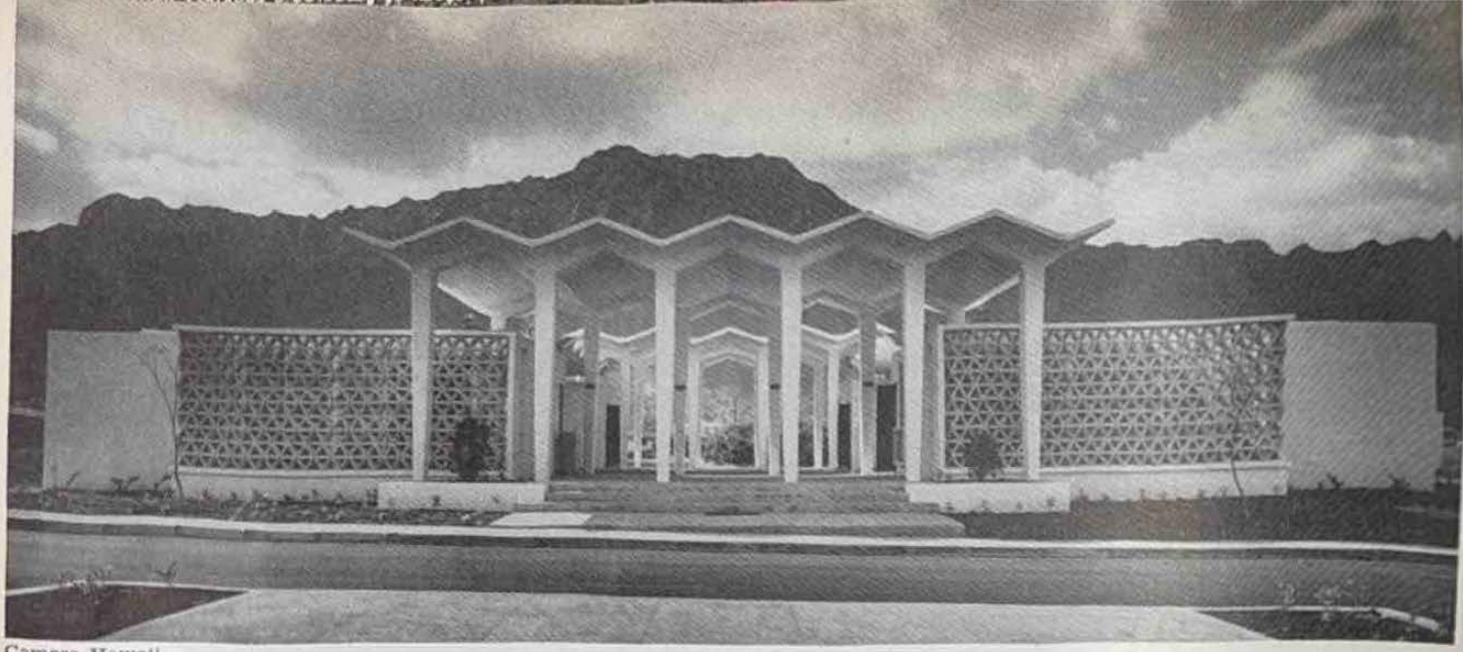
RECEPTION ROOM has one color of intensity—deep lemon gold.



PRIVATE DRAFTING AREA, which also serves as plan room, looks out on patio, defined by gravel and asphaltic paving with redwood curbs.

DRAFTING TABLETOPS are warm white linoleum with birch edges.





Camera Hawaii

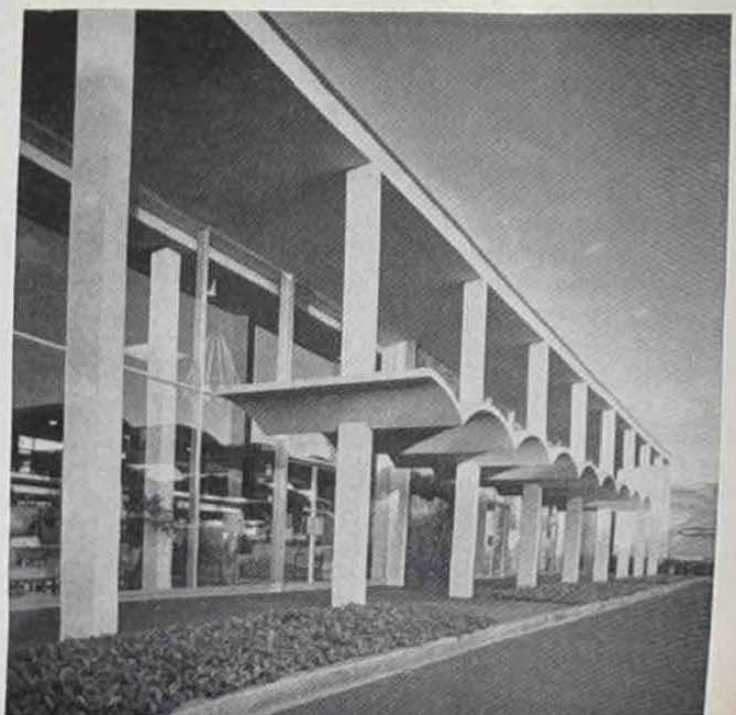
HAWAIIAN MEMORIAL PARK ADMINISTRATION BUILDING, KANEOHE, OAHU: Concrete tile grills decorate the front, rear and sides of this administration building, first of three planned for the 1½-year old, 80-acre cemetery. Structure is of concrete tile block with a concrete folded plate roof. Rain downspouts are encased in the concrete supporting columns. Facing the Kam Highway near the Pali Golf Course, the $100,000 building offers a view of the Koolau Mountains on one side and the ocean on the other. A reflection lake with white swans will be a feature of landscaping now underway.

Facilities include a family room with an outdoor garden of tropical plantings, executive and accounting offices and a large sales conference room which is available to organizations for nighttime meetings. A music control panel houses equipment for playing eight hours of taped religious music daily, fed through four miles of underground wiring to concealed speakers on the grounds. Chapel and crematorium will be constructed later. Architects: Wimberly & Cook; general contractor: Highway Construction Co.

Project roundup

Two Hawaiian buildings

C. S. WO FURNITURE STORE, HONOLULU: Among the projects on the architectural tour during the Pacific Rim Conference last fall was this one, an Honor Awards winner in the 1959 Hawaii Chapter, AIA, competition. The tour guide's comments: "Simplicity is the theme of this design to form a pleasing background for furniture display. Emphasis is on proportion; the structure is expressed and uncluttered. Absence of obstentatious detail permits customers to focus attention on merchandise. Interior is innocent of partitions to allow flexibility for mockups of rotating furniture groupings." A stairway at either end of the building leads to a mezzanine, which houses offices as well as additional furnishings. Architects: Merrill, Simms & Roehrig.



R. Wenkam

by GLENN M. CANADAY

Specialty divisions become increasingly more complex

20. BUILDING EQUIPMENT & SPECIALTIES

This division of the building estimate, which seems to contain more items with each passing year, is intended as a catchall for those manufactured items which do not clearly fit into other divisions. The following will serve as a check list, but the estimator should not place too much faith in its completeness. New items appear on the market yearly. Check these:

- Chalkboard and tackboard
- Metal lockers
- Stage equipment
- Laboratory equipment
- Auditorium seating
- Gymnasium equipment and seating
- Laundry chutes
- Mail chutes
- Post office boxes
- Fire escapes
- Garbage enclosures and cans
- Metal kitchen cabinets
- Fire hose cabinets
- Fire extinguishers
- Laundry equipment
- X-ray shields and x-ray equipment
- Curtain and drapery rods
- Time clock and intercommunication systems
- Movie projector equipment and screens
- Playfield equipment
- Vacuum cleaning systems
- Directories and bulletin boards
- Blinds and shades
- Flag poles
- Pneumatic tube systems
- Toilet room accessories
- Vending machines
- Janitor's tool holders
- Automatic door openers
- Metal shelving

21.01: Elevators. Include here the subcontractor's bid, labor and material for installing elevators. Review the specifications carefully to determine responsibility for furnishing and installation of anchor bolts, furnishing and installing of support beams, hoisting of heavy equipment, furnishing installation power and testing power, and furnishing and installation of elevator doors.

Utilization of the elevator after installation and painting may also require clarification. If a hydraulic elevator is involved, it is important to clarify excavation, concrete work and installation of the hydraulic casing. Elevator installations usually proceed smoothly; however, as the general contractor is usually forced to sign a contract strictly on the terms of the elevator company, elevator installations can become very troublesome. A thorough discussion of problems involved will often prevent strained relations.

21.02: Overhead Traveling Cranes. Include all costs of material and labor for a complete installation. The supplier may quote his equipment installed or f.o.b. rail head. Figure installation by the unit or by the ton. Include all costs of miscellaneous inserts, brackets and hanging rods. Review specifications and plans carefully to determine responsibility for furnishing rails.

21.03: Hydraulic Hoists. Your supplier will probably quote installed. Determine responsibility for excavation, concrete, setting of casings and backfill work.

21.04: Overhead Hoists. Include all types of small overhead hoists—hand, electric or air operated. Check plans and specifications to determine responsibility for furnishing support beams.

22. ACOUSTICS

The acoustical division of the building estimate is becoming more complex each year as the variety of materials used increases. Many patented systems are now in use, serving the dual or triple purpose of supporting electrical fixtures and serving as decorative ceilings or walls. Include in this division all acoustical work except acoustical plastering incidental to other plastering work and specified in that division.

You will probably subcontract your acoustical work if it is extensive. Review specifications and plans carefully to determine all items of construction associated with, or required by, the acoustical installation. The following will serve as a check list:

- Sound deadening blanket or board between partitions
- Acoustic tile
- Wood stripping and furring
- Closure moldings, wood or metal
- Metal support systems
- Hanging rods or wires
- Ceiling inserts
- Perforated hardboard installations
- Perforated asbestos installations
- Wood fiber sheets installed in forms
- Wood fiber sheets installed in framing or stripping

23. FLOOR COVERING

Include in this division all types of resilient floor coverings and those associated materials normally installed by this subcontractor. Preparation of surfaces, protection of floor and wall covering materials, and cleaning and polishing must be clarified. Review the plans and specifications and discuss these items with your subcontractor.

23.01: Resilient Floor Coverings. This subdivision should include all types of resilient floor coverings and accessories—asphalt tile, rubber tile, vinyl tile, linoleum tile, roll linoleum, roll vinyl, roll rubber, and all required cement, edgings, stair nosing, etc.

23.02: Plastic Laminates. Include all costs of plastic laminated coverings on counters, cabinets, walls, etc. Include all backup materials and metal edgings.

23.03: Metal Tile, Plastic Tile, Wallboard. This subdivision includes costs of metal tile, plastic tile and other cemented-on wall finish materials. Check plans, specifications and your subcontractors' quotations carefully to determine responsibility for preparation. Include all costs of facing materials, cement, moldings and surface preparation.

24. PAINTING

Unfortunately, architects often distribute portions of the painting throughout the specifications. Unless the painting subcontractor or the general contractor is alert, this can lead to arguments and hard feelings later on. The estimator should carefully search each section of the specifications for any reference to the painting work. Make notes referencing these in the painting specifications and discuss them with the painting contractor. Also question other subcontractors as to whether they include painting. Particularly, check these items:

- Field touchup painting of miscellaneous and structural steel
- Field painting of structural steel
- Back-priming of millwork
- Painting of movable partitions
- Painting of electrical equipment, painting of mechanical equipment, pipes, ducts and insulation.

Research proposal: solar curtain wall

Third prize design in national competition is basis for project

A research project to develop the principles for designing curtain walls which would intercept solar energy in winter for heating and in summer for cooling has been proposed by Robert P. Darlington, head of the architectural research section at Washington State University in Pullman.

The proposal, made at the Building Research Institute's fall conference in Washington, D. C., would include design, construction and testing of a working prototype solar curtain wall.

In describing his proposal, Darlington pointed out that great progress has been made in the past decade in the development of thin, lightweight, nonload-bearing curtain walls for buildings which can be factory produced and easily and quickly erected, have good thermal characteristics and require minimum maintenance. Much progress also has been made in the development of the heat pump and in utilization of solar energy for heating, cooling, power and other purposes.

"A logical development would seem to be the integration of these facets of our technology to produce a building skin approximating the human skin in its ability to control the interior environment," Darlington said.

"As our natural fuel resources continue to dwindle, more and more attention must be paid to developing new sources of power. A combination of building technology with the technology of the utilization of solar energy could create buildings ultimately requiring little or none of the traditional fuels or sources of energy for environmental control. Costs for this control would be drastically reduced and the depletion of the supply of natural fuels would be sharply cut. Also buildings so constructed would be much more self-sufficient and less dependent on sources of supply and supply lines in cases of emergency."

Darlington envisions a program of research lasting probably three to five years. It would use as a point of departure his solar curtain wall design which won third prize in a nationwide competition in 1956, sponsored jointly by the National Association of Architectural Metal Manufacturers and Aluminum Company of America (see adjoining artwork).

The basic design proposed suggests that hollow extruded aluminum louvers would be used to form the entire exterior surface of the building. Vertical panels of these louvers would be prefabricated in a factory and erected in large sections on the building frame. A refrigerant would circulate through the extrusions down the entire building facade, collecting the solar heat picked up by the extrusions.

A solar heat-to-water heat pump would form the basis of the heating system, as the circulating refrigerant would lose its collected heat to chemical salts or to large water storage tanks and return for another cycle through the extrusions. A warm water or warm air heating system would then use the stored heat to heat the building.

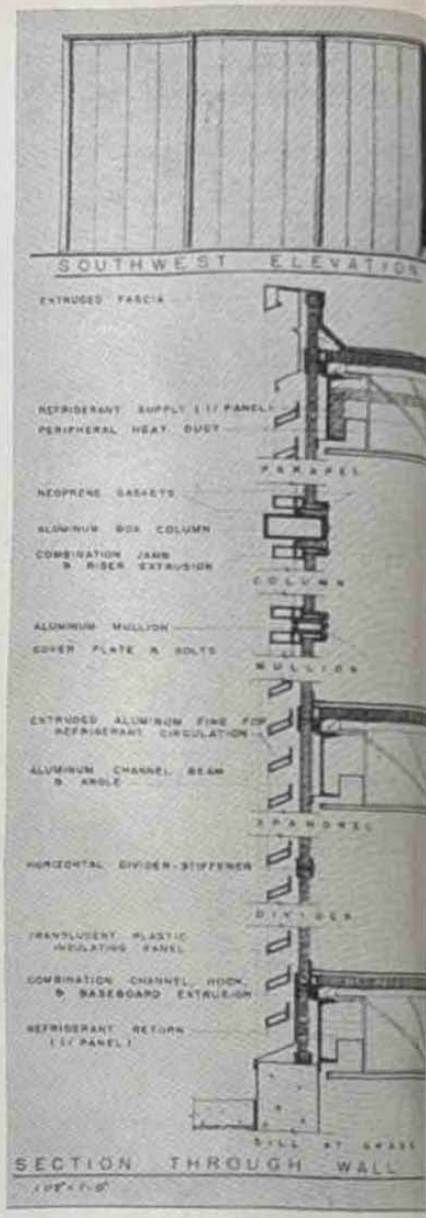
Resistance current through the extrusions on the exterior of the building would prevent frost formation.

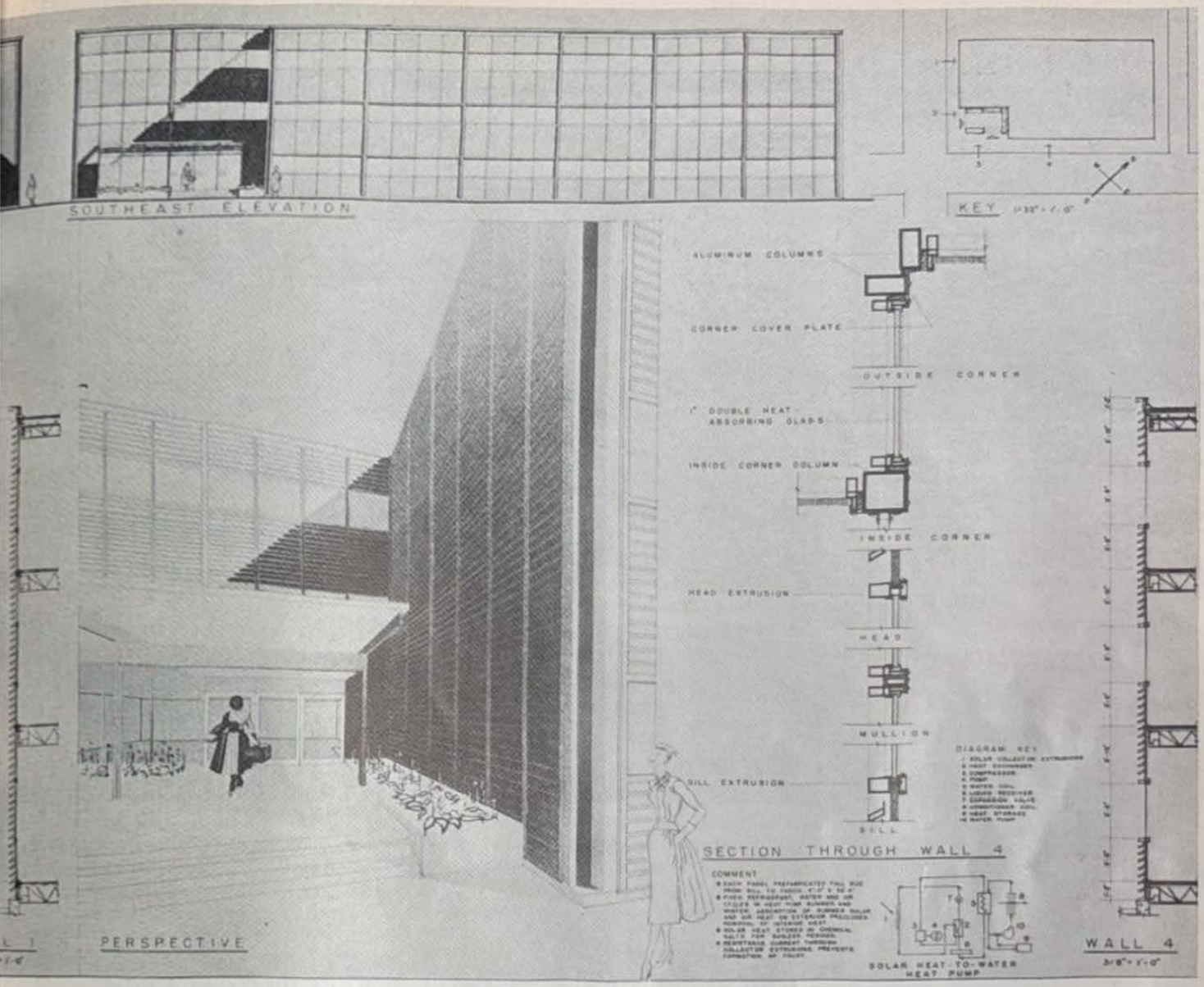
Summer cooling would be accomplished by continuing the same operating cycle as in the winter and intercepting the solar heat before it ever reached the interior. The heat thus collected could be used for domestic water heating or other use or could be exhausted outside by a blower system. This would cut down or eliminate the need for interior air conditioning equipment.

Insulation of the building and transmission of diffused light to the interior would be accomplished through use of a translucent plastic wall panel behind the exterior collector extrusions.

In addition to studies of curtain wall technology, solar energy utilization principles, heat pump principles and other basic studies, Darlington expects one particular phase will require special attention: the problem involved in environmental control of all parts of the building, especially when the sunny side requires cooling and the shady side, heating. "Development of a skin, circulatory system and control system to balance the solar input will be a major objective of the project."

Research work already is underway at Washington State University on effective control of sunlight in residential design for thermal and visual comfort. The subject has come under intensive research study at the Massachusetts Institute of Technology, University of Houston School of Architecture, Association of Applied Solar Energy in Phoenix, Texas A&M Engineering Experiment Station and Princeton University School of Architecture.

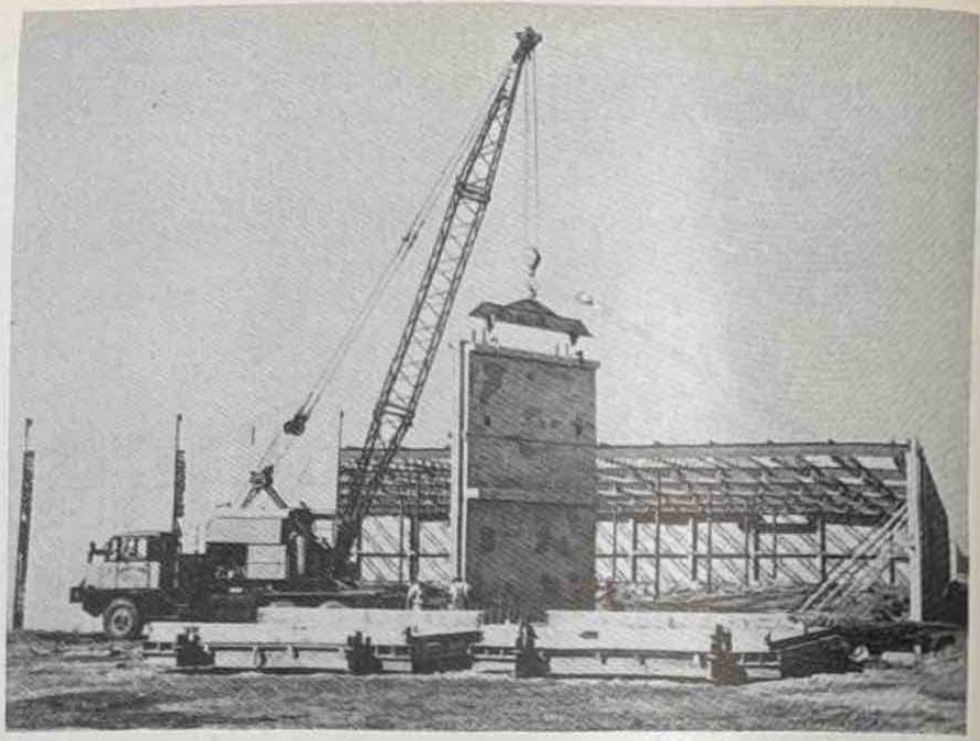




PRIOR AND RELATED WORK IN SOLAR ENERGY RESEARCH COMPILED BY DARLINGTON

1. Massachusetts Institute of Technology: long-term program in solar energy research; 65 publications of the Godfrey L. Cabot Solar Energy Conversion Research Project.
2. School of Architecture, University of Houston: research in solar radiation and thermal conduction of building materials; publication: "Interim Report on Experiments in Solar Radiation and Thermal Conduction of Building Materials at the University of Houston."
3. Engineering Experiment Station, Texas A&M: solar radiation and its effects on buildings.
4. Association for Applied Solar Energy, Phoenix: association formed for the purpose of sponsoring and coordinating research in solar energy; in 1957 sponsored International Solar House Architectural Competition in which the winning entry provided solar energy collection area sufficient to meet all the heat requirements of the house and the swimming pool during a normal Phoenix year and sunshine control to minimize the summer cooling load.
5. School of Architecture, Princeton University: solar research program; publications by principal investigators:
   a. "The Temperate House," Victor G. Olgyay, Architectural Forum, March 1951: an analysis of the climate and the factors which produce climate, notably the sun, its mechanics and its effects.
   b. "The Theory of Sol-Air Orientation," Victor and Aladar Olgyay, Architectural Forum, March 1954: a new method of orienting buildings which includes time, air temperature and total effect, as well as the old maximum sun-heat gain calculations.
   c. "Enviroment and Building Shape," Architectural Forum, August 1954: the impact of thermal forces on buildings.
   d. "Application of Climate Data to House Design," Housing and Home Finance Agency: report of research by Victor and Aladar Olgyay to find a method of approach for evaluation of existing weather data for one climate region.
6. "Design and Performance of a Solar Collector Heat Pump," Gene Ambrose and Philip Sporn: paper presented before the World Symposium on Applied Solar Energy, Phoenix, November 1955; describes in detail the idea of using the same surface for both heating and cooling cycles.
7. "The Solar Battery," Gordon Raisbeck, Scientific American, December 1955: a newly developed device to tap solar energy.
8. "Progress in Solar Power," Harry Tabor, Scientific American, July 1956: the search for ways to tap the sun energy; emphasis on devices simple and cheap enough to repay their cost.
9. "The Curtain Wall," James Marston Fitch, Scientific American, March 1955; the possibilities of designing a solar curtain wall to perform the control features of the human skin.





WALL PANEL is swung into place on piers with frame still intact (right). As wall is set in place and braced, frame tilts away. Note other panels ready for lifting. Walls have been tilted into place as fast as setting crews and crane operator can handle them, about 130 lin. ft. per day (above). Completed 100,000-sq. ft. warehouse shown below is easily adaptable for any industrial use.



Tilt-up costs lowered with special frames

A Texas firm has developed a construction process for forming and erecting steel reinforced concrete walls that eliminates the necessity for grade beams and flooring to be in place before walls can be set.

Called Tilt-Frame, it is said to considerably reduce the cost of erecting concrete buildings since construction time is shortened and the contractor can operate with a minimum-sized crew with little experience. It is estimated that wall panels for a 100,000-sq. ft. building can be erected in 11 working days using this system.

The originator, Garmon Construction Co., is now negotiating for franchises throughout the country which will permit the holder to use the construction unit consisting of patented wall frames, column frames, a corner frame and accessories.

Walls may be cast as either curtain or load bearing. Structural members are positioned in the frame or in the concrete after it is poured. Less than 24 hours after the wall is poured it is ready for lifting, the developer says. A spreading bar is attached to the frame and the wall slab is lifted into place.

Because of the design of the frame and the manner in which the wall is lifted, no stress is applied to the uncured wall. Once the walls are in place, precast reinforced concrete columns are inserted between the slabs.

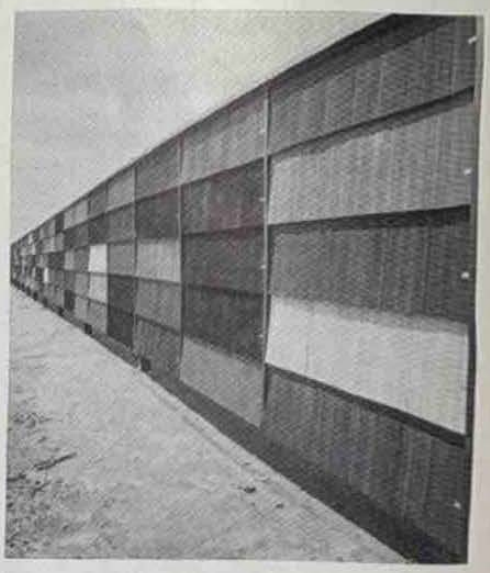
Standard walls are 23x15.8 ft. Wall thickness may be varied. Interior spans of 40x50 ft. with no columns are standard. Minimum size for a building utilizing this system is about 12,000 sq. ft.

Cedar shake finishes undergo testing on West Coast

Improved stain and paint finishes for prestained red cedar machine grooved shakes are the goal of a current research program being carried out by the Red Cedar Shingle Bureau, according to Virgil G. Peterson, secretary-manager.

A 112-ft. test exposure fence has been constructed at Park Forest, an experimental facility of the University of Washington College of Forestry at La Grande, Wash. The fence is composed of 138 different stained or painted machine grooved shakes, picked at random from inventories of 17 manufacturers. They are applied in 4-ft. wide sections on both sides of the east-west fence so that both south and north exposures can be noted.

A similar fence has been installed at Wilmington, Del., to observe East Coast results. The fences are part of a program of testing which includes a weatherometer machine.



CEDAR SHAKES are applied to fence to test ability of finishes to withstand exposure. Each of 138 colors are marked with small metal identifying tags.

Vinyl plastics reduce costs in lab drainage systems

Use of thermoplastic materials for laboratory drainage systems in new and remodeled campus buildings is causing a "revolutionary reduction in installation and maintenance costs," an industry executive told the eighth annual conference of Pacific Coast Association of Physical Plant Administrators which recently met at Idaho State College in Pocatello.

James L. Sheehy of San Jose, Calif., western division manager of Tube Turns Plastics, Inc., declared that "vinyl plastic materials are reducing, and in some cases totally eliminating, maintenance costs." He cited the use of unplasticized polyvinyl chloride (UPVC) fittings now being used in laboratory drainage systems and water systems which provide "lower initial cost and proven corrosion-resistance, thus lightening the burden of plant facilities administrators."

Sheehy reported that Northwest Testing Laboratories in Portland installed UPVC fittings in its laboratories 18 months ago and that "this equipment has undergone regular, controlled inspection by trained chemists to determine how effectively the vinyl plastic holds up after continual exposure to the most corrosive acids. The UPVC fittings there are as virginal in appearance as the day of their installation."

Initial cost of these materials is another distinct advantage, he said, pointing out that a Southern California electronic company discovered that the only material other than UPVC that could be used to handle drainage wastes was a "tremendously expensive superalloy."

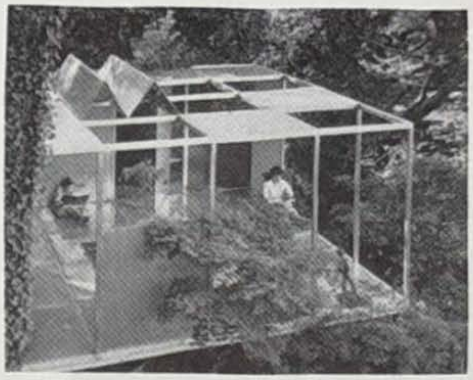
Other installations cited

Sheehy said UPVC has also been employed successfully in laboratory drainage systems at Stanford Research Institute, Santa Clara University, Oregon State College, Space Age Laboratory of Ramo-Woolridge Corp., Los Angeles; and the new Hughes Aircraft Co.'s semiconductor division at Laguna Beach, Calif. He said that in California the state legislature has recently enacted a measure approving plastic fittings and piping for gas and water service whereas only galvanized pipe and iron fixtures had been allowed before.

Thermoplastic materials, he predicted, will continue to play an important role in future campus construction—not only in plumbing systems but in a variety of uses ranging from stair railings to furniture coverings.

Movable shelter joins aluminum design series

Unveiled at the 1959 San Francisco Home Show, the "viewbox" is a 16-ft. square structure, 8 ft. high, created by California designer John I. Matthias for Aluminum Company of America's continuing collection of designs for tomorrow. It is assembled from structural aluminum channels, simple slide-in joints and panels of aluminum or other materials, such as plastic, plywood, canvas, glass, screening and rattan.



STRUCTURE may be partially open as seen here or completely closed and weathertight.

Based on 4-ft. modules, the shelter may be carried in sections to the site and erected without tools. It requires no foundation, sitting on adjustable supports that vary up to 6 ft. in height. Placed on a slope, it will provide a dead-level floor with no excavation.

Not yet a production item, the prototype suggests a number of other applications in addition to its family uses: campus structure, refreshment stand, portable ski hut, etc.

Plastic layer protects San Francisco sidewalk

To solve the problem of water leakage into the basement from sidewalks above, the White House department store in San Francisco has coated surrounding walks with a plastic material. The paving resin, Hycon-Guardkote, is not only expected to seal out water and ease repair bills, but also has eliminated unsightly patchwork appearance and provided a distinctive charcoal gray approach to the store.

White House is the first store in the Bay Area to try out the product, an epoxy resin-bitumin surfacing compound developed by Hodges Chemicals Co. The product has been tested out previously on roadways and bridges. It bonds permanently to most substrata, sheds water, resists most chemicals and will take repeated impact without breaking, the manufacturer reports.

In covering the 14,000 sq. ft. of sidewalk at the White House, contractor Harold A. Price Co. first acid-etched the concrete for 10 min. This was washed off and after the surface was dried, all active cracks were sealed with an epoxy resin elastomer. The Hycon-Guardkote resin, combined with curing agent and silicone-carbide grit, was poured onto the concrete and troweled over 3-yd. areas to about ⅛-in. thickness. Increased skid- and slip-resistance was added by sprinkling more grit over the resin until it was completely covered.







SIDEWALK before application of plastic coat is shown at top. Directly below, compound is troweled on. At left, sidewalk after coating.

flexible bus duct

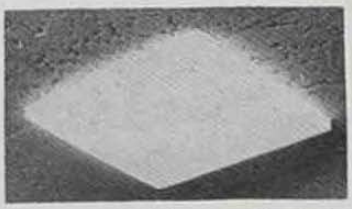
Bulldog has completely redesigned its plug-in bus duct to produce a line offering extremely low voltage drop, simplified joint design for easy installation and a number of safety features making it almost impossible for an electrician to touch a live bus bar. The XL Bustribution plug-in duct will be available in ampere ratings of 225 through 1,000. Separate plug-in switches may be attached at almost any point and detached and moved at any time even while the power is still on. Each bus bar has full-length Butyl insulation, even in bus plug openings. A further safety feature is the plug-in cover which must be closed until the switch plug is in a safe position and cannot be attached or removed while the switch is in "on" position.—Bulldog Electric Products Division, I-T-E Circuit Breaker Co. **(Item No. 1)**

hardwood folding doors

To meet individual design needs, Leggett is marketing a folding door faced with designer specified hardwood veneers. The custom manufactured Martin door consists of ¾-in. thick by 6- to 12-in. wide panels hinged by a high tensile strength nylon webbing. Top supported only, the entire suspension assembly operates in a 1¼-in. square 16-gage steel channel. Any commercially available wood veneer can be used in heights up to 12 ft. At present western distribution is confined to the Los Angeles and Salt Lake City areas. —The Leggett Co. **(Item No. 2)**

frameless lighting fixture

A newly developed high thermal-resistant plastic diffuser makes possible this line of frameless recessed



incandescent lighting units. The material, according to its manufacturer, withstands rated incandescent lamp heat without warpage, distortion or discoloration. Space-Lites are available with flanged housings for 8¾-sq. in. and 12-sq. in. ceiling openings and in a tile replacement fixture designed to replace a standard 12x12-in. ceiling tile without overlapping. Fixture's floating appearance offers many design possibilities for both commercial and residential construction. Installation cost is low because absence of frame eliminates trim time. Special fasteners simplify diffuser replacement.—Alkco Manufacturing Co. **(Item No. 3)**

pad-bonded carpeting

To simplify installation and reduce the cost of wall-to-wall carpeting, Roxbury has developed a process for permanently bonding a resilient foam rubber pad to broadloom. Padding also forms the underlay. Foam-Loom is being marketed in both wool and rayon carpet fiber in a variety of textures and colors. Carpeting comes with tape for bonding to the floor and a special cement for making seams.—Roxbury Carpet Co. **(Item No. 4)**

self-supporting interior wall

No wall supports or studs are required for the Pabcowall, an interior partition fabricated from three thicknesses of gypsum wallboard laminated on the job site to form a rigid, self-supporting fireproof wall 2¼ in. thick. The system cuts wall space in half, resulting in more usable floor space without loss of soundproofing qualities. The company also reports that it produces a stronger wall than the conventional method. During construction, room divisions are laid out from blueprints with nailing strips. Electrical outlets are precut in wall sections. Doorways, formed after the sections are in place, may be cut anywhere in the walls. The system is now being introduced in the 13 western states and is receiving its first try out at the 700-home Seven Trees subdivision in San Jose, Calif.—Pabco Gypsum Division, Fibreboard Paper Products Corp. **(Item No. 5)**

steel beam fireproofing

Zonolite has developed a direct-to-steel fireproofing for steel buildings that can be applied to full thickness in one application. Called Mono-Kote, the product can be machine applied and used with standard mixers and plaster machines. When applied on ceilings and beams, it offers fire protection, insulation and sound absorption. It excludes the need for lathing. Mono-Kote consists of a vermiculite base combined with other ingredients. It is premixed, requiring only addition of water for application.—Zonolite Co. **(Item No. 6)**

push button water control

A system of water control utilizing push buttons in place of faucets brings automation to home plumbing. Ultra-flo buttons control solenoid valves through a low voltage electrical system, supplying hot, cold, warm water or other combinations of heat and flow. Buttons can be placed wherever practical for functional and design reasons. Water is mixed at the water heater, reducing heat loss and also size of pipe since the line serves only one fixture. Possibly the greatest advantage is the elimination of faucet drip and washer replacement.—American Sanitary Manufacturing Co. **(Item No. 7)**



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patterned portland cement

Three decorative portland cement finishes, used for several years in other countries, are now being introduced to the American market. Included are a process in which murals are cut into a wet Cement Enamel background, producing a three-dimensional multicolor effect; a highly textured cement coating designed specifically for exterior use called Coraltex; and a group of textured finishes designed to produce custom made, multicolor patterns in theaters, lobbies and other areas where special effects are desired.—Cement Enamel Development, Inc. **(Item No. 8)**

concrete column forms

A complete and varied line of tubular fiber forms are being marketed for forming round columns of concrete. Super-Tubes can be used for forming supporting columns, underpinning, stub columns, quarter, half and obround columns or concrete piers. Forms are light in weight, easily handled and placed by semiskilled labor and simple to strip.—Superior Concrete Accessories, Inc.

(Item No. 9)

cherry grained hardboard

Plank-by-plank variations that exist in cherry woods have been simulated in a decorative group of interior hardboards offered by Masonite. The t&g ¼-in. panels can be applied over studs, furring strips or existing walls with metal clips. Hardboard is designated the 400 Series and is available in three shades.—Masonite Corp.

(Item No. 10)

striped linen wall tile

Vinyl tile wall facing in a three-dimensional striped linen pattern is the latest addition to the Bolta-Wall line. The 8x8-in. tiles can be applied to most wall surfaces. Eight colors are offered.—The General Tire & Rubber Co. **(Item No. 11)**

acoustical light control

By laminating a layer of porous cellulose film to each side of a core of rigid vinyl sheet, Contrex has produced a construction material combining both acoustical and light diffusion qualities. Called Soundsheet, it employs Bakelite, a vinyl sheet that has been used for a number of years in standard luminous ceilings. Acoustical quality is achieved by perforating the vinyl sheet with small, evenly spaced pores. Noise reduction coefficient is 70%, with the standard 48% light transmission value of ceilings with baffles. Material comes flat or corrugated, is light in weight, nonflammable and easy to clean. It can be cut into desired dimensions with scissors. While primarily designed for use in wall-to-wall and area lighting systems, Soundsheet also is recommended for use in air conditioning and heating ducts, as an absorber barrier in space dividers and screens and for backlighted wall treatment.—Contrex Co.

(Item No. 12)

aluminum alloy shear plate

Extra high tolerances are claimed for a precision shear plate cast of aluminum alloy. The shear plate, for timber and structural fastening, has a patented compression ring cast into the plate which raises the shear valve beyond that of cast iron, the manufacturer says. Shear values are equal to the bolt used in fastening. Nails are cast as an integral part of the plate, eliminating the use of common nails for fastening — Timber Hardware Co. **(Item No. 13)**

HAWS

FIRST WITH BEAUTY



In drinking fountains . . . the skill and beauty embodied in Haws superbly styled fountains are recognized the world over: Model 10Y was selected for International Design Competition, Milano, Italy. Designed by Channing Wallace Gilson, this beautiful fiberglass fountain is only one of Haws' many distinctive fountain creations.

In flush valves . . . you see only a button—for Haws-Kramer "Silent Service" Flush Valve System is **concealed** in the wall to give home bathrooms the streamlined beauty of "built-in" convenience. "Silent Service" operates with **conventional pipe sizes** for easy adaptation to residential construction. Find out more!

Specify these new Haws items. See them in Sweet's Architectural File or write for complete Haws catalog—today!

HAWS DRINKING FAUCET COMPANY

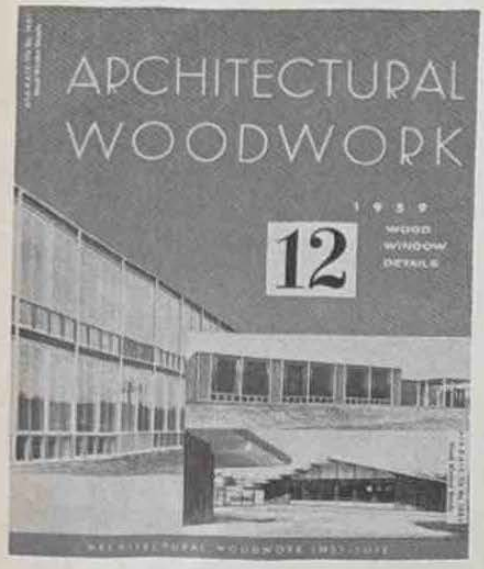
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LITERATURE



pa&b pick of the month

Wood window details and specifications are the subject of the Architectural Woodwork Institute's 12th brochure (AIA 19-E-1) in a series that will eventually cover all aspects of the use of millwork in residential and commercial building. Included are six pages of traceable detail drawings on double hung windows and window wall openings. Specifications cover species of wood adaptable for window use, as well as information on sash, nails, glazing, caulking, weatherstripping, hardware, preservative treatment and stained or painted finishes. Material is in looseleaf form for easy removal and use.—Architectural Woodwork Institute, 332 S. Michigan Ave., Chicago 4, Ill.

Plumbing Fixtures (Catalog G-9): presents complete line with dimensional drawings and installation data; 96 pp.—Gerber Plumbing Fixtures Corp., 232 N. Clark St., Chicago 1, Ill.

Lighting Fixtures: uses color photos to demonstrate design possibilities with representative types for homes; 52 pp.—Emerson Electric Manufacturing Co., 8100 Florissant Ave., St. Louis 36, Mo.

Engineering in Wood—1960 (AIA 19-B-3): offers detailed drawings, tables of dimensions, section properties and specifications for glued laminated arches, beams, rigid frames and domes, trusses and decking with installation photos showing typical examples; 24 pp.—Timber Structures, Inc., P. O. Box 3782, Portland 8, Ore.

Modernistic Service Stations: sketches some highly different designs for service stations that would be possible by using modular electric fueling system (which eliminates need for usual pedestal housing) and explains system; 16 pp.—Bowser, Inc., Fort Wayne, Ind.

Aetnawall Partitioning Systems: features large, handsome photographs of several types of installations including the new Aetnawall-A of extruded aluminum shapes with snap-on pilaster covers; 24 pp.—Aetna Steel Products Corp., 730 Fifth Ave., New York 19, N.Y.

Welded and Fitted Railings: illustrates and describes line in steel or aluminum with basic design data; 12 pp.—Tubular Products, Inc., Souderton, Pa.

Metal Curtain Wall (AIA 17-A) gives engineering data, details and specifications for CWA-5 cast panel construction for curtain walls and fascia panels, a system that incorporates the sculptured qualities of casting into the advantages of standard metal wall components. — The Michaels Art Bronze Co., Inc., P.O. Box 668, Covington, Ky.

Tubular Steel Scaffolds: outlines scaf folding and shoring line with drawing showing suggested bracing; 8 pp.— Superior Scaffold Co., 5624 Bankfield Ave., Culver City, Calif.

Teco-U-Grip Joist and Beam Hanger (AIA 19-B-5): introduces larger ca pacity hangers for up to 4x14-in structural wood members; 4 pp.—Timber Engineering Co., 1319 18th St N.W., Washington 6, D. C.

Sanpan Translucent Building Panel (AIA 17-A): catalogs line of fiberglas panels, window walls and curtain wal system with scale drawings; 8 pp.— Panel Structures, Inc., 45 Greenwood Ave., East Orange, N. J.

Lazy Susan Shelves: pictures model of revolving shelves that turn dea corners into useful space; 4 pp.— Washington Steel Products, Inc., 194 E. 11th St., Tacoma, Wash.

Steel Deck (AIA 12-C): gives com plete data, including detail drawing of 24-in. steel roof deck and other sections; 16 pp.—The R. C. Mahon Co E. Eight-Mile Road, Detroit, Mich.

T-SQUARE TALK

new offices, partnerships

Edward Avedisian, architect, has established an office at 1126 N. Fresno St., Fresno, Calif.

James Waldowski has opened an office for the practice of architecture at 310 Fidelity Building, Spokane.

George V. Whisenand has become a partner in the Honolulu firm of Wimberly & Cook Architects, Ltd.

Stuart B. Mockford and Joseph H. Rudd have formed a partnership for the practice of architecture, under the name of Mockford & Rudd, with offices at 723 Washington St., Oregon City, Ore.

Ralph A. Edwards and George N. Daniels, Salt Lake City architects, have become partners in a firm known as Edwards & Daniels, with offices at 1407 S. 22nd East.

new partners, associates

Law & Wilson, Honolulu architects-engineers, have given associate status to Robert M. Matsushita, archi tect, and Frits H. Fenger, civil engi neer.

James E. Jackson, senior designe for John Graham & Co., Seattle archi tects-engineers, has been named partner in the firm. New associate are architects John Ridley and Arthu E. Edwards.

firm changes

The Seattle architectural firm o Decker & Christenson is now know as the Office of Ralf E. Decker, with offices remaining in the 1411 Fourth Avenue Building. Waldo B. Christen son, who joined Decker in 1950, die last May.

new addresses

Mandeville & Berge, architects engineers, to the Logan Building, 500 Union St., Seattle.

Laurence Farrant Associates, plan ners-architects-engineers, to the Salt Lake Stock Exchange, Salt Lake City

Benjamin E. Cave, architect, to 329 Bush St., Salem, Ore.

Daniel, Mann, Johnson & Mendenhall, architectural-engineering firm, has moved its Honolulu offices to the Aloha Tower.

R. Lindsey Lamberson, architect-builder, to 3766 Stevens Creek Road, San Jose, Calif.

appointments, elections

Lynn M. F. Harriss, assistant superintendent of Oakland parks since 1947 and executive secretary of the California Council of Landscape Architects, resigned January 1 to become field secretary of the American Society of Landscape Architects. In the newly created position, he will establish an office in Washington, D.C., for the 1,500-member organization now based in Boston. Succeeding Harriss in the CCLA post will be Daniel Rolfs of Stanford University's planning staff.

Harry B. Wilson Jr. has been elected vice president and general manager of Charles Luckman Associates, Los Angeles planners-architects-engineers. Joining the firm (then Periera & Luckman) in 1950, he moved east to establish its New York headquarters eight years ago.

Lawrence Halprin, San Francisco landscape architect, has been selected to assist in immediate and long-range planning of landscape design on the Universtiy of Washington campus in Seattle.

honors

Arthur Froehlich of Beverly Hills, architect of the new Aqueduct Race Track in New York, has been cited "for designing the most outstanding building in any classification, constructed in the Borough of Queens during the year 1959."

AIA chapters elect officers

AIA chapters in four western states—California (six), Nevada, Arizona (two) and Hawaii—are among those who recently elected new officers. They include:

East Bay: Roland Gibbs, president; George P. Simonds, vice president; Nathan J. Kuper, secretary; Roland K. Kuechle, treasurer.

San Joaquin: Walter Wagner, president; M. D. Mortland, vice president; Edwin S. Darden, secretary; Richard J. Manogian, treasurer.

Southern California: A. Quincy Jones, president; C. Day Woodford, vice president; Clinton Ternstrom, secretary; James Mount, treasurer.

Pasadena: Donald S. Neptune, president; Roland L. Russell, vice president; Robert E. Tryon, secretary; Richard W. Rose, treasurer.

Orange County: J. Herbert Brownell, president; Raymond W. Johnson, vice president; Kermit P. Dorius, secretary; Knowlton Fernald Jr., treasurer.

San Diego: Selden B. Kennedy, president; Robert E. Des Lauriers, vice president; Richard Lareau, secretary; James Bird, treasurer.

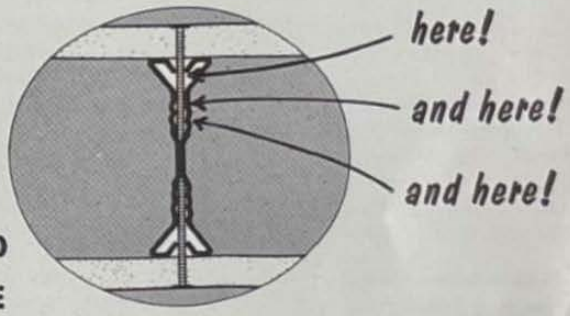
Reno: Raymond Hellmann, president; Ralph A. Casazba, vice president; Edward S. Parsons, secretary; Milferd R. Wheeler, treasurer.

Central Arizona: Jimmie Nunn, president; Kemper Goodwin, vice president; Lester Laraway, secretary; Charles Hickman, treasurer.

Southern Arizona: Gerald I. Cain, president; David Swanson, vice president; Barnard Friedman, secretary; Carl John, treasurer.

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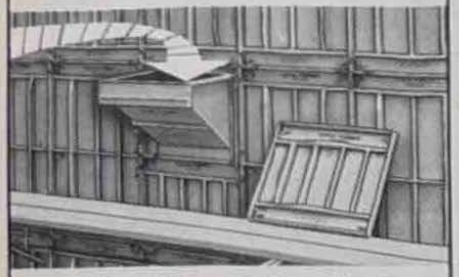
• **Kohler Co.** has named Ralph E. Caldwell as manager of the Seattle branch office which handles the territory of Washington, Oregon, Idaho, Alaska and part of Montana. He has been serving as a salesman in the Los Angeles branch.

• **Drayer-Hanson Division** of National-U.S. Radiator Corp. has picked W. Fred Henke to head a new packaged air conditioning products section in the sales department.

• **American Art Metals Co.** has named James F. Mullen Jr. as sales representative in Colorado, Utah, Arizona and New Mexico.

• **Plywood Service, Inc.,** has named Donald E. Earwood district sales representative in the newly created Pacific Northwest territory which encompasses northern California, Oregon, Washington, Idaho, Montana and northern portions of Nevada and Utah. He will headquarter in San Francisco. Mark Bailey will represent the firm in New Mexico, Arizona, southern California and Nevada from Corona Del Mar, Calif. Plywood Service is national sales representative of Pacific Plywood Co., Pacqua, Inc., Umpqua Lumber Co. and Sierra Lumber Co. of Dillard, Ore.

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• **Beverly Willis & Associates,** industrial and interior designers, has opened a new contract furnishings division at 514 Piikoi Parkway, Honolulu. John Schubert has been appointed vice president and manager of the new division. He formerly was midwest sales manager for Troy Manufacturing Co.

• **The Master Builders Co.** has opened a branch office in Salt Lake City to serve the Utah-Idaho territory. Martin J. Switters has been appointed field representative for the office.

• **Kaiser Steel Corp.** has appointed C. Fred Borden as executive vice president. He has been with the firm since 1945 and vice president in charge of sales since 1950. Succeeding to Borden's former post is C. Lee Emerson, general sales manager since 1954. Alan Grey and Charles F. Cooper have been appointed assistant general sales managers.

A. L. Peake Jr. becomes district sales manager in the central district which serves northern California, Nevada and Utah. R. F. Howard moves up to Peake's former post as assistant. Rand R. Hogan has been promoted from southern district sales manager at Los Angeles to a new post, manager of sales development in the Oakland home office. Mark T. Anthony takes over Hogan's former post.

• **American Sisalkraft Corp.** has transferred Robert D. Wilson to Seattle to take over the Washington area. Wilson has covered Oregon for the company for the past two years. He is replacing Richard C. Robinson who has been promoted to the tape division in Massachusetts.

• **Formica Corp.** has named Harter's Distributing Co. of North Hollywood, Calif., to handle the firm's laminated plastics line.

• **Hardco of California Inc.,** metal finishers of Berkeley and San Carlos, has a new president and chairman of the board of directors: William J. Saunders, a Los Angeles industrialist who recently acquired controlling interest in the firm.

• **Kaiser Gypsum Co.** has established sales offices in Albuquerque as headquarters for its southwest division office. Division sales manager Galen M. Thomas also announces several new appointments, including James W. Hum as products sales manager; Kurt Storch, contractor salesman in the Albuquerque area; Clarence J. Corrigan, insulating products representative working out of the Albuquerque office; and William M. Plummer, contractor salesman in Denver. In the northern division at Seattle, Richard H. James has been appointed products manager, succeeding Charles Watson who has been transferred to the southern division in Long Beach. Raymond A. Ethell succeeds James as special salesman.

• **Johns-Manville Corp.** has elected R. S. Hammond as vice president and named him general manager of the building products division. A veteran of 33 years with the company, Hammond succeeds retiring W. R. Wilkinson. Myles E. Sweeney, district sales manager at San Francisco, has been transferred to New York where he will serve as general product manager of the industrial building products sales department.

• **Keasbey & Mattison Co.** has named Andrew C. Richardson, formerly a general line salesman in the San Francisco district, merchandising manager for sprayed Limpet asbestos.

• **The Flintkote Co.** and **Calavera Cement Co.** stockholders have approved merger of the two firms. Calavera will become a division of Flintkote. Almost immediately after announcement of stockholder approval was made, Flintkote revealed that it will construct a $14 million cement plant at Redding, Calif.

• **State Steel Industries, Inc.,** has moved to a new plant at 17900 E. Valley Blvd., City of Industry, Calif.

• **Lightolier, Inc.,** will open this month a combination warehouse, custom factory, showroom and western headquarters at 2515 S. Broadway in Los Angeles, the first such installation for the manufacturer on the West Coast.

• **Raypak Co., Inc.,** has appointed Richard M. Norton to the new post of national sales manager in charge of all sales activities outside the southern California area.

• **The Mosaic Tile Co.** has opened a showroom for the company's line of decorated tile on "decorators' row," at 131 N. Robertson Blvd., Beverly Hills, Calif.

• **Seattle Hardware Co.** has formed a new company, Seattle Steel Service, to deal exclusively in distribution of steel in the Pacific Northwest. The new subsidiary will operate out of its own building under the management of T. N. Hughes, a 30-year veteran in the field of manufacture and distribution of steel. Formation of the company is an outgrowth of a steel supply service begun by the parent company in 1883.

• **Aluminum Company of America** has transferred Edward G. Cahill from his post as assistant district manager at Cleveland to Seattle where he will be northwest district sales manager. He succeeds Harold A. Faisst who takes a similar post in Philadelphia.

• **United States Gypsum Co.** has appointed Junius G. Oldham as sales promotion manager of the western region with headquarters in Los Angeles. Oldham most recently has been sales manager of the Los Angeles and Pasadena districts.

• **General Electric Co.** has named two California distributors for Textolite, a decorative plastic laminate. They are Case Products Co., San Diego, and Western Wholesale Co., San Bernardino. Newly named field sales representatives for the manufacturer include V. Christopher Price, northern California, northern Utah and Idaho; and Walter E. Slaven, Los Angeles.

• **Pittsburgh Corning Corp.** has appointed Harry E. Porter as regional field sales manager for the Southwest and West Coast. He will headquarter in Houston.

• **McKinney Manufacturing Co.** has moved its West Coast Regional sales office to larger quarters at 560 Ninth St., San Francisco.

• **The Trane Co.** plans to build a million-dollar plant for the fabrication of air conditioners, heating units and the like in Salt Lake City.

• **W. P. Fuller & Co.** has expanded its northwest region to include Washington, Oregon, Montana, Idaho and Utah under a new name, the northern region. New manager is Paul G. Loynd, general manager of the intermountain region the past three years. Montana, Idaho and Utah formerly were part of the intermountain region.

• **Permanente Cement Co.** has appointed Darrell Gee sales representative in the Gray's Harbor and Olympic Peninsula area of Washington. He has been working in the Seattle office.

pacific architect & builder

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Among our design features will be an office building in California, a manufacturing facility in Oregon, a drug research center in Colorado and a bank in Hawaii.

Looking back to January, we erred in referring to Los Angeles civil engineer I. F. Mendenhall as an architect and failed to credit Marvin Rand for his photos of the Hunt Beach House.

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QUINN

New contributing editors of PA&B are William G. Quinn for Southern California and Beatrice M. Howell for Hawaii, joining Ward Lindbeck (Northern California), Win Romtvedt Holmes (Oregon) and Peggy Hansen (Rocky Mountain) plus 15 correspondents in five states.

Bill is well known in architectural and building circles in the Greater Los Angeles area, having served for seven years as editor and public relations director of the Southern California Chapter, AIA. A graduate of the University of Wyoming, he was associated with several newspapers in that state before moving to California, where he makes his home in Laguna Beach.

A native of Seattle, Beatrice is a graduate of the University of California at Berkeley and currently is working on her master's degree in English at the University of Hawaii. She is the widow of a San Francisco architect who worked with the Puerto Rico Planning Board.

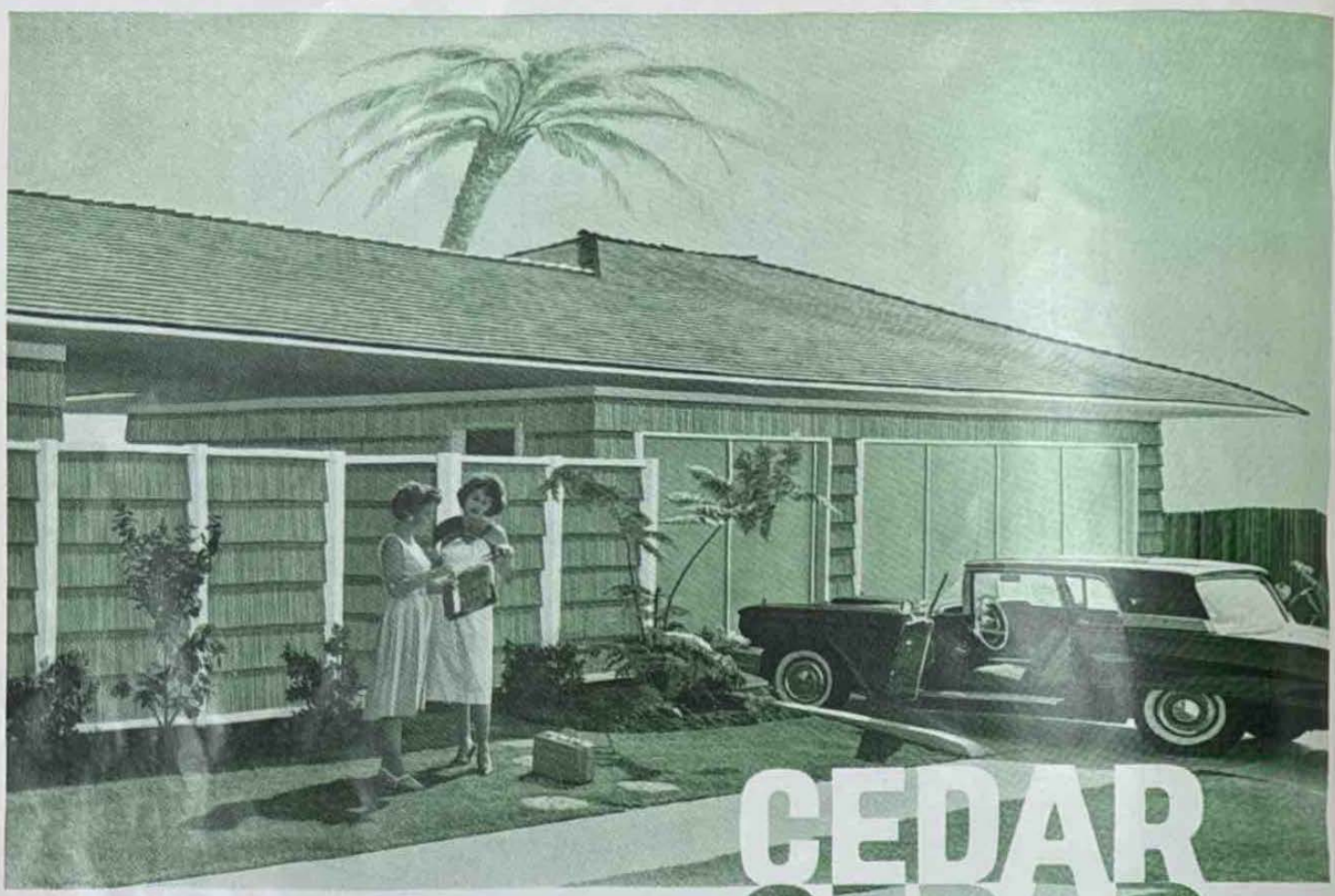
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COVER: General Engineering Building, University of Washington, Seattle (p. 37)—Harmon, Pray & Detrich, Architects-Engineers; Art Hupy photo.

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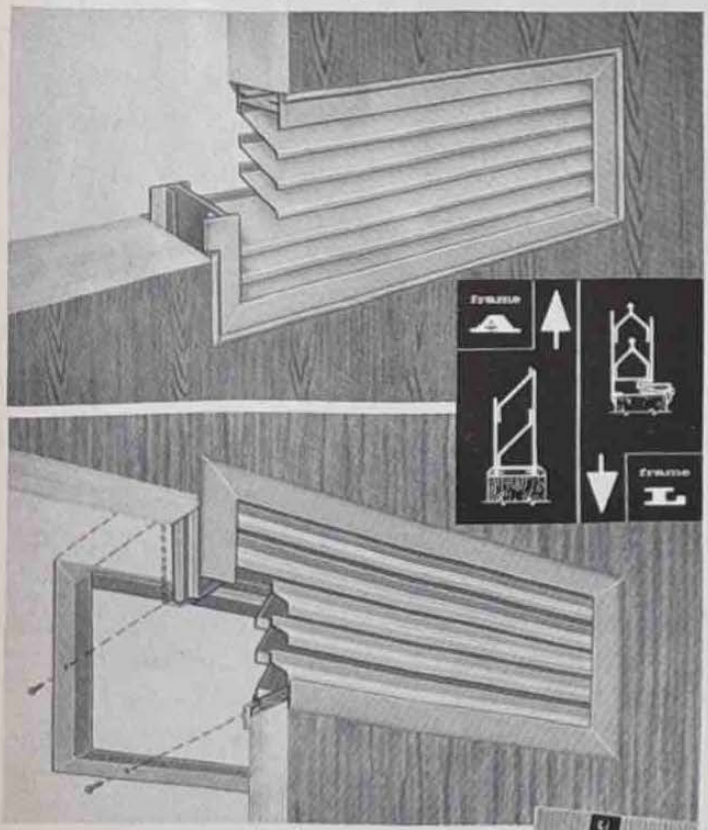
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January's $226 million reveals slowdown

Building permit volume for 155 key western agencies in January totals $225,795,987, a drop of $44.7 million from the same period a year ago. The slowdown in building starts is fairly widespread. Only four states record increases and these were slight. Arizona leads the list with a $4.1 million increase over January 1959; Utah is up $1 million; Nevada, $683,000; and Wyoming, $95,000. Largest decrease is in California, down $22.5 million. Other states recording decreases from 1959 are Washington, down $12.5 million; Colorado, $9.4 million; New Mexico, $4.5 million; Idaho, $1.1 million; Oregon, $185,000; Hawaii, $9,000; Montana, $8,000; and Alaska, $3,000.

15 leading agencies

Of the 15 top building permit agencies for January, 10 are in California, two in Washington and one each in Arizona, Colorado and Hawaii. Following are the top 15:

	January 1960	January 1959
1. Los Angeles	$44,064,350	$48,780,532
2. Los Angeles County	16,728,924	16,906,475
3. San Diego	11,700,478	18,236,768
4. San Diego County	9,492,400	8,161,600
5. King County, Wash.	8,929,500	10,285,165
6. Sacramento County	7,818,163	7,692,712
7. Honolulu	7,735,520	7,881,000
8. Seattle	7,294,517	20,163,999
9. Phoenix	6,135,228	3,594,139
10. Torrance	5,759,911	591,941
11. San Jose	5,144,995	5,676,106
12. Long Beach	4,552,750	5,609,365
13. Contra Costa County	4,316,599	1,993,628
14. Denver	4,139,450	11,459,845
15. Santa Ana	3,800,378	1,536,591

Decline seen for first half of '60

The January total is also $46.4 million below December. These figures bear out a forecast by James C. Downs Jr., chairman of the board of the Real Estate Research Corp., who recently predicted a decline of 6.6% in the first six months of 1960. Downs said that residential construction would be off 20% compared to the same period in 1959 due to several factors, a slowdown in urban population growth on the one side and tight and high-price money and rising costs on the other.

Unfavorable mortgage money conditions also were one of the prime concerns of the nation's home builders when they met in January for the annual NAHB convention, with estimates ranging up to a 12% drop if the financing picture does not improve. The organization is particularly concerned with high discount rates. (For a report on the NAHB sessions, see p. 12.)

Analysis of selected areas—January

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$10,620,111	$2,913,416	*$2,717,921
Orange County	1,228,645	213,417	36,000
Sacramento County	6,037,413	1,106,687	591,500
Las Vegas	1,964,552	597,650	———
Denver	1,694,370	963,985	56,700
Portland	1,098,500	538,800	42,500
Seattle	2,220,531	1,301,686	3,700,000
King County	4,395,890	2,107,250	2,395,000
Honolulu	5,229,590	1,902,142	557,738

*Does not include $904,080 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for January

CALIFORNIA	Jan. 1960	Jan. 1959
Alameda County	$ 1,401,900	$ 728,200
Anaheim	2,405,977	2,012,450
Bakersfield	876,364	808,275
Burbank	1,420,789	969,029
Contra Costa County	4,316,599	1,993,628
Fresno	876,467	3,605,010
Fullerton	1,118,419	1,414,696
Glendale	804,805	2,801,721
Inglewood	650,995	938,802
Long Beach	4,552,750	5,609,365
Los Angeles	44,064,350	48,780,532
Los Angeles County	16,728,924	16,906,475
Oakland	2,727,975	2,220,445
Ontario	522,347	229,589
Orange County	1,679,027	10,341,389
Palo Alto	1,924,635	852,372
Pasadena	1,569,079	1,168,290
Pomona	1,064,370	818,657
Richmond	197,823	477,735
Riverside	1,199,585	2,328,660
Sacramento	2,747,357	2,255,758
Sacramento County	7,818,163	7,692,712
San Bernardino	872,894	955,627
San Bernardino County	2,872,699	5,961,771
San Diego	11,700,478	18,236,768
San Diego County	9,492,400	8,161,600
San Francisco	3,727,872	12,275,159
San Jose	5,144,995	5,676,106
San Mateo	3,425,638	577,447
San Mateo County	732,701	977,230
Santa Ana	3,800,378	1,536,591
Santa Monica	1,853,726	2,078,655
Stockton	492,265	1,083,092
Sunnyvale	1,679,762	1,083,092
Torrance	5,759,911	591,941
West Covina	270,084	370,639
TOTAL	**$152,494,503**	**$175,084,755**

OREGON	Jan. 1960	Jan. 1959
Albany	$ 31,250	$ 130,900
Astoria	4,350	13,680
Baker	34,870	476,660
Bend	31,600	64,300
Coos Bay	237,250	139,125
Corvallis	190,820	236,595
Eugene	961,770	425,498
Grants Pass	132,350	30,300
Gresham	7,600	11,600
Hillsboro	42,640	19,955
Klamath Falls	186,820	244,000
LaGrande	10,500	9,500
Lane County	700,148	608,166
Medford	252,283	390,825
Multnomah County	1,291,143	2,442,729
North Bend	97,790	16,150
Oregon City	36,693	72,900
Portland	3,615,245	3,158,195
Roseburg	211,230	28,240
Salem	716,866	279,254
Springfield	97,981	84,877
The Dalles	7,000	100,100
TOTAL	**$ 8,798,199**	**$ 8,983,549**

WASHINGTON	Jan. 1960	Jan. 1959
Aberdeen	$ 12,548	$ 52,253
Anacortes	68,475	63,500
Auburn	69,720	109,050
Bellingham	214,961	107,930
Bremerton	41,565	101,345
Centralia	28,216	257,789
Chehalis	7,110	45,429
Ellensburg	6,700	3,150
Ephrata	Nil	6,150
Everett	851,876	146,410
Kelso	30,551	122,300
Kennewick	72,750	72,600
King County	8,929,500	10,285,165
Kirkland	86,000	166,500
Longview	195,475	445,429
Moses Lake	5,644	167,544
Olympia	252,602	127,583
Pasco	12,300	88,930
Pierce County	2,749,334	1,330,785
Port Angeles	15,375	7,600
Puyallup	55,800	128,170
Seattle	7,294,517	20,163,999
Spokane	822,942	718,679
Spokane County	272,725	526,240
Tacoma	1,339,211	842,739
Vancouver	442,941	240,516
Walla Walla	83,210	23,700
Wenatchee	42,786	141,325
Yakima	56,650	156,375
TOTAL	**$ 24,061,483**	**$ 36,649,185**

ALASKA	Jan. 1960	Jan. 1959
Anchorage	$ 93,860	$ 52,418
Fairbanks	5,250	14,450
Juneau	1,300	38,120
Ketchikan	5,150	4,375
TOTAL	**$ 105,560**	**$ 109,363**

IDAHO	Jan. 1960	Jan. 1959
Boise	$ 399,147	$ 249,322
Caldwell	15,350	27,155
Coeur d'Alene	5,450	39,700
Idaho Falls	119,629	830,505
Jerome	1,300	8,500
Lewiston	10,950	180,580
Nampa	42,525	228,775
Payette	5,650	63,400
Pocatello	119,169	71,275
Sandpoint	Nil	128,000
St. Maries	4,500	Nil
Twin Falls	42,100	80,620
TOTAL	**$ 765,770**	**$ 1,907,832**

MONTANA	Jan. 1960	Jan. 1959
Billings	$ 175,250	$ 135,600
Bozeman	81,700	31,700
Butte	2,000	32,500
Glasgow	3,000	Nil
Glendive	17,000	Nil
Great Falls	300,125	303,632
Helena	42,800	94,600
Kalispell	167,300	20,000
Lewistown	1,000	85,800
Livingston	28,300	72,200
Miles City	11,795	46,275
Missoula	34,400	51,200
TOTAL	**$ 864,670**	**$ 873,507**

WYOMING	Jan. 1960	Jan. 1959
Casper	$ 466,745	$ 608,450
Cheyenne	625,909	397,020
Sheridan	40,331	32,357
TOTAL	**$ 1,132,985**	**$ 1,037,827**

COLORADO	Jan. 1960	Jan. 1959
Aurora	$ 244,770	$ 419,873
Boulder	414,800	477,690
Denver	4,139,450	11,459,845
Englewood	136,093	254,932
Fort Collins	617,860	295,995
Grand Junction	124,690	2,381,702
Greeley	226,585	266,181
Pueblo	1,025,705	790,587
Trinidad	36,500	4,265
TOTAL	**$ 6,966,453**	**$ 16,451,070**

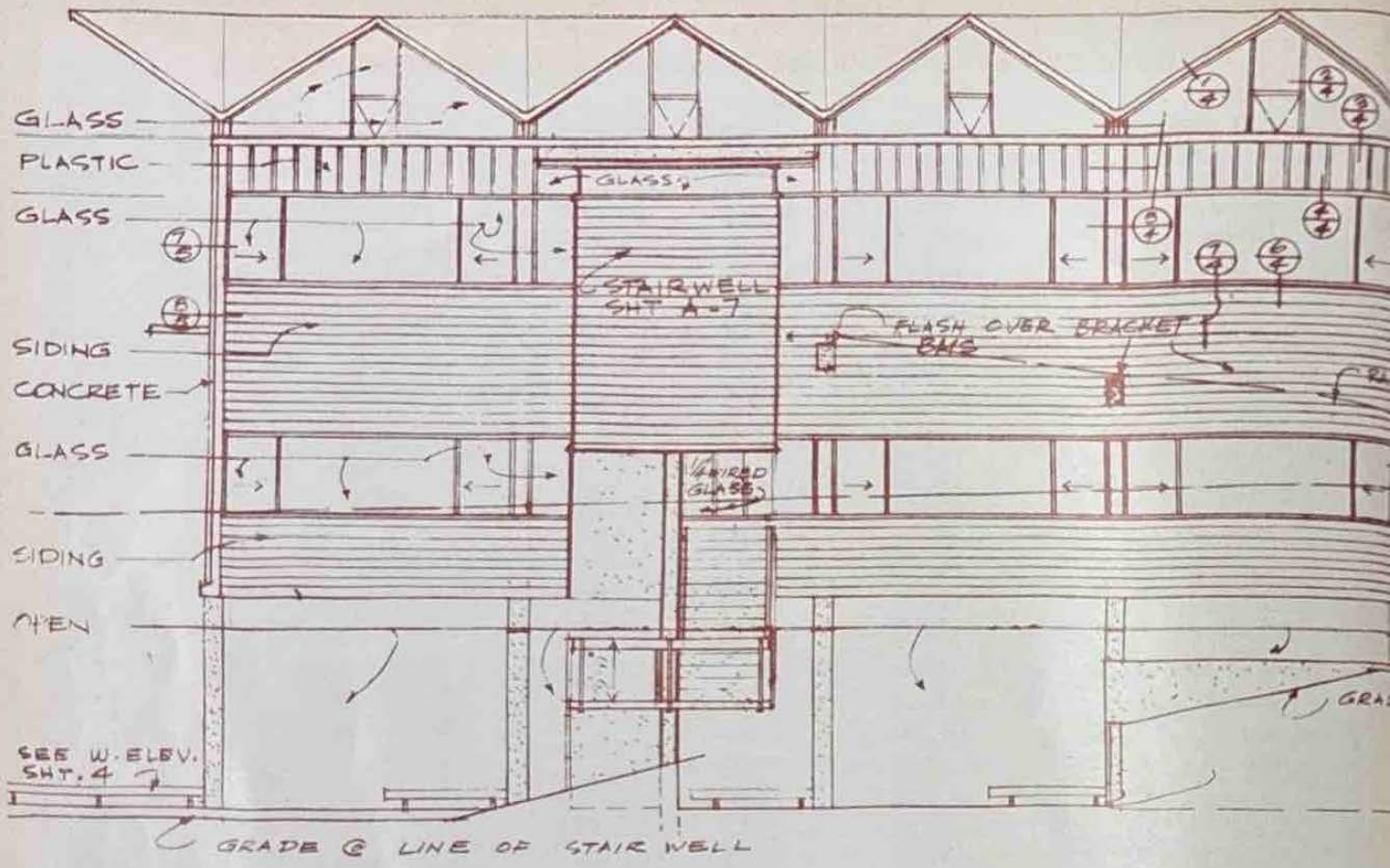
UTAH	Jan. 1960	Jan. 1959
Logan	$ 146,300	$ 58,000
Murray	167,400	178,875
Ogden	293,200	296,020
Provo	70,350	112,055
Salt Lake City	2,074,438	1,076,782
TOTAL	**$ 2,751,688**	**$ 1,721,732**

NEVADA	Jan. 1960	Jan. 1959
Elko	$ 7,495	$ 94,300
Las Vegas	2,582,302	1,846,296
Reno	896,008	694,238
Sparks	275,100	442,143
TOTAL	**$ 3,760,905**	**$ 3,076,977**

ARIZONA	Jan. 1960	Jan. 1959
Douglas	$ 20,645	$ 110,317
Flagstaff	68,201	192,082
Glendale	214,225	189,525
Maricopa County		
Mesa	831,591	1,064,971
Phoenix	6,135,228	3,594,139
Tucson	3,222,452	1,102,818
Yuma	41,575	146,450
TOTAL	**$ 10,533,917**	**$ 6,400,302**

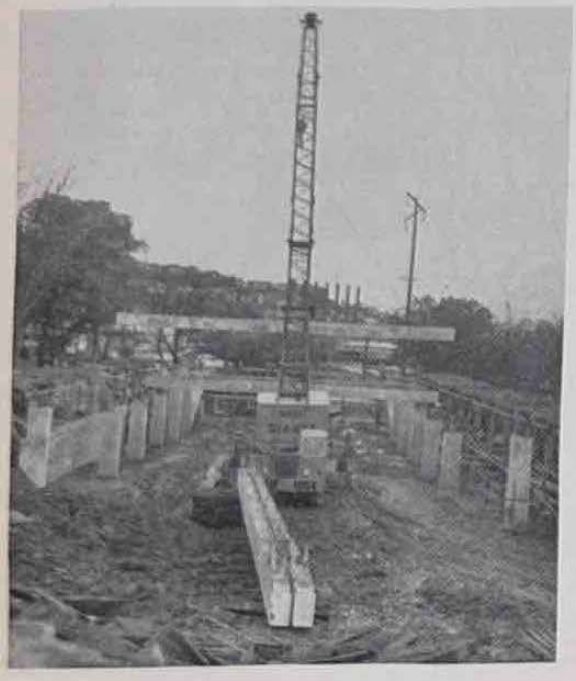
NEW MEXICO	Jan. 1960	Jan. 1959
Albuquerque	$ 3,391,298	$ 7,797,411
Carlsbad	81,350	172,360
Clovis	225,160	391,621
Gallup	38,367	177,457
Hobbs	160,300	235,900
Las Cruces	400,000	759,000
Roswell	477,775	
Santa Fe	391,000	231,319
TOTAL	**$ 5,165,250**	**$ 9,765,068**

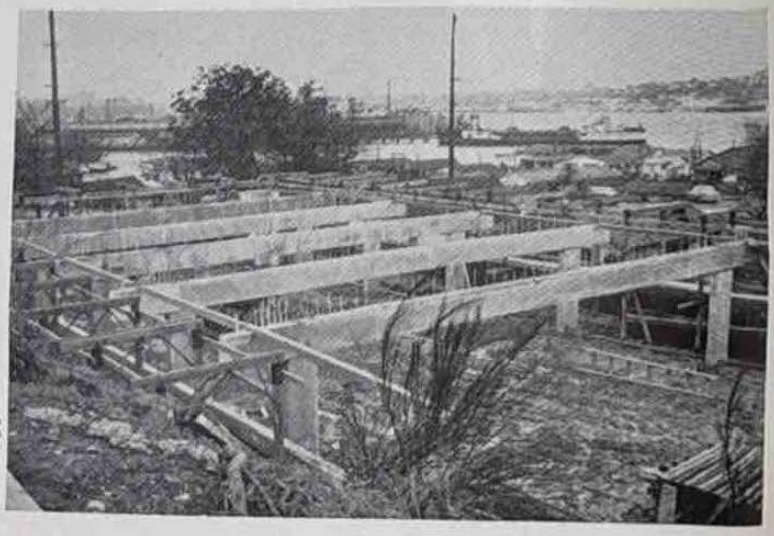
HAWAII	Jan. 1960	Jan. 1959
Hawaii County	$ 320,013	$ 312,937
Honolulu (city-county)	7,735,520	7,881,000
Maui County	339,071	210,258
TOTAL	**$ 8,394,604**	**$ 8,404,195**
GRAND TOTAL	**$225,795,987**	**$270,465,362**



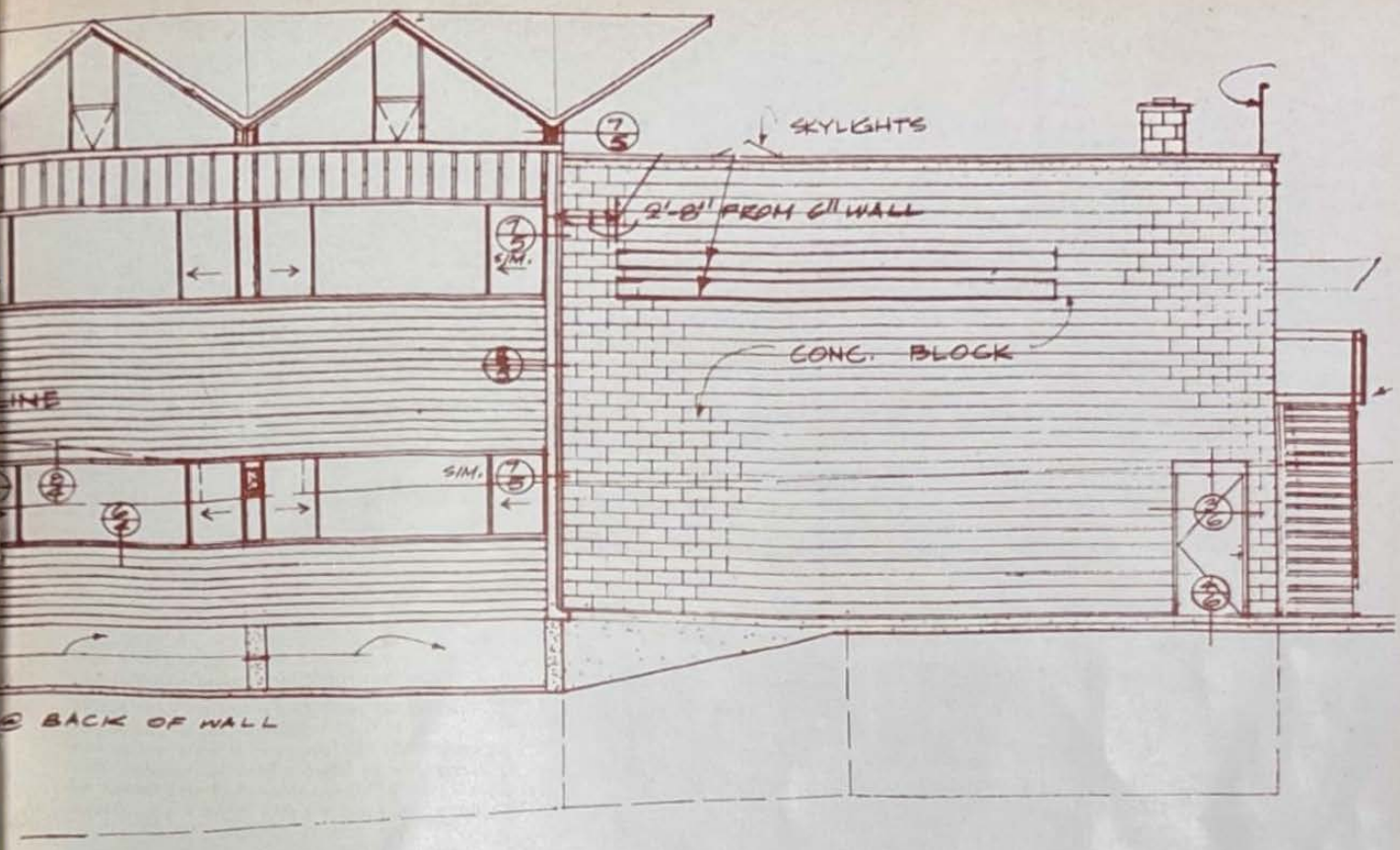
RETAINING WALL at property line creating parking terrace still is evident before backfilling is complete at right. Also shown are 10x22-in. cast-in-place concrete columns. Five precast beams, also 10x22 in. and 6,000 psi., seen below were set in place in less than two hours. They cantilever 3½ ft. off columns.







Art Hupy



FRONT ELEVATION facing curve of Yale Place North. Note that street elevation is at dotted line cutting across second floor. Main entry (top level of stairwell) is reached by ramp from street, also indicated by dotted line.

No. 2: PA&B progress report

Construction is well underway by Riley Pleas, Inc., for the headquarters building which Pacific Architect & Builder will share with its publisher, Pacific Builder & Engineer, Inc., about one mile from downtown Seattle. The three-level scheme—parking on the ground level; loading, printing and storage on the first; publishing on the second—developed by architect A. O. Bumgardner calls for a concrete structure with a wood curtain wall and a 2½-in. thin shell concrete hyperbolic paraboloid roof.

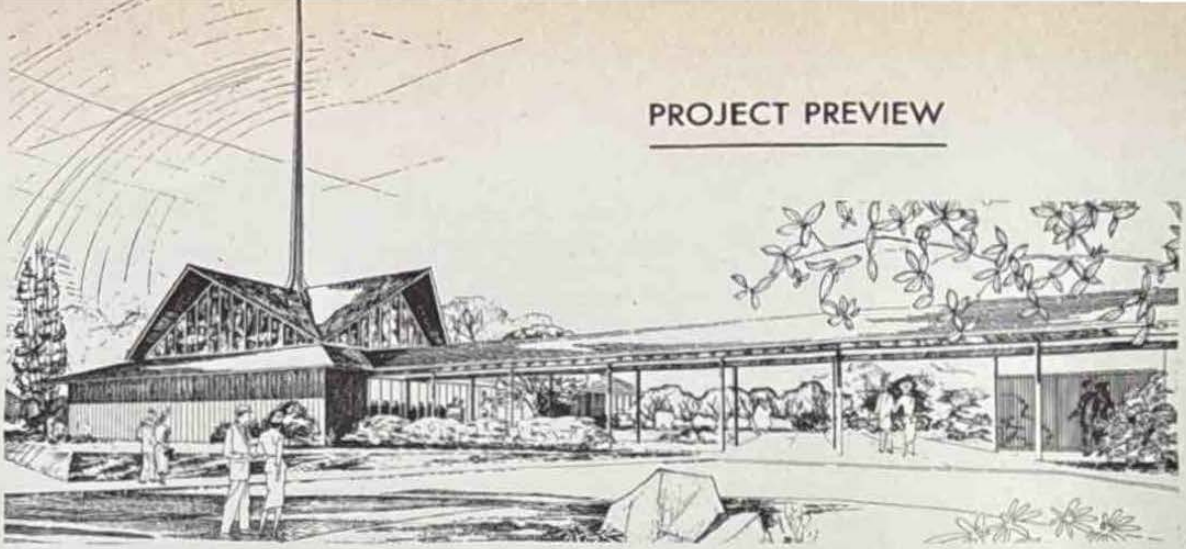
Exterior concrete will be left unpainted, other than the application of a silicone sealer to prevent discoloration when wet. However, considerable care has been taken in the selection of forming materials so as to control surface textures. Columns, undersides of slabs and precast elements are formed with plywood to produce as smooth a finish as possible; retaining walls, end walls of the main block and other poured-in-place walls are formed with 1x8 rough sawn, mill-run cedar to emphasize the difference in board width and grain.

The 2x4 studs of the wood curtain wall will pass in front of the concrete columns. The 1x6 flush cedar siding will be stained a medium value; the wood posts where exposed, a darker value. A horizontal band at the top of the publishing level will consist of stained 2x2s on either side of translucent white plastic.

Structural engineers are Worthington, Skilling, Helle & Jackson, Jack Christiansen, associate.

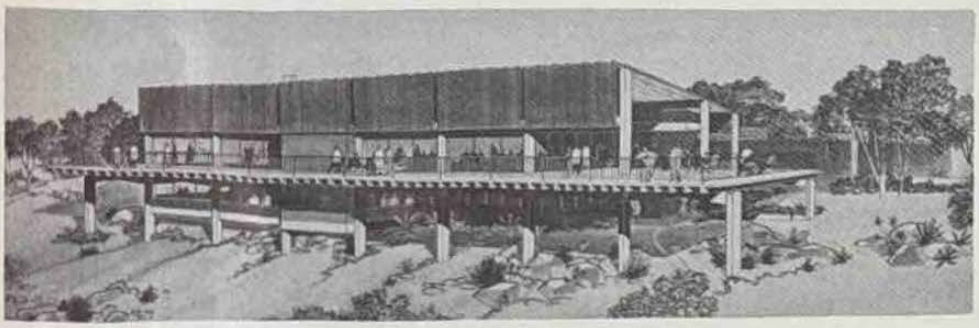


PRINTING FLOOR LEVEL gets rigid insulation, steel and conduits prior to pouring of concrete. Band of trees at curve of street has been saved.



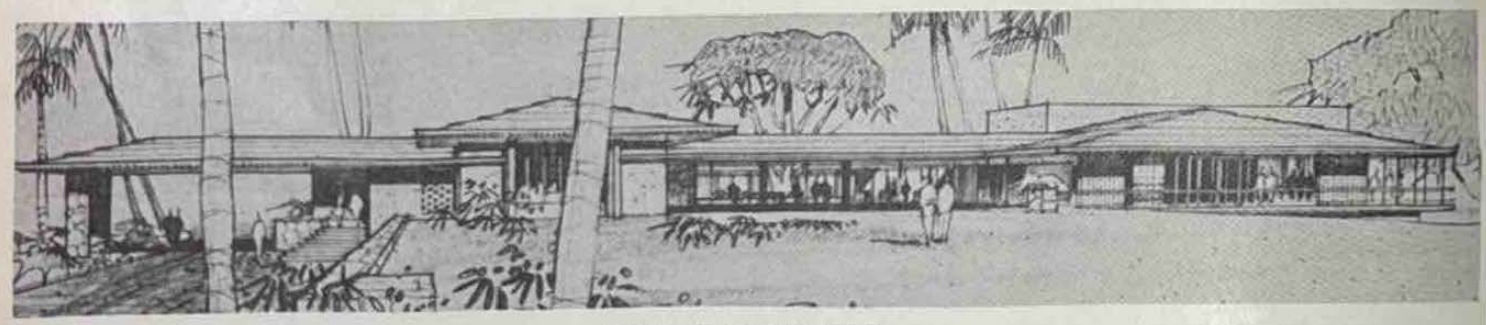
LUTHERAN CHURCH

in suburb of Eugene will feature varicolored translucent plastic panels and perforated board panels cut to forms for casting of silhouettes of religious scenes. Starter unit, to cost $65,000, will include chapel seating 144, offices, classroom and fellowship space. Building will sit on wood frame platform. Architects: Lutes & Amundson.



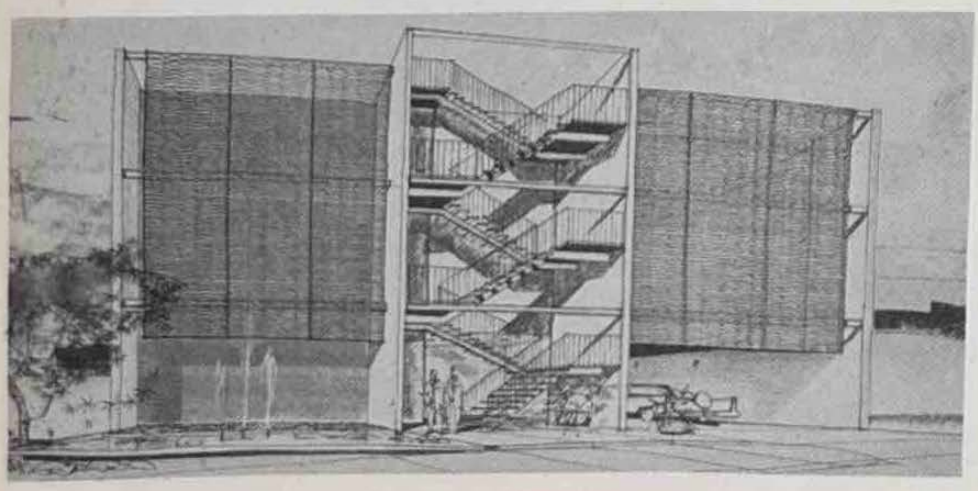
OFFICER'S MESS HALL

at reactivated Beale Air Force Base near Marysville, Calif., will overlook water reservoir. Costing $653,000, structure is now under construction in an area where a hospital, noncommissioned officers' mess hall and homes for military personnel are also being built. Design agency: West America Engineering Co.



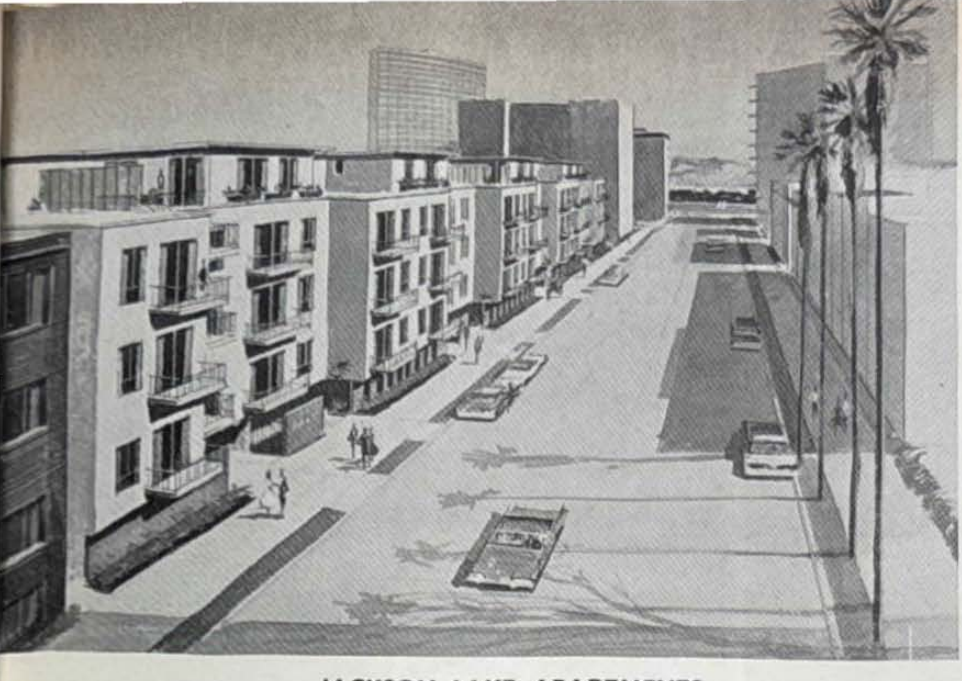
PRIVATE MEN'S CLUB

nearing completion in Honolulu will provide dining, lounging and recreational facilities designed around interior court but not living quarters as is case in existing Pacific Club on same site. Steel frame structure has stucco and Wainae sandstone finish. Roof is lightweight concrete poured in continuous bands with copper and redwood fascia. Architects: Ossipoff and Merrill, Simms & Roehrig.



OFFICE BUILDING

to be constructed in Beverly Hills, Calif., will house its designer among other tenants in 28,425-sq. ft. steel frame structure. It will feature open garden courts and skylighted conference rooms for all third floor offices; water garden with decorative sculpture and jets of water at principal entry. Sunscreens will panel east and west facades and exterior metal staircase will augment central elevator. Architects: Richard Dorman & Associates.



JACKSON LAKE APARTMENTS

will be located on site of old Civic Center Hospital, now being razed, in Oakland. Largest project of its type in city's history, it will provide 174-unit building on Jackson Street (418-ft. frontage) and 18-unit building on Alice Street (50-ft. frontage). Among its features: 80% off-street parking in semibasements; three interior garden courts and two swimming pools. Estimated construction cost is $2,250,000. Architects: Wurster, Bernardi & Emmons; structural engineer: David A. Welisch; consulting engineer: Dan Yanow.

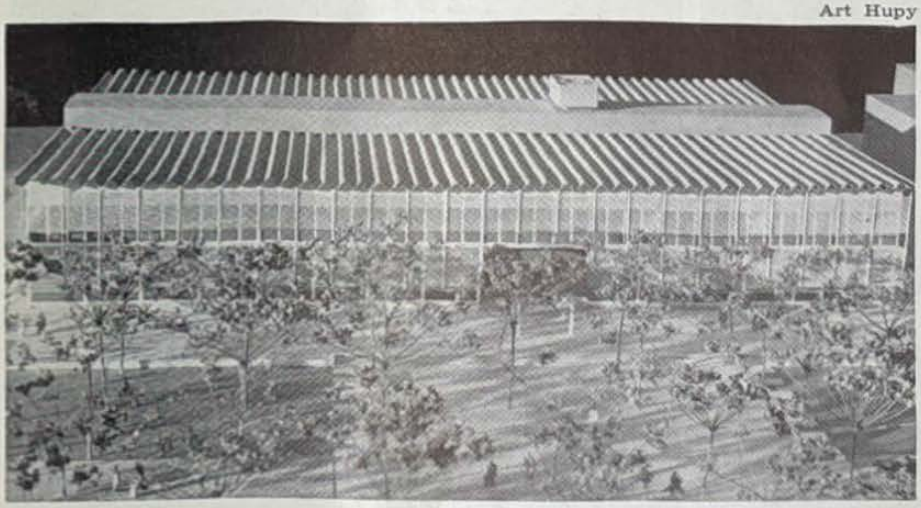
KENNECOTT BUILDING

is one of largest current projects in Salt Lake City, costing estimated $6.5 million and totaling 340,000 sq. ft. on 16 floors. Top five will be occupied by Kennecott Copper Corp. Basement through third floors are continuations of sales floors to south, with existing wall being entirely removed. Structure will be sheathed in bronze and copper curtain wall system and white cast stone panels. Architects: Ashton, Evans & Brazier; structural engineer: H. C. Hughes.



Hal Rumel

Art Hupy



LIBRARY BUILDING

for Central Washington College of Education in Ellensburg will be protected on west or main entrance facade by 8-in. concrete grill and "bosque"—grid of trees which creates space by dividing it on about 30-ft. module of columnar trunks. Grillwork will be repeated on east side. Roof of prestressed, precast, corrugated concrete elements will span 65 ft., allowing great flexibility inside. These elements will slope toward center of structure so that all rain and snow water is collected in two gutters running north-south on each side of spine. Architects: Bassetti & Morse.

FIVE-STORY HOSPITAL

at Clark Air Force Base in the Philippines will be protected from extreme heat, hurricane pressures and flying objects during typhoon season by transite, grilled cement-asbestos panels hung 6 ft. away from windows. Second story of $4 million, 200-bed hospital will have only controlled indoor lighting. Architects-engineers: Belt, Lemmon & Lo in association with Isadore & Zachary Rosenfield.



MACOMBER

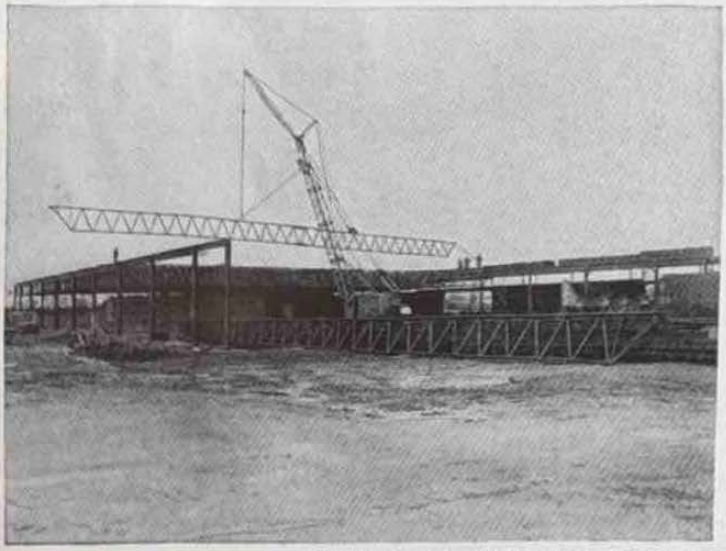
ALLSPANS



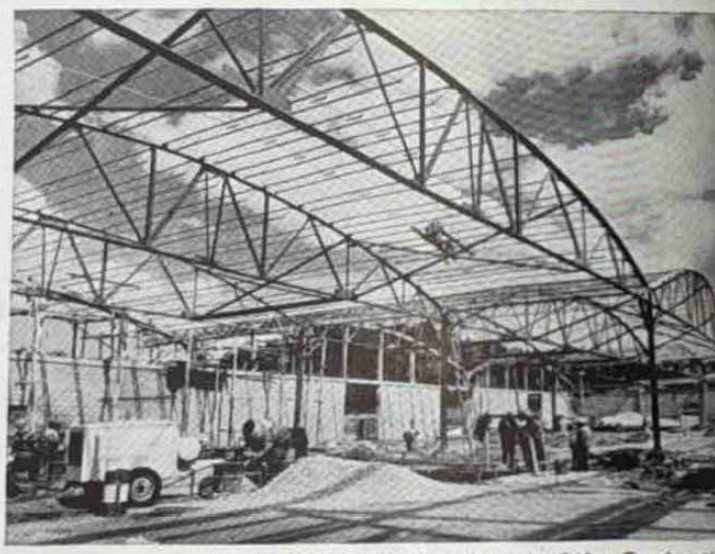
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BOWSTRING TRUSSES





Bowling Lanes—Wilmington, Delaware



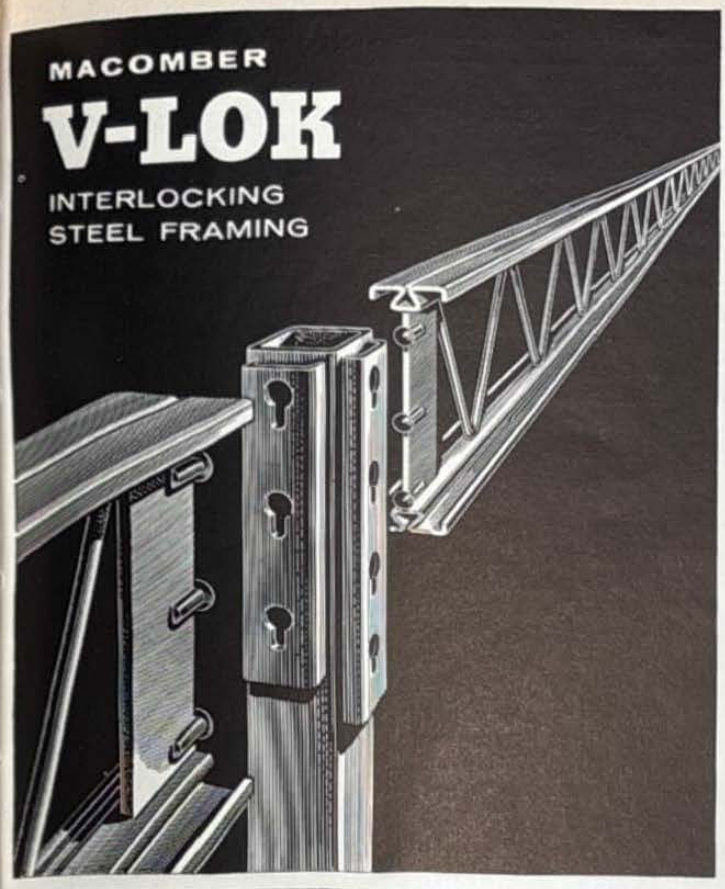
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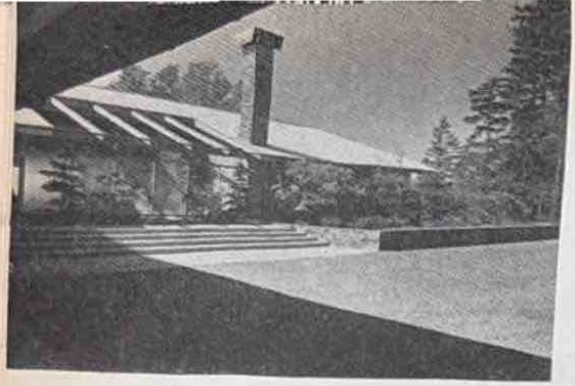
CITY _____ STATE _____

MACOMBER

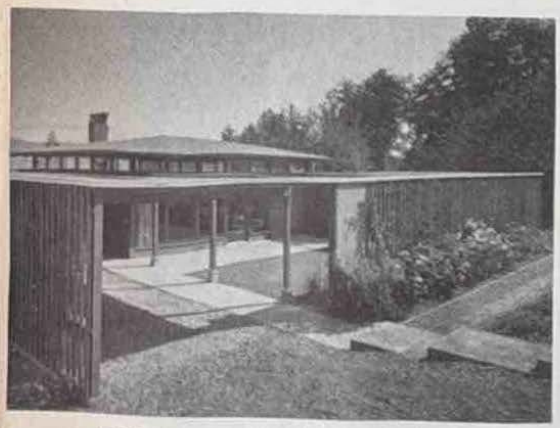
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FRANCIS BROWNELL JR. RESIDENCE, Seattle: Paul Thiry, architect.



PAUL W. LANGE RESIDENCE, Mercer Island, Wash.: A. O. Bumgardner, architect.



KENNETH NORTON RESIDENCE, near Boulder, Colo.: James M. Hunter & Associates, architects.



MERCHANT BUILDER HOUSE (Elmer Gavello), Sunnyvale, Calif.: Anshen & Allen, architects.

SPECULATIVE HOUSE (four builders) in Southern California: Edward H. Fickett, architect.



NAHB convention boosts architect-builder cooperation

Tight money and related economic matters dominated the 16th annual convention of the National Association of Home Builders in Chicago during the latter part of January and the subject of design, for the most part, was relegated to a single panel discussion. Yet one of the most significant aspects of the mammoth affair—registration exceeded 30,000 and exhibitors totaled 450—was a step forward in architect-builder relationships.

This year marked the presentation of the first annual AIA-NAHB Award of Honor, whose recipients had been announced earlier (see photo below), for outstanding cooperation in the design and construction of merchant-built homes. In this connection, the AIA Journal devoted its January issue entirely to architect-builder collaboration and distributed the 148-page issue to the latter group without charge. A special "Portfolio of Homes" illustrated the work of 13 architects from across the U.S., including the five houses designed by westerners shown here.

Of the four winners in NAHB's Design Merit Award competition for 1959, two went to builder-designer teams on the West Coast: E. B. Vaughters and architect Seth M. Fulcher, both of Seattle, and Severin Construction Co., San Diego, and architect Edward H. Fickett, Los Angeles.

Tucson contributed two of the four winners in the Neighborhood Development Awards sponsored by the NAHB Journal. The projects: Glenn Heights—Chesin Construction Co., Inc., builder; Maddox & Associates, land planners; Suffolk Hills—Lusk Homes, Inc., builder; Blanton & Cole, land planners.

Commented the jury: "The winning entries displayed good integration of house design and topography. As a result of careful attention given to the preservation of natural contours, attractive, livable environments have been achieved. It was demonstrated in several entries that the preserving of trees gives a decided character to a community which cannot be duplicated in an open area. The Southwest winners took decided advantage of the natural desert terrain and developed a harmonious and pleasing layout and overall design."

Photo credits (top to bottom): Art Hupy, Dearborn-Massar, Reynolds, Roger Sturtevant, Julius Shulman.

The theme that housing exists for living was repeated again and again at the "Designing for Profit" session. Fickett emphasized that the house should be considered as an entity. He criticized small bathrooms and the lack of attention paid to the backs of houses.

Another architect, John Highland of Buffalo, urged builders to think of total design as involving the site, the building and the components which make it up. The monotony in design, he declared, comes from lack of imagination of bankers, FHA, architects and builders.

Industrial designer Richard Latham of Chicago said that aesthetics, use and whether a product will sell are so related that home builders should learn from the big manufacturers that product planning is absolutely necessary. The architect is the industrial designer of the building industry, he explained, but the builder uses him as merely a stylist.

Dan Kiley of Charlotte, Vt., landscape architect, worked on the Air Force Academy, asked the builders to develop an appreciation of good design which confers the benefits of satisfaction, comfort, beauty and security in a home.

Harriet Burket, a Better Homes & Gardens editor, advised home builders to be alert to the multiple selling opportunity made possible by the fact that time brings changes in the composition and housing needs of the family. She listed the three family housing periods as the new family with small children, the middle aged family with teen-agers and the couple after the children have grown up. These all require different size homes, she added.

Congressman Albert Rains (D.-



WINNING TEAM of initial AIA-NAHB Award of Honor during local presentation in California: A. Quincy Jones of Jones & Emmons, Los Angeles architects; Joseph L. Eichler, president of Eichler Homes, Palo Alto; Edward H. Fickett, chairman of AIA committee on home building, Los Angeles; and William S. Allen of Anshen & Allen, San Francisco architects.

Ala.), chairman of the House subcommittee on housing, told the convention that he would press for immediate legislation to meet the present critical shortage of mortgage funds which is crippling home construction in many parts of the country and that later in the session he would push for a provision establishing the Central Bank long advocated by home building experts.

Joseph B. McGrath, legislative director of the NAHB, stated that it is clear that "housing issues, among other major national legislation, will hold the center of the stage again this congressional session." He pointed out that passage of the 1959 Housing Act did not settle "the basic split in viewpoint on the controversial issues which twice resulted in a veto of the 1959 bills."

Among the new NAHB officers is William Blackfield, a builder in both California and Hawaii. Regional vice presidents include Clarence S. Simmons, Layton, Utah; Ed L. Northway, Denver; John A. McLeod, Portland; J. R. (Dick) Shattuck, San Diego; M. Douglass Couch, Palo Alto, Calif.; and Fred Busby, Tucson.

AGC convention may draw 2,500 to San Francisco

The 41st annual convention of the Associated General Contractors of America will be held at the California Masonic Memorial Temple on Nob Hill in San Francisco March 21-24. Early reservations indicate that attendance will reach a record-breaking 2,500.

Among nationally prominent speakers scheduled to appear are John Noble Richards, president of the AIA; William P. Scott Jr., president of the Mechanical Contractors Association; Maj. Gen. W. K. Wilson Jr., Corps of Engineers' deputy chief of engineers for construction; Rear Admiral Eugene J. Peltier, chief of the Navy's Bureau of Yards and Docks and many other government and industry leaders.

The building contractors' workshop which has proved to be a popular feature since its inception in 1957 will be held Wednesday afternoon, March 23. Moderator will be Carl W. Olson of Lincoln, Neb., vice chairman of the building contractors' division, AGC.

Host for the convention is the Northern and Central California Chapter. Social events planned for the conference include a theater show at the San Francisco Opera House and a tour to Hawaii scheduled to leave San Francisco Friday, March 25, the day after the convention closes.

Wright eulogized at Marin County groundbreaking

Groundbreaking was held February 15 and construction has now begun on Frank Lloyd Wright's Marin County Government Center, one of the last major works to be wholly designed by the late architect.

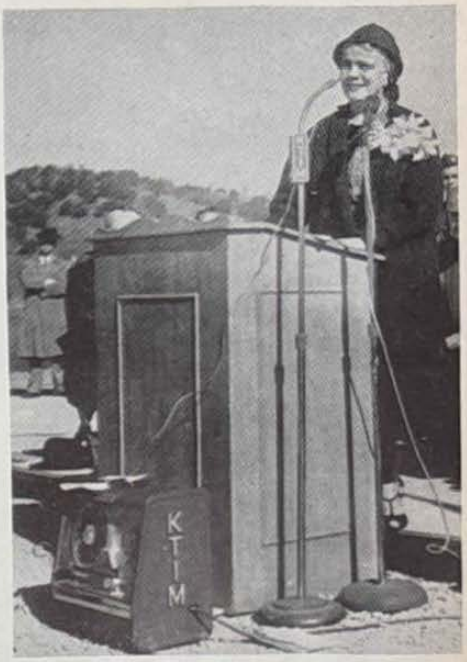
Speakers at the ceremony not only dedicated the center but eulogized Wright, calling his work the greatest contribution to art in our time. Mrs. Wright and architect Edward D. Stone were joined by such local political dignitaries as State Sen. Jack McCarthy, State Director of Finance John Carr and members of the Marin County Board of Supervisors.

Mrs. Wright, who took over development of the Marin County project after Wright's death, said in part: "It is to the people of America that Mr. Wright dedicated this building. Mr. Wright was inspired by the beauty of the site, and, being a lover of nature, he would never violate nature; he would even enhance nature by the structures that he designed.

"When he finished it, he said: 'I am happy with these plans. It is good. My country will get a beautiful building.'"

As principal speaker, Stone declared: "Mr. Wright was certainly the greatest creative talent that this country ever produced and, in my opinion, the greatest architect the world has ever known. And I welcome this opportunity to pay homage to his memory." (Excluding introductory remarks, the complete text of his address is printed on p. 20.)

Aaron Green, architect-in-charge of the San Francisco office of the Frank Lloyd Wright Foundation, will supervise the construction. The San Francisco contracting firm of Rothschild, Raffin & Weirick will build the first wing of the administration building.



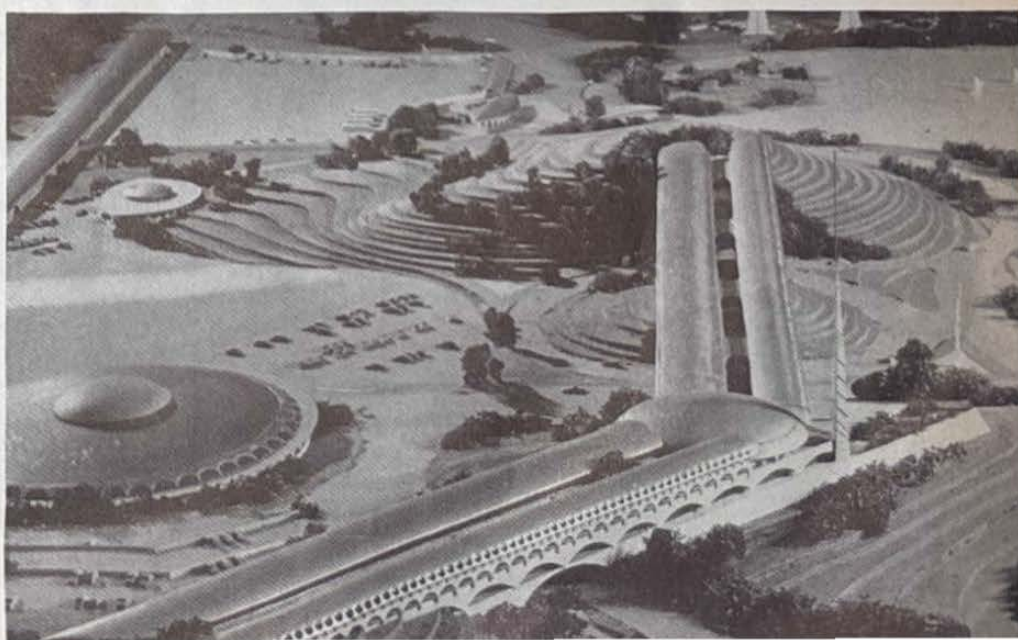
OLGIVANNA LLOYD WRIGHT: ". . . he would never violate nature; he would even enhance nature by the structures that he designed."

This initial unit will contain the county library under a huge dome, board meeting rooms, the office of the superintendent of schools, a data processing center and other county functions.

Wright designed the main structure to eventually span three hills. The first wing will bridge two of these hills. Robert Rothschild remarked: "When we first saw the plans, we thought construction would involve expensive, difficult techniques. After careful study, we have found that the buildings can be put up economically and with ordinary methods."

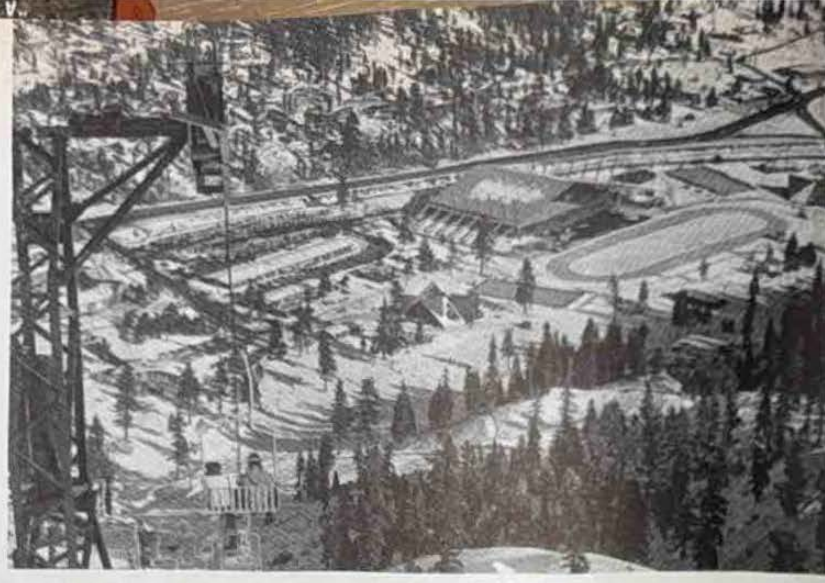
First and second stage costs will hit $3.4 million, with a two-year construction schedule.

MODEL OF MARIN COUNTY PROJECT (for Wright's own sketch, see PA&B for June '59).





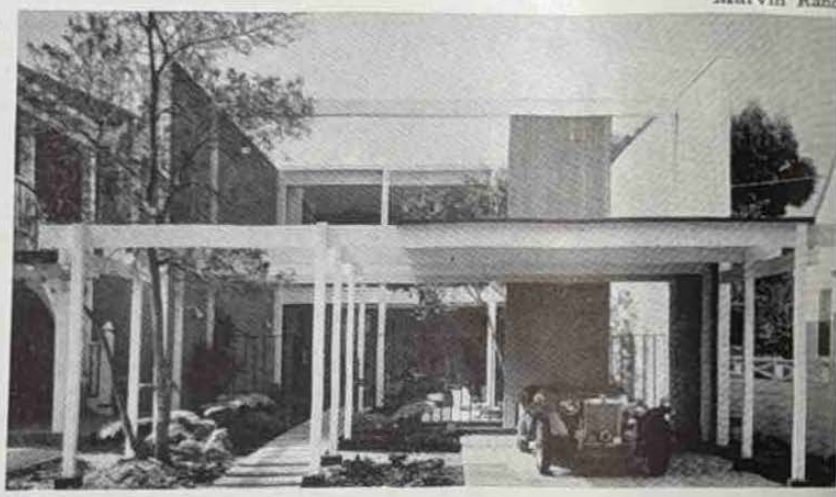
Phil Palmer photos



1

Marvin Ran

2



First Honor Award

1. Blyth Arena, Squaw Valley, Calif. Associated architects: Corlett & Spackman and Kitchen & Hunt; structural engineers: H. J. Brunnier and John M. Sardis; consulting engineers: Punnett, Parez & Hutchison; utility engineers: Kennedy Engineers; mechanical-electrical engineers: Vandament & Darmsted.
2. Richard Opdahl Residence, Long Beach, Calif. Architects: Killingsworth, Brady & Smith; decorator: John Nicholson; contractor: Al Dorsey.

3



Awards of Merit

3. Asilomar Housing, Asilomar Beach State Park, Pacific Grove, Calif. Architects: John Carl Warnecke & Associates; structural engineers: William B. Gilbert & Associates; general contractors: Comstock Associates.
4. Builder's House (one of two pilot projects for hillside lots), Mill Valley, Calif. Architect: Raphael S. Soriano; contractor: Frank McCauley.
5. Alyn Reid Residence, Mill Valley, Calif. Architect: Lee Stuart Darrow; structural engineer: Constantine C. Chekene; contractor: Ralph Briggs.

4

Raphael S. Soriano



Ernest Braun

5



AIA cites five California projects; honors Mies, Sturtevant; proposes reform

Announcement of the design competition winners, the Gold Medalist and related award recipients in February was an emphatic reminder that the 1960 annual convention of the American Institute of Architects was not far off; and preliminary discussions on both state and chapter levels in the West clearly indicated that the proposed basic reform of the organizational structure of the Institute would do its part to engender interest in the April 18-22 sessions in San Francisco.

California, the lone western representative in the Honor Awards program, has received five of the 16 citations—two First Honor Awards and three Awards of Merit (photos across page). Other top winners are the Mutual Insurance Co., Hartford, Conn., by Sherwood, Mills & Smith; the Moore School of Electrical Engineering, Philadelphia, by Robert L. Geddes, Melvin Brecher and Warren W. Cunningham; and the United States Embassy Office Building, Oslo, Norway, by Eero Saarinen & Associates.

Gold Medal to Mies

Ludwig Mies van der Rohe, retired director of the department of architecture and city planning of the Illinois Institute of Technology, has won the Gold Medal. In addition to the Seagram Building, on which he collaborated with Philip Johnson, he designed a great many of the projects on the IIT campus, the glass enclosed apartment houses at 860 Lake Shore Drive in Chicago and Cullinan Hall, an addition to the Houston Museum of Fine Arts.



MIES

Roger Sturtevant of San Francisco, whose work has been widely published in the professional press, is the first recipient of the new annual award for architectural photography. Other awards:

- Fine Arts Medal to painter Thomas Hart Benton of Kansas City, Mo.
- Craftsmanship Medal to silversmith William L. DeMatteo of Williamsburg, Va.
- Allied Professions Medal to naval architect Francis Gibbs, designer of the Constitution of the United States Line.
- Kemper Award for service to the Institute as chairman of the judiciary committee to Philip D. Creer of Austin, Texas.
- Honorary Memberships to Raymond R. Tucker, mayor of St. Louis; James H. Douglas, secretary of the Air Force; Sir Leslie Munro, permanent New Zealand representative to the United Nations; and Shirley Cooper of Washington, D.C., assistant executive secretary of school administrators.
- Honorary Fellowships to Henrique E. Mindlin, Rio de Janeiro; Santiago Agurto Calvo, Peru; Robin Boyd, Australia; Jose Gnecco-Fallon, Colombia; and Hideo Futami, president, Architectural Institute of Japan.

Wright, Hunter are nominees

Election of officers has more than usual interest in the West this year. Henry L. Wright of Los Angeles, who is completing his second term as second vice president, has been nominated for first vice president; and James M. Hunter of Boulder, Colo., will run against I. Lloyd Roark of Kansas City, Mo., for second vice president. Other nominees up to press time (March 9 is deadline for filing): Philip Will Jr., Chicago, president; J. Roy Carroll Jr., Philadelphia, secretary; and Gerson T. Hirsch, Pleasantville, N.Y., and Raymond S. Kastendieck, Gary, Ind., treasurer. Carroll and Kastendieck are nominees for reelection.

'Expanding Horizons' and reform

Among the speakers who will explore the general theme "Expanding Horizons" are J. Robert Oppenheimer, director of the Princeton Institute of Advanced Studies; Cyril Northcote Parkinson, historian and author of "Parkinson's Law"; Morton Gabriel White, philosopher of Harvard University; and Wendell Bell, sociologist of the University of California, Berkeley. Panel discussions and business meetings will be held in the new Masonic Temple; convention headquarters will be the Mark Hopkins Hotel.

Delegates will be asked to take action on the new Institute structure which is discussed in a brochure and a 15-minute sound film being circulated among the AIA chapters. The proposal would involve several major changes, including the reorganization of the present 13 districts into six—a move which would affect the California, Northwest and Western Mountain districts.



Workmen secure MO-SAI "diamond" to steel superstructure of new General Engineering Building at the University of Washington.

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Montana architects, engineers have two-day meeting

Some 200 architects and engineers from throughout Montana attended a meeting of their professional groups in Billings January 29-30. Convening in both individual and joint sessions were the Montana Chapter of the American Institute of Architects, the Montana Chapter of the American Society of Civil Engineers and the Consulting Engineers Association of Montana.

A highlight of the two-day program was the awarding of a life membership in the ASCE to A. V. McIver, veteran Great Falls architect and engineer, at a dinner meeting in the Lake Hills Golf Club. Beginning his practice in 1915, he now is senior member of the firm McIver & Hess. He is a past national director of the AIA and was president of the Montana Chapter for several years. McIver is a member of the Board of Architectural Examiners for Montana and chairman of the licensing committee of the National Council of Architectural Registration Boards.

Principal speaker at joint sessions was Ralph Westcott of Los Angeles, president of the Consulting Engineers Council of the United States.

Westcott stressed professional development, calling for tolerance and understanding. He pointed to the differences in organization between architects united under the AIA and the "multiplicity of organizations" in the engineering profession. He said one reason for the engineers' groups is the disparity of income and responsibilities which hinder the task of solidifying them into one organization. Closest approach to such unity in the engineering field, he said, is the Engineers Joint Council. Civil engineers are considered the parent group of this organization, followed by mechanical engineers, refrigeration engineers, heating and ventilating, environmental, radio, electrical and electronic groups.

Other speakers were James Battin, Billings attorney, who urged architects and engineers to "work as a group in assisting the legislature with your technical and professional knowledge," and Dr. Donald Harr, Billings psychiatrist, who discussed environmental influences in professional development. "The way a structure is designed, its color, shape, size and arrangement, will influence the people who come in contact with that particular structure," he said.

The ASCE discussed formation of the Montana Technical Council, designed to represent architects and engineers in matters of professional development.

The architects went on record as opposing the Forand bill, which would provide free medical care to persons over 65 under the social security system, as a step toward socialized medicine.

The consulting engineers named Fred Liquin of Billings as president, succeeding F. K. Steele of Great Falls.

Oregon AIA chapters join for sessions in Salem

Members of the Oregon and Southwest Oregon chapters of the AIA met in Salem's Marion Hotel February 13 for their second annual joint meeting. Opening luncheon was followed by an afternoon devoted to three seminars: the so-called "state architect," legislative matters and the proposed new structure for the Institute.

Each session was repeated so that the architects could be divided into smaller, more workable groups of about 20 to 30 participants. No one expected any solutions to be forthcoming, of course, but the discussions did provide an exchange of information and ideas on those problems which must be approached from the state rather than solely the chapter level.

The seminar on the state architect, one of the most ticklish topics confronting the profession in Oregon today, was led by two Portlanders—moderator Elmer Harrington and Wyman Bear who reviewed background material and outlined the apparent advantages and disadvantages of such a position. A divergence of opinion was expressed concerning the title itself, the duties of such an office and whether it actually requires the services of a licensed architect. Nevertheless, it was the sense of the meeting that both chapters should cooperate in suggesting a program to the Board of Control and/or governor to keep the matter out of the state legislature.

Moderating the legislative seminar was Keith Maguire of Portland who discussed the amendments to the Architects' Registration Law which were submitted to the 1959 legislature but were not acted upon. The architects agreed to wage a campaign in an attempt to obtain favorable action, including the possibility of engaging lobbyists.

Stuart B. Mockford of Oregon City reviewed the ramifications inherent in the wage rates on public works, passed last year, which were referred to as "a tricky and dangerous act."

In summarizing the work of the State Board of Architect Examiners, President George Whittier of Portland explained how steps are being taken to improve the examinations.

After the showing of the film on the AIA structural revision, Harry C. Weller, Northwest regional director of Pullman, led a discussion to stimulate thinking on the proposal prior to the national convention in San Francisco. The head of the department of architectural engineering at Washington State University also spoke briefly during the dinner program, at which the architects were joined by their wives.

The meeting ended with slide presentations by Glenn Stanton, Donald Edmundson and Will Martin, all of Portland. Joseph H. Rudd of Portland was this year's chairman.

Century 21 picks Yamasaki for federal building

Minoru Yamasaki will design the Federal Science Pavilion at the Century 21 exposition which will open in Seattle in 1962. Announcement of the selection of the Detroit architect was made by U. S. Commissioner Philip Evans. The Seattle firm of Naramore, Bain, Brady & Johanson will be associated with Yamasaki in designing the $3.5 million structure which will house the federal exhibits.

Yamasaki has been serving as consultant to the Design Standards Advisory Board of Century 21 since 1957. He also is a member of the Architectural Commission of the University of Washington, from which he was graduated in 1934.

Groundbreaking for the state-financed coliseum, first actual construction of Century 21, is set for March 25. Award of the contract—Howard S. Wright Construction Co. was low bidder at $3 million—had been held up by a lawsuit filed by Alfred J. Schweppe, Seattle attorney, who challenged the state's right to condemn the property. A Superior Court decision issued late in February, however, ruled against holding up the project. Paul Thiry is architect for this structure.

Another phase of the exposition, a monorail rapid transit line from downtown Seattle to the fair site which has been off again, on again for a number of months, seems to be heading back on the track. Alwac International, Inc., whose system is used at Disneyland, has offered to finance and build a $3.5 million monorail system. Alwac's proposal and one by Lockheed Aircraft Corp. are now under consideration by city officials.

Spokane AIA Chapter cites six projects in first annual design competition

From a total of 26 submissions in its first Honor Awards program, the Spokane Chapter, AIA, presented six citations: a First Honor Award, four Awards of Merit and a Special Award for a house designed on a "fantastically low budget"—$20,000 including lot, sales tax and architect's fee. Architects and clients received their certificates at a dinner meeting January 29 from Omer Mithun, partner in a Bellevue architectural firm and professor at the University of Washington, who reviewed the jury's report, with critical comment, on each project. Serving with the chairman were architects Lewis Crutcher of Portland and Royal McClure of Spokane; and Harry C. Weller, head of the department of architectural engineering, and Philip E. Keene, university architect, both of Washington State University, Pullman.

First Honor Award

1. Joel E. Ferris Residence, Spokane: Walker, McGough & Trogdon, architects; Lawrence Halprin, landscape architect; Bauer Construction Co., contractor.

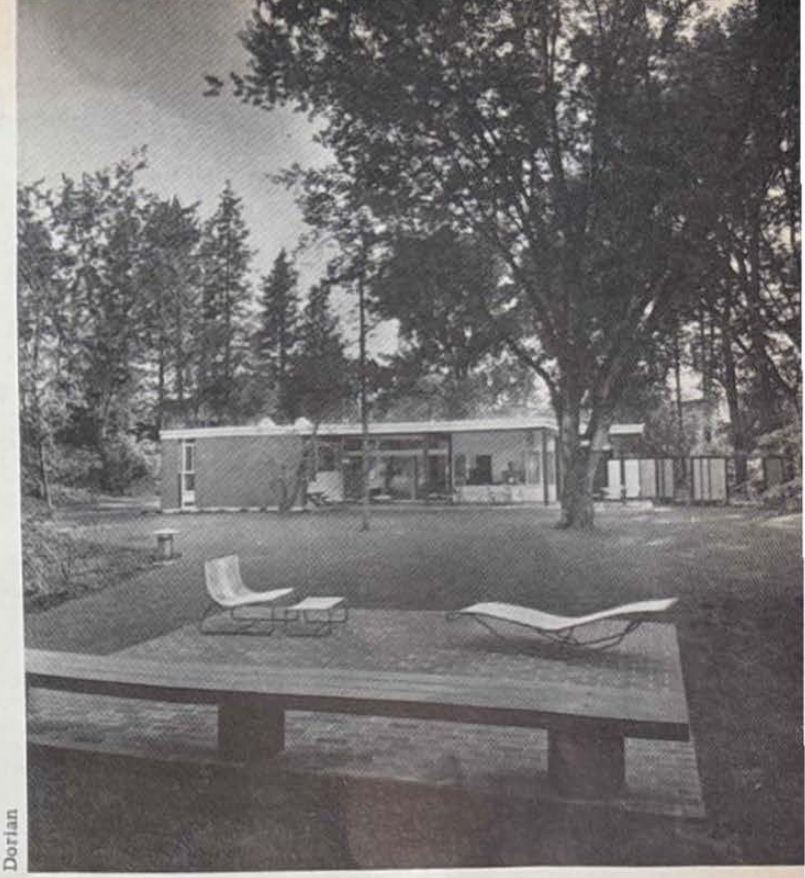
Awards of Merit

2. Liberty Lake Gold Course Clubhouse, Spokane: Warren Cummings Heylman, architect; Robert Woener, landscape architect; Northwestern Construction Co., contractor.
3. Jacqueline's Women's Wear (remodeling), Walla Walla: Thomas O. Williams, architect; Ray Keeney, contractor.
4. Kenneth W. Brooks Residence, Spokane: Kenneth W. Brooks, architect; Kendall M. Wood, mechanical engineer; Bauer Construction Co., contractor.
5. Garden Crypts Mausoleum, Greenwood Cemetery, Spokane: Rigg & Vantyne, architects; Mausoleum Construction Co., contractor.

Special Award

6. Norman E. Wells Residence, Spokane: Warren Cummings Heylman, architect; A. J. Popp Construction Co., contractor.

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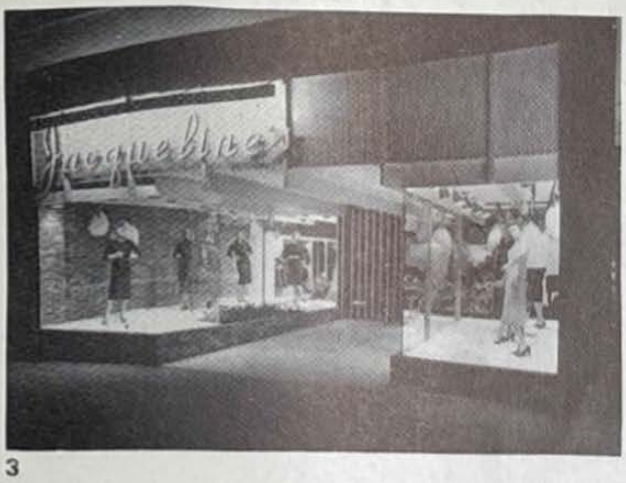


Dorian

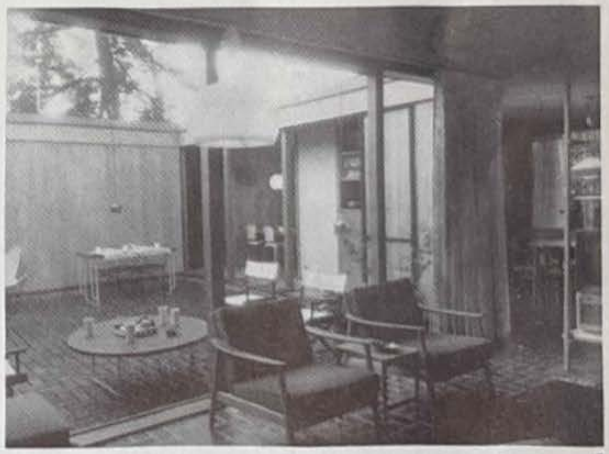
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Charles R. Pearson





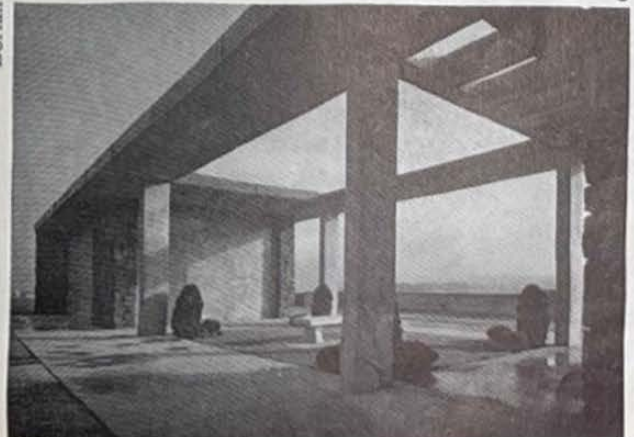
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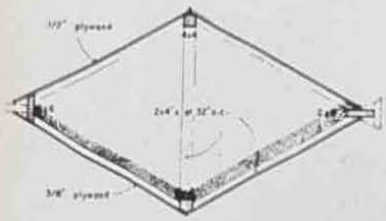


6



Dick Williams

For a timber firm: an experiment in wood

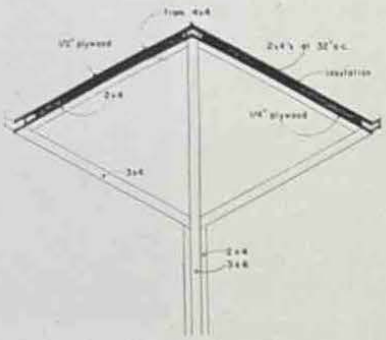


section b (box truss)

CENTRAL RESEARCH LABORATORY, SIMPSON TIMBER CO., BELLEVUE, WASH.: Groundbreaking is scheduled to take place in spring for this 20,000-sq. ft. structure which, appropriately enough, will serve as a showcase of wood products in use—stressed skin plywood panels, folded plates, box beams and selected plywoods. It is planned to be in operation by fall.

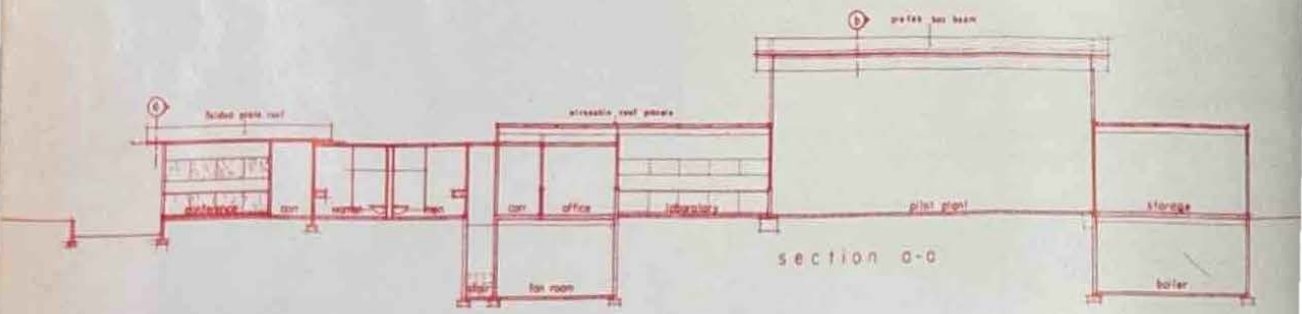
Among new concepts to be introduced is a diamond shaped box truss spanning 44 ft. in one direction and ft. in the other. This truss, along with the folded plates, will be prefabricated and set into place. The diamonds will be filled with colored glass to symbolize the client's trademark. The firm's acoustical tile will be used throughout the building.

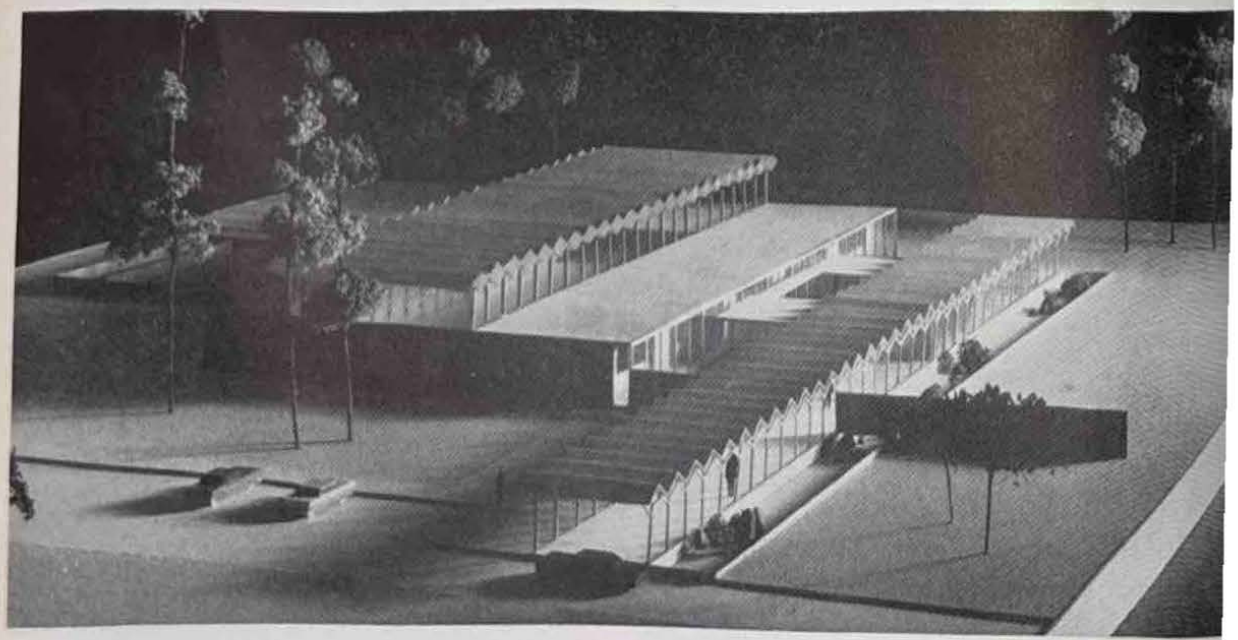
Described as "achieving a new goal in our company's objectives of supplying wood products for the nation through sustained yield forest management and total utilization of trees," the laboratory will employ 40 scientists, technicians and project specialists in the initial staff. Located on a 10-acre tract in Overlake Park, it will have as its neighbor the new United Control Corp. building, designed by the same architects. The selected site is close to the company's central administration office in downtown Seattle and to University of Washington facilities. Architects: Paul Hayden Kirk & Associates, Donald S. Wallace, David A. McKinley Jr.

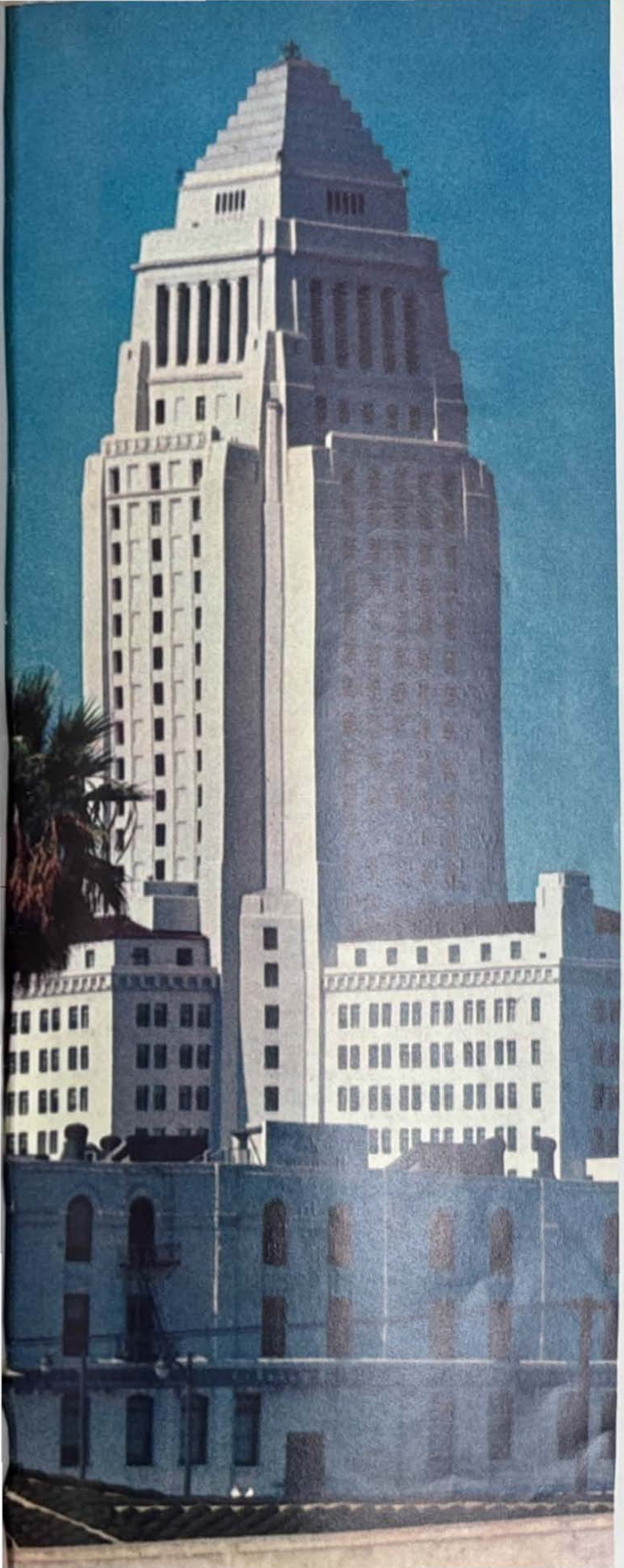


section c (folded plate)

JOB OF THE MONTH







This famous Los Angeles figure has

TAKEN A BATH ONLY TWICE IN 28 YEARS!

Los Angeles City Hall, widely recognized for its architectural beauty, has another beauty for the men charged with maintaining its lovely face: *Ceramic Veneer*. They've had to clean only twice since City Hall's erection—and the *permanent* beauty of Ceramic Veneer is there to see every day. The cost of maintenance and repairing . . . even cleaning after earthquake . . . is less than 1¢ per sq. ft. per year!

Contrast this record of easy maintenance with the recommendations of a top building maintenance expert for keeping another popular facing clean: ". . . should be cleaned or washed *once a year* to remove all stains. This costs approximately 7¢ to 10¢ per sq. foot. If this is not done, in about 3 years time the stains penetrate the surface and the only way to remove them is to hone and repolish the facing on the job; this costs about $1.00 per sq. foot and it is practically impossible to do a good job of restoring the original luster or polish."

No wonder Ceramic Veneer's easy maintenance and outstanding appearance persuaded the architects of the Police Administrative Building and the Health Center to use glazed Ceramic Veneer!

BY DIRECTION OF THE BOARD OF SUPERVISORS, the County Administration Building, County Court House, and Central Heating Plant have been faced with Ceramic Veneer, and the new Hall of Records will be faced with "similar glazed material".

Isn't this combination of easy maintenance and beauty high on your list of recommendations, too? Consult with a Gladding, McBean & Co. representative soon. He can give you full detailed accounts of the savings you can have with

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FRANK LLOYD WRIGHT :

a tribute to a personal hero

Remarks presented at the groundbreaking of the Marin County Government Center

by Edward D. Stone

MR. WRIGHT was my personal friend and personal hero for the past 25 years and I'm sure that this occasion would give him great pleasure wherever he is. To the best of my knowledge, this is the first opportunity he was given to completely design a government center. It speaks well for your wisdom in this day when material considerations, standardization of ideas and creature comforts seem to govern our daily lives.

Fortunately, there is a great debate going on in Washington where one group maintains that we are wasting our efforts and our resources. The emphasis on creature comforts, etc., is dissipating our strength and we are indeed a nation without a purpose. Emphasis on education, health, cultural and spiritual values has given way to superficial luxuries. With our pioneering over and with our untold wealth, we should be turning our attention to cultural and spiritual values and first among them would be the creation of a beautiful environment in which we can live and work.

It has been said that in periods of prosperity and overabundance we seem to be able to afford everything but beauty. It is therefore inspiring that your community had the wisdom to accept this challenge and aspire to a great civic center designed by Mr. Wright and carried through to completion by Mrs. Wright and his faithful colleagues. I predict that it will be a place of pilgrimage for generations to come, just as today the work of Michelangelo and Leonardo da Vinci provides exultation for millions of visitors to Italy.

In New York today we are witnessing an example of this thirst and appreciation of great architecture. There are groups standing in line three and four abreast waiting to visit the great Guggenheim Museum designed by Mr. Wright. With a paid admission this has been a financial bonanza for the institution. That it has been a controversial building is good. It has stimulated great interest and as a result has attracted visitors who have never before set foot inside a museum.

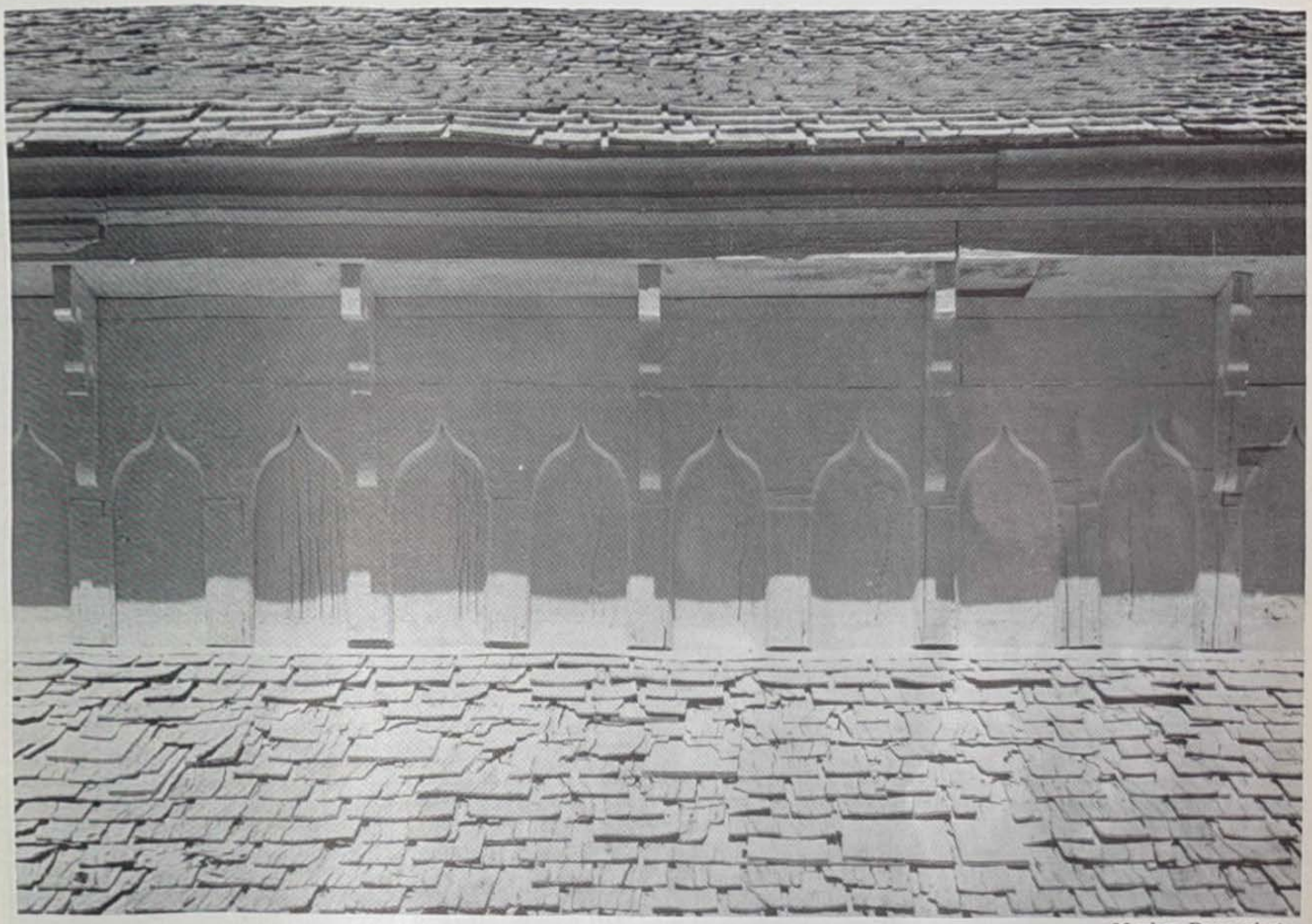
There was a time in our country when architects were content to copy monuments of the past. We're all familiar with the Greek chapel used as a bank, the Italian palazzo for a city hall and the Renaissance dome of St. Peter's Cathedral for our state capitol buildings. This was a sad state of affairs. The creative talent of our country was repudiated and we were renouncing our indigenous national heritage.

Mr. Wright had the vision to change all of this. His principles of modern architecture at first were slow to be accepted in this country, but were immediately adopted by the Europeans who came to this country and perpetuated them. So that today, thanks to Mr. Wright, we are developing an indigenous architecture based upon his principles. No architect touches his pencil to paper today without subconsciously paying tribute to Mr. Wright.

Mr. Wright was certainly the greatest creative talent that this country ever produced and, in my opinion, the greatest architect the world has ever known. And I welcome this opportunity to pay homage to his memory.

It has been said that all great periods of history were great only because of the arts they produced. You people here in Marin County will have a great work of art, the best that our times can produce. And it will be a source of inspiration and pleasure for generations to come. I salute you in your wisdom.

In the Mother Lode country: a lesson in restoration



Morley Baer photos

The topic of restoration of buildings of historical significance is a popular one these days in architectural and related circles, but examination of the record clearly indicates a tremendous gap between words and deeds. Nor does it necessarily follow that restoration means preservation, for often the result is only a mockery of what was an original forthright expression.

John Carden Campbell, a partner in the architectural firm of Campbell & Wong, has translated his pleading for the cause into practical action. Exhibit 1: a century-old house, shown above and on the following pages, which he has restored—without violating its architectural integrity—as a weekend retreat for his family and friends in the foothills of the Sierras. In addition, Campbell is president of Leger, Ltd., a San Francisco organization pledged to restore key downtown structures in Mokelumne Hill, including the two-phase program described on page 25.

There's a past in our future

by JOHN CARDEN CAMPBELL

WITH this seemingly contradictory phrase we can start a whole new idea: utilizing some of the best things of our past for our present and future needs. I am referring more specifically to the fine old buildings left as our heritage throughout California and particularly in the Mother Lode country, which is endowed with more such examples than any other given area I can think of in America, except along the eastern and southern seaboard.

There are hundreds of these structures that can be made to accommodate new uses without destroying their basic merit. Some of them are suitable for hotels and motels or for small businesses and, as illustrated in this article, many of the houses would be appropriate for weekend occupancy. They are situated in a most interesting hill country close to ski resorts, with warm, dry summers; beautiful, colorful autumns; brilliantly green and flowery springs.

Most of the buildings are now about 100 years old and in varying states of repair, some still very solid and some falling apart. And they express a true regional architecture, a fact that is seldom recognized. It is granted that most of the houses were made from designs brought around the Horn from New England and were in the then internationally popular Greek Revival style, but their adaptation to the climate of the country, the hilly location and generally the whole ruggedness of the area brings forth in them a style all their own. They are, to be sure, in the classic tradition, but they are also of a more rugged cut—frequently more simple, sometimes almost primitive. This curious combination of refinement and ruggedness produced, I believe, a truly regional type.

If a closer study is made of the detail of many of these buildings, it will be found that the louvered shutters of the tall, narrow French doors are in the most elegant classical tradition. The detail around the porches, the double columns frequently found and the interior trimwork; the general proportions of the houses themselves; the roof lines; and an occasional fanciful detail, such as a Gothic window or a Gothic wood tracery, give them a distinction all their own. Most of these houses have verandas on two or three sides, possibly four, for protection from the midsummer sun. A more elaborate architectural treatise could certainly be expounded on the houses, as well as the more familiar stone and brick buildings of more commercial nature throughout the area.

Stone and brick buildings, of course, have their most distinctive black and green iron shutters which to my knowledge were not prevalent anywhere else in the country. They are an earmark of nearly every stone and brick building throughout the Mother Lode and could thus be considered a regional characteristic. The shutters were used for fire protection, possibly burglary protection, and were constructed in a simple rugged way. It is also apparent in looking at them that the proportion was excellent, again combining ruggedness and refinement, as they also cover openings of equally fine proportion.

To be more specific, we might now discuss the house illustrated here. It is a fine example of Greek Revival, but with some off-beat detail that is not exactly typical, thus giving it its own individuality. The window detail, the classic Greek columns on three sides, the formal symmetry, the plan and the form of the house itself (34x34-ft. box) and the pure pyramid roof make it a clean architectural expression. The interior with its Greek Revival doorways and window trim unifies the house into a fine overall architectural unit.

However, it might be noted that near the eaves we will find a kind of Victorian wood icicle and directly below that an Arabic arch between each board, finishing the board and batten detail. The board and batten itself is a little heavier and cruder than is usual on a Greek Revival house of later period. It is interesting to note here that the boards of the board and batten are 2-in. thick planks. This material, as well as the windows, shutters and columns, were all brought around the Horn in 1853 by a Dr. Woods. The house has gone through many hands and some of the descendants of the original occupants are still in the area. I discovered it about 1936 and sketched and photographed it then.

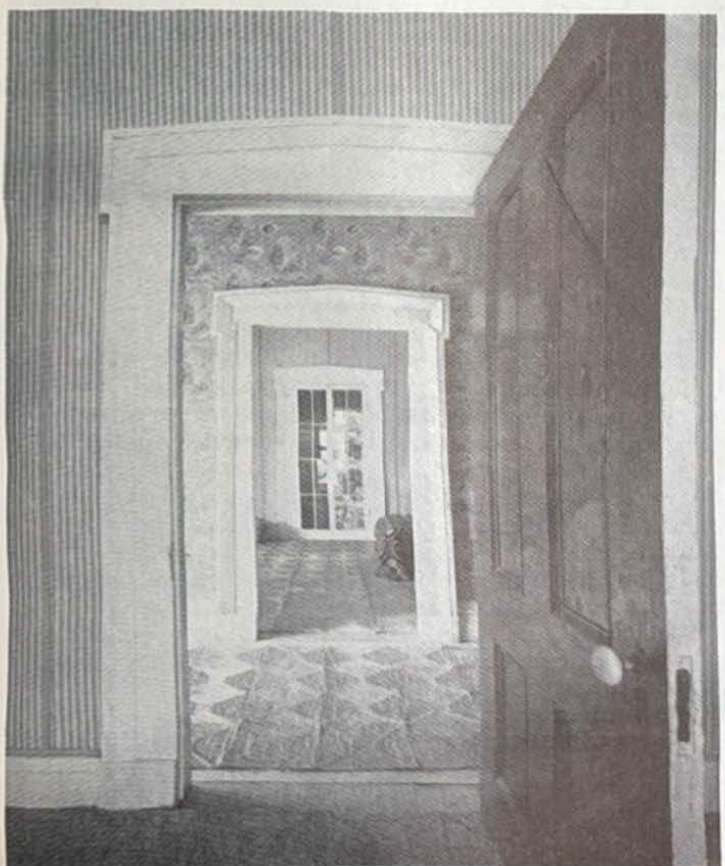
This house has a new life. It is being used as a weekend retreat and the rooms as they were divided are still used in a similar manner except that the large front bedroom is now a kind of dormitory where four to six people could sleep on a skiing weekend. With two in the master bedroom, two more in the living room and another in the dining room, nine people could spend a reasonably comfortable weekend here.

Nearly 100 years ago when this house was built, closets were not considered so essential as they are today and clothing was kept in wooden wardrobes. However, as a further adaptation to weekend use, clothes in this house are now hung, just for the weekend, of course, on old hall coatracks, each guest having his own. Thus, everything is readily available and not too overly cluttered.

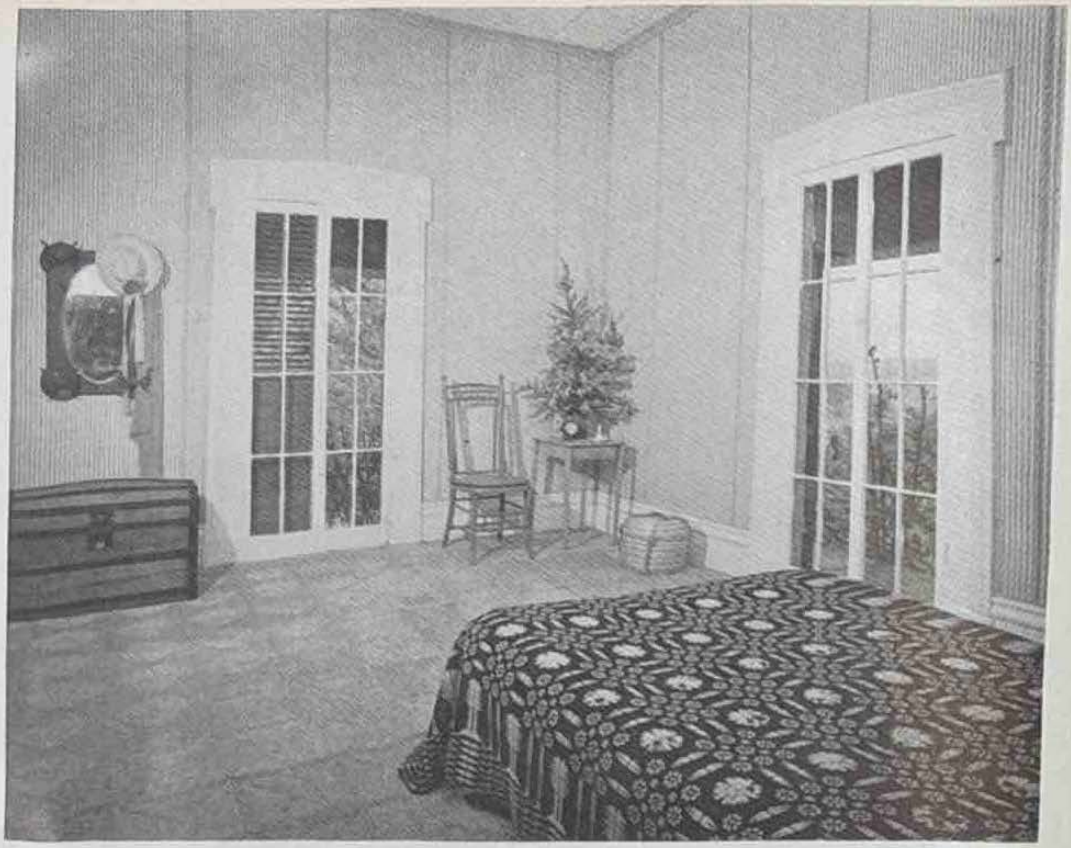
For anyone living in a contemporary city or suburban area, the charm of the old house is, in a way, as refreshing as a rugged mountain cabin, but in quite a different manner. This particular house is situated on the top of a knoll in the small, attractive village of Mokelumne Hill and has a commanding view to the west over the foothills of the Sierras.

In restoration, nothing was added but two old brass lamps on either side of the front door, gold leaf sunburst finial at the peak of the roof and several hundred gallons of paint. The interior furnishings are a simple, practical mixture of wood pieces of the period and contemporary couches and

CLASSIC GREEK COLUMNS on three sides of exterior are typical of Greek Revival style and of other houses constructed in area during that time. French doors, molding and shutters suggest formal character that is almost European. Two office chairs of period are used with contemporary furnishings.







BEDROOM WALLS are beige and white mattress ticking with small beige battens over seams. Trim and ceiling are white. Old bedspread, about vintage of house, is navy blue and white. Matting has provided practical, inexpensive covering of floors that are in very bad condition.

THERE'S A PAST IN OUR FUTURE

beds. The bedspread in the master bedroom is an antique found in Nevada City and the wall covering in both front bedrooms is mattress ticking stretched over existing rough boards, which formerly had been finished with muslin and wallpaper. At some time or other, it was apparently necessary to surface the old pine floors with plywood and then asphalt tile. For the use of the house at this time, the tile has been covered with matting of grass squares.

The color scheme has been coordinated and kept subtle in keeping with the contemporary idea, but certainly in sympathy with the period. The house, when recently purchased, was white with a dark roof. The entire house now is white, reflecting the hot summer sun. Another important aspect of this kind of restoration is that it is, in a sense, stopgap; in other words, the house as presently restored will hold together for a good many years, but there are still many things that could be done to make it more finished inside and more durable outside. Eventually the porch should be reconstructed as it sags occasionally; the basement could be lined with concrete. (More paint could be applied in many places, but in its present state it is most satisfactory.) Since it is not too finished and refined, it makes for more casual living. Full modern plumbing has been installed, as well as electricity. The rooms are generally good size with 12-ft. ceilings and there is a feeling of airy spaciousness throughout the house. In short, it serves its purpose well and still has all its original character—the past has a future.

The restoration of this whole house, illustrating its new use, might serve to introduce an idea which it is hoped will be accepted on a vastly wider scale: the general preservation of fine old buildings throughout California and particularly in the Mother Lode.

It is hard to realize that before the Gold Rush, California was a handful of sleepy, little communities that boomed to world prominence overnight. The remnants of this dramatic period are still very much in evidence, but it is an unfortunate fact that many of them are being torn down for what is considered as progress or allowed to fall down out of neglect and lack of appreciation. From Nevada City in the north and as far south as Sonora, there is a steady destruction going on that must surely indicate that in a few years there will be all too little left of this remarkable area, in its historical sense. In this case, it is true that an whole area can be an historical monument. Several of the finest old buildings have already been torn down and more are slated.

It would seem to be time that we reevaluate our

activities in this direction and make some concerted effort to have both the past and the future, lest the future be able to study its past only in pieces of paper and bits of lace and faded photographs. To aid in this direction, the California Heritage Council is being formed, with headquarters at 2090 Jackson St., San Francisco, to create a new and vital interest in the preservation of worthwhile buildings.

Let's keep our past for our future!

Mokelumne Hill--Hotel Leger restoration program

IN THE HEART of the Mother Lode country, through which thousands of tourists pass each year, is the old Gold Rush town of Mokelumne Hill. However, vacationists who want to stay in the area for a weekend or longer—facilities prevail for hunting, fishing, swimming, boating, skiing and riding—find the choice of accommodations extremely limited. Leger, Ltd., has purchased the historic hotel and five related properties with a twofold purpose: to restore these structures as authentically as possible and to turn them into useful and profitable enterprises.



HOTEL LEGER: authentic face lifting after 100 years of operation.

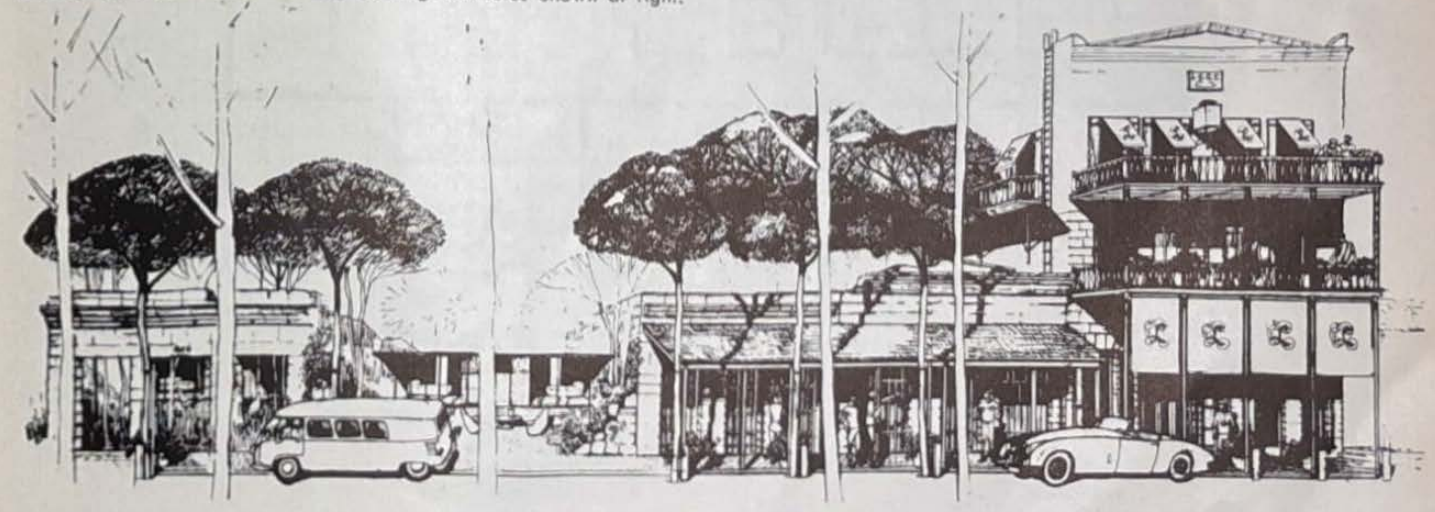
The hotel will be redecorated and put back into the grandeur of its original more dramatic times. It will be operated as a small resort with a lounge, first-class restaurant, pleasant rooms, swimming pool in the rear garden and other tourist features. The other buildings will be restored and leased to businesses that will complement the hotel operation.

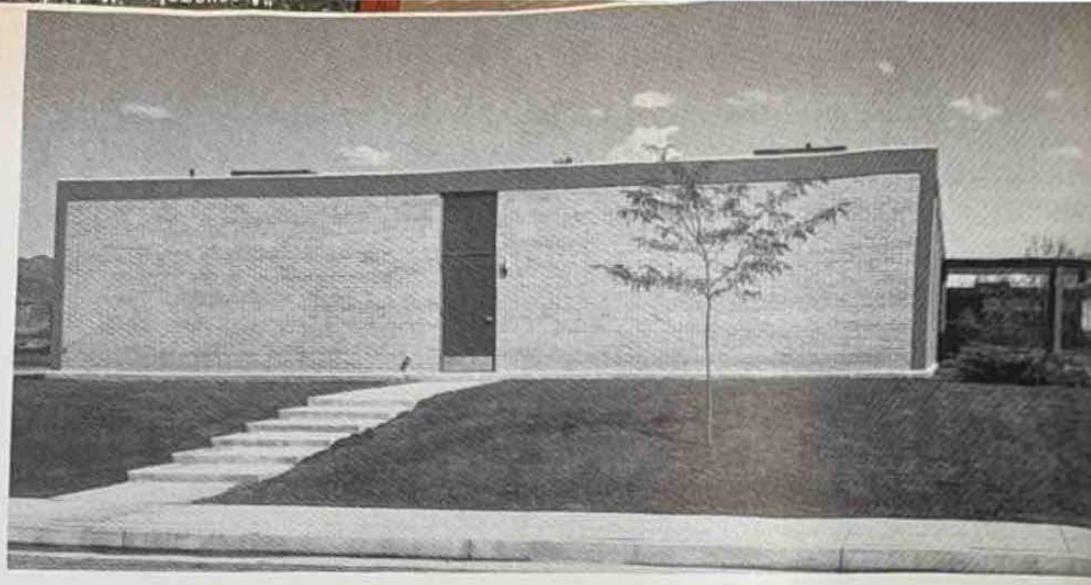
A second phase of the overall program will be concerned with converting a series of 100-year-old structures into a "unique resort unlike anything else in America or for that matter, anywhere in the world." A motel to be constructed within the ruins of these old buildings will be made livable and attractive without damaging the aesthetic historical value. In addition, it is proposed to restore an old meeting hall in which to hold small conventions, meetings, musicales, etc., thus providing a source of entertainment for local residents and visitors alike.

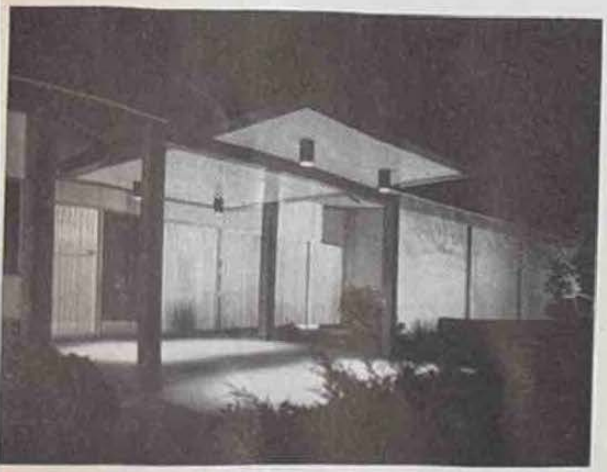
Leger officials optimistically comment that "the combination of the natural setting, the recreational possibilities and the true intrinsic charm of the buildings themselves best expressed in simple though colorful decoration can hardly fail to attract a great number of guests."



THE RUINS: resort motel utilizing existing structures shown at right.







COLORFUL EXTERIOR consists of tan glazed brick, white porcelain panels, blue steel frame and red doors. Canopy fascia and roof equipment are dark gray. Low garden wall at right of main entrance is of brown native stone. Building is floodlighted for both decorative and protective purposes.

Lasdon Foundation Building
Colorado Springs, Colorado

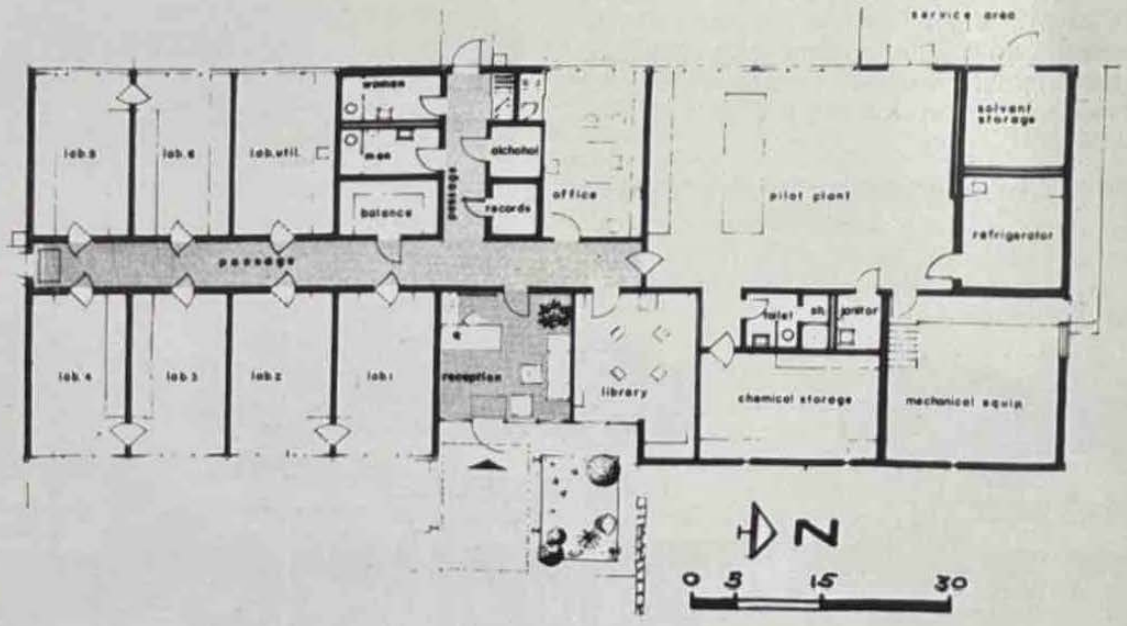
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EDWARD L. BUNTS
& F. LAMAR KELSEY
Architects

GEORGE O. TEATS & SONS
General Contractors

Guy Burgess photos





Polished little structure for drug research

HIGHLY TECHNICAL PROGRAM of the Research Institute of Chemotherapy called for a carefully controlled environment, both in arrangement of rooms and type of materials used. In addition, there were two other requirements: flexibility of interior spaces and provision for ultimate expansion. For these reasons, the modular steel frame carries the entire load so that walls and partitions can be moved as desired. Room arrangement was established by the client's staff of consultants in coordination with the architects.

Function of the nonprofit institute is to design and synthesize drugs for treatment of diseases presently considered incurable and to develop a basic process for their manufacture. Findings are then made available to the pharmaceutical industry. Use of the building requires that it be kept spotlessly clean both inside and out. Therefore nearly all surfaces are glazed material so that it can literally be washed with a hose.

A walk-height tunnel is placed around the building perimeter to provide easy access to piping. All laboratories and the pilot plant are provided with steam, vacuum, nitrogen, compressed air, hot water, cold water, distilled water and natural gas, with piping coded for easy identification.

Site planning was based upon the architect's intention to put a "polished little industrial building in a parklike atmosphere." The site, in a semi-industrial district, is nearly level and of ample size to accommodate the total building program, including expansion to over twice the present size. Interior furnishings were planned by the architect in cooperation with Knoll Associates.



RECEPTION AREA uses colors in fabrics and paintings to accent gray tile floor, tan glazed brick and off-white walls.



PILOT PLANT has concrete floor with sealer, gray glazed tile walls, white gloss enamel ceiling and metal casework.

OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete; frame: exposed structural steel; roof: gypsum deck on insulating formboard over bar joists; floors: concrete slab.

Exterior Walls: aluminum curtain wall with porecelain enamel panels—Cupples Co.; fixed solar gray plate—Libbey-Owens-Ford Glass Co.; glazed brick.

Roof Surfacing: built-up with gravel topping.

Doors: exterior: aluminum entrance; flush metal frames; interior: hollow steel in steel frames.

Interior Finish: glazed brick—Robinson Brick and Tile Co.; plaster on masonry with enamel finish in reception room and offices.

Floor Surfacing: asphalt tile—(Tile-Tex) Pioneer-Flintkote.

Ceilings: acoustical tile on suspended plaster—(Acoustone) United States Gypsum Co.

Lighting Fixtures: recessed fluorescent troffers (Gratelite louver)—Edwin F. Guth Co.; explosion square and round incandescent—General and Art Metal.

Heating: gas fired hot water, convection—Trane Co.

Plumbing and Sanitary: white porcelain fixtures—Kohler Co.; custom acid-resistant laboratory fixtures.

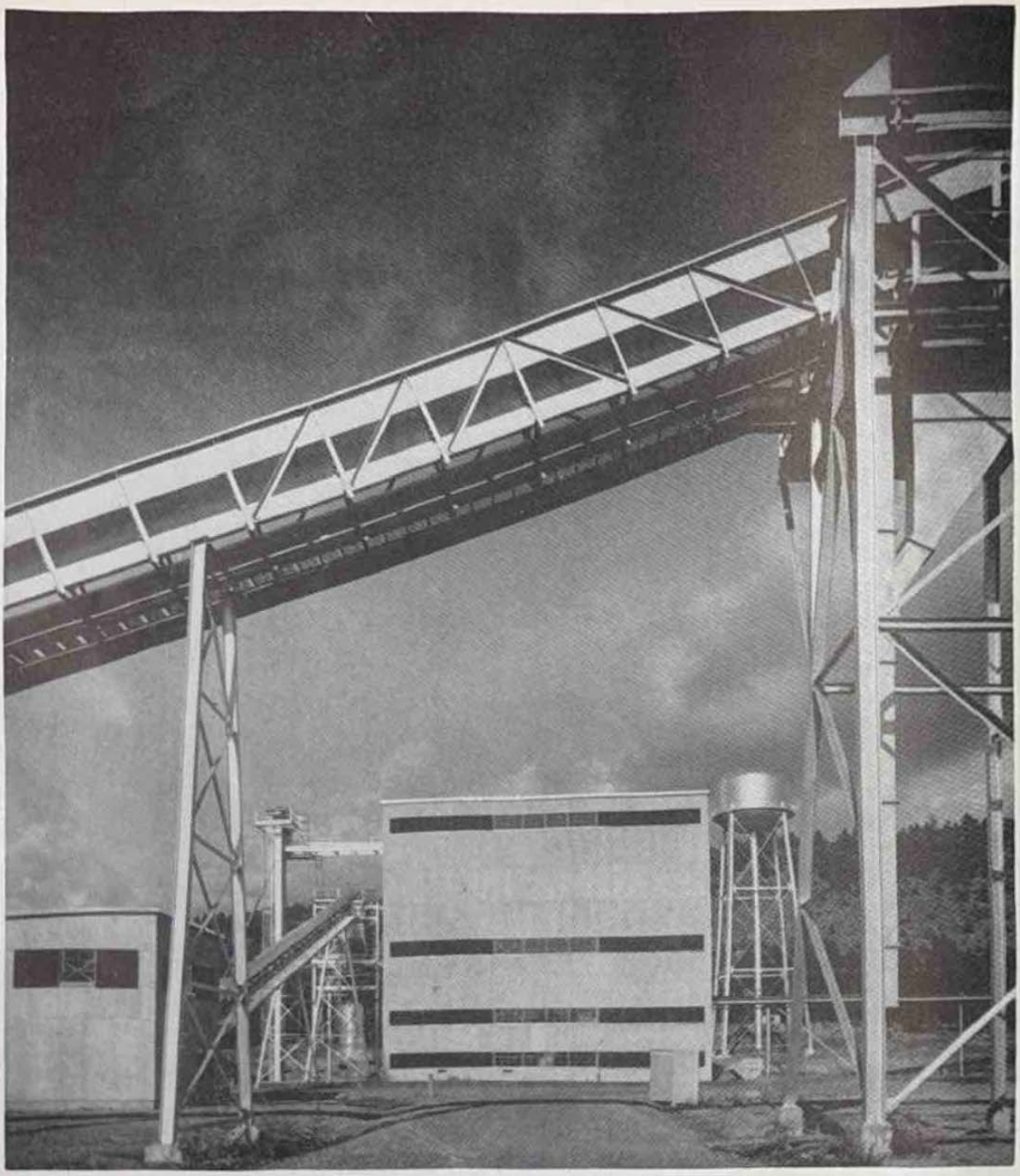
Special Equipment: laboratory furnishings—Steelab Equipment Co.; refrigeration and distilled water equipment.

Total Area: 6,050 sq. ft.

Total Cost: $175,632.

Cost per Square Foot: $29.03.

Date of Completion: June 1958.



Design amenities for a manufacturing facility

Insulating Board Plant
Johns-Manville Corp.
Klamath Falls, Oregon

•

SKIDMORE, OWINGS & MERRILL
Architects

GEORGE A. FULLER CO.
General Contractor

MOST manufacturing plants are dumped on the landscape with very little attention to outward appearances. Here is an exception. The long, low, buildings with their slightly pitched roofs harmonize with the lines of the sloping southern Oregon hills in the background, creating an unusally pleasant visual effect for a factory.

The plant, which consists of three principal buildings, is located on a 400-acre tract 22 miles north of Klamath Falls. The site was selected because of its proximity to the raw materials which will be used in the manufacture of insulating board and acoustical ceiling panels and its location near the largest West Coast market: California.

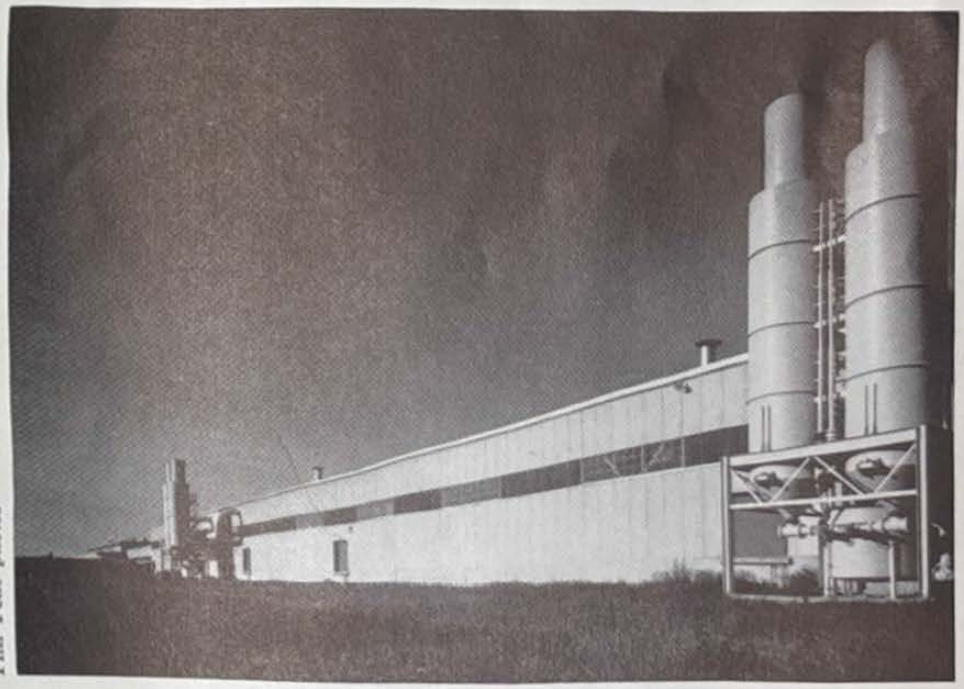
It was designed to provide the most efficient production operation possible, utilizing machinery to eliminate the backbreaking and monotonous jobs. Another important factor in design consideration was the desire to use Johns-Manville products in construction, including insulating board of the type to be manufactured there. This insulating board is of particular interest since it will be produced from local lodgepole pine whose value heretofore has been solely as a historical sidelight. Indians used the pine for teepee poles and for currency.

The main production building covering approximately 300,000 sq. ft. is a one-story steel framed structure. Exterior and interior walls are faced with the company's corrugated asbestos-cement sheets. Building rests on poured concrete spread footings and floor is constructed with a concrete slab poured on compacted fill.

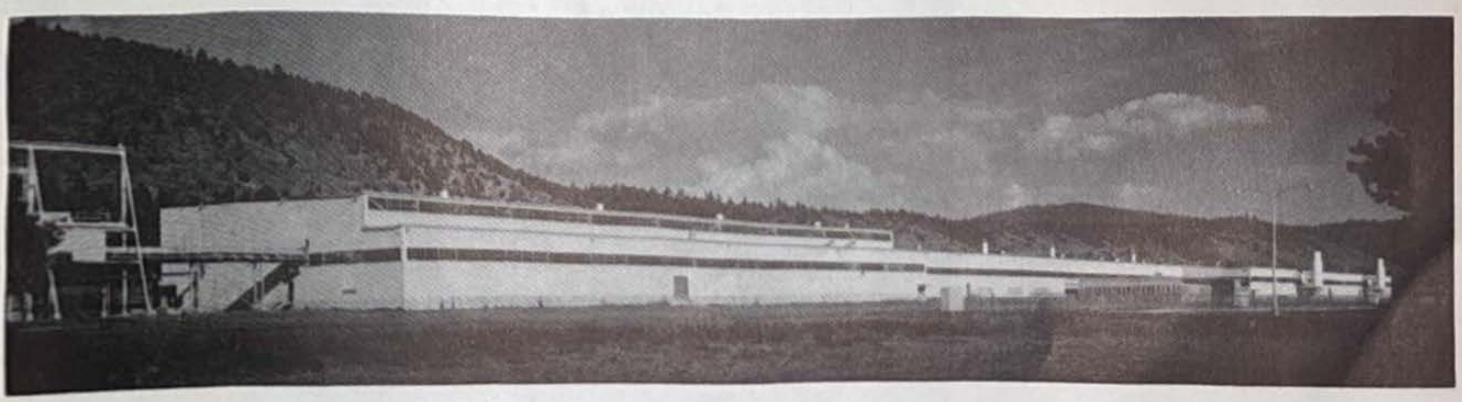
Roof consists of corrugated asbestos-cement sheets with 1½-in. rigid insulation and built-up roofing. A large part of the production activities are located in outdoor areas. Logs are picked up by cranes from stockpiles and conveyed to debarking machinery and soaking vats before entering the production building for reduction to pulp and manufacture into the finished product.

The other two principal buildings are a small one-story office structure of exposed steel framing with concrete slab on grade and the boiler plant which is essentially the same construction as the main production building.

Manufacturing facilities were designed by the company's general engineering department under the direction of George S. Smith. Total investment, including utilities, landscaping and timberlands to be purchased, may reach $12 million.



Phil Fein photos





BLACK MULLIONS accent gold anodized aluminum panels of curtain wall and louvers.

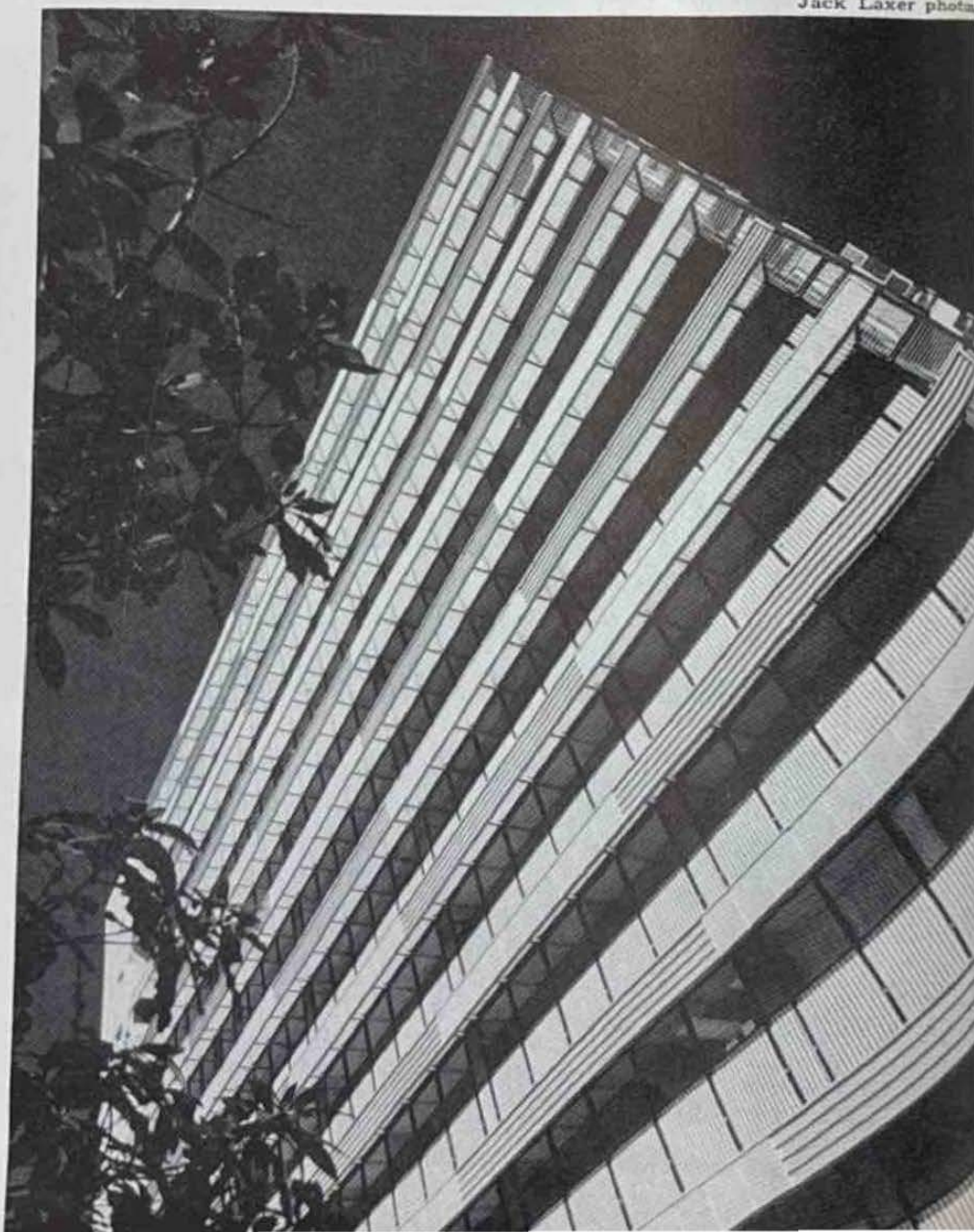
First Federal Savings & Loan
Association of Hollywood
Hollywood, Califorina

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AUSTIN, FIELD & FRY
Architects-Engineers

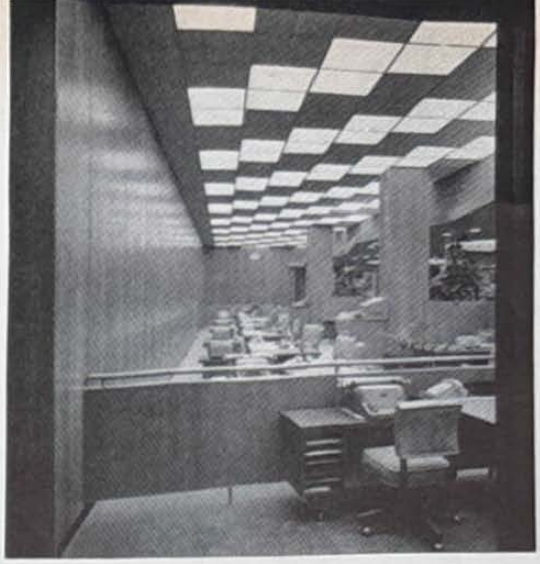
WILLIAM SIMPSON CONSTRUCTION CO
General Contractor

Jack Laxer photo





RED GRANITE STAIRWAY has black terrazzo risers.

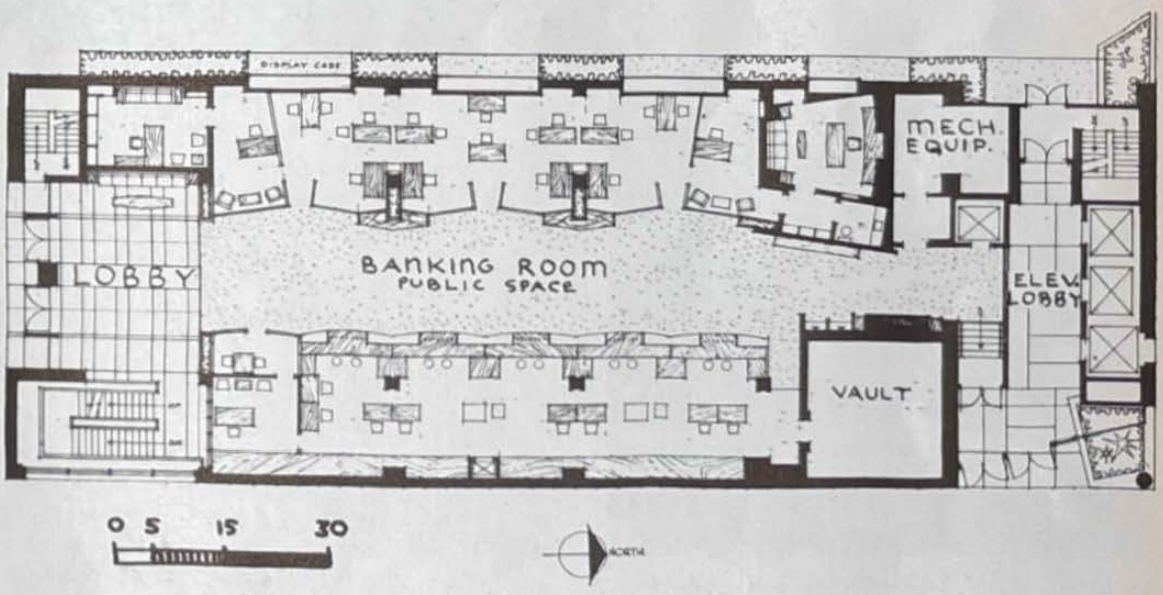


BANKING AREA with luminous acoustical ceiling.

First phase of complex on a celebrated site

INITIAL UNIT in a four-building shopping complex is this 13-story lightweight concrete structure with its aluminum curtain wall which stands on the former site of the Hollywood Hotel, a landmark of the film world for more than three decades. The problem presented to the architects was twofold: to design banking facilities with easy access for the public (basement, ground and second floors) and well-planned office rental space above; and to fit the building in the overall scheme of things.

A court on the west side will connect the office structure with a 200,000-sq. ft. department store, as yet unnamed, whose top floor will house a 1,500-seating capacity restaurant. The third building will provide parking for 1,200 cars, while the fourth will be a 300-room hotel with a swimming pool and cabanas. Entire project will involve an investment exceeding $10 million.



OUTLINE SPECIFICATIONS

Structure: foundation: drilled concrete caissons; frame: welded structural steel with vermiculite plastic fireproofing; roof: concrete slab; walls: precast lightweight concrete—Wailes Precast Concrete Corp.; floors: 2½-in. concrete fill over cellular steel decking—(UK) H. H. Robertson Co.

Exterior Finish: painted concrete surfaces—(Cemelith) Super Concrete Emulsions, Ltd.; anodized aluminum curtain wall—Reynolds Aluminum Co.; granite veneer—Cold Spring Granite Co.

Roof Surfacing: waterproof decking—(Dex-O-Tex) Crossfield Products Corp.; composition and gravel on penthouse.

Doors: exterior: tempered plate glass—W. P. Fuller & Co.; interior: aluminum frames—A. J. Bayer Co.

Floor Surfacing: vinyl tile and vinyl-asbestos tile; carpeting in banking area; ceramic mosaic tile in toilet rooms.

Insulation: fiberglass.

Interior Finish: painted plaster; walnut veneer paneling in banking area; glazed tile in toilet rooms.

Ceilings: luminous acoustical tile suspension system—(Duo-Flex) Shugart Co.

Lighting Fixtures: fluorescent—Sunbeam Lighting Co.

Plumbing and Sanitary: Crane Co.

Total Area: 124,800 sq. ft.

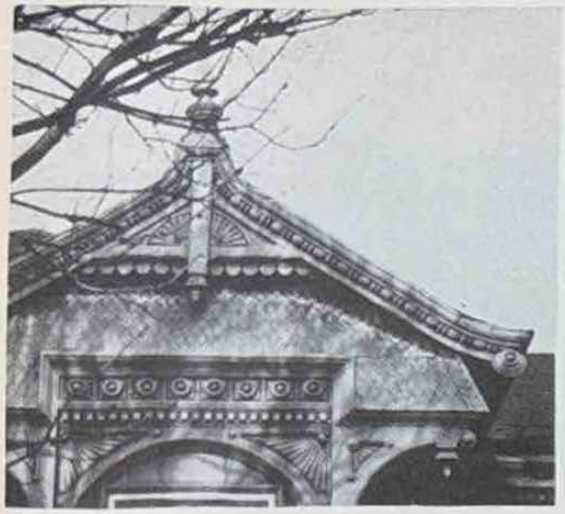
Total Cost: $3,660,826.

Cost per Square Foot: $29.34.

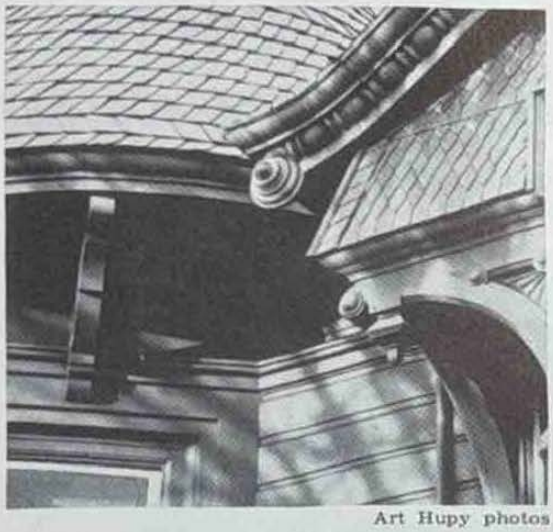
Date of Completion: December 1958.

Where architects hang their hats

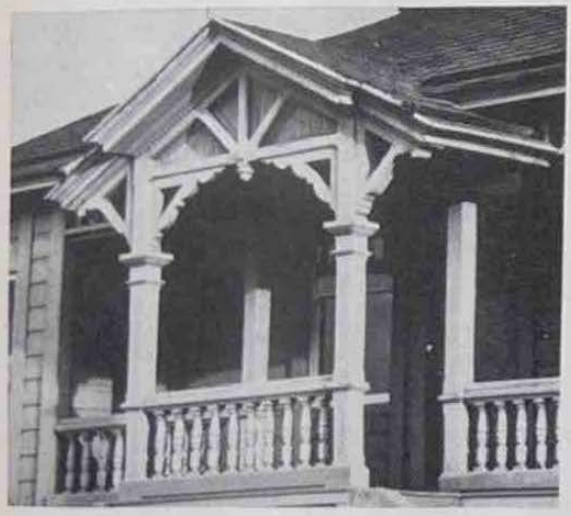
LEWIS CRUTCHER
Portland, Oregon



FRONT DORMER is painted gray-green to blend with slate turret (see architect's sketch below).



Art Hupy photos



ENTRANCE to architect's office off parking lot, formerly back porch of historic house.





WHEN the architect opened his own office eight months ago, he took over the rear of a famous old house shared by three other tenants. The structure was designed and built of Port Orford cedar in 1880 by John B. Bridges, whose family resided there until 1956, and restored by architect Larry Bisset before he moved to Paris.

Commenting on the four handsome drafting tables which distinguish the work area (a large portion of the practice is devoted to parking studies, freeway locations, etc., for Downtown Portland, Inc.), the architect says: "We have grown tired of leaning over a sheet of plywood on two saw horses. This is going to be where we hang our hats—berets, by the way—for the next 50 years and we deserve something better. Thus, we had these tables cut of walnut, then we sculptured them, applied a finish of turpentine and linseed oil and added white linoleum tops with 42-in. parallel rules. They work as we hoped they would, yet give sufficient privacy for concentration."



ONE OF TWO lovely old fireplaces (coal burning) which still does good job of heating, although gas furnaces recently were installed. Slate was skillfully finished to simulate marble and granite and has held up remarkably well. Mirror has gilded frame.

Kapiolani Branch
Bishop National Bank
Honolulu, Hawaii

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WIMBERLY & COOK, LTD.
Architects

E. E. BLACK, LTD.
General Contractor

ORIGINAL BUILDING housed small feed store.

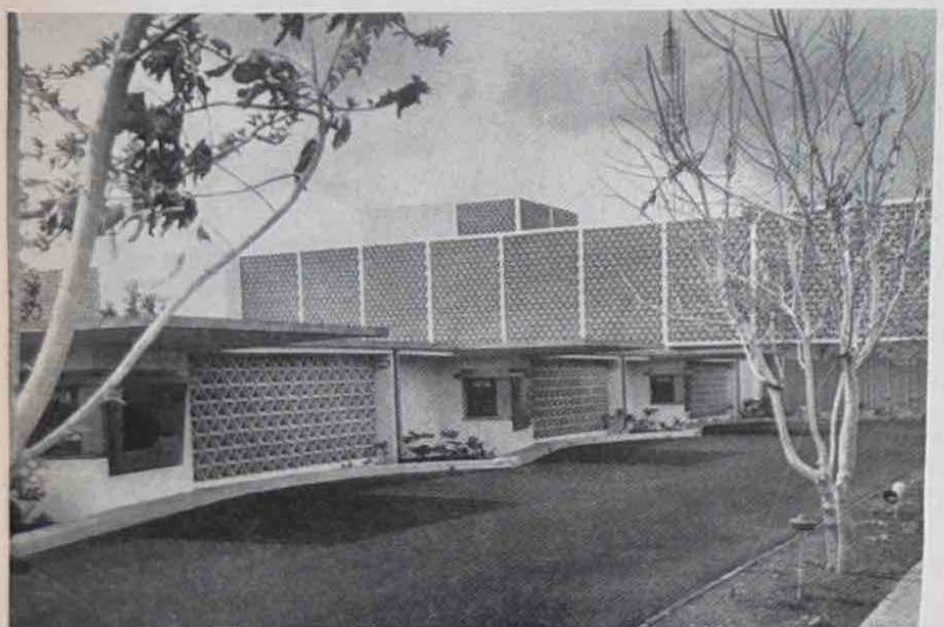


Grillwork gives building a new lease on life

Camera Hawaii photos



CONCRETE GRILLWORK that surrounds bank is repeated between six drive-up windows, three on either side of finger segment extending from left rear of structure. Parking area accommodates 50 cars.



DEFT USE of specially cast concrete block screens has transformed this utilitarian-looking seed store into an eye-catching branch bank. The concrete sun screens were used on upper exterior walls, replacing a massive concrete overhang, and also to mark off the six drive-up windows. Glass expanse of lower section has been retained to allow passersby to see into the bank.

Since the banking room is rather large and with a low ceiling, the architects felt that a center of interest should be provided within the room itself. This has been accomplished by using Japanese paper collages in brilliant gold and yellow placed upon the screens behind the teller's windows. Colors complement the golden beige in the terrazzo floors, beige marble on columns and walnut paneling of counters. Cabinets also are walnut, trimmed in gold anodized aluminum. Collage mural is the work of artist Ben Norris.

Officers' platform is set off from the lobby by a walnut grill trimmed in the anodized aluminum. Another collage here is in brilliant blue and green.

An addition was made at one end of the building to provide more ground floor space. It also was designed to serve as a base for an office tower to be built in the future. This created the additional problem of designing a building that would look complete within itself, yet require no structural changes when the office tower was constructed.

Sculptural details in the small gardens are the work of Edward Malcolm Brownlee. Remodeling was completed in May 1959 at a construction cost of $550,000.

by GLENN M. CANADAY

Ninth in a series: Electrical, Mechanical, etc.

Service installatians deserve careful consideration

25. ELECTRICAL

Electrical work is almost a subcontract item. Review the electrical and mechanical specifications carefully to determine responsibility for furnishing and installation of controls. Clarify responsibility for excavation and concrete work shown in the plans, temporary power and light, hookup of all miscellaneous equipment furnished by the general contractor, etc. Since many electrical contractors do not figure excavation and concrete work, even though specified in their sections of specifications, it is wise for the estimator to make a separate estimate of this work so that he can fairly compare electrical quotations.

26. MECHANICAL: PLUMBING, HEATING & VENTILATING

Today's mechanical subcontractor is often a general contractor in his own right. The complexity of the mechanical installations in today's large buildings necessitates the mechanical contractor subcontracting many phases of his work. Clarify responsibility for furnishing and wiring of controls, painting, excavation, concrete work and hookup of equipment supplied by the general contractor. It is not always obvious whether certain grills and louvers are to be furnished by the mechanical contractor or general contractor. Review both mechanical and sheet metal specifications and plans to clarify this.

27. SPRINKLING SYSTEMS

Fire protection systems, a specialized branch of mechanical work, is often bid directly to the general contractor. Review the applicable section of mechanical specifications to ensure complete coverage of work. Clarify excavation and painting with your subcontractor.

28. REFRIGERATION

Include in this division costs of all work pertaining to refrigeration installations.

28.01: Refrigeration Equipment. Include costs of equipment installation, service, etc. This is usually a subcontract item. Clarify responsibility for controls and painting.

28.02: Refrigeration Insulation. This is normally a subcontract item but on small or isolated jobs you may be forced to do the work yourself. The following checklist will serve as a guide:

- Insulation material
- Mastic, skewers and fasteners
- Support framing
- Equipment rental

28.03: Refrigerator Doors. Include all costs of doors, door installation, rough bucks, door thresholds and hardware.

28.04: Plastering. This item may or may not be covered under the plastering division. Include all cost of plastering, back-plastering and mastic coatings.

28.05: Floors. Check other divisions of the estimate for possible inclusion of this item. The following checklist will serve as a guide in making the estimate:

- Membrane dampproofing
- Reinforcing mesh
- Concrete floors
- Concrete base
- Hardeners and sealers

29. SITEWORK, UTILITIES & LANDSCAPING

29.01: Site Excavation. Include in this subdivision all excavation and removal of material from the site. Include costs of rock excavation, earth excavation and transport. Price by the cubic yard.

29.02: Site Fill. Include fill of all classifications necessary to bring the site to required levels. Include costs of fill, transport and compaction. Price by the cubic yard in place.

29.03: Site Grading. Include all costs to grade and shape, form drain ditches, etc. This item is usually priced by the equipment hour. Add for hand labor and engineering if required.

29.04: Streets, Roads and Parking Areas. Break these items into component parts. Include costs of excavation, selected fill, compaction and grading.

29:05: Asphaltic Paving. Include all costs of paving—selected base course, leveling course, prime coat, asphaltic concrete, asphaltic seal coat and painted parking lines, if required.

29.06: Concrete Paving. Include all costs of concrete paving on streets, roads, parking areas, playfields, etc. Include costs of fine grading, forms and screeds, expansion joints, construction joints, concrete finishing and curing.

29.07: Gravel Surfacing. Include all costs of gravel surfacing on roads, streets, parking areas, etc. Price by the cubic yard.

29.08: Sidewalks. Include costs of all sidewalks, whether concrete, asphalt, brick, stone, cinder or gravel. All sidewalks may be priced by component parts or by the square foot.

29.09: Curbs and gutters. Take off and price by the linear foot or by component parts. If you price by the linear foot, separate into classifications. Include all costs of excavation, fine grading concrete, forms, reinforcing steel, expansion joints, concrete finishing and curing.

29.10: Retaining Walls. Include all types of retaining walls—concrete, steel and concrete, steel and wood, masonry, etc. Separate into component parts and price accordingly.

29.11: Fences and Gates. Include costs of all types of fences and gates—steel, wood, masonry, concrete. Price by component parts.

29.12: Miscellaneous Foundations (flagpole, street lights, playground equipment, etc). Price by component parts. Include costs of excavation, concrete, forms, finishing, curing and backfill.

29.13: Septic Tanks. This item may be specified in the mechanical section. Check for your mechanical subcontractors's quotation for inclusion of this item. If you must estimate the work, include all costs of excavation, concrete, reinforcing steel, forms, finishing and curing, miscellaneous iron and backfill.

29.14: Drainage Fields. Check the mechanical specifications and quotations for this item. Include all cost of excavation, drainage fill, pipe, pipe accessories and backfill.

29.15. Sanitary Sewers. Check the mechanical specifications and quotations for sanitary sewers. Include all costs of excavation, pipes and acces-

sories, connection to main sewer lines and backfill.

29.16, Storm Sewers. Include all costs of excavation, pipes, backfill and concrete outfall structures.

29.17: Culverts (concrete pipe, steel pipe). Include all costs of excavation, culvert pipe and placing, concrete and masonry wing walls, outfall structures and backfill.

29.18: Water Lines. Check the mechanical plans, specifications and mechanical quotations for inclusion of this item. Include costs of excavation and backfill, pipe, valves and fire hydrants.

29.19: Lawn Sprinkling Systems. Include costs of excavation and backfill, steel, copper and plastic pipe, fittings, sprinkler heads and valves.

29.20: Seepage Pits. Check the plans and specifications carefully. Include all types of seepage pits whether for sewage, rain water or interior drains. Include costs of excavation and backfill, concrete, reinforcing steel, forms, concrete blocks and other masonry units, selected gravel, covers, ladder rungs, etc.

29.21: Manholes and Catch Basins. Include labor and material to construct all types of manholes and catch basins whether made of precast rings, concrete or masonry. Check your estimate for inclusion of excavation, backfill, precast rings and slabs, concrete, reinforcing steel, forms, finishing and curing, masonry units, cast iron gratings and covers and ladder rungs.

29.22: Exterior Electrical Work. Although exterior electrical work is usually quoted by the same subcontractor who bids the interior electrical work, this is not always true. Check specifications and electrical quotations carefully. The general contractor will generally use an electrical contrator's quotation for the electrical portion of this work. Check the quotation carefully for inclusion of transformer platforms, concrete or gravel slabs, fences and gates.

29.23. Topsoil. Include all costs of stock piling, purchasing, transport, placing, rolling and preparation of top soil for seed beds. Price by the cubic yard.

29.24: Seeding and Sprigging. Include all cost of fertilizers, seed, sprigs, protection, watering and labor. Price by the square yard or acre according to type of seeding and circumstances. If you subcontract this item, be sure your subcontractor includes necessary repairs and replacements.

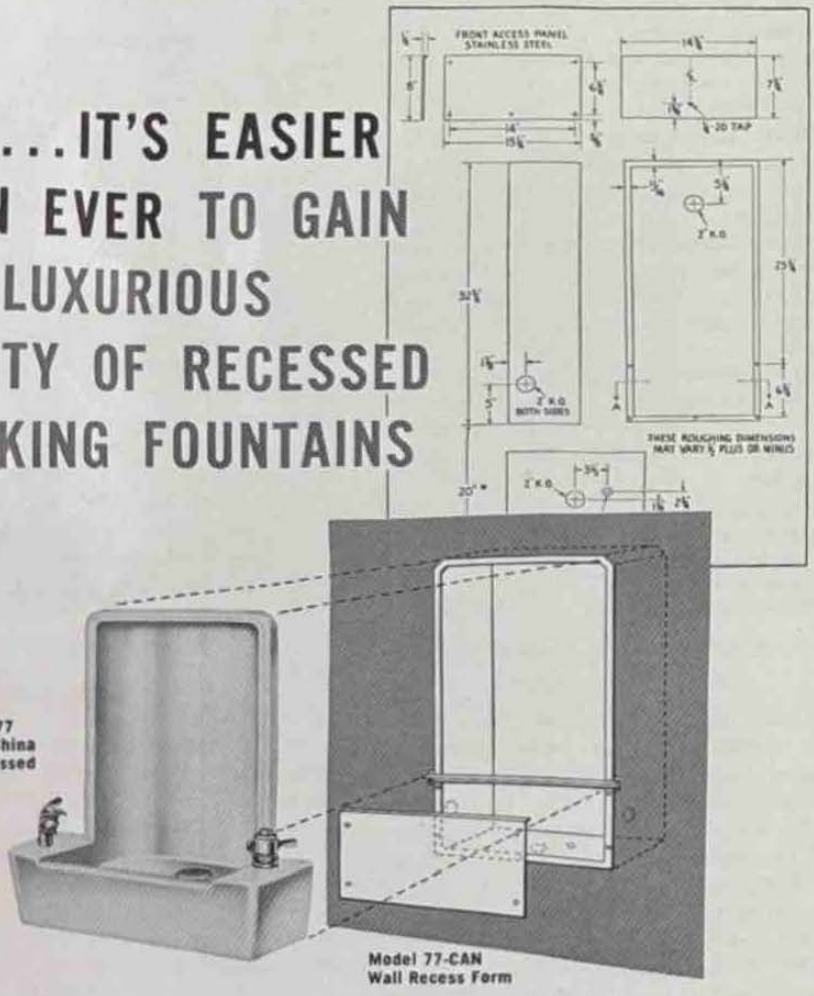
29.25: Trees and Shrubbery. Include all cost of excavation, fertilizers, nursery stock, watering, maintenance, replacement and labor.

30. FREIGHT & DRAYAGE

This division of the estimate is sometimes of extreme importance and deserves careful consideration, especially when bidding work in Alaska and other isolated areas. Include all costs of crating (not absorbed by the material supplier), freight, drayage and handling. List all materials and equipment items subject to freight and drayage charges. Price freight and drayage separately by the hundredweight or ton. When shipping by water, be sure to include port charges, heavy lift charges, longshoring charges, etc. Water shipment also necessitates the listing of cubage for lightweight and bulky items so this can be compared with the weight to determine applicable charges.

Study delivery requirements to determine methods and class of shipment. You may be forced to ship some materials or equipment items by air freight. Less than carload lot freight may be applicable to some items, while carload or large rates may suffice for others. If the job being estimated is a local job with very few freight or drayage charges, you may prefere to include these with material costs in the applicable section of the estimate. This division of the estimate should be carefully analyzed and treated with extreme care when bidding isolated jobs.

NOW...IT'S EASIER THAN EVER TO GAIN THE LUXURIOUS BEAUTY OF RECESSED DRINKING FOUNTAINS



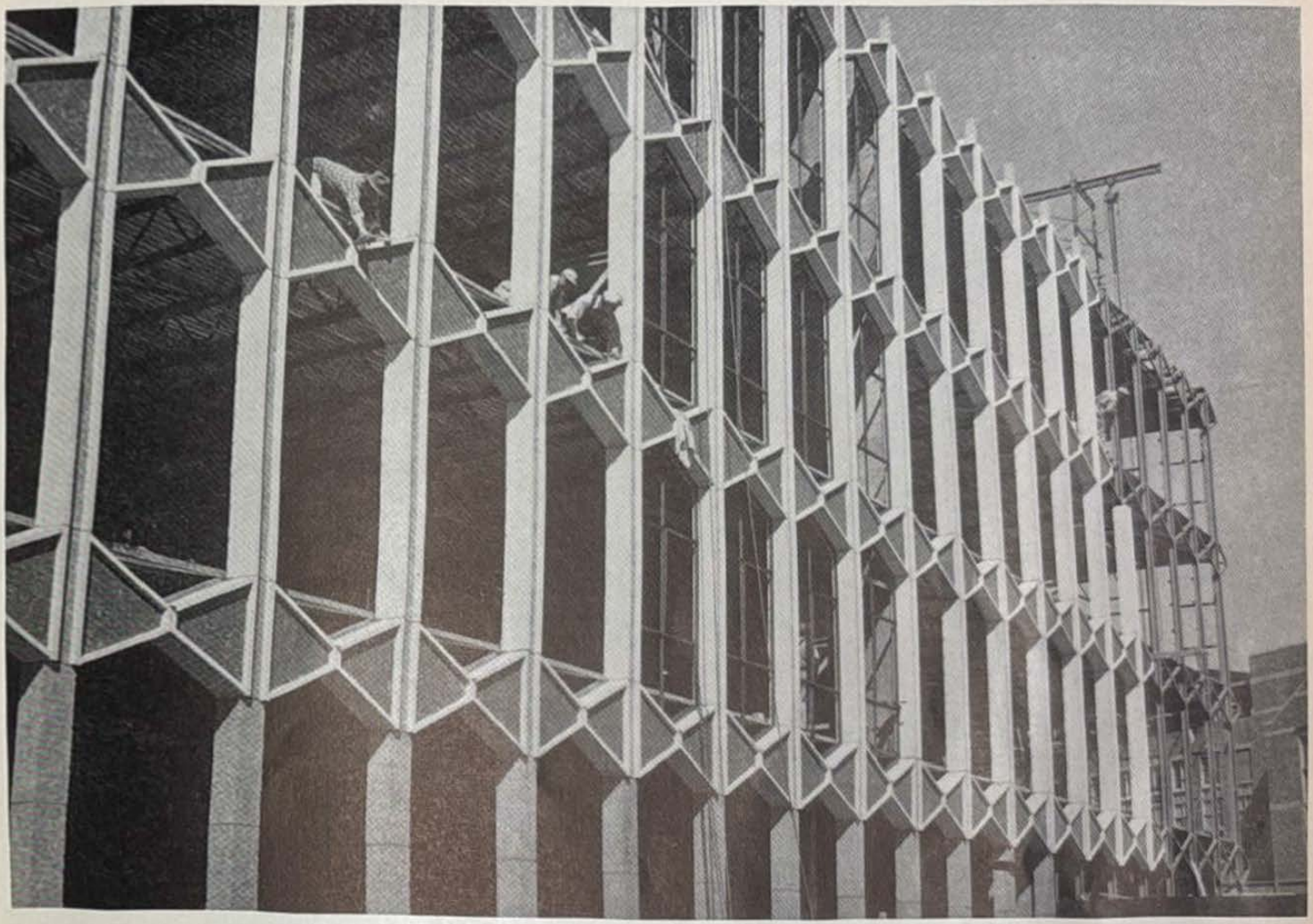
Model 77
Vitreous China
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Cast stone exterior serves as campus transition

Most interesting aspect of the latest addition to the University of Washington in Seattle—the General Engineering Building—is its colorful cast stone exterior. The four-story steel and concrete structure was completed in January at a total cost of $1,178,000, including taxes and fees.

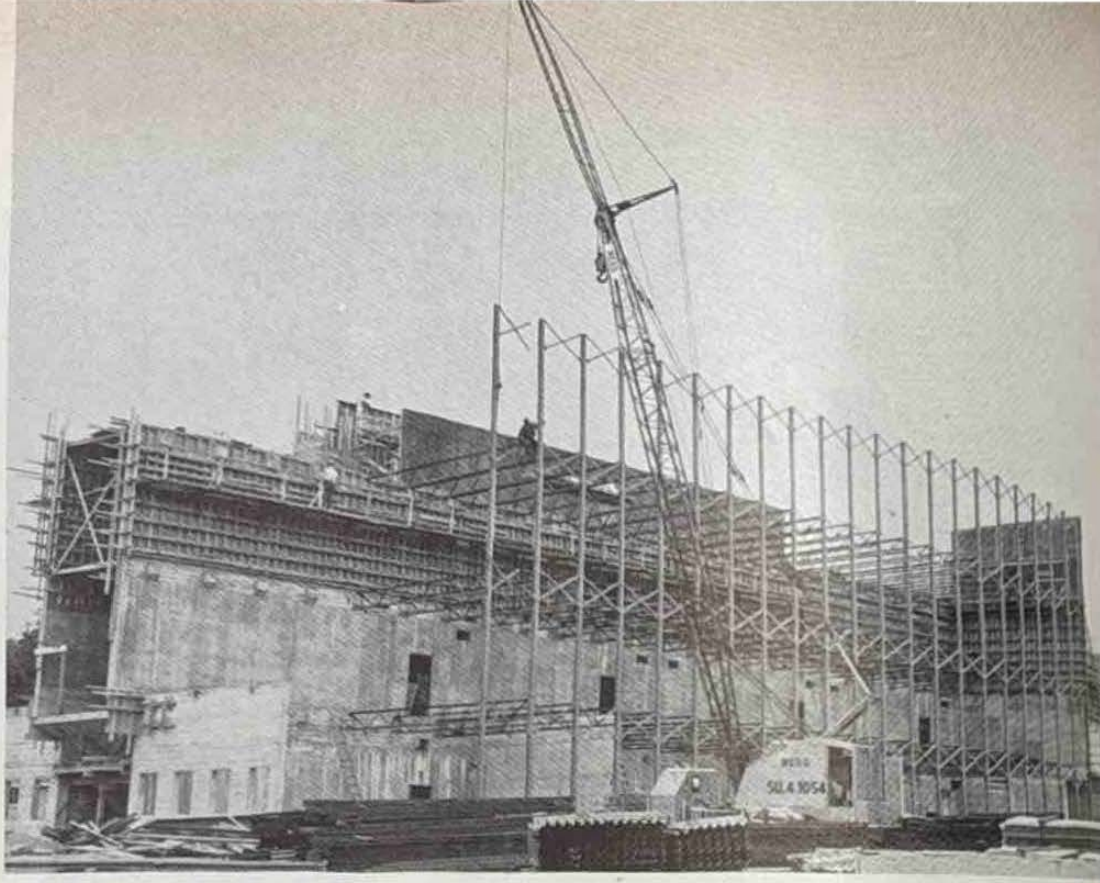
Faced with the problem of designing a building to harmonize with the traditional Tudor Gothic of the upper campus, architects-engineers Harmon, Pray & Detrich decided on an unusual window treatment to provide a feasible transition. They worked closely with Olympian Stone Co. in developing the exposed aggregate panels, marketed under the name Mo-Sai, which in this particular case were fabricated from theoretical dimensions and not field measurements.

A strict specification written for the steel selection and erection, handled by United Iron Works, Inc., allowed the general contractor, Wick Construction Co., to produce the overall length of the building with no variations between joints of the individual stone pieces exceeding $\frac{1}{8}$ in. Furthermore, this eliminated problems at the time of installation of window sash and factory-cut glass, both also fabricated after theoretical dimensions. (Construction progress photos are on the following pages.)

CAST STONE PANELS, 207 in all on both longitudinal facades, are 4x6 ft. and 2 in. thick. Fins are white cement with fine quartz; interior of diamond is very coarse aggregate mixed with crushed glass (orange); column is coarse aggregate with slightly tinted (tan) concrete base.

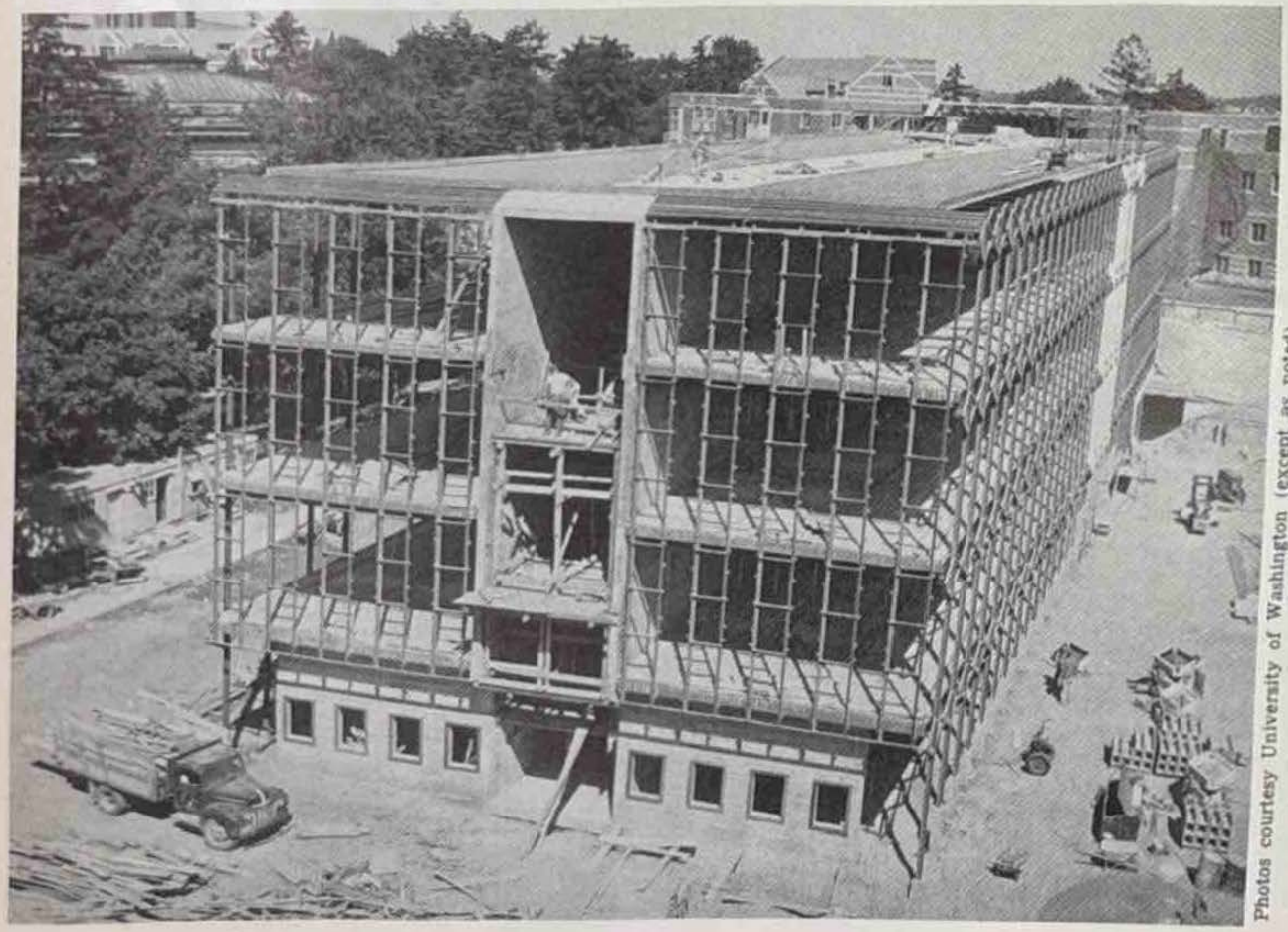


In addition to classrooms, the building contains offices for the department of general engineering and a 159-seat auditorium. It is interesting to note that the department kept extensive photographic coverage, including a 35mm movie, of the project so that it may be used in conjunction with the working drawings and blueprints as a case study for beginning students. Thomas Macartney, associate professor, is in charge of this particular phase, intended to aid instruction in graphic communications.



EARLY PHASE OF BASIC STRUCTURE shows longitudinal concrete core walls, longitudinal exterior steel columns with lateral X-bracing at each floor level and open web steel joists connecting core and exterior wall.

COMPLETED BASIC STRUCTURE reveals rectangular steel frame for end wall stone support. Note how stone facing on longitudinal walls is started in center of building in order to minimize accumulation of errors in steel erection, necessitated by fact that panels were fabricated from theoretical dimensions and not field measurements.



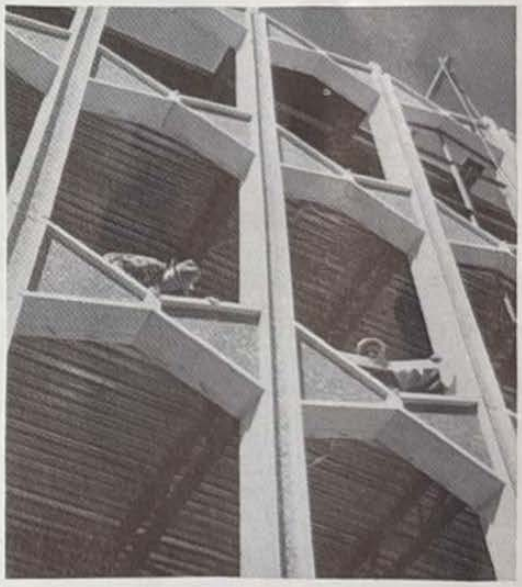
Photos courtesy University of Washington (except as noted)

STONE ERECTION proceeds from inside building and with use of roof mounted hoists shown below. Stone was fabricated in two basic shapes: diamond piece fitting over lateral steel bracing and column cover spanning from diamond to diamond.

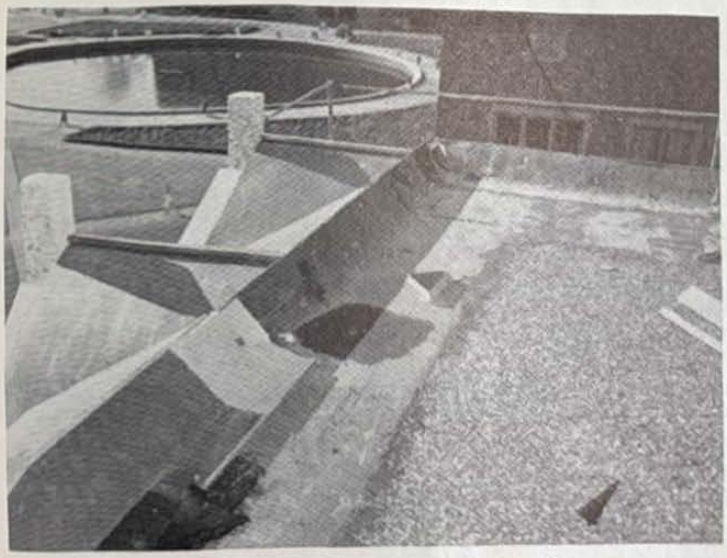




EACH DIAMOND is supported on steel angle ledge mounted on column in order to eliminate transfer of load from diamond to column cover directly below. Final adjustment of diamond is accomplished with four clip angles mounted on lateral X-bracing, visible at extreme right. Clips are cross slotted to allow horizontal as well as vertical movement; in and out placement is adjusted through tightening on stone mounted bolts. Inside of panel is finished with Foamglas, topped with plaster, stacked between cast stone "lips."



CLOSEUP OF STONE prior to installation of windows. Workman at right is installing copper flashing to go between stone and steel window.



TRANSITION between exterior wall and flat roof is accomplished through bent steel plate resting on top diamond, open web steel joist and roof cant strip. Steel pans are later clad with copper, of which flashing between pan and cant strip is made. Gravel roof is carried all way to high cant strip flashed on inside with Saraloy.

OCCUPIED IN JANUARY, building is reflected in Frosh Pond.

Art Hupy





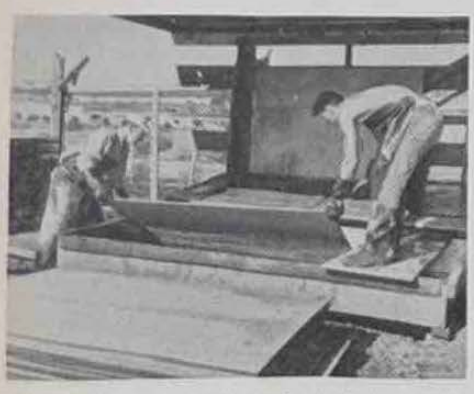
OUTSIDE CORNER of cold formed steel system shows perfect alignment of vertical and horizontal members. Specially designed corner clip ties all three members together to form smooth corner. Steel strip need not depend on vertical line of corner post. If latter is out of plumb, strip can be adjusted.

Form coating speeded with dipping system

A dipping technique worked out by Engstrum & Nourse, San Francisco building contractors, considerably speeds up the process of coating plywood concrete form panels. System can be used either on the jobsite or in the contractor's yard.

Engstrum & Nourse use an 18-gage trough of galvanized steel large enough to accommodate a 10-ft. panel. After panels are dipped, approximately three minutes, they are stacked on a sloping metal shelf with notched stringers which drains back into the trough. Later panels are restacked horizontally, using stickers to permit all surfaces to dry. Job is a two-man operation.

The contractors found this system not only was much faster than brushing, but produced a more thorough job, particularly on edges.



TWO MEN can coat plywood panel with sealer in three minutes. After dipping, panel is stood on edge on rack in background.

Steel joints speed drywall construction by two days

A system for installing drywall that can cut building time for a 1,200-sq. ft. home by two or more days and save $21 in installation costs has been developed by the Research Institute of the NAHB in collaboration with United States Steel Corp.'s Research Center.

Called SteelFast, it was originally conceived by Clayton Powell, president of Powell Homes, Inc., in Georgia and has already undergone a time and cost study at one of his building project sites.

SteelFast employs cold formed steel members at all corner and ceiling joints. These shapes are cold rolled strip steel formed to receive drywall sheets along their edges and hold them securely.



CENTER CEILING PANEL is placed by bowing it slightly and slipping ends into steel member. Only cutting required is to trim outside panels to length and center panel to width. Taping and spackling is confined to butt joints between panels and to cover nails.

Test installations indicate SteelFast provides a better finished job with all ceiling lines level and corner lines plumb. Level and plumb lines are assured, according to Dr. Ralph J. Johnson, NAHB Research Institute director, because the SteelFast member is nailed to the top plate and only one surface of the corner steel post. Drywall panels are held evenly in place at the edges by the steel member instead of following the contour of uneven ceiling joists or out-of-plumb corners. A special bracket for joining the members automatically aligns them where they meet at inside and outside corners.

In the field test installation conducted by Powell, it was found that use of the system eliminated backing lumber normally used to provide nailing surfaces at the ceiling line and at most corners. Conventional corner posts made of three 2x4's nailed together to form two nailing surfaces were eliminated, as were the usual T-posts where wall partitions join the main wall framing.

In addition, the system precludes use of metal strapping plates across frame openings for plumbing and ductwork and eliminates six steps in finishing, as well as saving time lost in waiting for spackling mud to dry.

Now in final stages of development, it is expected that SteelFast will be further field tested by members of the NAHB Builders Research Council before being put on the general market. NAHB officials hope the system will be available for the 1961 building season.

Structural epoxy uses expanding in construction

The unique properties of structural epoxies are steadily creating new uses in all phases of construction for this tremendously strong group of comparatively new adhesive materials.

First developed for highway use, epoxy concrete adhesives and mortars recently have been put to work in airport runway construction, as well as to bond extruded curbing, restore weathered exterior concrete, resurface floors and even repair sidewalks.

Each of these uses has the common denominator of a permanent bond to concrete, which tests show is substantially stronger than the concrete itself. Epoxies are said to be the only known materials having this property. Most important, structural epoxies retain this strength in formulations adapted to construction field conditions.

A contract just completed for the 12th Naval District at the Naval Auxiliary Air Station, Fallon, Nev., demonstrates the economies of time and materials effected by epoxy adhesive and mortar.

Surface failures in runways at Fallon had become a matter of urgent concern because of the Navy's transition to jet aircraft—with their attendant characteristics of applying high instantaneous loads and searing heat to runways, plus the sucking-in (into engines) of potentially damaging loose objects. Failures in the runway at Fallon necessitated a complete overlay of the asphaltic concrete portion. It also was necessary to repair the portland cement concrete portion of the runways and taxiways.

Problems had developed in landing-takeoff areas and the adjacent taxiway. Slab edges had cracked, roughly parallel to and back a few inches

from the pavement joints. Some corner areas failed through the full 9-in. concrete slab. Fifteen corners and approximately 10,000 lin. ft. of joints were involved.

A sealing compound to contain and bind loose pieces of concrete aggregate was used initially, as a temporary measure. However, edges continued to degenerate, with progressive spalling occurring still further back from the joints. It became apparent that the existing concrete needed structural support, a function not expected of a sealing compound.

Both the time and cost factors ruled against the possibility of saw cutting, breaking, removing and replacing the damaged areas. The impending arrival of fleet aircraft did not allow time for this much work and proper curing time for the large masses of new concrete necessary to give adequate strength. Costs would be further increased by the presence of steel dowels on 12-in. centers, running through contraction joints to tie adjacent slabs.

The Navy's solution was to specify use of an epoxy mortar composed of epoxy and polysulfide resins and amine hardeners and sand, with a suitable pigment added to approximate the color of the existing concrete pavement. Time for completion was 18 calendar days from date of award.

Epoxies offered substantial advantages in this repair application. First, preparation was minimized since only unsound material had to be removed. Second, the specified epoxy mortar bonds completely to the existing concrete with a tenacity greater than the cohesive strength of the concrete itself. Its strength in compression, shear and tension exceeds freezing-thawing cycles or fuels or solvents; and it maintains structural strength between -70 deg. F. and well over 350 deg. F.

Contractor was A. R. Reid Co. Inc., of San Francisco, who used Concresive, the epoxy resin adhesive developed specifically for construction use. It is one of a group of specialized adhesive products developed by Adhesive Engineering, San Carlos, Calif., a division of Hiller Aircraft Corp., a pioneer firm in the epoxy field.

Most widely specified of the epoxy formulations now on the market, Concresive also has been utilized recently by western contractors for such varied applications as bonding a ⅜-to-2-in. concrete topping to the deck of a logging bridge in Newhalem, Wash.; restoring a badly cracked slab in an Oakland food warehouse; repairing spalled edges of runways at Castle Air Force Base, Merced; and bonding traffic buttons on San Francisco's Central Freeway.



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extra-wide roof decking

Mahon has added a 24-in. wide section to its line of roll formed steel roof decks. Classified as a closed rib deck, it can be used in bonded roofs with ½ in. or more insulation below the roofing felt. The extra width speeds up roof installation almost 50%. Like the three other deck sections in the company's line, this one is installed by welding to each structural support on 12-in. centers laterally. It meets yield point requirements of 33,000 psi. to allow a maximum working stress up to 18,000 psi.—The R. C. Mahon Co. **(Item No. 1)**

movable wall systems

To provide architects and designers with a greater freedom of design and style choice when utilizing movable walls, Hauserman has developed the Delineator line, created specifically to allow an extensive range of individual effects. Panels are available on a 4-in. module from 2 to 5 ft. in width. Precise delineation of wall units by a recessed feature trim integrates the various elements of the system. A wide variety of wall covering materials can be used. Also being introduced is a companion line, the Signature (shown above), designed to meet the needs of a broad commercial and industrial market. Both



systems have panels only 2¼ in. thick. Although the panels have been slimmed down, the company reports that sound control has been improved. System also features greater flexibility, both for relocating panels and for easy access to wiring and utilities. —E. F. Hauserman Co. **(Item No. 2)**

colorful screen frames

Aluminum window and door screen frames are now available in eight colors from a California manufacturer who has developed a special tooling technique for roll forming the frames from precoated aluminum with a baked enamel finish. Color precoating is applied to both sides and consists of a layer of long-lasting vinyl on top of a primer, each baked independently. Pretesting, including salt spray and humidity tests, indicated that the Unicolor frames have good resistance to weather and wear conditions.—Universal Molding Co. **(Item No. 3)**

matching switch plates

To eliminate that sore thumb look of switch plates in a wood paneled room, someone has at long last come up with the logical solution, switch plates of matching woods. Superior is marketing a line of wall plates for switches and outlets in single and multiple combinations in all panel woods. Plates are provided unfinished.—Superior Panel Plate Co. **(Item No. 4)**

ceiling grinder

For removing fins and finishing ceilings on large jobs such as apartment houses, Stow is marketing a ceiling grinder said to enable an operator to complete 4,000 sq. ft. a day from 8 to 10 ft. in height. Machine is powered by a gasoline engine. Height of grinding disc is easily adjusted.—Stow Manufacturing Co. **(Item No. 5)**

structural steel tubing

Espro, a factory fabricated, large-size square and rectangular structural steel tubing, is offered in girths and thicknesses to meet exact requirements of architects and structural engineers. Recommended applications include structural columns, beams, window mullions, canopy supports, stair stringers, columns for lift slabs and steel buildings. Smooth exterior surfaces on all four sides of the tubing are easy to paint or can be left exposed. Tubing ranges in girth from 12 to 48 in. and from ⅛ to ½ in. in wall thickness.—Espro Tubing Division, Union Asbestos & Rubber Co. **(Item No. 6)**



wall mounted water cooler

Handsome plastic vinyl laminate finish on Kelvinator's wall mounted water coolers considerably tones down the usual utilitarian appearance of this type of fixture. Behind the dark gray Scandia pattern is 20-gage steel. On-A-Wall also features removable front panel and grill, wall protector back and stainless steel top.—Kelvinator Water Coolers. **(Item No. 7)**

air conditioner purifier

Latest push in the air conditioning field seems to be air purifying devices. Up to now these have been primarily marketed as separate installations. But this spring Carrier will offer a central air conditioning system for homes and small commercial establishments which will include an air purifier and winter humidification device. The purifier utilizes a filtering element bathed by an odor absorbing fluid. The humidifier will automatically control indoor moisture. Larger models of the system will be available for marketing this summer. —Carrier Corp. **(Item No. 8)**

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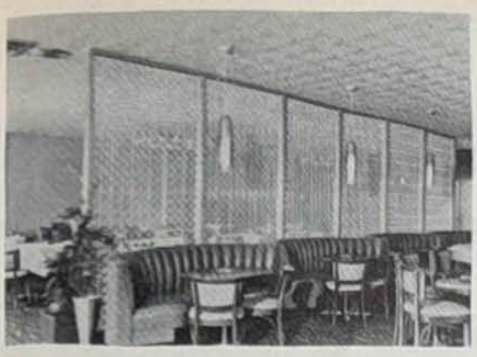
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polystyrene grillwork

The increasing use of grillwork in architectural design has in turn spawned an increase in the variety of materials and designs available as stock items. Latest entry is FiliGrille, a ¾-in. polystyrene grill offered in standard designs and factory fabricated in customized panels. Recommended for use as screens, space dividers, in entryways or for railings, FiliGrille is offered in a variety of complete framing systems, including an aluminum binding for wall plaques and floating screens and wood to match paneling or decor. Grillwork comes in white, aluminum, gold-brass or copper or can be factory painted in a specific color.—Holcomb & Hoke Manufacturing Co., Inc. **(Item No. 9)**

low cost home elevator

A lower priced model of the Home-Lift automatic residence elevator is specifically designed to appeal to a wide range of homeowners. Elevator has self-supporting steel framework to carry it without strain on any part of the house. Cab is paneled in natural wood finishes to blend with various decors.—Shepard Elevator Co. **(Item No. 10)**

acoustical wall fiberboard

An interior finish fiberboard for walls and specialized ceiling applications called Classic Cushiontone Plank combines acoustical efficiency, structural strength, decoration and insulation all in one material. The product is designed primarily for areas requiring additional acoustical treatment beyond what can be installed on the ceiling. It absorbs up to 70% of the noise striking the wall surface. The fiberboard is manufactured in 12-in. wide sections, 8 ft. or 10 ft. in length and has a lacelike arrangement of tiny sound absorbent perforations on the surface. Tongue-and-groove joint on the long edges of each section facilitates installation. Product can be nailed or stapled to wood furring strips or cemented directly to an existing wall. It also can be cut various sizes to fit between exposed beams on open beam or cathedral type ceilings.—Armstrong Cork Co. **(Item No. 11)**

flexible luminaires

A versatile line of prismatic plastic shielded luminaires offers the option of three lamps or two, 4-ft. rapid-start slimline, 8-ft. slimline, color stabilized polystyrene or acrylic plastic diffusers. Called the Achromatic series, it is designed for areas requiring high efficiency and low surface brightness. Ribbed construction and inverted prismatic design of the shielding provide a dust-free interior and easily cleaned outside surface. Shallow height and clean profile blend well with modern decor.—Keystone Electric Manufacturing Co. **(Item No. 12)**

acoustical door

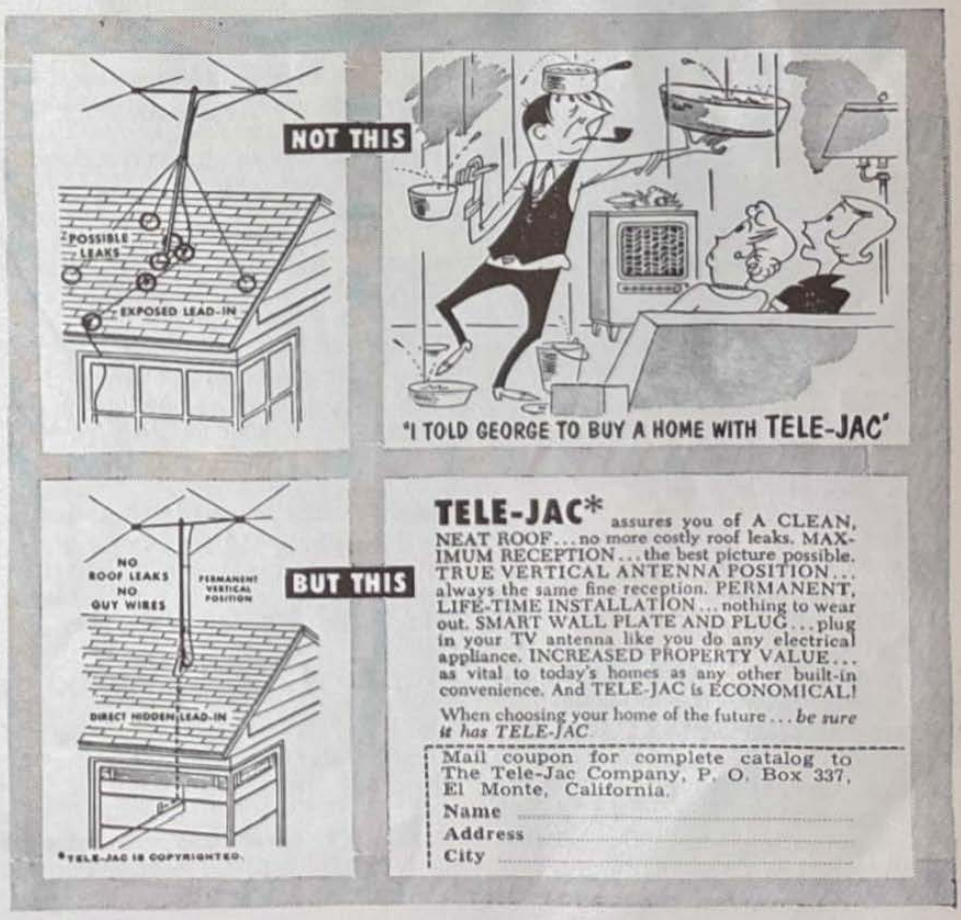
An acoustical door in the medium price range is being introduced by U.S. Plywood and soon will be available from branch warehouses. Weldwood door is manufactured from Novoply, a three-ply board of resin impregnated, laminated wood flakes and chips whose dense construction provides good sound transmission reduction properties in itself. Door can be faced in a wide variety of veneers. — United States Plywood Corp. **(Item No. 13)**

metal ceiling unit

For supermarkets, retail outlets, small business offices and other installations where economy is a major consideration, National Gypsum is offering a noncombustible metal ceiling unit providing noise reduction in the .65-.75 NRC range. The 24x24x1-in. Acousti-Grid panels have a slotted and embossed surface finished in baked enamel paint and backed with a black glass fiber pad to form a one-piece unit, easily installed in any manufacturer's grid system.—National Gypsum Co. **(Item No. 14)**

sliding glass door

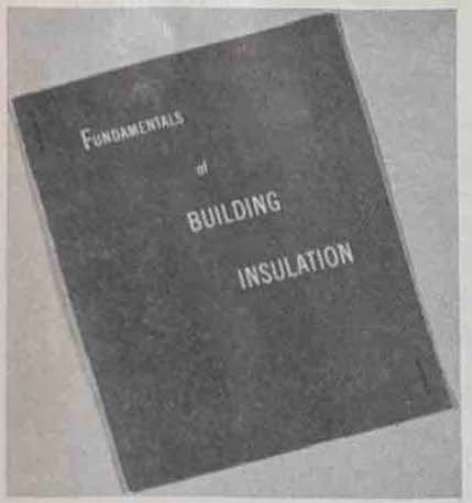
An economy priced, heavy gage extruded aluminum sliding glass door with panels of 1-in. double insulating glass has been added to the DorWal line. Called the Series 1100, it features sloped sill and interior condensation gutter for drainage, deep baffle jamb sections for automatic alignment of out-of-square installations and overlap-interlock corner that prevents twisting of panel.—Acorn Aluminum Products Co. **(Item No. 15)**





pa&b pick of the month

This is a handsome, extremely thorough publication intended primarily as a guide for applying porcelain enamels to aluminum. Sufficient information is included to aid in alloy selection, metal preparation, choice of frit, slip formulation, enamel application and firing. Applications where porcelain enamel on aluminum provides superior service over anodized aluminum are also discussed. The 22-page book outlines defects that can occur in application of porcelain enamel to aluminum and their remedies and provides definitions of terms.—Reynolds Metals Co., Richmond 18, Va.



pa&b pick of the month

For the architect or builder who finds the mass of publications on insulation at times confusing, the Insulation Board Institute has again published its "Fundamentals of Building Insulation." As in previous editions, the latest one offers information on how building insulation works, why it is used and where it should be used. The 44-page booklet includes the latest improvements in insulation design and application.—Insulation Board Institute, 111 W. Washington St., Chicago 2, Ill.

Workwall Movable Partitions (Brochure 460): depicts colorful possibilities of line of plastic and aluminum partitions; 8 pp.—L. A. Darling Co., Workwall Division, Bronson, Mich.

Sanymetal Catalog 97 (AIA 35-H-6): describes and illustrates line of toilet compartments, shower stalls and hospital cubicles with construction detail drawings and color swatches; 32 pp.—Sanymetal Products Co., Inc., 1664 Urbana Road, Cleveland 12, Ohio.

Western Pine Association 1960 Membership Directory: lists and gives addresses and products manufactured by 400 mills in the 12-state region; 24 pp.—Western Pine Association, 510 Yeon Bldg., Portland 4, Ore.

Lightweight Fireproofing with Perlite (AIA 21-C-1): gives capsule details of 41 approved fire rated construction systems with perlite plaster and perlite concrete; 8 pp.—Perlite Institute, Inc., 45 W. 45th St., New York 36, N.Y.

Rust-Oleum Architectural Specifications (AIA 25-B-241): gives specifications for coating structural steel and other metal surfaces with color swatches; 30 pp.—Rust-Oleum Corp., 2799 Oakton St., Evanston, Ill.

Insulation Product Information (AIA 37-D): catalogs thermal insulation for all types of commercial and industrial requirements with application data; 54 pp.—Johns-Manville Sales Corp., 22 E. 40th St., New York 16, N. Y.

Isolating Buildings from Vibration (AIA 39-D): describes several examples where lead-asbestos pads were used to reduce or eliminate vibration in buildings adjacent to railways, subways, etc.; 4 pp.—Lead Industries Association, 60 E. 42nd St., New York 17, N. Y.

Marlite Plastic Finished Wall and Ceiling Paneling (AIA 23-L): illustrates entire line of paneling including new Trendwood finishes; 8 pp. — Marsh Wall Products, Inc., Dover, Ohio.

Home Insulations (AIA 37-C): presents design data and installation information, recommended practices and climate data; 24 pp.—Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

Masonite Concrete Form Presdwood (AIA 4-D): outlines advantages of this product in construction of beams, girders, slabs, walls, columns, etc.; 8 pp.—Service Bureau, Masonite Corp., 111 W. Washington St., Chicago 2, Ill.

Precast Concrete Curtain Wall Panels (AIA 17-A): gives construction details and specifications for panels surfaced with ceramic mosaic tile; 4 pp.—The Marietta Concrete Division, American-Marietta Co., Marietta, Ohio.

Aristocrat Glazed Concrete Masonry Units: introduces concrete block with terrazo-like face that makes it possible to erect a completely finished, colorful, load-bearing wall in one operation; 8 pp.—Aristocrat Association of America, 8801 Page Blvd., St. Louis 14, Mo.

Light Steel Framing (AIA 13-G): is one of series offering design ideas with excellent photos, floor plans and project description of seven homes; 12 pp.—Bethlehem Steel Co., 20th & Illinois Sts., San Francisco.

Skydome Catalog: includes tables for quickly estimating amount and type of daylighting units for most structures—Wasco Products, Inc., 5 Bay State Rd., Cambridge 38, Mass.

1960 Gurley Ephemeris: includes for first time charts showing Northern, Southern and Equatorial stars; charts simplify computation of Polaris; almanac lists 28 selected stars for determining stellar observations; 92 pp.—W. & L. E. Gurley, Troy, N. Y.

Fir Plywood for Today's Construction (AIA 19-F): gives up-to-date information on Douglas fir plywood standard grades and specialty products with DFPA recommendations and FHA requirements; 16 pp.—Douglas Fir Plywood Association, 1119 A St., Tacoma 2, Wash.

Shallotroffer Series 620 (AIA 31-F-2): introduces new recessed lighting fixture series with plug-in unitized electrical assembly, with comprehensive mounting details and ordering information; 32 pp.—Globe Illumination Co., 2121 S. Main St., Los Angeles 7, Calif.

Cafco Sound-Shield (AIA 39-B-1): gives sound absorption, light reflectivity and fire rating data on acoustical treatment for office buildings, restaurants, schools and the like; 4 pp.—Columbia Acoustics and Fireproofing Co., Stanhope, N. J.

Operation School Burning. Los Angeles Fire Department. National Fire Protection Association, 60 Batterymarch St., Boston 10, Mass. 269 pp. $4.75.

Here is the official report with all the charts and complete test data on a series of experimental fires conducted by the Los Angeles Fire Department in an abandoned school building. The tests included studies of the effectiveness of curtain boards (draft or fire curtains) at stairway openings and in corridors, roof vents over stairways and complete and partial automatic sprinkler protection. Data also were tabulated on operation of automatic fire and smoke detection equipment, fusible links and automatic door closers. Fires were built at the bottom of one of the open stairways, in classrooms and in corridors. The tests showed that smoke, even with free-burning fire, was the principal life safety hazard and it was recommended that flame spread characteristics, therefore, should not be the sole criterion for determining the life hazard of interior finish materials. The report suggests that standards be developed for classifying interior finish materials based on tenable levels of smoke generation. It was also reported that cellulose fiber acoustical tile had rapid flame spread characteristics unless covered with fire-retardant paint.

Reference Manual for School Construction Inspectors. California Council, American Institute of Architects, 916 Kearny St., San Francisco 11, Calif. 23 pp. $1.

Duties, responsibilities and working relationships of the California school inspector are outlined in this manual prepared by the AIA school building committee in cooperation with the Consulting Engineers Association of California and the California Council of Construction Inspectors Associations. It is intended for use as a general reference tool supplied by the architect to the project inspector. Sections cover general school district policy; general responsibilities of school inspectors, architects and superintendents or authorized agents; and qualifications, appointment, conduct and duties of inspectors.

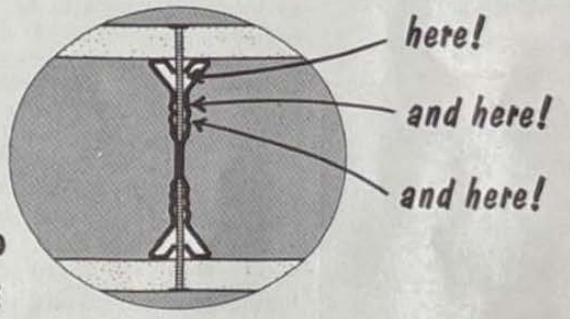
Plumbing Fixtures for Educational Facilities. School Planning Laboratory, School of Education, Stanford University, Stanford, Calif. 1959. 43 pp. $2.

Presents detailed recommendations for plumbing fixtures in elementary, junior and senior high schools based on an investigation conducted at the university in cooperation with the Plumbing Fixture Manufacturers Association and on recommendations received from over 10,000 teachers, principals, superintendents, planning commissions, custodians and architects. Brief discussion of the educational program for each level gives background information to aid in planning of sanitary facilities that will meet their special needs. Material also deals with courses of instruction, such as physical education, home economics, etc., which require special installations. Among the data included are fixture-pupil ratios; proper placement of toilet rooms; type of fixtures found to be most satisfactory; best height for drinking fountains; and most practical shower installations.

Dormitory Furniture Planning. Sligh-Lowry Contract Furniture Co., 174 E. 11th St., Holland, Mich. 1959. 40 pp. $3.

While this book was published by a company interested in selling its line of furniture, it contains a great deal

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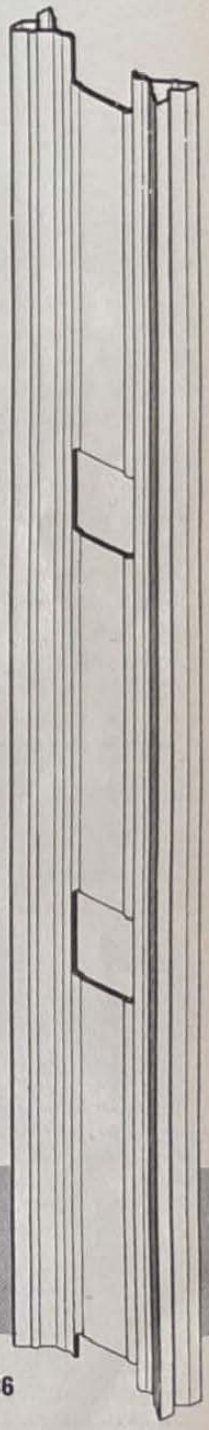
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Metal Curtain Wall Manual. Metal Curtain Wall Division, National Association of Architectural Metal Manufacturers, 228 N. LaSalle St., Chicago 1, Ill. 1959. $5.

The rapid growth in metal curtain wall construction in recent years has considerably outdistanced technical information and publications on the subject. This manual is an attempt to fill the gap and provide designers and manufacturers with an organized grouping of information. It includes sections on performance standards, general specifications, terminology and a bibliography. It is in a loose-leaf binder so that later sections on testing, recommended design, fabrication and erection practices and other data, plus revisions, can be easily added. Material was prepared with the assistance of the AIA and the Construction Specifications Institute.

Alcoa Structural Handbook. Aluminum Company of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. 1959. 420 pp. No charge in limited quantities.

Sixth revision of this popular handbook includes some changes in text, general updating of tables, addition of several new tables and extensive data on aluminum-magnesium alloys and welded structure design.

The Story of Toledo's Shoppers' See-Way. Downtown Toledo Associates, 810 Security Bldg., Toledo 4, Ohio. 1959. 16 pp. $1.

Those interested in downtown pedestrian malls might find an idea or two from this publication which is actually a scrapbook of newspaper clippings put together evidently in the order of their appearance during the development of plans and final accomplishment of an experimental mall in Toledo, Ohio. However, the information is sketchy and pictures are poor.

Camber and Deflection—Glued Laminated Beams. American Institute of Timber Construction, 1757 K St. N. W., Washington 6, D. C. 1959. 4 pp. Single copies free; bulk, $4 per 100.

Presents standard developed by AITC staff and the standards committee. Recommendations provide suggested deflection limitations and camber for glued laminated beams, purlins and girders.

Adhesive Bonding of Aluminum. By C. P. Talbott. Reynolds Metals Co., Richmond 18, Va., 1959. 20 pp. Free.

Riveting Aluminum. Same author and publisher. 1959. 52 pp. Free.

Mechanical Joining of Aluminum. Same author and publisher. 1959. 32 pp. Free.

These three companion publications are part of a public service series. "Adhesive Bonding of Aluminum" takes up principles and procedures of this method. Chapters deal with design of joints, various types of adhesives and processing of adhesive joints. "Riveting Aluminum" covers use of conventional and special rivets and includes tables listing weights and dimensions of aluminum rivets, recommended lengths and other data. "Mechanical Joining of Aluminum" covers nails and pins, metal stitching, mechanically formed joints and architectural fasteners. All are well illustrated with no advertising.

Selection of Silencer Units. Air Conditioning Department, Industrial Acoustics Co., 341 Jackson Ave., New York 54, N. Y. 1959. $1.

Enables engineers and contractors to quickly and accurately determine the type and number of silencing units required for any air handling system. Called the "short form," the package consists of a binder and a pad of 25 reproducible work sheets.

Building on Expansive Clay. Colorado School of Mines, Golden, Colo. Vol. 54, No. 4 of Quarterly. $2.

Reprints papers presented at soil mechanics conference dealing with the problems of building and theoretical and practical treatment of expansive clays of middlewestern and southwestern areas of the U. S.

Publications List. Building Research Advisory Board, National Academy of Sciences, National Research Council, 2101 Constitution Ave., Washington 25, D. C. 1959. 11 pp. Free.

Lists current publications, with brief description, prices and discount details, covering conference proceedings, FHA technical studies and Federal Construction Council technical reports.

Tips-Techniques and Drafting Aids. Alvin & Co., Inc., 611 Palisado Ave., Windsor, Conn. 1959. 32 pp. 50 cents.

Offers tips on protecting prints and drawings, simplifying drafting practices, drawing techniques and getting the most from drawing instruments.

Western Pine Grading Rule Book. Western Pine Association, Yeon Bldg., Portland 4, Ore. 1960. 164 pp. 35 cents.

Incorporates all supplemental and additional rules adopted by the 12-state industry since the last edition.

new offices, partnerships

Don Slade has opened an office for the practice of architecture and as a consultant in planning problems at 15219 Sunset Blvd., Pacific Palisades, Calif. Formerly with the Santa Monica firm of John C. Lindsay & Associates, he holds two degrees from Miami (Ohio) University and has done further study at the University of California, Berkeley.

Thedore E. Selden, former project planner for the State of Nevada Planning Board, has established his own architectural office at 510 N. Stewart, Carson City.

Kenneth C. Kruger, formerly with Arendt, Mosher & Grant, has opened an office for the practice of architecture at 3710 State St., Santa Barbara, Calif.

Herbert J. Haguewood has opened an office for the practice of architecture under the name of Haguewood & Associates at 2255 N. Mercer Way, Mercer Island, Wash.

Kal H. Porter & Associates is the name of a new architectural firm organized following dissolution of Porter & Nolte, architects-engineers, with offices in the Alameda Building, San Jose, Calif. Professional services formerly provided by the partnership will be furnished through the establishment of a consultant association between the two firms.

Ken White, Denver architect, has dissolved his partnership with Carl Hammergren and has formed his own firm, Ken White & Associates, continuing to maintain offices at 1726 Champa St.

Charles Finney and Charles R. Kahrs have established an architectural partnership in the Professional Building, 765 Bridgeway, Sausalito, Calif.

Jack A. Edson and Walter J. Pappas have formed an architectural partnership known as Edson & Pappas, with offices at 44 N. Front St., Medford, Ore. Pappas will continue to work out of his Pine Grove studio for several months before moving to Medford, where Edson has had his own practice since 1953.

Richard Marshall, James Leefe and Ezra Ehrenkrantz have formed an architectural partnership known as Marshall, Leefe & Ehrenkrantz, with offices at 150 Green St., San Francisco.

Harvy R. Dodd and Joseph J. Millegan, structural engineers, have established a partnership at 501 Arctic Building, Seattle. Dodd has been the senior structural engineer for the city building department for the past 5½ years; Millegan has been associated with various architectural and engineering firms in Seattle for 13 years.

A partnership known as Whitlow, Hoffman & Albritton, civil-structural engineers, has been formed in San Rafael, Calif., with offices at 912 Grand Ave.

new associates

Robert L. Bloodworth and Richard Z. Hawes have been made associates in the Portland architectural firm of Burns, Bear, McNeil & Schneider.

new addresses

Howard R. Perrin, architect, to 1415 Esplanade Ave., Klamath Falls, Ore.

Georgius Young Cannon, architect, to 5163 Moor Road, Salt Lake City.

Lorand West, architect, to 8417 Beverly Blvd., Los Angeles.

Edward M. Dunham Jr., architect, to 2208 S. Plumer Ave., Tucson.

Kenneth G. Walter, architect, to 4636 S.W. Hewett Blvd., Portland.

Karl Treffinger, architect, to 680 Beach St., San Francisco.

deaths

Lowell E. Parrish, 52, Salt Lake City architect, died January 31 following a sudden illness. A graduate of Columbia University, he had a number of school projects to his design credit. At the time of his death, he was completing work on the State College of Education Building at the University of Utah.

Charles B. Miller, architect of Pendleton, Ore., died January 2 after an extended illness.

Wilfred H. Capell, principal in the San Francisco architectural firm of

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Hurt, Trudell & Capell, died January 3. The firm will continue its practice as Hurt & Trudell.

Ben H. Todd, 63, architect of Medford, Ore., died December 24. Among the structures he designed were the Jackson County Courthouse Annex, the Christian Science Church and Jacksonville Elementary School.

appointments, elections

Paul J. Prout, architect-engineer, has accepted an appointment as assistant city engineer and assistant public works director of Ontario, Calif. He was formerly chief draftsman in the office of Kenneth S. Wing, Long Beach.

Edward Shaifer Jr. has joined the faculty of Arizona State University at Tempe as acting coordinator of the School of Architecture's program in construction, toward which the building industry in the Phoenix area has contributed $5,000.

Hertzka & Knowles, Inc., San Francisco architectural firm, has made two executive appointments: Robert S. Tobin as second vice president of the board of directors and George S. Dolim as secretary.

James C. Howland, consulting engineer, has been named president of Subsurface Exploration Co. of Corvallis, Ore., organized earlier this year to assist architects and engineers in foundation investigations.

Architect Dan S. Cherrier, former director of planning for California's Kern County, now is assistant director of planning for San Diego County.

George B. Thenn, Palo Alto consulting civil engineer, has been elected initial president of the Building Industry Conference Board of Santa Clara County, composed of representatives from engineering, architectural and contracting groups. Other officers: Otto Illerich, San Jose consulting structural engineer, vice chairman; and Robert J. Duffy, public relations director for the Plumbing, Heating and Air Conditioning Council of Santa Clara County.

Oregon Chapter, AIA, has named Mrs. Emily Hunter to the newly established position of administrative secretary, with offices at 206 S.W. Stark St., Portland, on the ground floor of the Concord Building.

architectural tours

Among the architectural tours scheduled for 1960 are three to be led by Californians. Two of them, to be led by Ulysses Floyd Rible of Los Angeles and Kenneth Nishimoto of Pasadena, will begin April 23, immediately following the AIA convention in San Francisco. The third, to be led by Henry L. Wright of Los Angeles, will depart July 23 from New York. Rible will lead a 48-day "round the world" journey by air, Nishimoto, a 20-day tour of Japan, and Wright, a 24-day trek of seven European countries. For more information, write U.S. Travel Agency, 807 15th St., N.W., Washington 5, D.C.

CCAIA looks at legal problems, elects officers

The California Council of the AIA focused its attention on the increasing number of legal problems confronting the state's architectural profession and elected Wayne S. Hertzka as president during a February 15 meeting in Carmel. Serving with the San Francisican, vice president of the council in 1959 and a past president of the Northern California Chapter, are Frank L. Hope, San Diego, vice president: Edward D. Davies, Pasadena, secretary; Joseph J. Jozens, Sacramento, treasurer; and Maynard Lyndon, Los Angeles, member-at-large.



HERTZKA

The directors adopted a concentrated program at the recommendation of a special committee on legal problems which was appointed last November to look into recent court rulings and proposed legislation that "indicate professional responsibilities and liabilities for the architect beyond customary practice." The five-point program:

1. Review and watch legislation which may breed legal problems.
2. Initiate remedial or clarifying legislation if needed.
3. Review and rewrite contract documents to meet the particular needs of the profession in California.
4. Keep the profession informed on legal developments and safeguards and seek information from the profession which may be of mutual benefit.
5. Maintain alertness to and seek solutions for legal problems inherent in interprofessional relationships.

L. F. Richards of Santa Clara, chairman of the special committee, reported to the board that the legal problems arise from and affect four major areas: legislation, insurance, contracts and interprofessional relationships.

In the area of legislation, Richards said, the committee will review and comment on SB 677, a bill proposed at the 1959 session of the California legislature which stated that responsibility for errors of omission or commission cannot be delegated by the architect to any other person, firm or corporation involved in construction of a building. The bill was referred to an interim committee of the legislature.

Other members of the special CCAIA committee are John Hogg, Mill Valley, and Howard Morgridge, Los Angeles.

In other action, the board discussed, but referred to the council's administrative committee for final formulation, a request by Assemblyman Winton for suggested ways for the State Division of Architecture to select private architects to design state buildings; and scheduled the 1960 board meetings for June 10-11 in Santa Barbara and October 19 in Yosemite National Park. The proposed national AIA structure also was discussed.

More AIA chapter officers

Among the AIA chapters whose new officers have not been previously listed in PA&B are four in California, two in Oregon and Colorado.

Central Valley: Albert M. Dreyfuss, president; Robert Oliver, vice president; Whitson W. Cox, secretary; Tod Hart, treasurer.

Coast Valleys: William H. Daseking, president; Allan Walter, vice president; David Potter, secretary; Edward B. Kress Jr., treasurer.

Monterey Bay: William L. Cranston, president; Frederick G. Keeble, vice president; William E. Ricker, secretary; Frederick C. McNulty, treasurer.

Oregon: Keith R. Maguire, president; Everett B. Franks, vice president; Robert B. Martin, secretary; Charles D. Hoyt, treasurer.

Southwest Oregon: Kenneth L. Morin, president; Donald H. Lutes, vice president; James C. Longwood, secretary-treasurer.

Colorado: Robert Berne, president; F. Lamar Kelsey, vice president; Jerome K. Nagel, secretary; Rodney Davis, treasurer.

• **Pacific Extrusions, Inc.,** has begun production at the first aluminum extrusion facility in northern California. Plant is located at Watsonville, Calif. Officers of the firm, an affiliate of Aluminum Extrusions, Inc., of Michigan, are Frank Gregg, president; Carl R. Henry, vice president; W. E. Dunlap, vice president; David R. Bishop, secretary; and Grant Goodrich, sales engineer.

• **National Lock Co.** announces that Edward M. Erikson is new Medalist Hardware Division sales representative for southern California and Arizona, working out of South Pasadena, Calif.

• **Ceco Steel Products Corp.** has promoted Arnold F. Kohnert from assistant to district manager in San Francisco, succeeding Howard J. Richter who has been transferred to Chicago. Donald B. Gibbs, formerly a sales engineer, is the new assistant.

• **E. A. Thompson Co., Inc.,** has named Burr O'Dell as sales representative in Washington for the firm's water seal. He will headquarter in Seattle.

• **Arvin Industries, Inc.,** announces the appointment of William G. Yeager of Denver as western regional manager for the architectural products division. He formerly was regional manager for the Clod-Rex Corp. The following distributors have been named: Columbus Building Specialities, Inc., Denver; Cramer Acoustics, San Francisco; Consolidated Specialities Co., Phoenix; Jay Grear, Inc., Albuquerque; Johnson Acoustical & Supply Co., Portland; and Laing-Garret Co., Las Vegas.

• **Pascoe Steel Corp.** has named Ralph Bradley to manage the newly-created dealer division of the Pomona, Calif., firm. He previously was assistant to the vice president in charge of marketing.

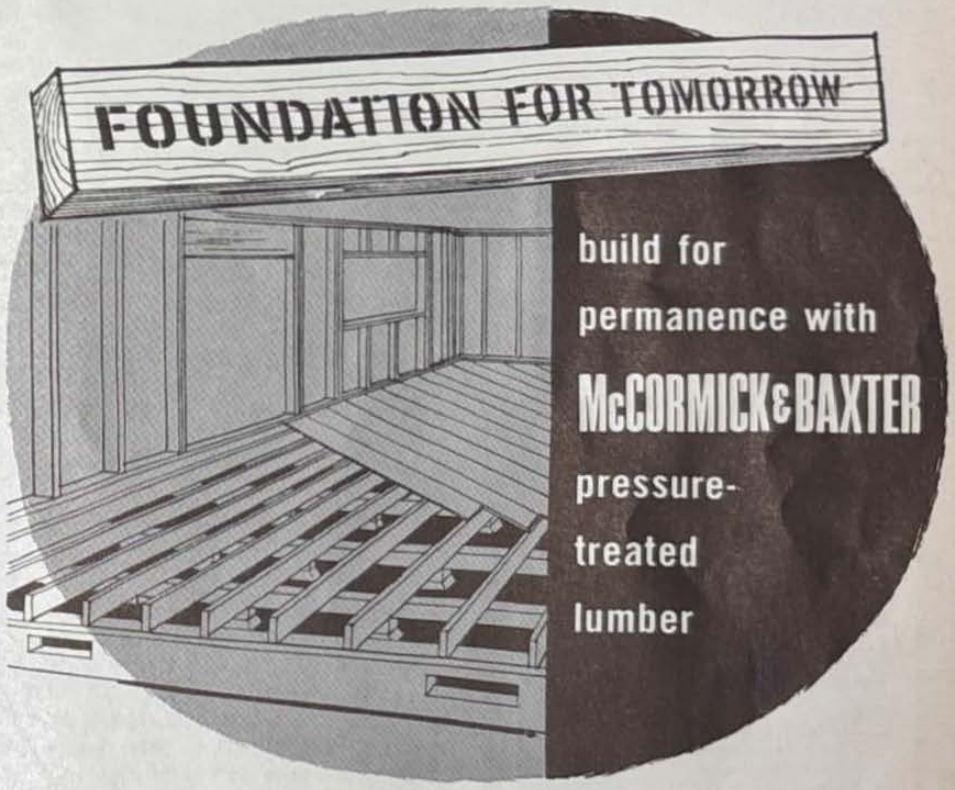
• **Reynolds Metals Co.** announces that the company's line of aluminum building products will be distributed in the Puget Sound area by the Seattle plant of Joseph T. Ryerson & Son, Inc.

• **Revere Copper and Brass Inc.** has transferred J. E. Ziegler from Seattle to Los Angeles where he will be assistant manager, building products, of the Pacific Coast division. Succeeding him as district manager at the Seattle office is J. T. Steel Jr., formerly on the Los Angeles sales staff.

• **Aluminum Co. of America's** new branch manager in Portland is Louis F. Lafferty, former resident sales manager in Lafayette, Ind.

• **Earle M. Jorgensen Co.** will open a $1 million steel and aluminum service center early this year in the new industrial park near Honolulu. Plant will stock products from 60 steel mills and from Kaiser Aluminum Co. It was designed by Edwin L. Bauer in collaboration with Welton Becket & Associates.

• **Plywood Fabricators Service, Inc.,** is planning to expand its pilot program started last summer into a nationwide network of laboratories and engineering services. An affiliate of the Douglas Fir Plywood Association, the organization provides quality supervision and control, uniform specifications, testing, advertising, sales promotion and engineering assistance to fabricators of engineered plywood



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components. Among the new laboratories planned are one in San Francisco and one either in Portland or Seattle.

• **United Products Co. of California,** Oakland manufacturer of sheet metal products, has been purchased by Carl R. Chrisco, former owner of several eastern metal products plants.

• **Permanente Cement Co.** will modernize its Seattle office and add a second story. The $150,000 program will include office space for Glacier Sand & Gravel Co., a subsidiary.

• **The Master Builders Co.** has opened a Pacific Northwest branch office in Seattle under the management of Don W. Freeman.

• **Ekco Products Co.** shareholders have approved a new stock issue, paving the way for acquisition of Washington Steel Products, Inc., of Tacoma, Seattle and Portland. The new subsidiary will continue under the management of its present top officials.

• **Airtemp Division** of Chrysler Corp., has opened a West Coast branch office and warehouse in Los Angeles under management of Sydney Anderson, former general manager of the packaged heating and cooling department.

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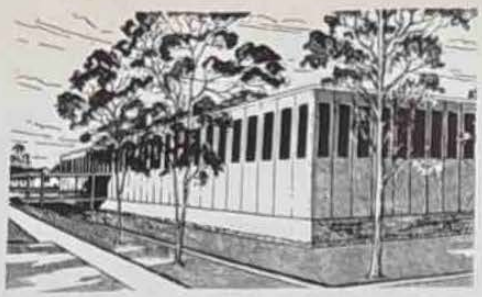
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at Geneva Works of United States Steel Corp. in Provo, Utah, will house latest equipment for studying western-produced raw materials used in steelmaking. Two-story 144x80-ft. structure will be of modular type construction with porcelain enameled steel curtain walls enclosing steel framework. It will contain offices, analytical and instrument laboratories. Architects: Skidmore, Owings & Merrill.

• **Rubber and Asbestos Corp.** has appointed Wiley-Bayley Inc. of Seattle, Portland and Spokane as exclusive Pacific Northwest distributor of Bondmaster industrial adhesives.

• **Hooker Chemical Corp.** has relocated the Los Angeles sales offices of the Durez Plastics and Western Chemical Division to a new warehouse at 6277 E. Slauson Ave.

• **United States Plywood Corp.** has acquired Panelbild Systems, Inc., Seattle manufacturer of stressed skin plywood components. Plans have been approved to expand the Seattle facility which will operate as a subsidiary under the management of Peter Bilder, its founder.

• **United States Gypsum Co.** and **Vaughan Interior Walls, Inc.,** of Los Angeles have signed a licensing agreement under which U. S. Gypsum will produce the special gypsum boards used in movable Vaughan walls and will undertake promotion of the system.

• **Ideal Cement Co.** has acquired a 25-acre site on W. Marginal Way and the Duwamish Waterway in Seattle and will construct a $2 million cement storage and distribution terminal there. Terminal will consist of six concrete silos, a packhouse, office and facilities for loading trucks and rail cars with either bulk or packaged cement.

• **Filon Plastics Corp.** has begun production in a new $2 million plant for the manufacture of fiberglass panels at Hawthorne, Calif. Production facilities at the new plant are capable of almost tripling annual capacity of previous facilities.

• **Georgia-Pacific Corp.** has appointed Arthur W. Petrey as sales promotion manager for all products other than plywood.

• **Holly-General Division** of The Siegler Corp. has established three new sales district offices in the west and appointed a vice president to head each. Earl C. Hefner will manage the San Francisco office covering northern California, Oregon, Washington, Idaho, Montana and northern Nevada. John F. Droge will head the Los Angeles office covering southern California, southern Nevada, Colorado, Wyoming and Utah. Jackson L. Garner will be in charge of sales for San Diego County and Arizona from the San Diego office.

• **American Sisalkraft Corp.** has transferred Murdo (Bud) Smart from New York to Portland where he will handle the Oregon-Idaho territory. He replaces Bob Wilson who has been moved to the Seattle office.

• **Weyerhaeuser Co.** of Tacoma has a new president, Norton Clapp. He succeeds F. K. Weyerhaeuser who will continue serving the firm as chairman of the board. In a move to decentralize the firm's western sales region, Robert Southwood has been named sales manager for the northern district which includes Colorado, Idaho, Montana, Oregon, Utah, Washington, Wyoming and parts of New Mexico. Carl Bastian has been named sales manager for the southern district which includes Arizona, California and parts of New Mexico. The company also has opened a sales headquarters in Los Angeles.

• **Kaiser Steel Corp.** has named Fred G. Brear to the new post of manager, customer service, and William M. Vaughey as manager of administration, general sales.

• **Calaveras Cement Co.** has transferred sales representative Kent Vickery from Modesto, Calif., to Reno. He is succeeded in Modesto by Michael O'Brien.

• **Lone Star Cement Corp.** has appointed W. C. Priest Frazier as vice president in charge of sales, succeeding R. J. Mahon, executive vice president, commercial, who is retiring due to ill health. Frazier has been sales manager for the firm's Superior Division in Seattle since Lone Star acquired Superior Portland Cement Co. in 1957. He is succeeded in this post

by Willis R. Greer, who has been serving as assistant general sales manager in the New York office.

• **Rockwin Prestressed Concrete Corp.**, Santa Fe Springs subsidiary of United Concrete Pipe Corp., has elected George L. Curtis as president. He will also continue as vice president for the parent firm.

• **Ador Corp** of Fullerton, Calif., has appointed Jay Boyce as general administrator of engineering, manufacturing and marketing for all the firm's products.

• **Pacific Iron and Steel Corp.** of Los Angeles has been merged into Standard Railway Equipment Manufacturing Co. of Chicago and will be operated as the PI Steel Corp. subsidiary under the management of Carl L. Lodjic, Pacific Iron president. The subsidiary is a fabricator and erector of structural steel for industrial buildings.

• **Prescolite Manufacturing Corp.** has named Donald Congdon sales representative for Colorado and Wyoming, working out of new offices in Lakewood, Col. Congdon previously was with Ryall Electric Supply Co. of Denver. He succeeds Al Thompson, who has been transferred to the home office in Berkeley and will now handle the territory in the San Francisco Bay area. Stan Heywood has been named to the newly created post of national marketing director.

• **Prestressed Concrete Institute** at its recent convention in Miami Beach, Fla., named two directors from the West: Elmer D. Clark, Superior Sand and Gravel, Phoenix, and Ezra C. Knowlton, Utah Sand and Gravel Products Corp., Salt Lake City. Randall M. Dubois of Freyssinet Co., Inc., New York, is president of the six-year-old organization, which has moved its headquarters from Florida to Chicago in order to provide a more centralized location.

• **Sliding Glass Door & Window Institute,** which has moved its headquarters from Monterey Park, Calif., to 6132 Whittier Blvd., Los Angeles, has elected these officers: George Radford of Radco Products, Inc., Santa Maria, Calif., president; Charles Walker, first vice president; R. E. Gulbranson, second vice president; and Irving Ninberg, treasurer. Regional vice presidents include Ralph Casebolt of Oakland (northwestern) and George W. Albritton of Houston (southern).

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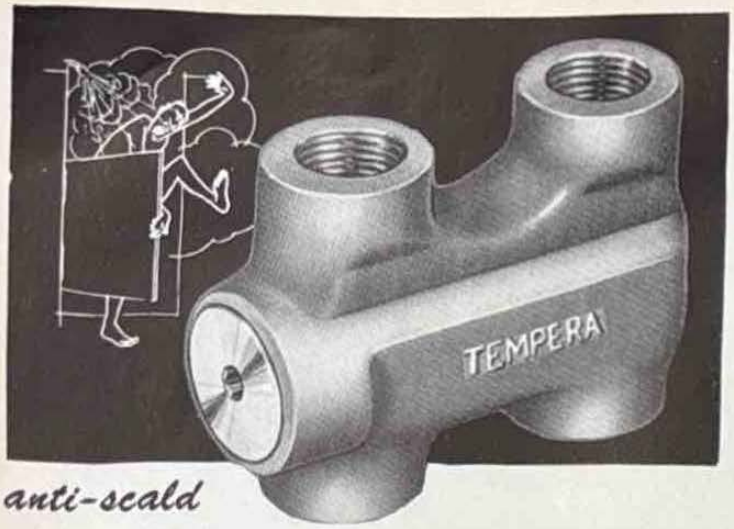
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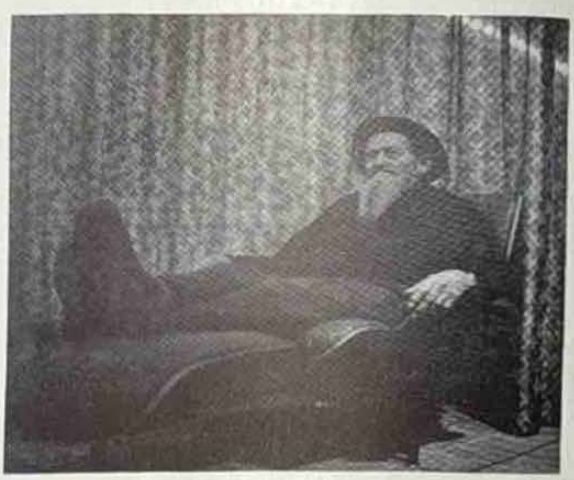
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on deck at p

When architects, their wives and other guests attend national AIA convention in San Francisco in April, the attend an "open house" party in historic Jackson Squa and undoubtedly a good many of them will wander nearby Pacific Avenue and stop off at No. 555, where Al ander Girard transformed a den of iniquity (the Hippodrome) into Herman Miller's new showroom. W present a preview of that visit next month, although can't promise that the kindly old gentlemen seen laxing below will still be around.

Other design projects will range from a plush count club in the desert to a delightful Japanese airline tick office in the Northwest. We'll manage to get under t wire with a last-minute report on the national AC convention, also being held in San Francicso, which en March 24. And our major building methods article w show a roof system which is having its first industri use in the West.



luck of the irish

There are many projects which lend themselves to architectural competitions and it is difficult to understand why the inherent advantages are so often overlooked. Such a program does more than produce what is generally a first-class and provocative solution; it provides an opportunity to underscore the role of the architectural profession in our society and to publicize the sponsor, whether it be a municipality or corporation or what have you. (Seattle's Century 21 Exposition, for example, would have been a natural for at least one competition.)

Latest international competition has been announced by Trinity College in Dublin for the design of a $1.4 million extension to the existing 18th century library building on its campus in the heart of the city. "The design of the new building presents an interesting challenge to the architect—the creation of a structure that will be in harmony with the fine examples of Georgian and Victorian architecture now on the campus," the American Council for Trinity says in a news release. "But far from demanding a neo-Georgian building, the college is asking for a contemporary design which will express the mid-20th century as faithfully as the present library, begun in 1712, expresses the Age of Reason." And if the architect needs further incentive, it should be pointed out that the first prize, including all fees, will be worth about $65,000.

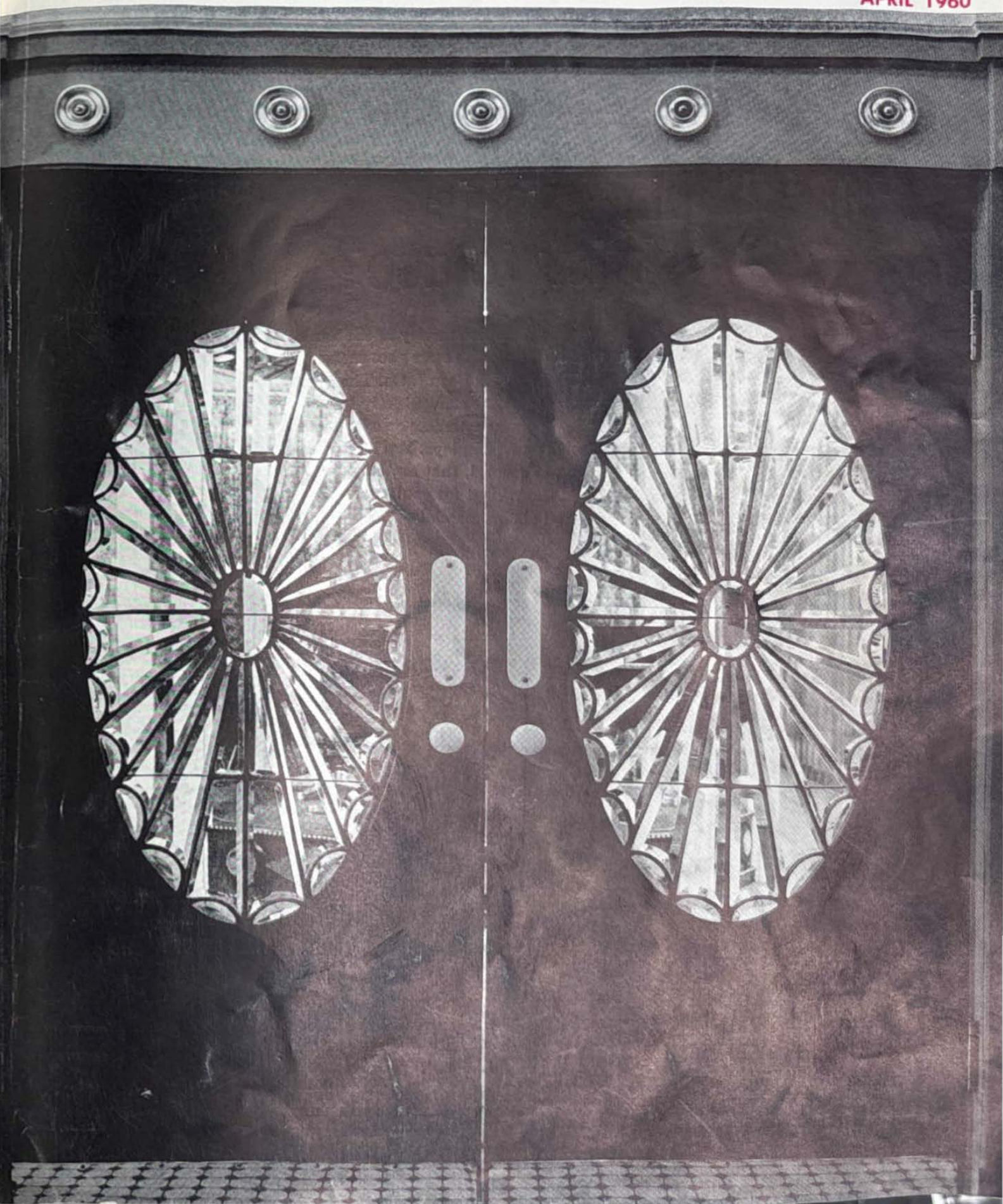
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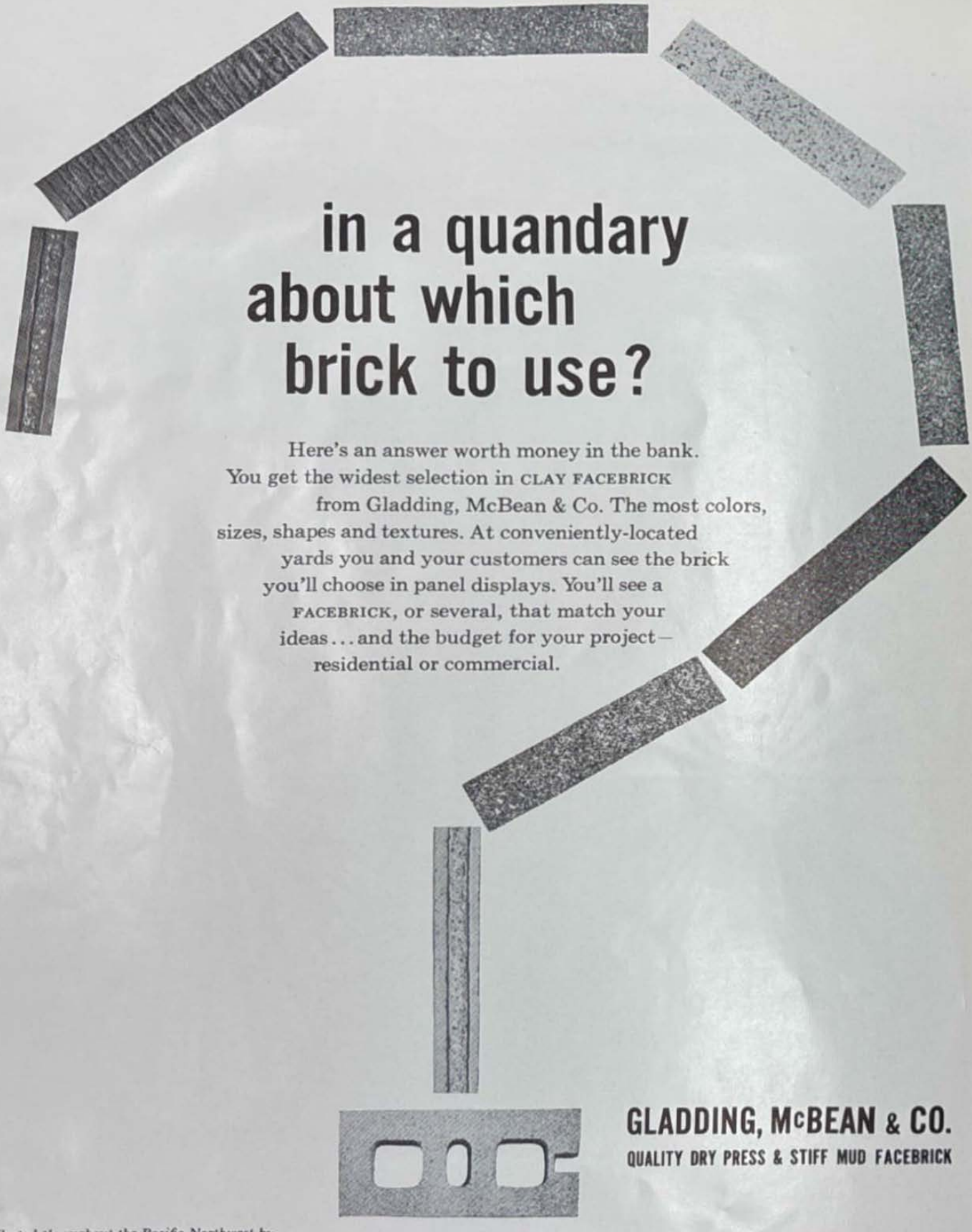
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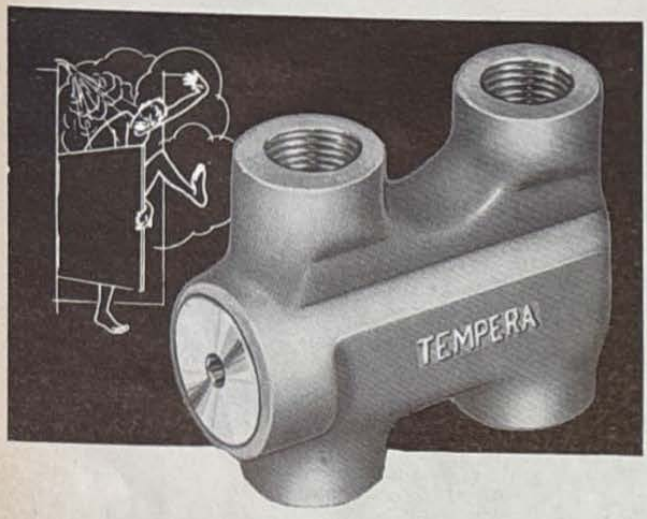
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COVER: Herman Miller Showroom, San Francisco (p. 21)—Alexander Girard, Architect; Charles Eames photo.

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February chalks up $35.9 million gain

Building permit volume for 155 key western agencies in February totals $273.3 million, an encouraging gain of $35.9 million over the same period last year, especially after the slow start in January. California and Hawaii building starts are responsible for most of the increase. California reports a $24.9 million gain and Hawaii, $9.2 million. Other states with increases over February 1959 are Arizona, up $4 million; Colorado, $1.4 million; Wyoming, $563,000; Montana, $349,000; Utah, $70,000; and Alaska, $65,000. Largest drop on a statewide basis is in Washington, down $3.9 million. Other states recording decreases are Nevada, down $338,000; Oregon, $176,000; Idaho, $176,000; and New Mexico, $161,000.

15 leading agencies

Of the 15 top building permit agencies for February, nine are in California, two each in Washington and Arizona and one each in Hawaii and Colorado. They are:

	February 1960	February 1959
1. Los Angeles	$56,480,162	$44,413,039
2. Los Angeles County	25,738,156	15,158,951
3. Honolulu	15,254,495	6,336,154
4. San Francisco	11,785,725	12,528,939
5. San Diego	10,717,670	12,543,744
6. San Diego County	9,299,900	11,825,600
7. Sacramento County	9,049,831	8,141,380
8. San Jose	7,006,815	7,080,574
9. Seattle	6,490,638	9,678,154
10. King County, Wash.	5,371,585	7,537,170
11. Orange County, Calif.	4,971,537	1,893,813
12. Fresno	4,959,812	955,105
13. Denver	4,898,070	5,624,708
14. Phoenix	4,419,386	3,571,533
15. Tucson	4,170,283	1,317,747

Widespread increase over January

The February total is a good $47.5 million higher than January, with gains widespread throughout the 13-state area. Only Washington and Arizona record decreases from January figures and these are slight.

Dollar volume for the first two months of 1960 totals $499,168,487, a slight drop of $8.7 million from the same two-month period in 1959. Line-up by states is almost exactly the same as the monthly tabulation. Two-month total for eight states is higher than last year. These are Hawaii, up $9.2 million; Arizona, $8 million; California, $2.3 million; Utah, $1.1 million; Wyoming, $658,000; Nevada, $345,000; Montana, $340,000; and Alaska, $62,000. Five states show decreases for the two-month period. These are Washington, down $16.5 million; Colorado, $8 million; New Mexico, $4.7 million; Idaho, $1.3 million; and Oregon, $360,000.

Analysis of selected areas—February

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$20,437,033	$4,262,518	*$ 450,075
Orange County	4,062,829	772,456	
Sacramento County	5,693,687	2,703,789	530,520
Las Vegas	1,580,835	570,360	4,000
Denver	2,363,125	854,110	36,000
Portland	1,147,550	998,350	368,000
Seattle	2,610,948	3,696,635	40,000
King County	4,650,512	428,700	140,000
Honolulu	6,246,087	4,846,706	3,928,376

*Does not include $454,972 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for February

CALIFORNIA	Feb. 1960	Feb. 1959
Alameda County	$ 733,275	$ 906,125
Anaheim	3,612,531	2,764,800
Bakersfield	2,135,295	1,262,250
Burbank	621,883	779,818
Contra Costa County	2,273,643	1,974,075
Fresno	4,959,812	955,105
Fullerton	1,613,490	1,897,570
Glendale	964,856	1,741,457
Inglewood	955,001	1,119,254
Long Beach	3,008,960	3,583,710
Los Angeles	56,480,162	44,413,039
Los Angeles County	25,738,156	15,158,951
Oakland	4,116,219	4,142,494
Ontario	724,402	129,694
Orange County	4,971,537	1,893,813
Palo Alto	1,396,635	689,365
Pasadena	1,680,092	1,323,251
Pomona	1,305,969	562,919
Richmond	530,611	1,277,938
Riverside	925,081	1,089,975
Sacramento	2,759,488	4,064,495
Sacramento County	9,049,831	8,141,380
San Bernardino	937,201	2,032,577
San Bernardino County	3,503,324	6,434,551
San Diego	10,717,670	12,543,744
San Diego County	9,299,900	11,825,600
San Francisco	11,785,725	12,528,939
San Jose	7,006,815	7,080,574
San Mateo	1,636,540	523,692
San Mateo County	866,460	1,232,970
Santa Ana	1,855,170	772,571
Santa Monica	2,871,964	1,478,332
Stockton	1,817,409	507,381
Sunnyvale	1,235,620	2,342,550
Torrance	849,235	1,609,231
West Covina	1,271,317	519,559
TOTAL	**$186,211,279**	**$161,303,749**

OREGON	Feb. 1960	Feb. 1959
Albany	$ 156,071	$ 231,550
Astoria	14,750	43,290
Baker	279,700	82,600
Bend	166,500	86,200
Coos Bay	186,700	75,025
Corvallis	349,350	410,150
Eugene	683,565	616,132
Grants Pass	116,700	167,450
Gresham	47,000	29,250
Hillsboro	513,750	86,727
Klamath Falls	80,785	66,590
LaGrande	61,420	2,000
Lane County	670,603	976,123
Medford	322,411	359,050
Multnomah County	2,249,523	1,954,740
North Bend	175,760	773,090
Oregon City	49,700	97,436
Portland	4,134,955	3,902,015
Roseburg	113,485	88,570
Salem	243,955	758,603
Springfield	124,908	73,089
The Dalles	22,400	60,600
TOTAL	**$ 10,763,991**	**$ 10,940,280**

WASHINGTON	Feb. 1960	Feb. 1959
Aberdeen	$ 77,904	$ 73,348
Anacortes	8,273	179,945
Auburn	126,600	332,770
Bellingham	233,974	190,310
Bremerton	277,955	230,260
Centralia	25,427	76,611
Chehalis	37,123	34,365
Ellensburg	63,600	10,814
Ephrata	53,200	11,100
Everett	135,950	230,023
Kelso	19,040	53,800
Kennewick	261,540	55,380
King County	5,371,585	7,537,170
Kirkland	61,200	80,700
Longview	135,861	293,644
Moses Lake	25,430	6,835
Olympia	300,355	159,418
Pasco	112,025	336,550
Pierce County	1,702,316	1,868,405
Port Angeles	75,200	15,700
Puyallup	57,550	131,535
Seattle	6,490,638	9,678,154
Spokane	1,383,805	1,041,299
Spokane County	1,135,032	825,384
Tacoma	2,179,498	1,330,790
Vancouver	255,673	297,806
Walla Walla	533,395	69,218
Wenatchee	55,450	63,638
Yakima	419,010	334,787
TOTAL	**$ 21,614,609**	**$ 25,549,759**

ALASKA	Feb. 1960	Feb. 1959
Anchorage	$ 77,716	$ 57,610
Fairbanks	91,500	15,550
Juneau	400	1,500
Ketchikan	19,300	48,500
TOTAL	**$ 188,916**	**$ 123,160**

IDAHO	Feb. 1960	Feb. 1959
Boise	$ 318,834	$ 276,157
Caldwell	66,900	145,095
Coeur d'Alene	40,460	266,150
Idaho Falls	186,377	195,574
Jerome	100	7,410
Lewiston	319,100	178,740
Nampa	94,299	126,905
Payette	35,535	55,645
Pocatello	403,230	411,690
Sandpoint	26,200	Nil
St. Maries	10,000	22,000
Twin Falls	162,400	163,600
TOTAL	**$ 1,663,435**	**$ 1,839,966**

MONTANA	Feb. 1960	Feb. 1959
Billings	$ 325,600	$ 192,100
Bozeman	36,216	59,000
Butte	100	Nil
Glasgow	33,800	17,502
Glendive	60,989	Nil
Great Falls	378,340	225,254
Helena	93,500	133,000
Kalispell	9,300	7,900
Lewistown	2,500	Nil
Livingston	5,500	4,600
Miles City	11,511	5,450
Missoula	47,015	10,300
TOTAL	**$ 1,004,371**	**$ 655,106**

WYOMING	Feb. 1960	Feb. 1959
Casper	$ 428,650	$ 941,825
Cheyenne	1,054,283	
Sheridan	48,804	26,854
TOTAL	**$ 1,531,737**	**$ 968,679**

COLORADO	Feb. 1960	Feb. 1959
Aurora	$ 690,761	$ 865,768
Boulder	783,814	396,077
Denver	4,898,070	5,624,708
Englewood	133,523	342,928
Fort Collins	539,645	427,650
Grand Junction	324,424	184,665
Greeley	795,167	203,209
Pueblo	1,867,357	743,411
Trinidad	8,779	10,022
TOTAL	**$ 10,041,540**	**$ 8,595,234**

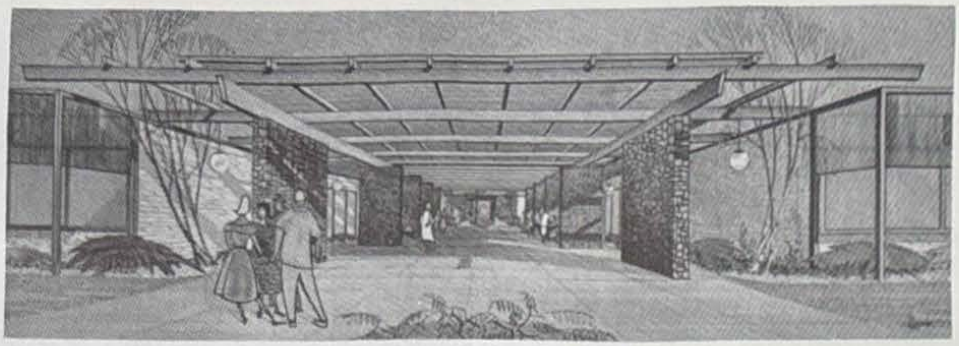
UTAH	Feb. 1960	Feb. 1959
Logan	$ 110,000	$ 53,500
Murray	69,200	88,775
Ogden	665,300	1,270,500
Provo	100,000	151,900
Salt Lake City	2,185,088	1,494,312
TOTAL	**$ 3,129,588**	**$ 3,058,987**

NEVADA	Feb. 1960	Feb. 1959
Elko	$ 79,680	$ 68,705
Las Vegas	2,186,220	3,343,835
Reno	1,460,336	825,662
Sparks	519,176	345,403
TOTAL	**$ 4,245,412**	**$ 4,583,605**

ARIZONA	Feb. 1960	Feb. 1959
Douglas	$ 121,125	$ 87,029
Flagstaff	118,593	128,858
Glendale	232,395	139,564
Maricopa County		
Mesa	1,304,511	945,340
Phoenix	4,419,386	3,571,533
Tucson	4,170,283	1,317,747
Yuma	91,700	232,125
TOTAL	**$ 10,457,993**	**$ 6,422,196**

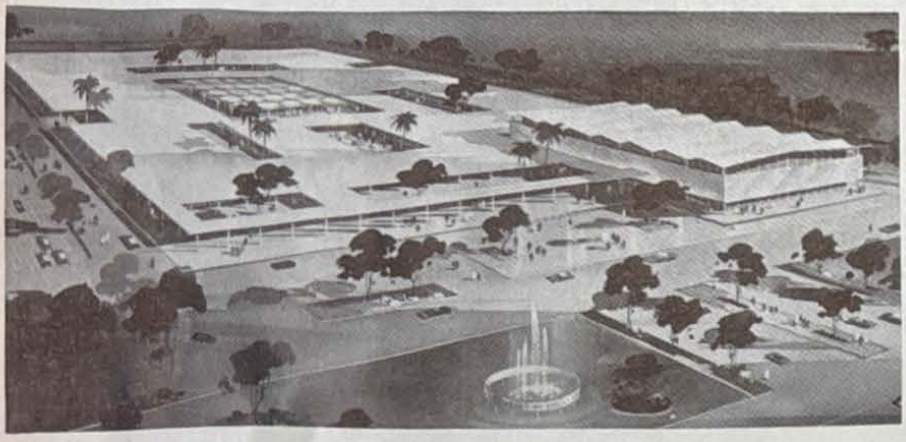
NEW MEXICO	Feb. 1960	Feb. 1959
Albuquerque	$ 3,601,597	$ 4,440,980
Carlsbad	166,530	
Clovis	463,985	242,896
Gallup	69,900	337,933
Hobbs	237,000	177,150
Las Cruces	1,206,000	1,242,000
Roswell	621,685	
Santa Fe	90,145	177,835
TOTAL	**$ 6,456,842**	**$ 6,618,794**

HAWAII	Feb. 1960	Feb. 1959
Hawaii County	$ 363,752	$ 315,922
Honolulu (city-county)	15,254,495	6,336,154
Maui County	444,540	152,445
TOTAL	**$ 16,062,787**	**$ 6,804,521**
GRAND TOTAL	**$273,372,500**	**$237,463,986**



EAST VALLEY HIGH SCHOOL

in Spokane County will be reached via extensive shelter area which connects wings of academic building. Gymnasium-commons building will be located beyond on lower level of site. Serving initial 500 students in consolidated district, school is planned for expansion to 800 and as community center for adult education and recreation. Architect: Kenneth W. Brooks.

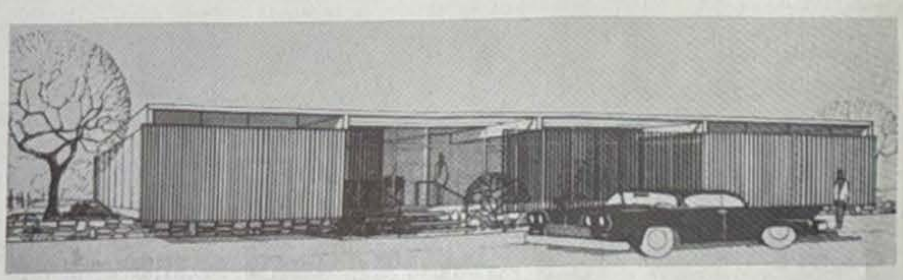


SHOPPING AREA

called Sage and Sable and billed as "unique fashion center" is being planned for Las Vegas on its famous "Strip" near airport. Enhanced by shaded areas, reflecting pools and landscaping, it will provide space under umbrella for 75 specialty shops, one major prestige store and restaurant on 24-acre site. Architects: Honnold and Rex & Associates.

OFFICE BUILDING

for United Metal Trades Association in Portland will have 4,200 sq. ft. of main floor space, including social area, and 925 sq. ft. of basement for service and storage only. Wood frame structure will incorporate stained cedar and gray tinted glass exterior and plaster interior. Architects: Skidmore, Owings & Merrill.



PARISH PLANT

for St. Bernadette's in Seattle's south end will consist of church, school, hall and convent, costing an estimated $385,000. Church, with 800-seating capacity, will be linked to two-level school by enclosed entrance vestibule. Integrally colored pumice wall units will form exterior of church and second floor of school, whose lower level will be reinforced concrete. Architects: Gotteland & Koczarski.



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Nine developer-architect teams seek Golden Gateway job

San Francisco was assured that Golden Gateway will be one of the most outstanding redevelopment projects in the country as nine developer-architect teams presented their bids and design proposals estimated to cost from $30 million to $70 million (see accompanying photos).

The proposals were based on plans outlined by the Redevelopment Agency of the City and County of San Francisco and developed by Skidmore, Owings & Merrill. In general they suggested apartment house structures totaling approximately 2,200 units and an equivalent number of parking units on sites totaling 16.3 acres and a public garage of approximately 1,300 parking stalls, topped by a landscaped pedestrian mall and by either an office building or an apartment structure, totaling 3.4 acres.

Site adjoins the financial district of San Francisco now mostly made up of old, low-level structures used mainly for produce warehouses. It is but a few minutes walk or ride from major shopping, entertainment and hotel areas of the city.

The proposals show considerable variety in meeting the conditions set down by redevelopment officials. They range from several large apartment buildings providing 2,575 dwelling units to combinations of apartments and town houses. Parking facilities for the most part are located beneath buildings, landscaped areas, shopping centers and the like. Several proposals provide for extensive recreational layouts, such as tennis courts, playing fields and in one, a little theater. Treatment of landscaped areas is split between large open park areas and smaller, more intimate courts and gardens.

'Bid call' requirements

Under terms of the "bid call," developers and their associated architects were required to provide a large-scale rendering and/or model suitable for study at public hearings, land use map showing placement of buildings, preliminary plans showing elevations and typical floor plans, estimated schedule of rents, schedule of start and completion for the buildings and a bid for the land.

A jury of architects, builders and bankers headed by Mario Ciampi will now study the plans and make a recommendation to the sponsoring agency. Final selection will be based on quality and amenities offered in design of apartment units; balance in range of size of apartments; balance in range of estimated rental charges; architectural excellence and its contribution to the appearance of the entire neighborhood; highest prices offered for the land; and experience and financial responsibility of the developer-group.



DEVELOPER: Webb & Knapp, Inc.; archit I. M. Pei & Associates and Ernest Born John Bolles, consultants.

AGC sessions sparked by AIA's Richards and resolution

Largest attendance on record was noted this year at the 41st annual national convention of the Associated General Contractors of America as more than 2,300 delegates and their wives were in San Francisco during the March 21-24 meetings.

From the large numbers at the building division meetings held in the main auditorium of the Masonic Temple, it appeared that this segment of the contractors' organization was better represented. An address by John Noble Richards, national president of the American Institute of Architects, seemed to serve as the keynote judging from his reception.

Richards said that "economic future of the country depends largely on how well the contractors and architects do our jobs . . . and how well we work together." He pointed out that the continuation of a high standard of living, national pride and leadership of the free world are all dependant on sound and continuing redevelopment programs based on proper planning and design. "The decay of our cities is overtaking our limited on-again, off-again renewal efforts," he declared.

The AIA head was quite optimistic in gaging the ability of architects and contractors to work together to achieve ends like the above and to solve the everyday problems that often arise.

"Our industry," he commented, "is not as yet fully coordinated, up to date or progressive. But we have made a beginning. And the most encouraging part of this beginning is the way you, the AGC, and we, the architects, have learned to cooperate and work together."

As evidence of this, Richards noted that out of the 126 local AGC chapters and 130 AIA chapters, 73 have formed joint cooperative committees and through these groups the views and experiences of the two associati are passed to the other, making better understanding. "I can ass you," he said, "that we archite consider practical and tangible operation with contractors a very portant part of our jobs. We can afford to merely dream of buildi and then let others turn these drea into brick and steel."

Richards freely admitted that sometimes takes time for the AIA make decisions on contract docume and other proposals made by AGC. He asked the delegates to member that these proposals must considered by more than one pers in the AIA and these persons are always readily available.

After noting that the relationsh between architect and client is co stantly changing, Richards said sees three fundamental jobs befo the AIA: First, to make itself into effective and efficient instrument continuously maintain the high standards of ethics and profession ism; second, to make itself an eff tive and efficient instrument to ra the professional competence of members; third, to make itself instrument to record the voice of t architect heard in our communiti the building industry, governme and society as a whole.

Richards said he thinks the AI has done well on its first job b that the other two facets need muc work. As he put it: "Like an airplan in flight, we can never stand still we crash."

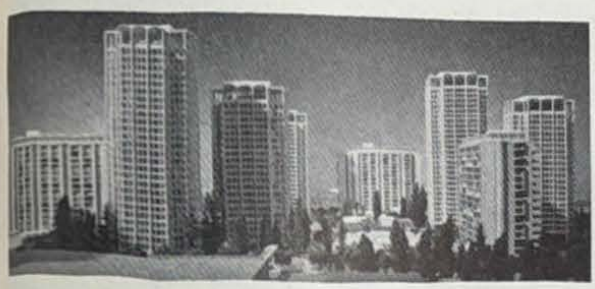
His speech followed one of th most hotly debated issues to com before the convention. The discussio centering around a resolution dealin with bid peddling and shopping, an an amendment to that resolution too nearly three hours.

The delegates by a large margi

Continued on page 1



DEVELOPER: Perini Land & Development Co.; architects: Wurster, Bernardi & Emmons and DeMars & Reay, associated.



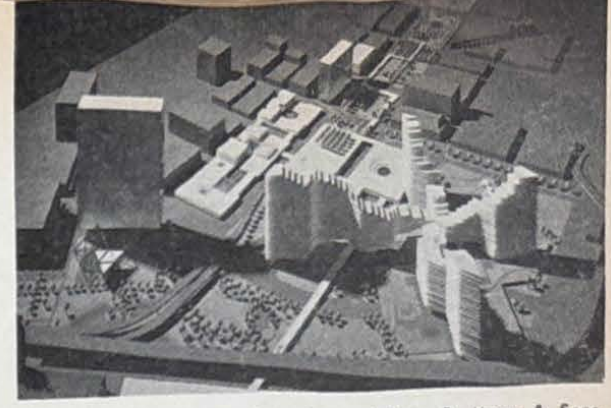
DEVELOPER: Tishman Cahill Renewal Associates; architects: John Carl Warnecke & Associates; Gardner A. Dailey & Associates and Victor Gruen Associates.



DEVELOPER: Lewis E. Kitchen; architects: Skidmore, Owings & Merrill.



DEVELOPER: Eichler Homes, Inc., and Dinwiddie Construction Co., associate; architects: Anshen & Allen.



DEVELOPER: Sidney Leiken Enterprises and Theo. O. Meyer & Sons; architects: Jan Lubicz-Nycz, John Collier and Philip Langley.



DEVELOPER: Barrett Construction Co., Diversified Builders, Louis Lesser Enterprises and Braemar Associates; architects: Daniel, Mann, Johnson & Mendenhall and Corlett & Spackman.



DEVELOPER: Kern County Land Co. and Del E. Webb Construction Co.; architects: Welton Becket & Associates.



DEVELOPER: Utah Construction & Mining Co. and Henry C. Beck Co.; architects: Angus McSweeney, Donald Beach Kirby and Loubet & Glynn.

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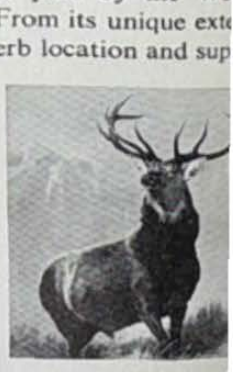
operatorless Elevator System

Destined to become *the* Chicago landmark, the Hartford Building at 100 South Wacker Drive will provide regal surroundings and facilities for tenants and visitors.

A case in point: thirteen Haughton Operatorless Elevators with the latest automatic electronic controls will speed passengers from floor to floor with silken smoothness. They will be motivated by an amazing electronic brain that anticipates service needs at every moment, day and night, and dispatches cars at the proper times and in proper sequence to meet traffic needs exactly.

Of course, operation of Haughton Operatorless Elevators is simplicity itself. One merely enters the car and presses the numbered floor button. Doors open and close automatically at floor level, with unfailing consideration for passengers. They are controlled by proven devices of ingenious design that help make Haughton Operatorless Elevators the safest mode of floor to floor travel.

The Hartford Building . . . to be occupied in part by the We Department of the Hartford Fire Insurance Company Group. From its unique exte creating a functional design accented by simple charm, to its superb location and sup facilities, this beautifully planned building carries its tasteful design throughout . . . The twenty floors are arranged for purposeful planning and unexcelled utilization of floor space. Windows are shielded from direct sun rays by the canopy effect created in the exterior design, a first in this country . . . The landscaped esplanade and spacious lobby provide an exciting vista, while building features combining the ultimate in fluorescent lights, automatic elevators, year 'round temperature control, under floor ducts for electrical and telephone equipment and other innovations make The Hartford Building an unparalleled office home for any organization.



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voted down the amendment which would have substituted the "four-hour plan" for the listing of subcontractors, one of the main control items in the resolution. Then the delegates voted in principle by 99 to 78 to adopt the resolution, leaving exact wording to the national joint cooperative committee of the AGC and the Council of Mechanical Specialty Contractors Industries, Inc.

James Cawdrey, AGC president, later suggested other changes in the resolution which, if adopted, would make the plan completely subject to local adoption and would prevent the plan from being introduced in areas where the specialty contractors were known to be against the single contract idea.

Tribunal proposed

The no-strike program being developed by the AGC was pointed up at a news conference during one of the sessions at the convention. Industry officials said they are highly hopeful such a plan will be adopted by contractors and the 18 building trades divisions within a year or two.

The basic idea of the no-strike, no lock-out program is that all disputes except jurisdictional, but including wage negotiations, would be submitted to a tribunal composed of men of labor and management. The decisions of this body could be either recommendations or they could be binding. But in any event, there would be no work stoppages during the time the matter was before the tribunal.

William E. Dunn, assistant executive director of AGC, said it would be weeks before further action is taken on this proposal as unions and employers are now studying a draft of the proposal and it has to be returned to Washington, D.C., before revisions can be made.

In the second session devoted mainly to building division affairs, Robert W. Long, Long Construction Co., Kansas City, Mo., in his speech on "Industry Analysis and Trends" said that overhead is perhaps the key to profit or loss in the industry today. He described in detail the results of a recently completed survey which attempts to show industry trends.

"We all feel the press of desperate competition and we wonder just how much smarter the low bidder is than we, or how much greener is the pasture where grazes the fellow who does twice the volume that we do," he pointed out.

In making general conclusions from the material included in the survey, one of the outstanding features concerns overhead, Long added. "Competitive contractors who fail to realize this cost of doing business are surely committing economic suicide."



OUTGOING AGC PRESIDENT James W. Cawdrey extends handshake to AIA President John Noble Richards (at podium) of Toledo. Seattle contractor has been succeeded by John A. Volpe of Malden, Mass.

James E. Hanson, member of the executive committee of the Society of Industrial Realtors, in an address on "Creating a Construction Market," used specific personal experiences to show how contractors, architects and realtors can work together to make more business for themselves.

He said that a group of such businessmen in his home area around New Jersey found out by working together to promote redevelopment and other such renewal programs that they were able to increase their annual volume by $3 million a year. The cooperation eventually slackened and disappeared and so did this part of their business volume, he explained.

Government spending rapped

Americans must stop living on government credit cards and fight an economic war as they would a military war if we are to meet the Soviet challenge and prove our system is the best, declared Budget Director Maurice H. Stans.

"In the face of Khrushchev's declaration of economic war, have we what it takes to face a call for discipline, to stop compulsive spending, to distinguish between growth and inflation, to pay our debts, to restore incentives by reducing taxes?" he asked.

Stans said the 1961 budget now before Congress includes nearly $7 billion for public works of every description—schools, office buildings, roads, hospitals, dams and reservoirs and military bases. Referring to criticisms that the budget is "austere," Stans received thunderous applause when he asserted that the vast majority of the people have confidence in President Eisenhower's leadership and the budget he has submitted to Congress.

—Ward Lindbeck

Westerner named as juror for national competition

Landscape architect Thomas Church of San Francisco has b named to the five-member jury wh will select the winner in a nationw competition to design a memorial the late President Franklin Del Roosevelt. Prizes totaling $110,0 will be awarded in the two-st competition, registration for wh should be filed before April 25.

Other jurors: Pietro Belluschi, d of the School of Architecture Planning, Massachusetts Institute Technology, chairman; Bartlett Ha Jr., director of the Addison Gall of American Art, Phillips Acade Joseph Hudnut, professor of arc tecture emeritus, Harvard Univers and Paul Rudolph, chairman of department of architecture, Y University.

The first stage of the competit is open to registered architects; or associations of landscape archite sculptors, painters or others provi they include a registered archit All contestants must be residents the U.S. Second stage is limited six competitors or associations lected by the jury from the first st

Each of the six finalists who c pete in the second stage will rece a prize of $10,000. The grand win will be awarded a prize of $50,000.

A site for the memorial has b reserved in Washington, D.C., on strip of land stretching from In pendence Avenue south of the Linc Memorial to the Inlet Bridge no of the Jefferson Memorial betwe the Potomac River and the Ti Basin.

Edmund N. Bacon, executive dir tor of the Philadelphia City Plann Commission, who is professional viser for the competition, stresses importance of the site to the mon mental section of Washington and necessity for the memorial to harmonious with the Washingt Monument, the Lincoln Memorial a the Jefferson Memorial. He furth observes: "The responsibilities i posed on the competitor by the si are matched by the opportunities offers. The Potomac River and embankment, the Tidal Basin, th number of fine trees on the ground the central location yet quiet detach ment of the site and the magnificen view which the location command provide a setting for the memoria which will challenge the capacities o the designer."

Registration forms are available from the Franklin Delano Roosevelt Memorial Commission, Tariff Commission Building, Washington, D.C.

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MAHON . . . a famous name in BUILDING PRODUCTS . . . announces its more-active part in the economic growth of the West. A new manufacturing facility is now in operation at Torrance, Calif., to make available to you *the full line of Mahon Building Products and construction services direct from a West Coast source.*

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- Acoustical Metal Walls, Partitions and Roof Decks
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Administration and engineering offices of The R. C. Mahon Company's Western Operation at Torrance, Calif. The new facility, now in operation, includes a 200,000 sq. ft. manufacturing plant.

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Century 21 names three more architectural firms

Architectural commissions for three additional major Century 21 Exposition projects have been awarded for the 1962 event, to run April 21-October 21 in Seattle's Civic Center area.

Naramore, Bain, Brady & Johanson of Seattle will design the Boulevards of the World International, embracing 65,000 sq. ft. of indoor space bordering the thoroughfares. Construction costs will be about $455,000. This firm also is affiliated with Minoru Yamasaki & Associates of Detroit, announced earlier as architects for the $3.5 million permanent Federal Science Pavilion.

Robert Price & Associates of Tacoma will be responsible for designing first units of the Domestic Commerce and Industry exhibit complex which involves 20,000 sq. ft. of covered space costing approximately $180,000.

Walker, McGough & Trogdon of Spokane are to design the Foreign Commerce and Industry exhibit pavilions encompassing 48,000 sq. ft. of display space at an estimated $430,000.

Groundbreaking was held March 25 for the first actual construction of the exposition—the $4 million state-financed Coliseum. It is the work of Paul Thiry, consulting architect for Century 21, who also is developing plans for the Federal Commerce and Industry structures surrounding the Coliseum. These temporary exhibit spaces will cover 96,000 sq. ft. at a cost of about $880,000.

The growing list of supporters includes the nation's two newest states. Gov. William F. Quinn has recommended to his lawmakers that Hawaii endorse a building and exhibits estimated at $712,900; and in Alaska a measure to appropriate $25,000 for preliminary study and design of a state building and exhibit has been introduced in the legislature.

Meanwhile, the Bureau of International Expositions has placed consideration of the Seattle event on its May 5 agenda.

CSI national convention to follow AIA in Bay area

Up to 500 registrants are expected for the fourth annual convention of the rapidly expanding Construction Specifications Institute to be held at Rickey's Studio Inn in Palo Alto April 25-27. The AIA will meet earlier—April 18-22—in San Francisco.

Program will be largely technical, concentrating on the building materials aspects of and better methods in preparation of specifications. Among the speakers: James W. Cawdrey, Seattle general contractor and outgoing president of the AGC, on the need for the CSI to augment and coordinate the work of other technical societies; Col. Archie Higdon, USAF, professor of mathematics and physics at the U.S. Air Force Academy, Colorado Springs, Colo., on collegiate education for the construction industry; and Joseph W. Kelly, professor of civil engineering at the University of California, Berkeley, and president-elect of the American Concrete Institute, on the relation of specifications to field inspection on concrete construction.

Presiding at these three sessions will be Jack Lewis, past national director and past president of the San Diego Chapter; Vincent Raney, San Francisco architect; and Herman H. Boisclair, president of the Los Angeles Chapter.

Papers will also be delivered on integration of contract documents, control of construction quality, evaluation of manufacturers' specifications, specification methods, the technical journal and the effective technical program.

Robert W. Harrington of San Francisco is convention chairman. The board of directors includes two West coast men: Rolf T. Retz of Sacramento and Wallace W. Macdonald of Seattle.

The 10-year-old organization now has more than 4,000 members in 41 chapters. Because of the ever-increasing interest expressed in the CSI, the 11 chapters in the 13 western states are listed below, along with their presidents and addresses.

Denver: Henry B. Baume, 1225 Bannock St., Denver 4, Colo.

Hawaii: president not elected; for information—Gene Granich, 2615 S. King St., Honolulu, Hawaii.

Las Vegas: Aloysius McDonald, 1420 S. Fifth St., Las Vegas, Nev.

Los Angeles: Herman S. Boisclair, 1600 S. Valencia St., Alhambra, Calif.

Phoenix: Harry Eichberger, 3500 N. Central Bldg., Phoenix, Ariz.

Portland (forming): for information—Lowell F. Anderson, Box 634, Portland 7, Ore.

Puget Sound: Donald E. Paine, Box 426, Seattle, Wash.

Sacramento: William P. Vickers, 2608 E. Segundo Drive, Rancho Cordova, Calif.

San Diego: James W. Bird, 642 Spreckles Bldg., San Diego 1, Calif.

San Francisco: Leonard M. Tivol, 3921 Clay St., San Francisco 18, Calif.

San Jose (forming): Frederick R. Barss, 220 Meridan Road, San Jose 26, Calif.

Healthy home building pictur seen for Southern California

One million homes will be built the metropolitan Los Angeles area the 1960s. This prediction, in view the much-discussed tight money sit ation, would seem to put Ray Cherry, president of the Home Build ers Association of Los Angeles, Oran and Ventura Counties, in the sam category with the "cockeyed optimis of "South Pacific" fame.

But Cherry explains: "I think a qualified buyers will get loans fo homes. There is a great deal of tal about tight money, but I feel tha there will be money for the buyer quality homes.

"Frankly, I would predict that th year 1960 will be as good, if not bette for Southern California than 195 even though it is possible that th national average (of home building would drop somewhat."

Cherry predicts a population growt of three million or more for the metro politan Los Angeles area in the decad which opened the first of this yea He comments that this will requir one million new homes to house th population or an average of 100,000 year throughout the 1960s.

Referring to sandwich panels, pla tics in various forms and new uses aluminum, the home builder says is his conviction that such materia and building techniques will brin an evolution in the construction homes in the next 10-year period. Th result will be greatly added comfo for the home owner as well as econo my with maintenance-free material

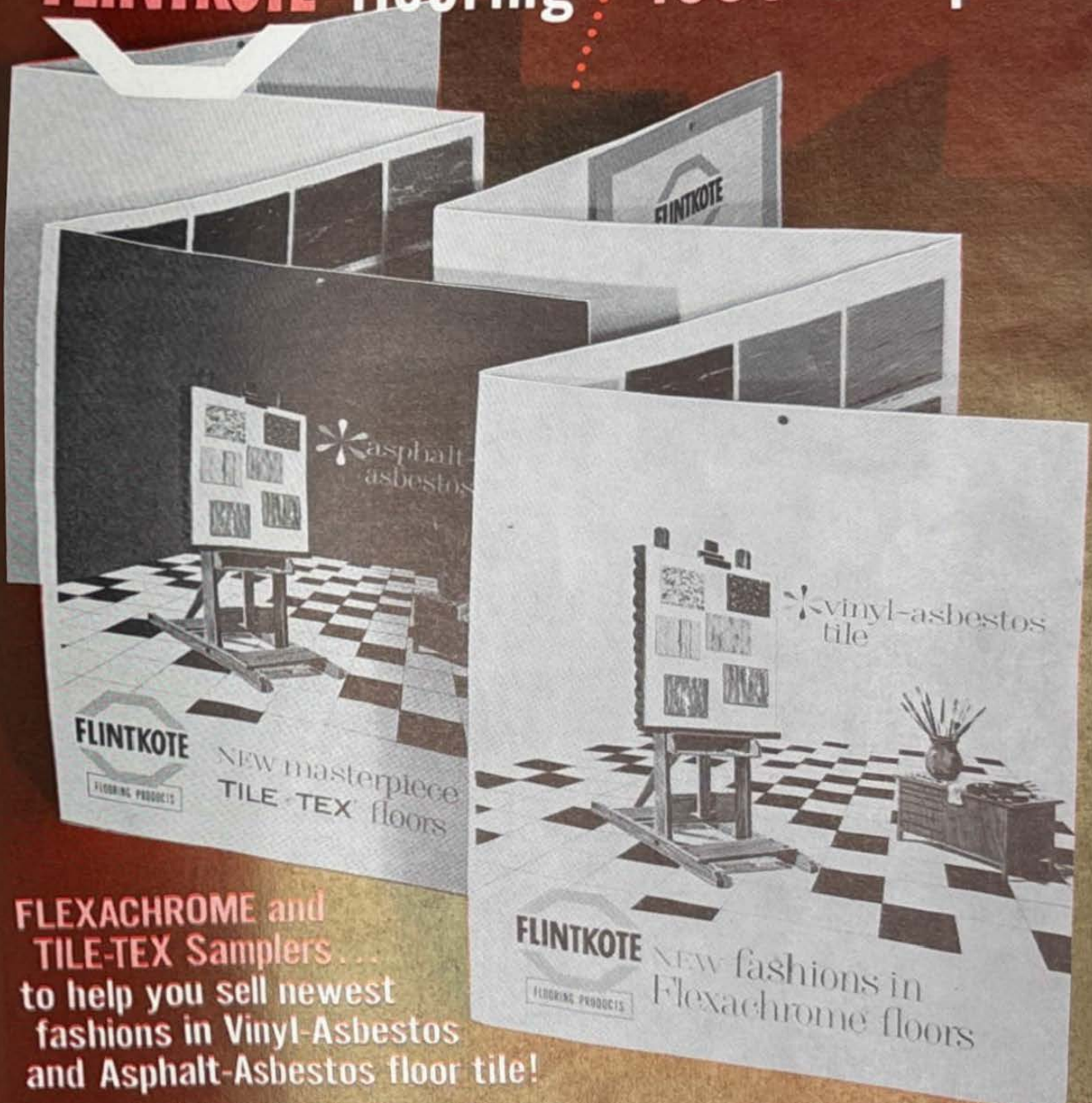
Oregon will host national CEC board meeting

Executive committee and directors of the Consulting Engineers Council will convene for the first time in the Pacific Northwest when they hold their fourth annual meeting at Gearhart, Ore., May 2-7. The executive committee will meet on the first two days and the directors on the next three, with plenty of time to enjoy the ocean and other recreational activities connected with the Gearhart Hotel.

Representation is expected from each of the 27 state associations affiliated with the CEC for a total of at least 80 delegates. Portlanders Harry Czyzewski and Delmer L. McConnell are co-chairmen; Ralph M. Wescott of Los Angeles is president.

The annual meeting of the Consulting Engineers Association of Oregon will be held in conjunction with the national group on Thursday, May 5.

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new offices, partnerships

Clyde Cohen has opened an architectural office at 444 Market St., San Francisco.

Donald R. Roark has opened an office for the practice of architecture at 1700 Broadway, Denver.

Robert Scott Geeting, architect, has established an office at 759 Valley Blvd., Escondido, Calif.

Roland Lane has established an architectural office at 1026 Third Ave., Anchorage. A graduate of the University of Washington, he is president of the Allied Arts Society of Anchorage.

Ward Deems, architect, has opened an office at 666 Ash St., San Diego, to be known as Deems-Martin Associates. The office will be affiliated with Albert C. Martin & Associates of Los Angeles.

William S. Kaplan, consulting structural engineer, has opened offices at 268 Market St., San Francisco.

new associates

Byron J. Tharaldson and Raymond S. Wright have formed an architectural partnership, with offices at 2500 W. Sixth Street Bldg., Los Angeles.

Daniel C. Carmichael and Richard J. Kemp have formed a partnership for the practice of architecture under the name of Carmichael-Kemp, with offices at 2312 Hyperion Ave., Los Angeles.

Richard L. Lewis has been named an associate in the Sacramento architectural firm of Starks, Jozens & Nacht.

E. Norman Sylvester and Laurel E. Carlsson have been named associates by Victor Louis Wulff, Spokane architect.

Harry B. Rich has joined the Seattle architectural firm of John O. Phillips as an associate.

new addresses

Paderewski-Mitchell-Dean & Associates, architects-engineers, to Harbor Insurance Bldg., 1017 First Ave., San Diego.

Harold Keeney, Jr., architect, to 18043 Bothell Way N.E., Bothell, Wash.

Robert B. Marks, architect, to 1821 Courtney Terrace, Los Angeles.

Richard Leitch, architect, to 410 West Coast Highway, Newport Beach, Calif.

John F. Milan & Associates, architects-engineers-planners, to 112 E. 14th Ave., Denver.

Edward North Chamberlain, architect, to 651 Hamilton Ave., Palo Alto, Calif.

Raymond R. Shaw, architect, formerly of Los Angeles, to 3600 Waialae Ave., Honolulu.

Gunnar Andersen, architect, to 538 Pacific Ave., San Francisco.

Arthur B. Darton, architect, to 141 S. Stratford, Tucson.

Lyle P. Bartholomew, architect, to 3629 Pringle Road S.E., Salem, Ore.

Coburn Ackley, architect, to 1413 C St., Vancouver, Wash.

Thomas & Richardson, architects, to 13912 Ponderosa, Santa Ana, Calif.

Robert J. Keeney, architect, to 310 Medical Center Bldg., Medford, Ore.

The Washington State Chapter, AIA, to 810 Central Bldg., Seattle (a change in floors).

deaths

Wilbert P. Lei, 50, Portland architect, died of a heart attack March 2. Born in Kwanotung, he was a graduate of the University of Michigan and at the time of his death was a partner in the firm of Annand, Boone & Lei.

William H. Carr, 71, architect of Tucson, died February 29 after a short illness.

honors

Among the 43 AIA members who will be advanced to the rank of fellow during the annual convention in San Francisco later this month are eight from the West. They are, along with their chapter affiliation and achievement: Mario J. Ciampi, Northern California, design; Wayne S. Hertzka, Northern California, service to the Institute; Paul Robinson Hunter, Southern California, service to the Institute; Perry B. Johanson, Washington State, service to the Institute and public service; A. Quincy Jones, Southern California, design; Bradley P. Kidder, New Mexico, service to the Institute and public service; Lutah Maria Riggs, Santa Barbara, design; and Burton Romberger, Pasadena, service to the Institute.

Oregon AIA Chapter cites six projects, craftsman

In its fourth annual design competition for current work, the Oregon Chapter, AIA, presented two Honor Awards and four Awards of Merit (see photos of winners across page) from a field of 37 entries. Certificates were given to the architects, along with the second annual Craftsmanship Award to Charles E. Grant, at a banquet meeting in the Benson Hotel March 4.

The jurors—architects Mario J. Ciampi of San Francisco and Victor Steinbrueck of Seattle and Max Sullivan, director of the Portland Art Museum—reported that the selections were unanimous in all cases. Other comments: "Residental class most interesting." "All worthy of considerable study." "High degree of quality."

Grant received his citation "in recognition of his distinguished talents and skills in cabinetmaking and for his cheerful cooperation with the architectural profession in advancing the standards and quality of his chosen craft." Starting his own company in 1947, he was responsible for the pews and chancel furnishings in the award-winning First Presbyterian Church.

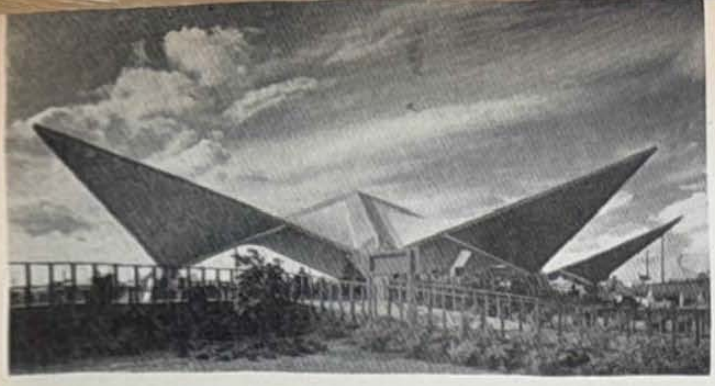
Frank L. Shell was awards chairman.

Lumber seminars planned for Colorado, Wyoming

A series of one-day technical seminars on "Lumber—Its Properties and Uses" will be held at four Colorado and Wyoming universities April 5-8 under sponsorship of the National Lumber Manufacturers Association. The schedule: University of Denver, April 5; University of Colorado at Boulder, April 6; Colorado State College at Fort Collins, April 7; and University of Wyoming at Laramie, April 8.

Designed primarily for architectural and engineering students, the seminars also will be opened to practicing architects, engineers, contractors, and building officials. Subjects to be covered in the all-day sessions include wood growth and properties, grading and grade marking, stress grading of lumber, light and heavy framing, fastenings, glued laminated construction, lumber specifications and building code requirements.

Guest lecturers will be recognized authorities from the regional lumber associations and faculties of the cooperating institutions. Norman H. Reece, regional manager of the sponsoring association's newly established Denver office, will be in charge.



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HONOR AWARDS

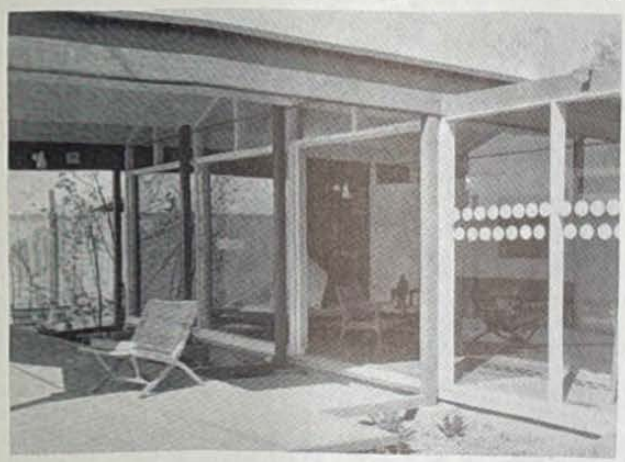
1. Forest Products Pavilion, Portland: John Storrs, architect; George Moore & Associates, contractor.
2. John W. Ray Residence, Portland: Saul Zaik, architect; Wayne Schrunk, contractor.

Photo credits: Photo-Art—1; Condit—3; Hugh N. Stratford—4; Tom Burns Jr.—5; Acme—6.

AWARDS OF MERIT

3. Exhibition House, Oswego, Ore.: Donald Blair and William L. Fletcher, architects: Wedgwood Homes, contractor.
4. First Presbyterian Church, Vancouver, Wash.: Stewart & Richardson, architects; Larry O. Collins, contractor.
5. Apartment Buildings, Oswego, Ore.: Donald Blair and Saul Zaik, architects; William Leer, contractor-owner.
6. Dormitories for Reed College, Portland: Farnham, Shell & Hoyt, associated architects; Juhr & Sons, contractor.

3



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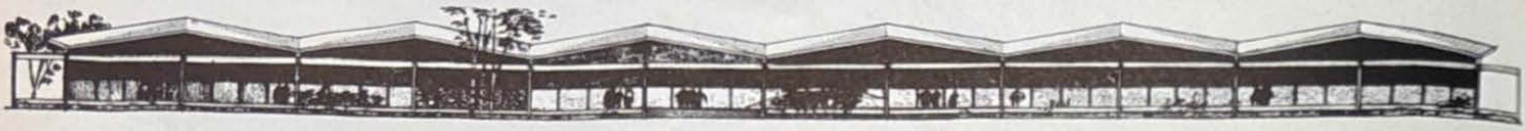


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6





EAST AND WEST ELEVATIONS

Roof system allows for flexibility, expansion in research complex

RESEARCH CENTER, NORTRONICS DIVISION, NORTHROP CORP., PALOS VERDES PENINSULA, CALIF.: All buildings in this 50-acre complex are being designed for maximum flexibility of areas and building systems in order to adapt easily to whatever needs arise in the research and development program centering around the fields of astronertial and inertial guidance systems, navigation and guidance computers, infrared and optical systems and equipment.

Initial segment of the development, first to be located within the newly created Palos Verdes Research Park, is expected to be completed in 1960 at an estimated cost of $4 million. It will include four office and laboratory buildings and the division administrative office building, totaling 120,000 sq. ft. Structures will be set on terraces stepping down a gently rolling hillside and arranged in a quadrangle surrounding a large court.

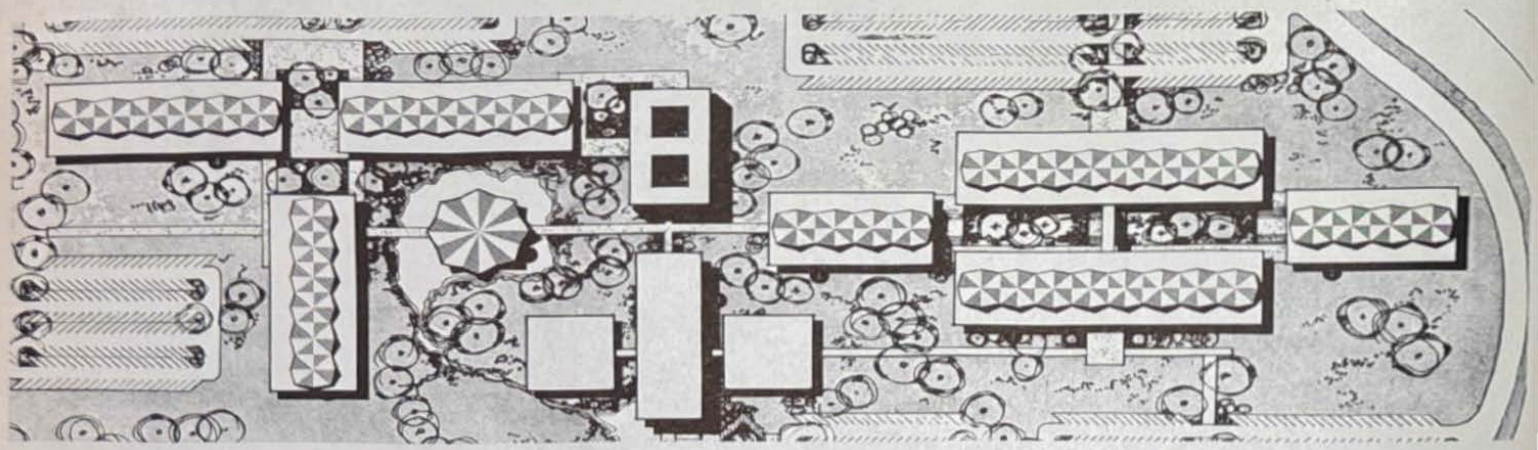
Each of the two large office-laboratory buildings will be 30,000 sq. ft., expandable to 40,000 sq. ft., while two smaller units will be 10,000 and 15,000 sq. ft., expandable to 20,000 sq. ft. Administration building will be 35,000 sq. ft.

Office-laboratories will be of light steel construction with a hyperbolic paraboloid system raised above the level of the flat steel roof to provide access to outside air wherever desired and eliminate unsightly roof projections.

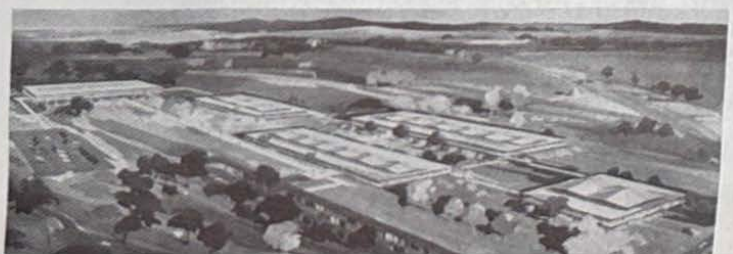
A utility core will be located through the center of the raised portion at its highest point to handle water, compressed air, vacuum systems, various gases and electrical services. Major corridors for each building will be outside the walls under a solar control overhang, offering both a spacious outdoor atmosphere and savings on interior floor space.

Two-story administration building will be of steel construction and enclosed with glass walls. Concourse parking areas will be provided around each building. They will be terraced into the side of the hill to eliminate the sea of automobiles commonly associated with an industrial complex of this size. The center will initially house a staff of more than 600.

Future plans call for an ultimate development totaling 350,000 sq. ft. including a cafeteria building, an executive office building, another group of office-laboratory buildings and a celestial observatory to be constructed at the southeast corner on the highest knoll of the property. Architects: Charles Luckman Associates.



ULTIMATE DEVELOPMENT of encompassing 350,000 sq. ft. of office and laboratory space on 50 acres is indicated in site plan. First increment of five buildings is shown below. Original roof scheme of folded plates has been changed to hyperbolic paraboloids.





MONEY-MAKING IMPRESSIONS

Many intangibles of good motel planning are reflected in this delightful room. Tectum roof decks, exposed over wood beams, make an important contribution to the comfort and safety of your guests. While attractively textured Tectum® is compatible with other materials from a decorator's viewpoint, it offers major savings in basic construction, helps reduce initial costs. This non-combustible roof deck provides structural, insulating and acoustical benefits — in fact 12 important qualities in a single material to save costs in time, labor and materials. Tectum is being used more and more by motel developers today. Have you investigated versatile Tectum?

Photo Above: Howard Johnson Motel, King of Prussia, Pa.; **Designers:** Bank Building and Equipment Co. of America; **Contractors:** Guidera and Goodman, Inglewood, N. J.

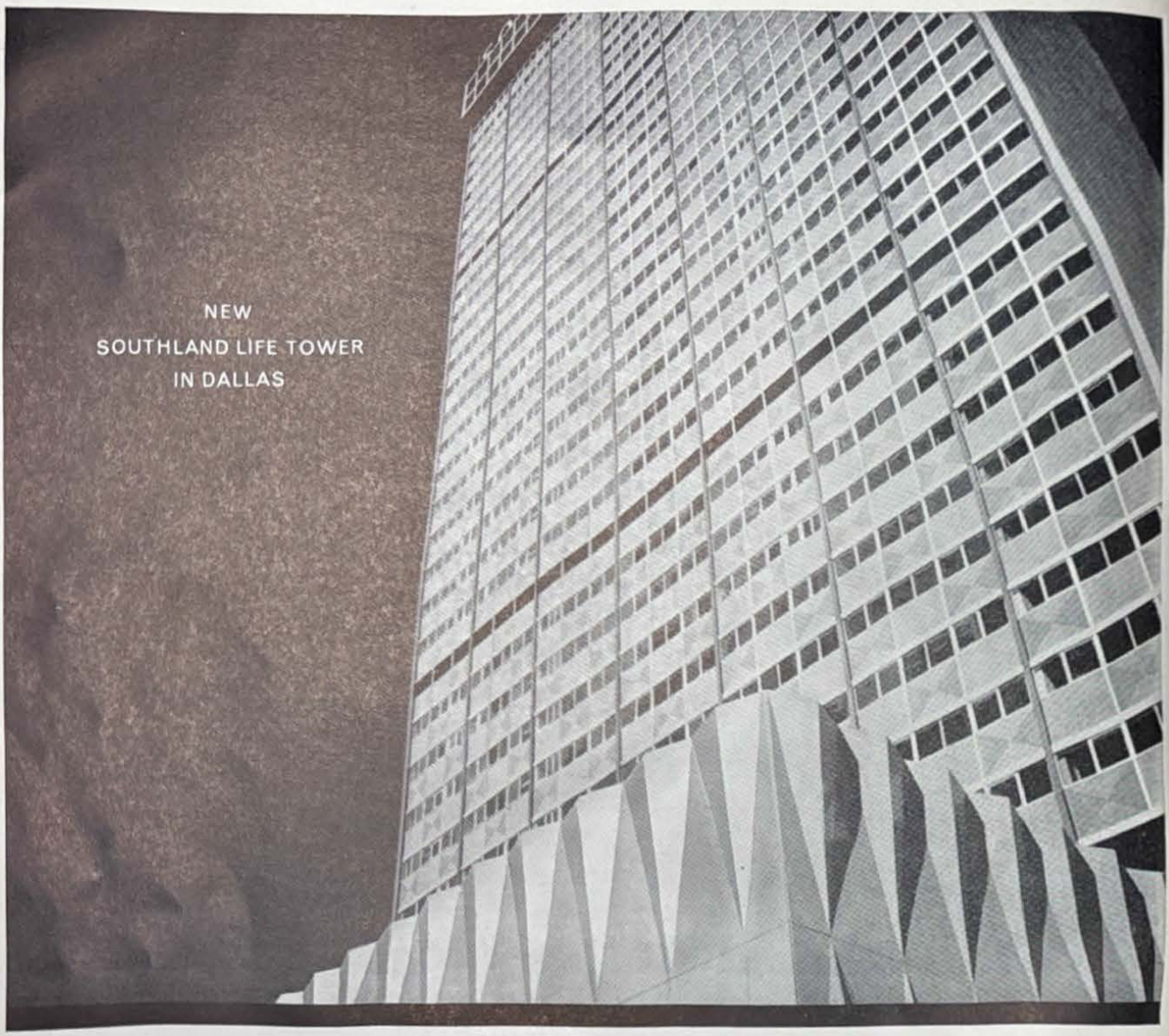
Ask your architect for the money-saving Tectum story or send for this new, colorful "No Vacancy" brochure.



TECTUM CORPORATION

535 East Broad Street • Columbus, Ohio

Tectum



Curtain walls of precast concrete achieve dramatic interplay of light, color and texture

The unbroken whiteness of the end wall is in striking contrast to bright, blue-green spandrel panels of the sidewalls. And on the broad base wall below, light and shadow form bold patterns across the sculptured facing. 42 stories, and the tallest office building in the West, the Southland Life Tower is part of a $35,000,000 project in downtown Dallas, Texas.

It's all done with concrete panels. For the end walls and base, exposed quartz aggregate and white portland cement give surface roughness and brilliance. The smooth-faced spandrels are vitreous tile cast in concrete. The total effect is one more example of the unlimited design possibilities in today's new forms of concrete.

Architects and Engineers: Welton Becket, FAIA, and Associates, Los Angeles and Dallas. Consulting Architect: Mark Lemmon, AIA, Dallas, Texas. Structural Engineers: Murray Erick Associates, Los Angeles.

FOR STRUCTURES... MODERN **concrete**

PORTLAND CEMENT ASSOCIATION

816 West Fifth St., Los Angeles 17, Calif. • 903 Seaboard Bldg., Seattle 1, Wash.
721 Boston Bldg., Denver 2, Colo. • 213 North First Ave., Phoenix, Arizona
425 Newhouse Bldg., Salt Lake City 11, Utah • Mezzanine, Placer Hotel, Helena, Mont.

A national organization to improve and extend the uses of concrete

From follies to furniture without batting an eye

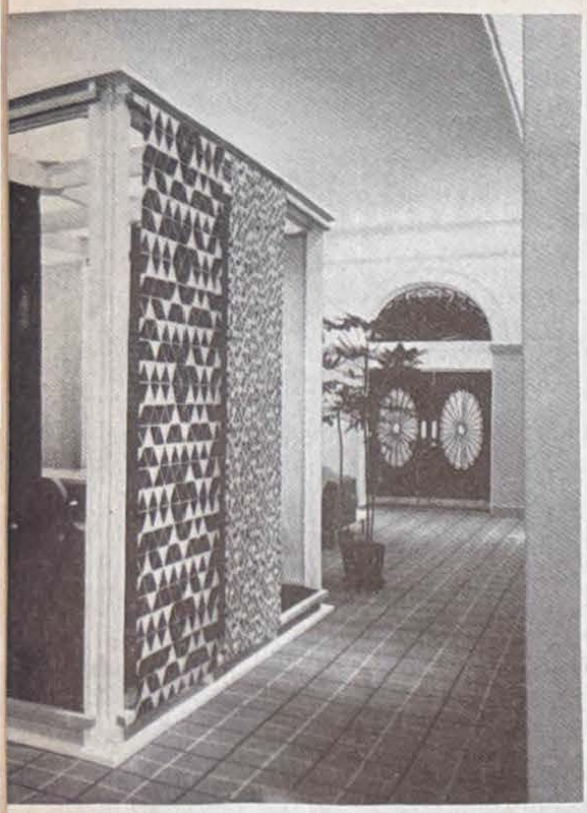
Herman Miller Furniture Co. Showroom
San Francisco, California

•

ALEXANDER GIRARD
Architect



HERMAN MILLER SHOWROOM



STRETCHED FABRIC PANELS wall off office space in foreground of showroom.

TURNING a baudy Barbary Coast music hall into a furniture showroom ordinarily would be accomplished by liberal use of the battering ram and crowbar. Here is a refreshing change of pace. The fancy lunette window and door glass, plaster frieze work, marble floor and iron pillar at the entrance all have been retained and enhanced by white paint in the interior and bright colors of purple, red, orange, blue and gold leaf on the exterior that are as enticing as the old Hippodrome must have been.

The result is not only a most unusual showroom but also a highly effective backdrop for the contemporary furnishings. The architect has used the company's fabric line to define furniture groupings, designed by Charles Eames and George Nelson. Fabrics hang from brass rods suspended some distance below the ceiling on almost invisible guy wires, serving to define the space without cutting it up. Groups of fabrics and furniture are keyed together by color, further organizing the various areas of the room.

The architect, who is responsible for the company's fabrics and wallpaper collection, also designed the carpet, a lightly crisscrossed pattern simulating the simplicity of hard flooring. Pavilion walled with panels of stretched fabric closes off office space from the showroom and doubles as a display section.

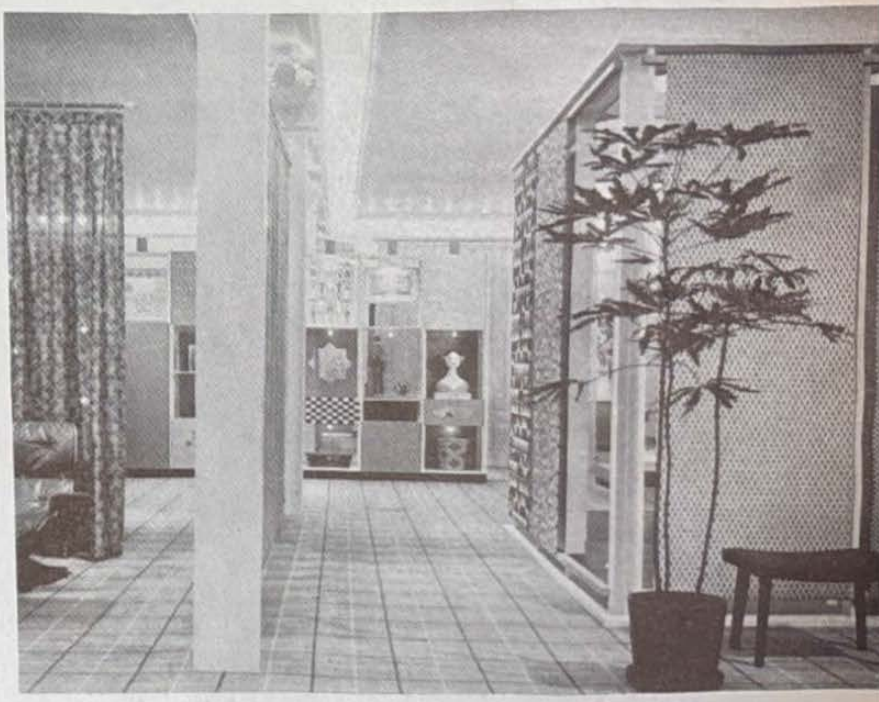
LINEN FABRIC forms casement grill defining one furniture grouping.

Charles Eames photos



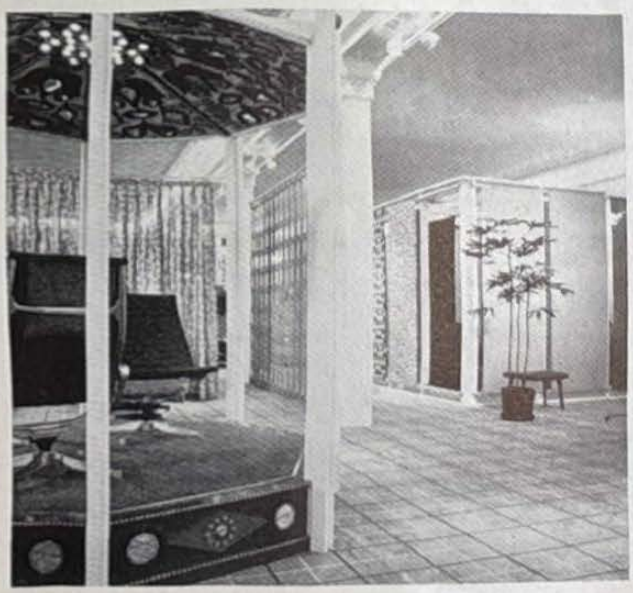


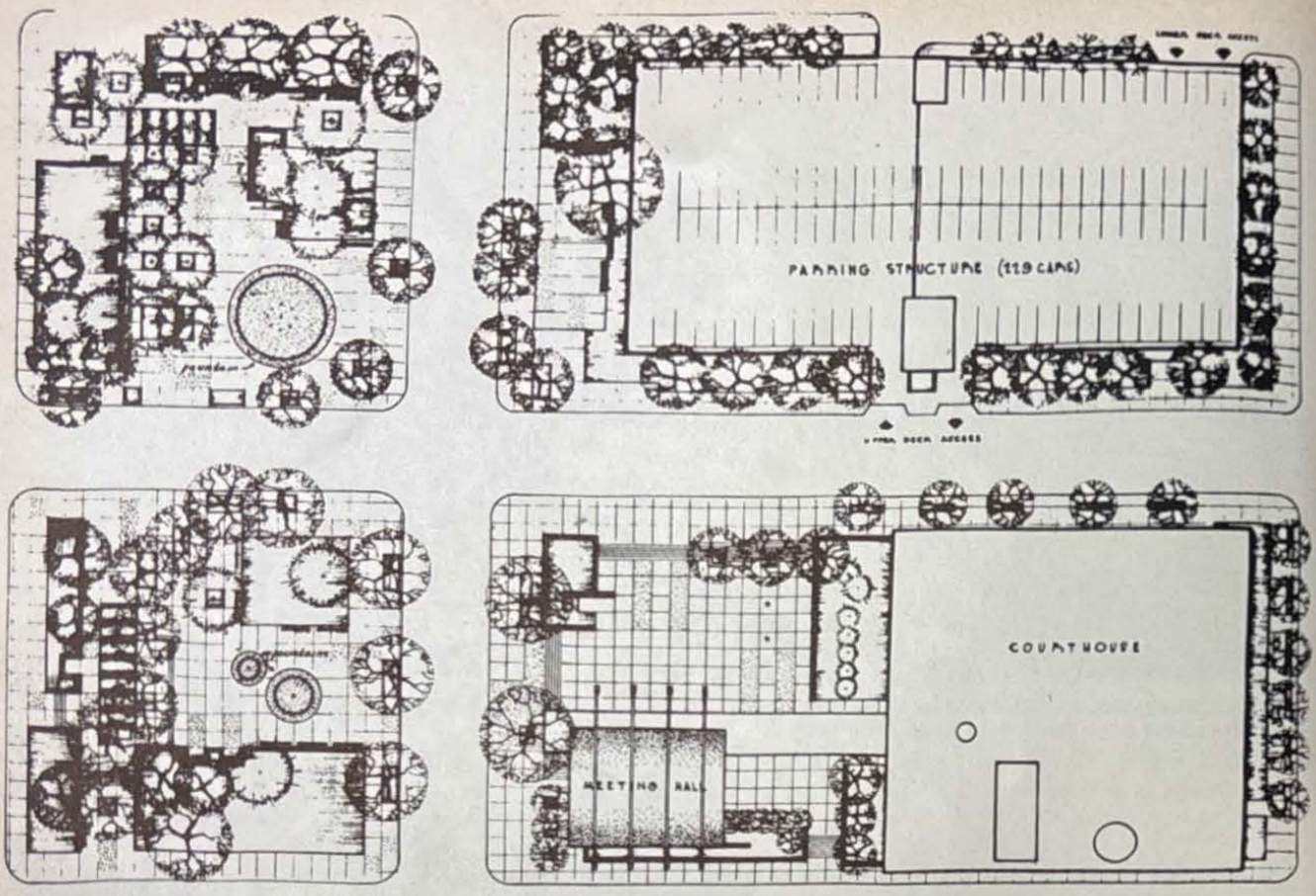
PURPLE AND RED CAROUSEL embellished with mirrors, beading and ornamental finials (toilet floats painted red) serves as main stagelike display unit.



EIGHT-PANEL STORAGE WALL with individually lit sections displays collection of folk art.

THEATRICAL LIGHTS studding cornices of carousel are reinforced by adjustable clip-on spotlights.





An auspicious return to the courthouse square



Lane County Courthouse
Square Development
Eugene, Oregon

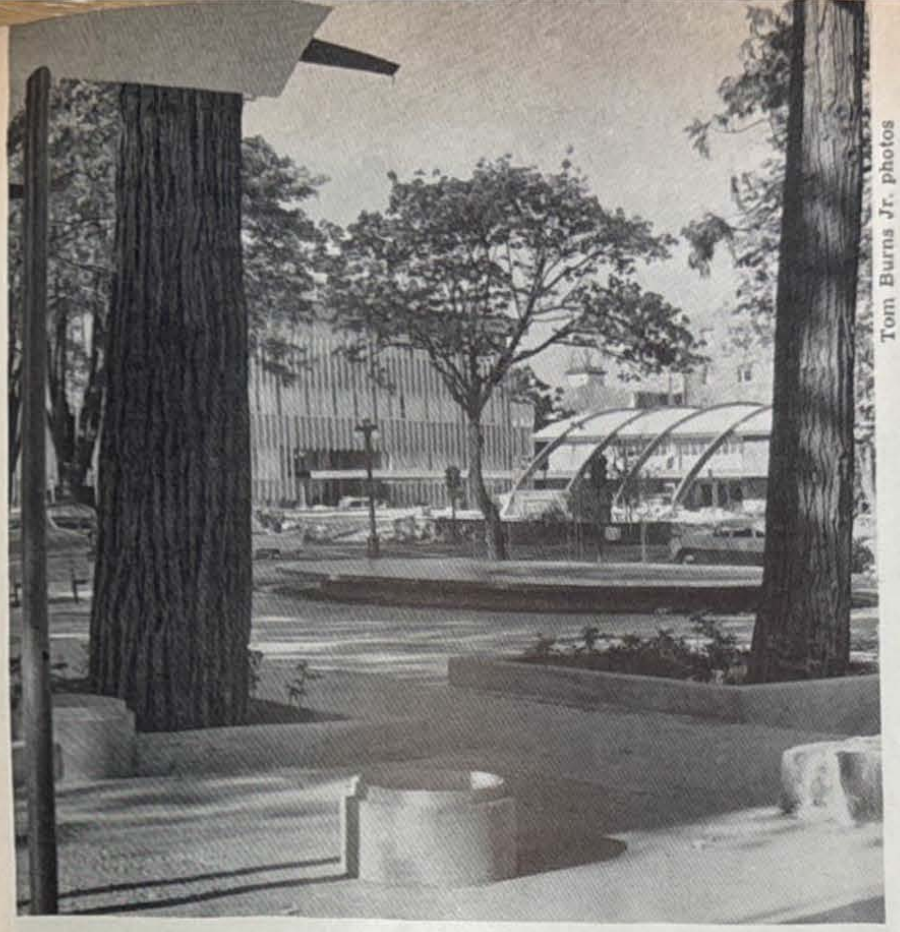
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WILMSEN & ENDICOTT
Architects

GALE M. ROBERTS CO.
(Courthouse)

JOHN M. STEINMULLER JR.
(Square development)
General Contractors

SHELTER in rejuvenated Pioneer Park blocks. Contract included two shelters, three fountains, landscaping around parking structure, new sidewalks and curbs.



Tom Burns Jr. photos

COURTHOUSE is four-story steel structure with glass brick exterior walls and solar screen of extruded aluminum H-sections. Plenums created by suspended ceilings for ductwork extend several feet beyond window line to provide walkways for washing glass and facilitate intake of fresh air into heating and cooling units. Meeting hall of structural steel and glass is heated and cooled from central mechanical plant in courthouse basement.





COURTHOUSE, meeting hall, parking structure and rejuvenated park blocks are the nucleus of a future civic center for Eugene and Lane County set in the heart of downtown. Long-range plan includes a future city hall, state office building, federal office building, art and historical museum and public auditorium.

Although the exterior of the courthouse—the aluminum facade in particular—is a controversial subject among Oregonians, there can be no doubt that the overall development has transformed this section of the city into a visually attractive array that augers well for the future construction.

Extensive use of a native stone, around the courthouse and within the park blocks ties the various elements together. Of special interest is the large amount of artwork assigned or planned, including murals, sculpture and mosaics. A Lane County Art Commission appointed by the county commissioners is charged with the responsibility of recommending appropriate art and proposing specific artists for each project. The commission has recommended 23 specific projects with a total budget of $39,500. Approximately half of these commissions totaling $21,000 have been awarded so far, all to Oregon artists.

Cost of the project was $2,146,350 for the courthouse and meeting hall; $199,400 for the 229-stall double deck parking structure; $79,886 for rehabilitation of the two park blocks; $99,589 for all furniture in the courthouse and meeting hall.



STAIRWAY creates visual pattern of its own, highlighted by incandescent spots.

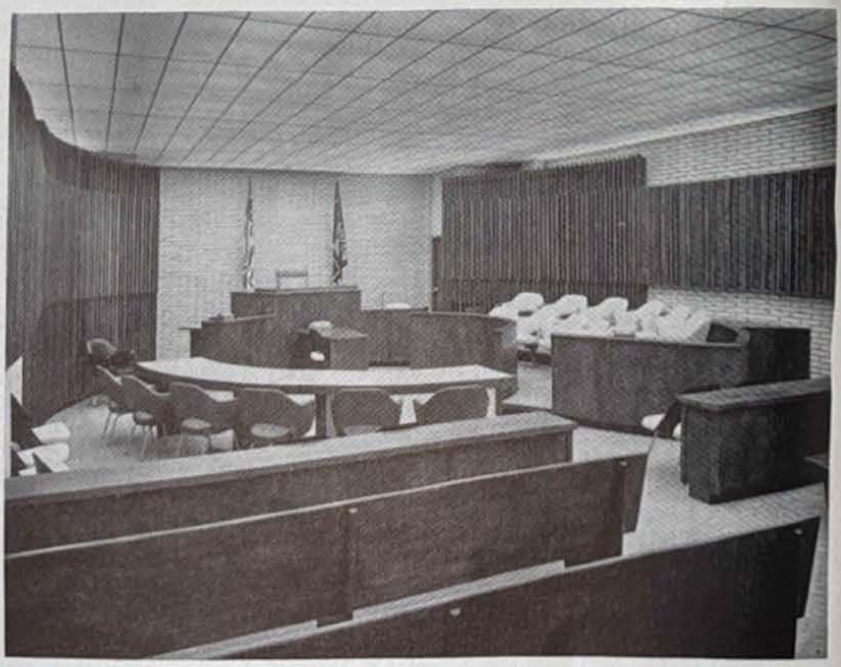
Seemingly small details stamp the interior of the Lane County courthouse as a building eminently successful in expressing the function of government in a democracy, for and by the people. Departments with the heaviest pedestrian traffic loads—sheriff, extension service, health, education and argiculture—are located near on-grade entrances at the first floor level. Sidewalk entrances are especially appreciated by those with small children and infants headed for the health department. A half level up is another public area where the spacious lobby in front of the counters was specifically designed to handle peak loads at taxpaying time.

Courthouse is a 150-ft. square building with four floor levels plus a full basement. This shape lends itself to locating large public spaces within its center, such as lobbies, corridors and courtrooms. Perimeter around these large open areas has been utilized for offices, jury rooms and other smaller spaces requiring outside light. Columns of the structural frame are spaced for courtroom widths so that additional courts can be created by remodeling existing spaces. When and if a separate office building is needed, it will be built across the street with a connecting link at the second, third and fourth floors, already provided for in the present structure.

Building is of structural steel, fireproofed with vermiculite plaster on metal lath. Corrugated steel panels with steel reinforcing mesh and electrical raceways span between the steel floor beams and purlins.



CLERICAL PORTION is primarily service section for populace. Here friendliness, efficiency and accessibility is basic design philosophy. Public space where taxes are paid, licenses obtained, etc., is half level up from main entrance and is treated much like bank lobby.



COURTROOMS reflect desire to produce atmosphere of dignity, justice and unity, implemented by design and materials that accent importance of individual. Soundproofing has been achieved by placing courtrooms in interior, by brick partitions and sound-absorbing screen of veneer hardwoods with fiberglass battens behind oak slats.

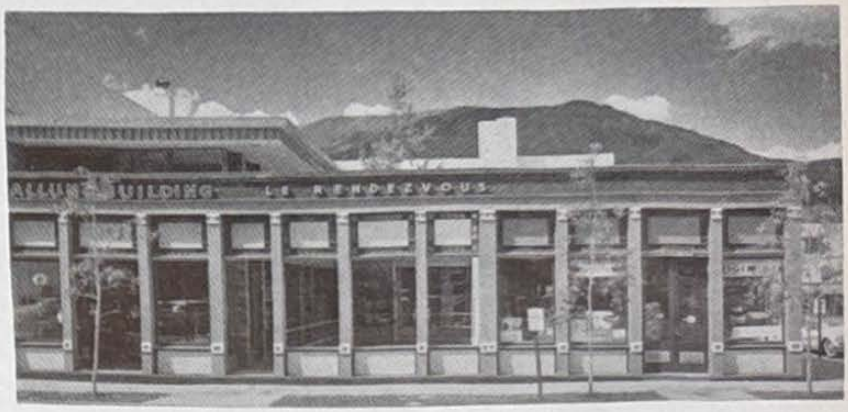
Gallun Building
Aspen, Colorado

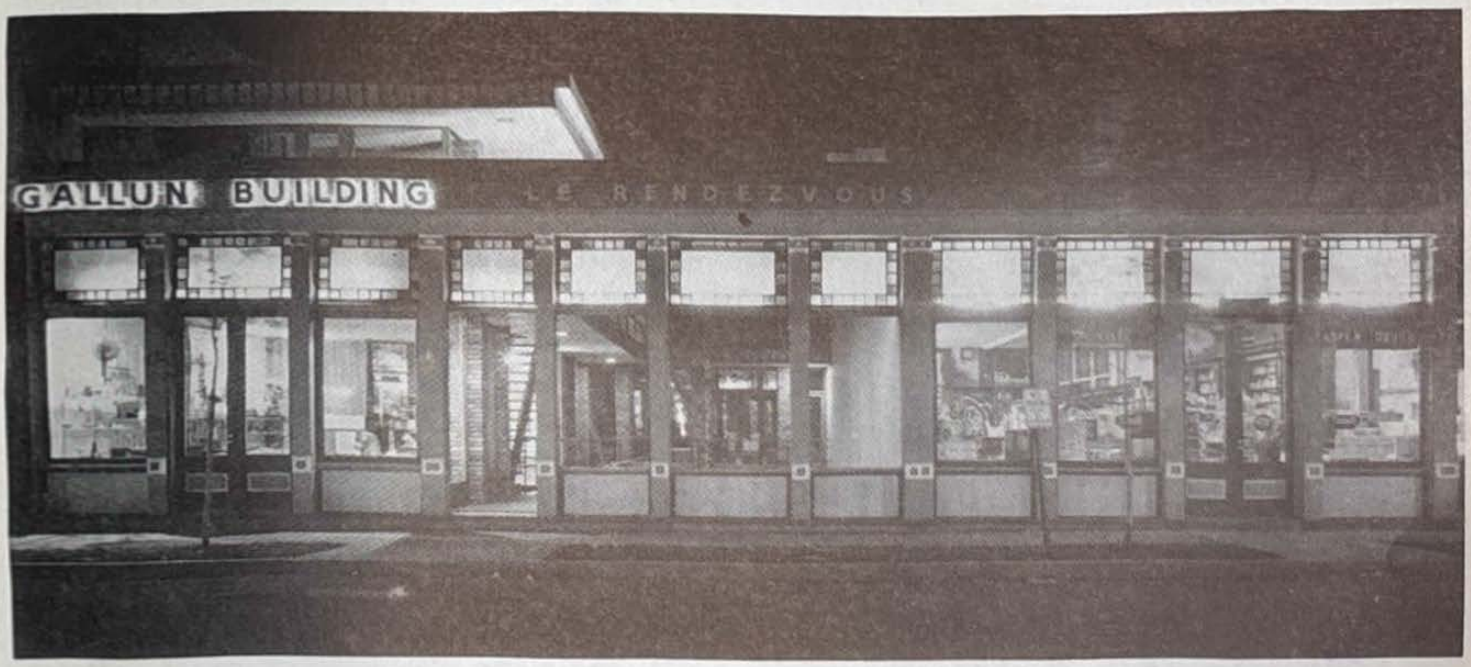
Modern commerce behind facade of mining frontier

FREDRIC A. BENEDICT
Architect

RICHARD WRIGHT
General Contractor

A SHINY, modernistic structure, either within or without, would have been out of place in this town which is seeking to turn back the pages of time as a restful setting for the cultural summit meetings which draw business executives and artists to the Aspen conferences every year. Flavor and nostalgia of the silver rush era has been retained by emphasizing the old-fashioned wood-columned facade, part of which serves as a false front for





a restaurant below the street level.

Drugstore was restored to the appearance of the 1890s. Adjoining section, which was burned out by fire some 40 years ago, was turned into the sunken restaurant with landscaped courtyard. Small shops open off a passage level with the sidewalk and a new floor of rental office space was constructed above the stores. Mechanical engineer for the restoration and modernization was A. M. Riley Jr.; landscape contractor, Henry Pedersen.

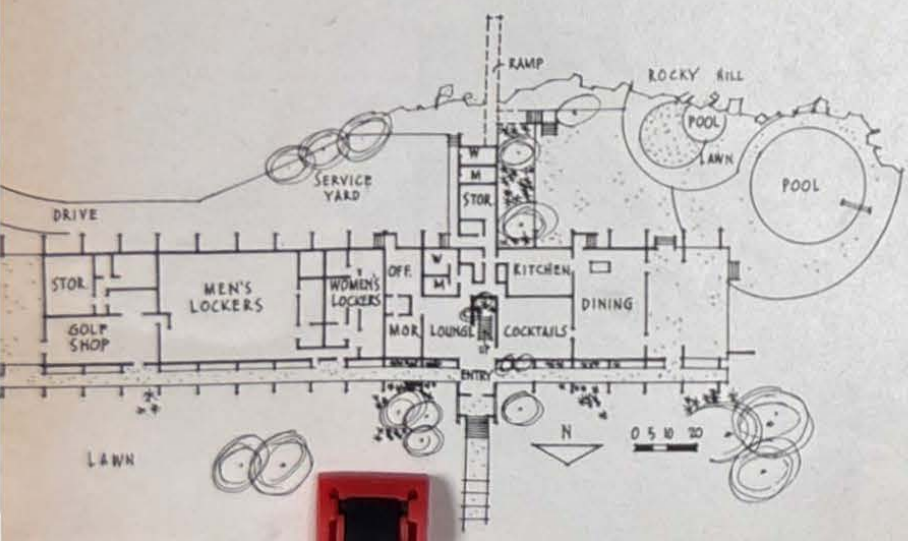


Art Hupy photos



Julius Shulman photos

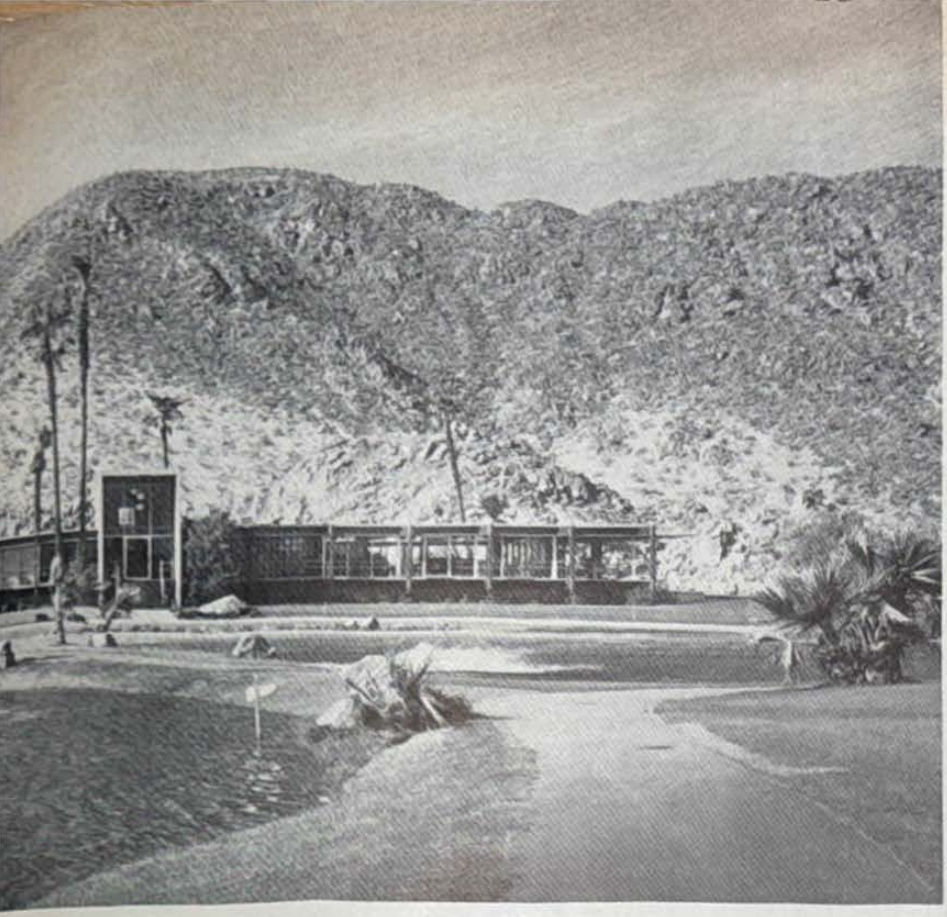




A compatible addition to the desert

THIS STRUCTURE stretches out along the base of the San Jacinto Mountains in the Palm Desert to take advantage of maximum protection from prevailing winds and sun. Housing a golf store, locker room, lounge and restaurant seating 75, it is elevated 4 ft. above the golf course level to provide a better view; in addition, this resulted in an economic factor since subcontractors were enabled to install wiring, plumbing and air conditioning without going into any walls.

Most of the exposed woods are stained to harmonize with the desert and to insure minimum maintenance. The overall decor suggests informality and introduces a play of color against the wood background. Landscaping was done by Edward Susalla; interior design by Vicki Stone; furniture by Gerald McCabe.



Indian Wells Country Club
Palm Springs, California

•

VAL POWELSON
Designer

GEORGE BUCCOLA
General Contractor

DINING ROOM overlooks pool area nestled in rock bank to give wind protection.





OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete; frame: laminated beams—(Summerbell) Fluor Products Co.; roof: detailed 3x6 Douglas fir; floors: 5/8-in. plyscore over laminated beams and joists—United States Plywood Corp.

Exterior Finish: stained wood—Samuel Cabot, Inc.; expanded metal sunscreens—United States Gypsum Co.

Roof Surfacing: built-up with granite gravel topping — Pabco Division, Fibreboard Paper Products Corp.

Windows: louvered—Louvre Leader, Inc.

Doors: exterior: aluminum—Rigid Metal Products Corp.; interior: hollow core ribbon grain mahogany.

Floor Surfacing: vinyl asbestos—Kentile, Inc.; mosaic tile—General Tire & Rubber Co.; wool carpeting.

Insulation: 4-in. aluminum and fiberglass—Johns-Manville Corp.

Interior Finish: stiple enameled plaster—Sherwin-Williams Co.; redwood.

Ceilings: resin stain—Monsanto Chemical Co.

Lighting Fixtures: Litecraft Mfg. Pacific Corp.

Heating: gas—Arkla-Servel Corp.

Air Conditioning: 25-ton gas units—Arkla-Servel Corp.

Plumbing and Sanitary: American-Standard.

Total Area: 9,860 sq. ft.

Total Cost: $112,000.

Cost per Square Foot: $11.37.

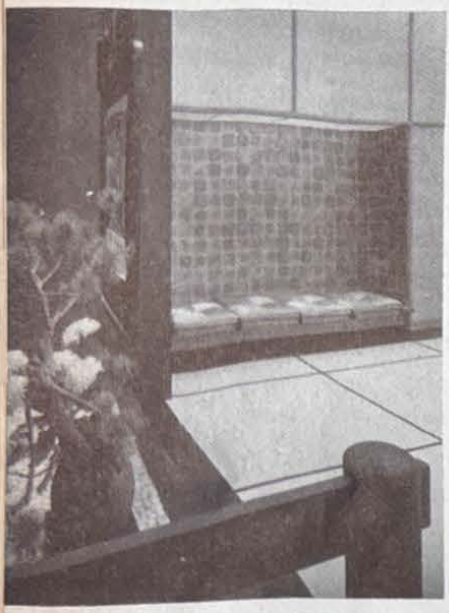
Date of Completion: May 1959.

Japan Airlines Office
Seattle, Washington

•

TERRY & MOORE
Architects

Oriental gem in downtown showcase



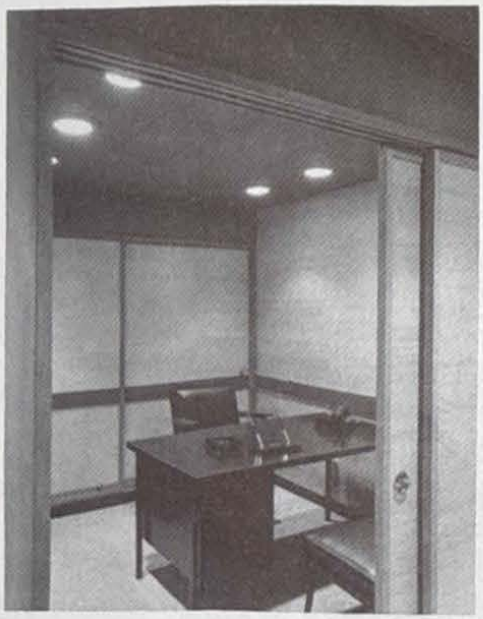
RECESS for seating breaks long wall surface, relieves tunnel effect.



SECOND RECESS provides space for displaying art objects. Legendary symbols decorate floor.



OBI PANELS screen desks that are bound to have cluttered appearance.



SLIDING PANELS covered with grass cloth define manager's office placed in rear to shorten room.

CONVERTING this long, narrow space — 62x18 ft. — into an asset, the architects have created an appropriate setting for the business at hand: selling the services of Japan Airlines. The result is a delightful break in the business structures on a busy downtown street that surround the ticket office and might otherwise almost completely overshadow it.

To avoid a tunnel-like effect, the manager's office has been placed at the rear, cut off by sliding panels. Secondary wall screening, decorative obi panels in front of some of the desks and two recesses also interrupt the wall surfaces. In keeping with the simplicity of Japanese design, pamphlets and other storage materials relating to the personnel at their desks are kept in storage units behind sliding panels on both sides for the entire length of the room. Panels are carried full height and covered with grass cloth.

Color selection—dark stained wood with light value inset panels —is reminiscent of Japanese design. Accent panels of dark foil paper are used on the rear wall to help foreshorten the length and provide a dramatic space for hanging art objects. The light floor offsets the simple dark desks. The legendary symbol on the entrance door is repeated inside on the floor. Gold anodized honey light is incorporated throughout the entire ceiling area to insure sufficient illumination at desk level without developing an intense source.



Dearborn-Massar photos

RAISED WINDOW DISPLAY AREA is done with white Japanese rocks in grout. Poster is neatly presented on large wood panel hung on temple cords. Sign is pylon, laminated rough-sawn fir and stained, with black letters mounted on gold leaf panels. Adjacent guardrail is of typical Oriental design.

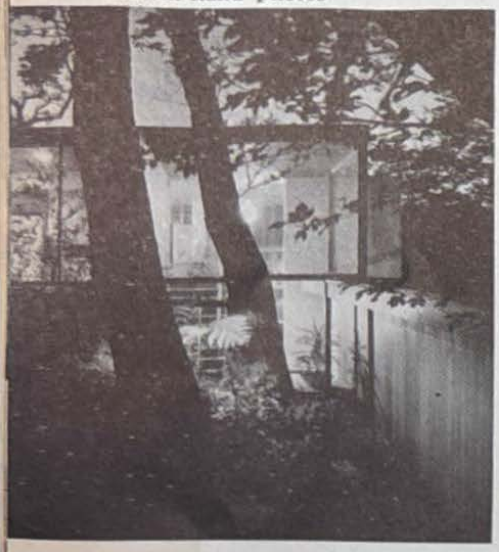
Where architects hang their hats

ROBERT H. SKINNER
Beverly Hills, California

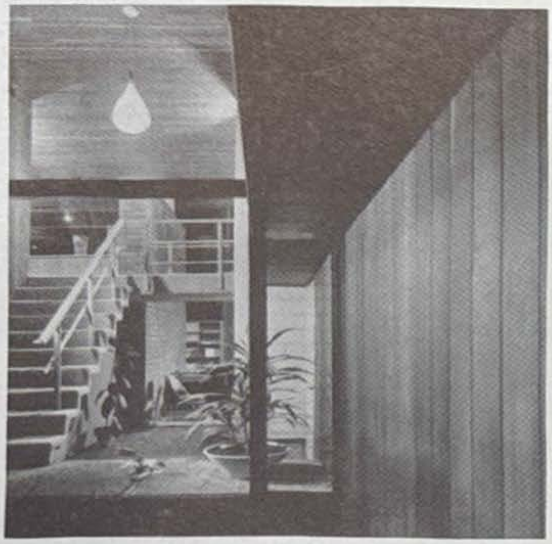


REDWOOD AND STUCCO form exterior of house, set in bank lush with vegetation.

Marvin Rand photos

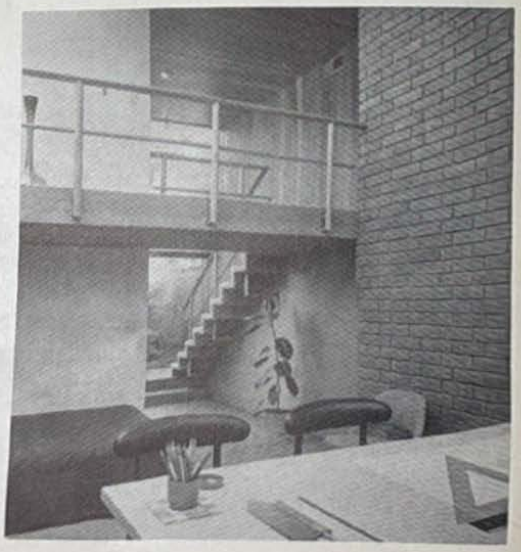


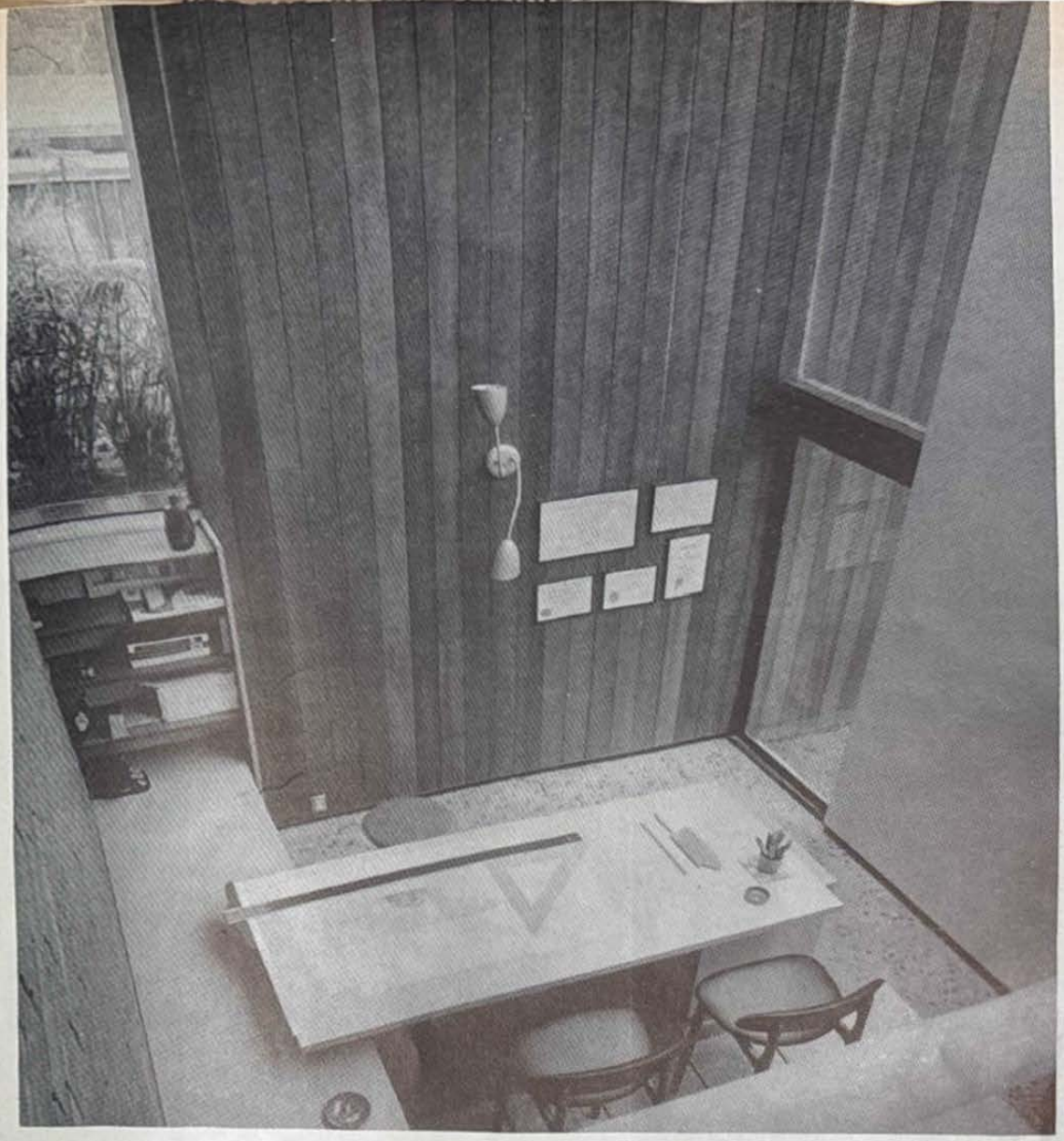
TWO-STORY ENTRY becomes dramatic focal point at night.



STUDIO in background can be entered directly from street level. Redwood wall insures privacy.

FIREPLACE WALL separates studio from living area.





WHEN the architect set about to design a house for his young family of four, he decided to incorporate his own studio. The obvious advantages of convenience and economy, he felt, outweighed the inherent disadvantage of a certain amount of interference, particularly with two active youngsters in the household. The plan he prepared has proved to be a happy solution for all concerned.

To most onlookers, the site was an almost impossible lot—small, sloping and with a tract requirement of a minimum 1,800-sq. ft. structure. By scooping out some of the front slope for a two-story entry, the architect was able to develop 1,950 sq. ft. of space plus a carport and three terraces (landscape architects: Eckbo, Dean & Williams). This arrangement allows the client to enter the studio directly, while a stairway leads to the main living level above. An extension of the hallway off the living room forms a gallery from which family and friends can look in on the studio below without interrupting work schedules or conferences.

As for the boy and the girl, they enjoy their own domain to the north of the kitchen and the two bathrooms: a 20x20-ft. area with two bedrooms which can be converted into one large play area when sliding screens are opened. For good measure, they have their own terrace, complete with sand pit and vegetable garden, supervised from the kitchen.

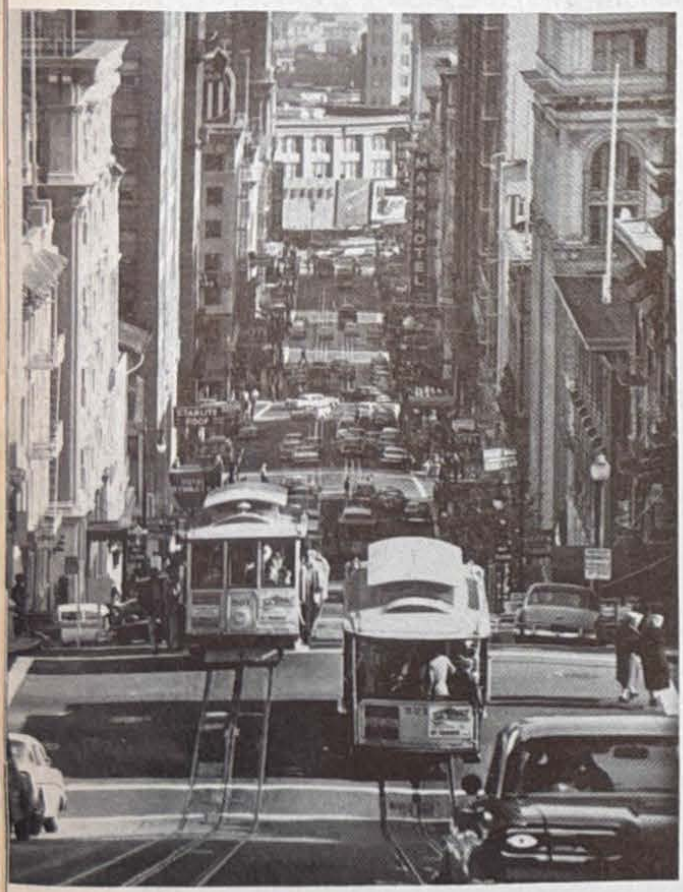
The studio itself seems much more spacious than it actually is because of the two-story volume and areas of glass which are used with wood, plaster and brick walls. A skylight overhead affords plenty of natural illumination.

The face of San Francisco



Photos by Phil Palmer

Cable cars clang over Nob and Russian hills



The city by the Golden Gate is nationally convention-minded this spring. Building contractors (AGC) are bidding farewell as the April issue goes to press only to make room for the architects (AIA), some of whom later will join fellow members of the Construction Specifications Institute in nearby Palo Alto. Those who are visiting her for the first time undoubtedly fall in love at first sight; the others are renewing a romance that never quite dies despite the passing of time. While San Francisco wears many faces well, she is always exhilarating and charming. Here we see her through the eyes of an architectural photographer whose observations over the past two years have appeared in two paperback editions, with two more (one a hardback) scheduled for publication before year's end.

Marina, home of pleasure craft



Skyline—and freeway, of course—from southeast



Row upon row of hillside dwellings



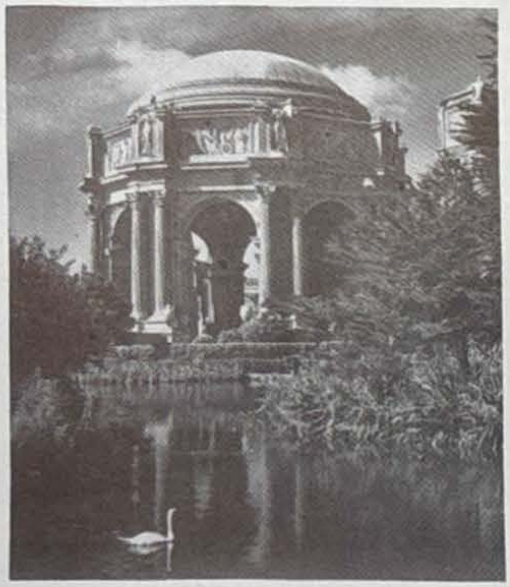
Western addition

Largest Chinese community outside China





Palace of Legion of Honor

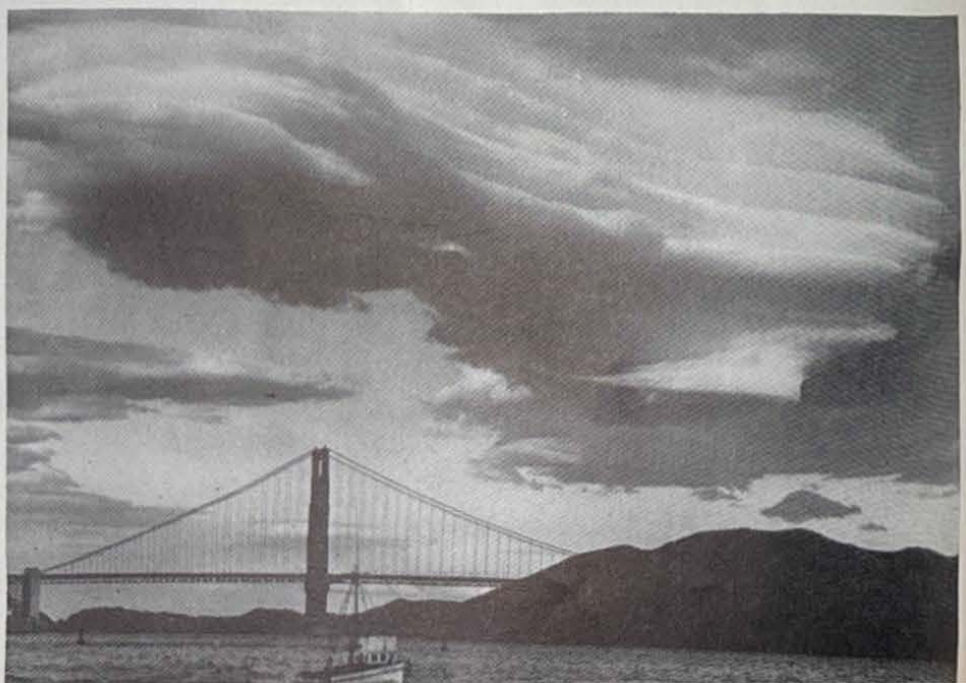


Maybeck's Palace of Fine Arts



San Francisco-Oakland Bay Bridge

Fog over Golden Gate Bridge



by GLENN M. CANADAY

Tenth in a series: Equipment, Tools, Supplies, etc.

Carelessness in job overhead costs can spell disaster

The remaining four divisions of the estimate—Equipment, Tools and Supplies; Temporary Construction and Facilities; Job Organization; and Bonds, Insurance, Taxes and Permits—are usually classified as job overhead. This may be defined as those costs incidental to the work which do not become a part of the permanent construction. Job overhead concerns the particular job under construction and should not be confused with general overhead which applies to the contractor's operation as a whole.

The wider the margin of profit, the more carelessly the contractor may prepare his estimates and get away with it. In a market of tough competition, the contractor must, if he is to be competitive, make his estimate as accurate as possible. This applies to job overhead costs as well as direct labor and material costs. The common practice of adding a certain percentage to the total of subcontractors' bids, material costs and labor costs is risky. The results obtained are no more accurate than if a percentage is used to arrive at the cost of painting or millwork. The percentage method may be accurate enough for preliminary estimates but certainly not for the contractor's bid estimates.

The job overhead sheet should be made up after the bulk of the estimate is completed and after the estimator is thoroughly familiar with the plans, specifications and job conditions. A systematic approach can be achieved by the use of a printed form or checklist. A printed form incorporated as a part of the estimate form is desirable because it makes this part of the estimate routine.

31. EQUIPMENT, TOOLS, SUPPLIES, ETC.

Practice in estimating equipment, tools and supplies for a building job differs from the normal practice used in estimating for heavy and highway jobs. Include in this division of the estimate tools and supplies which are in general use throughout the construction operation. Those items which are used for a limited period of time for a particular operation should be included in the respective divisions of the estimate; for example, costs of shovel and trucks used for excavating a basement should be included in excavation. The following subdivisions may be used as a guide:

31.01: Small Tools. Include cost of all hand tools. Items in this subdivision are considered expendable and include shovels, rakes, wrenches, hammers, wrecking bars, etc.

31.02: Small Power Tools. Include cost of all small power tools such as skill saws, drills, grinders, chipping hammers, screw drivers, electric hand planes, routers, sanders, etc.

31.03: Concrete Mixing Equipment. Include cost of batchers, mixers, vibrators, buggies and wheelbarrows, hoppers, buckets, chutes, elephant trunks, etc.

31.04: Towers and Hoists. Include depreciation or rental costs for equipment and labor for erection and dismantling.

31.05: Compressors. Include rental or depreciation costs of compressors, hoses, paving breakers, jackhammers, chipping hammers, etc.

31.06: Power Saws and Woodworking Equipment. Include costs of radial saws, table saws, jointers, band saws, etc.

31.07: Welders. Include rental or depreciation costs of welding equipment—electric welders, cables, acetylene torches, hoses, etc.

31.08: Light plants. Include depreciation or rental of portable light plants used for general construction requirements.

31.09: Pumps. Include depreciation or rental of pumps, intake hoses and discharge hoses.

31.10: Scaffolding. Include cost of scaffolding equipment.

31.11: Automotive Equipment. Include depreciation or rental of trucks, pickups, buses and automobiles used for general hauling and transportation.

31.12: Heavy Equipment. Include depreciation or rental costs of cranes, fork lifts, loaders, etc.

31.13: Special Equipment. Include cost of specialized equipment not covered by other classifications.

31.14: Expendable Supplies. Include in this classification all miscellaneous expendable job supplies such as rubber boots, brooms, brushes, drills, fire extinguishers, first aid supplies, water cans and paper cups, sanitary supplies, tarps, goggles, saw blades, etc.

31.15: Fuel and Maintenance. Include cost of fuel, grease and oil, repair parts and maintenance labor of all equipment items in Division 31. Calculate requirements for each item individually.

31.16: Freight, Loading and Unloading Equipment. Costs may be included under this subdivision or under Division 30 (Freight and Drayage).

32. TEMPORARY CONSTRUCTION FACILITIES

32.01: Contractor's Job Office. The cost of this item varies considerably between jobs. It may consist of no more than a $100 charge for moving a small building from a completed job to the new one; or it may require the expenditure of thousands of dollars.

32.02: Engineer's Job Office. Review the specifications carefully for requirements.

32.03: Warehouses and Sheds. Include all costs of warehouses, storage sheds, tool sheds, saw sheds, warmup sheds.

32.04: Sanitary Facilities. Include costs of buildings, plumbing, septic tanks or connection to sewers and rental of temporary toilets.

32.05: Barricades. Include all purchase, labor and rental costs for fences, sidewalks, barricades, flares and their maintenance.

32.06: Signs. Review specifications for requirements. Include costs of materials, painting, lettering and installation.

32.07: Temporary Roads: Under this subdivision include costs of temporary roads and graveling of work areas.

32.08: Temporary Water Service. Include all costs of water lines, valves, storage tanks and purchase cost of water for construction and overhead operations.

32.09: Temporary Power Service. Include costs of transformers, poles, distribution lines, service panels and outlets, meters, lighting fixtures, extension cords, light bulbs, purchase cost of electricity and all labor involved. In isolated areas, installation of gasoline or diesel powered light plants may be required. If so, include all fuel and operation costs. Review

the specifications to determine testing requirements for elevators and other equipment. List requirements for each temporary building, power supply for all items of contractor's equipment and lighting of working and building areas in detail. Temporary power is often an expensive overhead item and deserves the careful attention of the estimator.

32.10: Temporary Heating and Ventilation. Under this heading include all heating costs for temporary buildings and buildings under construction. If the job is large and considerable heating is required, use a scientific approach to determine equipment and fuel requirements. The local weather bureau can supply you with temperature and wind velocity records upon which to base your calculations. Analyze the comparative costs of equipment and fuel for various methods of heating. List costs of heating equipment, fans, fuel lines, storage tanks, fuel and installation and maintenance labor. Heating of concrete aggregates and water is usually included in Division 4 (Concrete).

32.11: Weather Protection. Include costs of materials and labor employed to protect construction materials and operations from inclement weather. List all materials and labor costs of enclosures, tarps, snow removal, temporary doors and windows, etc.

32.12: Office Maintenance. Include costs of materials and labor or hire of cleaning service.

32.13: Final Cleanup. Include costs of equipment, materials and labor to clean up building and site preparatory to turnover. Glass cleaning is included in Division 16. Include costs of cleaning floors, hardware, site, etc., not the direct responsibility of subcontractors.

33. JOB ORGANIZATION

This division should contain labor and material costs required for job supervision, engineering and accounting operations, travel, transportation and overtime costs.

33.01: Superintendence. Include salary costs for project manager, superintendents and general foremen. Craft foremen are usually included in direct labor costs.

33.02: Engineering. Include salary costs for all engineering personnel required—project engineer, office engineer, field engineer and survey crews.

33.03: Accounting. Include salary costs for office manager, accountant, clerks, timekeeper, watchman, expediters, warehousemen and stenographer.

33.04: Office Equipment. This subdivision should contain depreciation or rental costs of office equipment and furniture required for all job overhead operations. Include costs of typewriters, adding machines, calculators, check writers, copying machines, file cabinets, desks, drawing tables, chairs, etc.

33.05: Engineering Equipment. Include costs of transits, levels, rods, chains and any required testing equipment.

33.06: Expendable Equipment. Include costs of all miscellaneous expendable equipment and supplies such as desk trays, wastebaskets, list finders, pencil sharpeners, pens and pencils, clipboards, ledger and other accounting books, stationery, printed forms, engineering and accounting pads, graph paper, blueprinting costs, postage, etc.

33.07: Photographs. Review the special conditions section of the specifications for requirements of architect or owner.

33.08: Telephone and Telegraph. Include costs of telephone installation, monthly charges, toll calls, telegraph and cable costs and intercom equipment and installation. Almost any job that requires over a month to complete warrants the installation of a telephone. Estimate the number of toll calls carefully. This item can amount to an expenditure of several thousand dollars on large jobs.

33.09: Laboratory Tests and Special Engineering Services. List costs of laboratory testing and special engineering services that may be required of the general contractor. This classification includes testing of cement, aggregates, concrete cylinders, curing compounds, etc.; also, soil bearing tests and borings, pile loading tests and floor loading tests. Check specifications carefully to determine responsibility for each item.

33.10: Drawings. Include the costs of extra sets of specifications and drawings and the labor and reproduction costs of "as-built" drawings if required. Review specifications carefully. As-built drawings can be costly.

33.11: Living Allowances. Include living allowances and moving costs for supervisory and key personnel.

33.12: Supervisory Travel. Travel expenses for both job and head office personnel chargeable to the job should be included in this classification.

33.13: Direct Labor Travel, Transportation and Subsistence. Include all costs of travel and subsistence for direct labor. If you are building a job in an unfamiliar area, investigate local conditions, availability of labor and union agreements carefully. These costs may add as much as 30% to the basic cost of labor.

33.14: Direct Labor Overtime. The nature of the job, completion time, location and the local labor supply dictate overtime requirements. Analyze conditions carefully to determine the amount of overtime allowance for the various crafts.

33.15: Entertainment. Large jobs may require expenditures for entertainment. Calculate the cost on a monthly basis.

34. BONDS, INSURANCE, TAXES & PERMITS

Since most items in this division are based upon total contract price or labor costs, except for addition of the profit and overhead, this is the last part of the estimate to be completed.

34.01: Surety Bonds. Include costs of performance, payment and maintenance bonds.

34.02: Subcontract Bonds. If you plan to require bonds from any of your subcontractors, include costs here. Subcontractors' rates are normally higher than general contractors' rates.

34.03: Builder's Risk Insurance. Review the specifications to determine what part, if any, of this classification of insurance is carried by the owner. Complete builders' risk policies protect the general contractor, his subcontractors and the owner from fire, tornados, floods, wind, earthquake, vandalism, theft and a variety of other risks. Protection should cover construction materials, the building structure, temporary buildings and facilities and equipment on site.

34.04: Marine Insurance. Include costs of marine insurance to protect yourself from loss or damage of materials and construction during shipment.

34.05: Building Permits. Include costs of building permits, street usage permits, inspection fees, etc.

34.06: Business Taxes. Include costs of taxes imposed by local or state governments.

34.07: Personal Liability and Property Damage Insurance. Review specifications carefully for requirements. This insurance may be purchased as a part of the builder's risk policy based on the total contract value or on a premium based on value of labor.

34.08: Labor Taxes. Most contractors apply a percentage factor containing all taxes and indirect charges to their total labor figure to arrive at cost. Included are workmen's compensation, federal and state unemployment insurance, social security payments and payments made by agreement with labor unions for retirement, health and welfare and tool allowance. Add for increased costs of risky work.

The home's welded steel frame utilizes light beams and columns on 10-foot centers, with clear spans up to 30 feet. Gerald Weisbach assisted in design; consulting engineer was William Porush; general contractor was Frank McCauley; steelwork by Independent Iron Works, Inc.



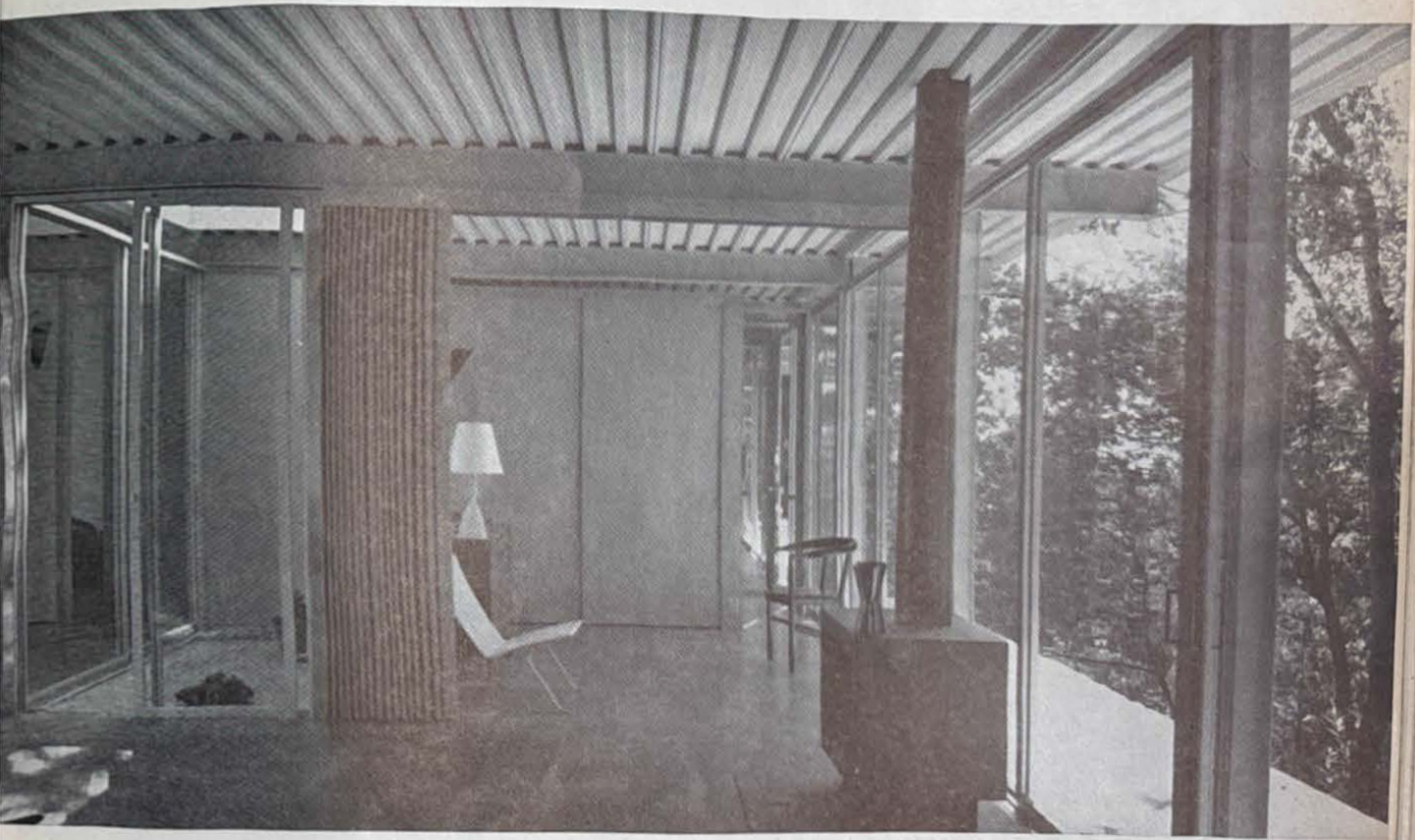
For contemporary homes Soriano designs with steel



Few architects specializing in the residential field have exercised so profound an influence as Raphael Soriano, AIA. Recipient of many honors, Soriano was again recognized by an Award of Merit in the recent *Sunset*—AIA Western Home Awards competition.

The award-winning home, located in Mill Valley, California, has a modular steel frame which carries the living area on a single level out over a steep slope—avoiding the usual grading, and preserving the site's magnificent trees. And not only was the steel framing economical, but it went up fast. The steelwork for this and a neighboring home was erected in only a day and a half.

In Soriano's words, "It has long been my opinion that the modular steel frame offers the greatest flexibility for the design of both custom and tract homes. With this system we can suspend the structure over a hillside or include an open patio within the home without losing the delicacy of concept so characteristic of steel."



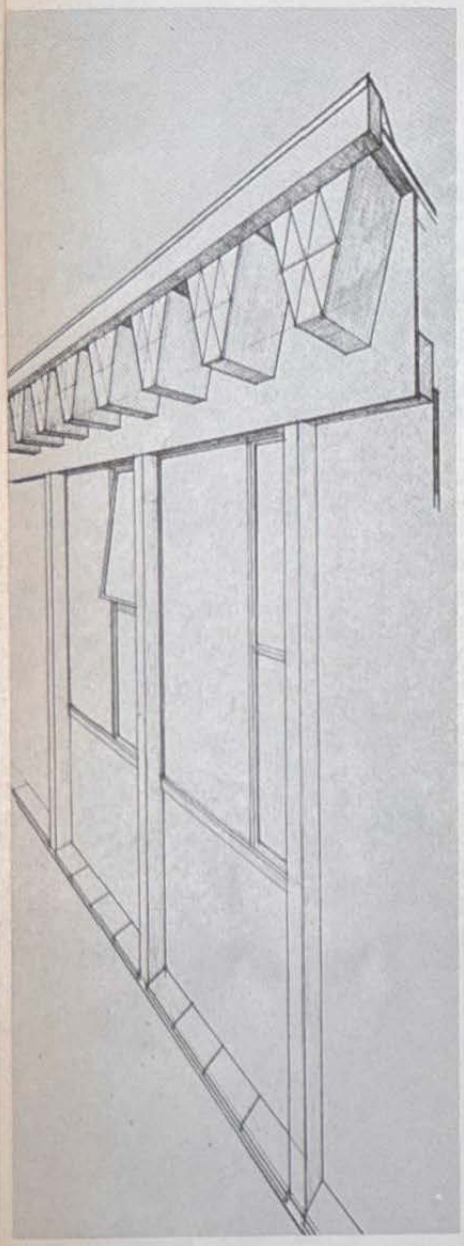
ng, open spans, the absence of conventional erior walls, and the lavish use of glass give this 500-square-foot home the spacious feeling of a ch larger residence. Steel decking provides an eresting ceiling pattern. Plastic domes admit ht to inner areas.

You can obtain a free copy of our booklet, "Light Steel Framing," describing homes and other light-occupancy structures, by writing to Publications Department, Bethlehem Steel Company, 3494 Rincon Annex Station, San Francisco 19, Calif.

BETHLEHEM STEEL
Pacific Coast Division
General Offices: San Francisco

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SECTION ENDS are blocked and faced with tile. All glass on job is set in aluminum frames, fixed as well as movable vents.

Light framing system makes U.S. debut

A plywood framing system similar to some steel floor decking is having its first industrial use in the U.S. in a combination factory and showroom nearing completion in Sausalito, Calif., for Heath Ceramics. Used for more than five years in England in the construction of hundreds of buildings, the prefabricated units are being introduced in the Bay area by Berkeley Plywood Co.

Architects Marquis & Stoller in association with Edith Heath and engineer William B. Gilbert "laid out a factory in strict accordance with the production flow of materials from raw clay to finished dinnerware. At the same time, the surroundings for employees and visitors are intended to be extremely pleasant and consistent with the high esthetic standard maintained in the design of the products."

Restrictions of economy and versatility—possible future resale or alteration—dictated an inexpensive, long span framing plus a panel system on exterior walls with a certain degree of changeability. Trofdek seemed to be a logical answer to the first requirements for several reasons: it goes into place quickly (installation time is from one-tenth to one-fourth that of conventional roof joist method); it provides raceways for utilities; it can be left exposed; and it is easily punctured for skylights.

The V-shaped troughs are composed of butt-jointed, butt-plated plywood stapled to scarfed 2x6s, with all joints made of waterproof resorcinol-type glue. Available in panels of 16, 32 and 48 in., the trough varies in depth from 5¾ to 15½ in. A 50-ft. span sags only ½ in. under its own weight, indicating its relative strength.

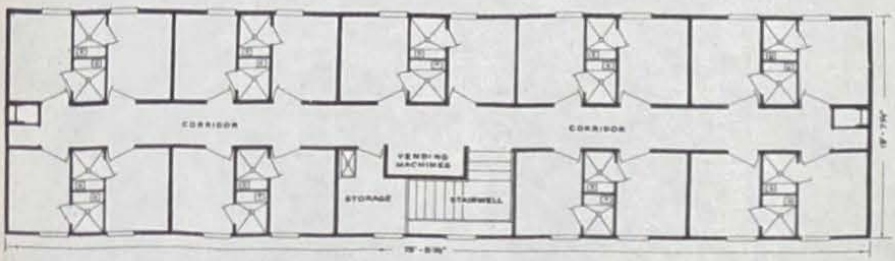
Exterior wall system used on this project is a sandwich panel having asbestos-cement sheets on both faces and a cane fiber insulation core. Plywood is substituted for inside faces where desirable.

FACTORY AREA exceeds 15,000 sq .ft., excluding entrance and interior courts (landscape architects: Royston, Hanamoto & Mayes). Raised section in left rear will house kilns for firing stoneware and tiles. Left side of roof already has been sheathed in ⅜-in. plywood.





EXTERIOR WALLS of porcelain enamel on steel can be supplied in range of colors.



AIRWAYTE FLOOR PLAN

Curtain wall provides stopovers for air travelers

Pullman type accommodations for air travelers awaiting plane connections, for a few hours or overnight, are being planned by Airwayte International, Inc., San Francisco, developer and patent owner, and the Hotel Division of Hotel Corporation of America, Boston, which will operate them.

Airwayte units consist of 18 compartments standing 9 ft. above the ground and reached through a center base housing lobby, stairwell, electrical outlets and plumbing. Base occupies a 16x19-ft. area, small enough so that it can be erected in areas where space is at a premium.

Exterior walls will be porcelain enamel on steel. The steel fabricated curtain wall panels will be 2⅝ in. thick and contain fiberglass insulation. Interior panels will be vinyl coated with a patterned, scratch-resistant finish. Compartments measure 7½x6 ft. Each will be soundproof and contain a bed, desk, toilet, shower, air conditioning, radio, telephone and call system for flight departures. Entire Airwayte will be 75 ft. long, 20 ft. wide and 21 ft. high.

American Bridge Division of United States Steel Corp. will construct these unusual hotel units. First two structures will be erected at Washington National Airport early this year. Contracts for units at other airports will be let on a franchise basis to builders with completed Airwaytes then leased to the hotel firm to equip and operate.



MAXIMUM COLUMN SPACING

to facilitate material handling throughout warehouse has been achieved by using 1,011 glued-laminated wood beams and girders in this Montgomery Ward distribution center in San Leandro, Calif. The 600-ft. beams were erected by using two 25-ton cranes. Glued laminated girders were set longitudinally atop rows of columns. Beams were set across girders to provide panelized system. Roof was erected prior to setting up of building's 6-in. concrete tilt-up walls. Austin Co. designed and constructed 580,000-sq. ft. structure, with Summerbell Roof Structures handling subcontract for beams and girders.

New grading concepts for western pine

In a move to standardize grades o framing lumber and eliminate con fusion, the Western Pine Associatio has adopted grading rules and grad names for dimension identical wit those of the West Coast Lumber In spection Bureau. The new designa tions (Construction, Standard, Utilit and Economy) apply to western pin region woods other than Douglas fi larch and hemlock. Inland Dougla fir and larch already have receive from the FHA interim strength value for joists and rafters on a par wit coast-type fir.

Most mills are expected to chang promptly to the new grades, althoug the old ones may be used optionall until the end of the year. About 30 of the fir from the western pin region already was being shippe under those concepts.

At the same time the association board of directors approved a testin program by independent agencies t obtain new strength informatio which it is hoped will permanentl justify equal stresses for all fir, grad for grade.

In other action at the annual mee ing in San Francisco March 5, th grading committee and board of d rectors authorized new grade stam for resawn product of thick commo and dimensions of all species. Th new stamps will show grade of th original stock and thickness of the r sawn product and was authorized t satisfy FHA requirements on sheath ing and subflooring and to accommo date buyers who order specific f grades resawn.

Los Angeles approves new flooring panel

The Los Angeles Building Bureau has approved use of 2.4.1 t&g fir ply wood flooring panels in lieu of 2x t&g lumber. The new panels, jointed either at the long edges or on all sides, act as combination subfloor and underlayment and may be used over girders spaced 4 ft. on center. Cross blocking is not required with panels using the specially engineered joint.

All panels used under this approval must bear the grading stamp of the Douglas Fir Plywood Association. The new joint was developed late in 1959 and tested in the DFPA laboratories to meet objections to the use of cross blocking. Finished floors, ranging from vinyl tile to carpet to solid oak strips, may be applied directly to the panels.

Masonry industry boosted by insulated wall system

A new low cost, water-repellent insulation reduces heat loss through concrete block walls by as much as 50% and costs only 8 to 12 cents per square foot installed.

In a recent speech in Los Angeles before the National Concrete Masonry Association, Daniel J. Boone, vice president of Zonolite Co., told his audience that the new concept gives the industry the opportunity to sell integrated, insulated walls rather than just block. The product is a development of the Chicago manufacturer.

"It does everything a wall should do and does it better," Boone explained. "In 1960 we can offer a complete building enclosure that is thermally efficient, fast to construct and economical. It is permanent and time-tested, fireproof and weathertight.

"To the designer, it offers a combination of materials which will enable him to take full advantage of the attractive, new block patterns and textures, both as interior and exterior finish, with no sacrifice of design possibilities. To the builder, it offers a combination of materials which reduces construction time and cuts wall insulation costs."

The interior side of the wall can be utilized "as is" without furring out and finishing, thus lowering overall construction costs, Boone commented.

He pointed out that the insulated wall can save the average home owner in combined heating and cooling costs. In the case of twin houses, the uninsulated one required a 4.2-ton air conditioning unit costing $1,900 while the other, insulated with the new material, required a 3.3-ton unit costing only $1,650.

Boone also emphasized that the new insulation offers savings in labor. "Installation goes so fast that one man can insulate more that 500 sq. ft. of wall in about one hour. It pours fast because vermiculite masonry flows freely, without bridging, snagging or balling up around wall ties, pipes or conduits.

"It also eliminates labor involved in shoveling the aggregate into wheelbarrows, hauling it to the installation point and the tedious job of filling the block cores practically by hand."

Earlier there was no water-repellent insulation universally available for filling the concrete block cores. The average insulating materials subjected to moisture absorbed water, becoming soggy, musty and inefficient.



Westinghouse Electric Corp., San Bernardino, Calif. Contractor Donald W. Shaw, Los Angeles, Calif. Constructed with 8 Rilco laminated beams, 5¼" x 29¼" x 56' 5-13/16".

CONTRACTOR FINDS INSTALLATION

Cost Cut 50% with RILCO Wood Beams

Erection cost was cut in half when Rilco laminated wood beams were used for the new Westinghouse building, San Bernardino, Calif., reports Contractor Donald W. Shaw. He writes: "We found the Rilco people cooperative, delivery prompt and the product as advertised. Our installation cost was about half that of a competing structure—the client is quite pleased."

Adds W. B. Meek, Westinghouse District Manager, "We feel an exceptionally fine job was done in the construction of this building. Mr. Shaw selected the Rilco products used and our reaction is that it made a neat and satisfactory job."

Rilco laminated wood beams, trusses, purlins cost less to buy, less to erect, less to maintain. Each member is fabricated for fast assembly by regular job crews. And Rilco structural members have a high strength to weight ratio—offer the natural beauty and fire resistant qualities of glued laminated wood. Rilco service engineers will be happy to consult with you on church, school, industrial or commercial buildings. Write for complete information.



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fiberglass coated deck

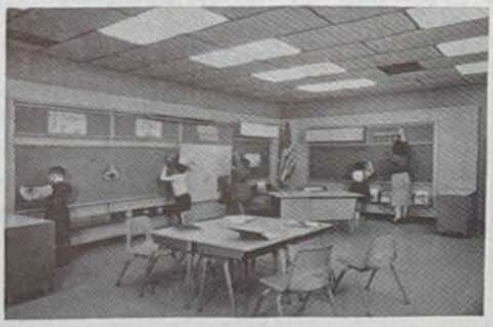
By spraying fiberglass onto exterior type fir plywood panels, a Seattle firm has produced an outdoor deck that is attractive and light in weight, yet will withstand heavy duty, acids and extremes of temperature and weather. The coating method is based on a four-nozzle spraying machine that can deliver continuous-strand fiberglass; two binders or resins; and an aggregate to give bulk or for special surface. The binder may be colored. Aggregate for roof decking usually is sand, added for better footing and wearing qualities. The coated plywood first was marketed as an outdoor deck for patios and sunporches, but the firm now is developing a roof system that will utilize grooved panels with a spline joint—Fiberlay, Inc. **(Item No. 1)**

stock size sliding door

For volume buyers of aluminum sliding glass doors, Arcadia is introducing a 6-ft. 10-in. door which will be available only in three cost saving stock sizes. Designated the No. 151, the door incorporates two engineering changes. Sliding panel is placed on the exterior of the installation, permitting a step-sill design which is said to insure positive watertightness proved out in two years of field testing. The manufacturer also has located the sliding screen on the inside, eliminating problems of deterioration caused by overnight dew or yard watering and making maintenance and cleaning easier. The 5½-in. frame of the 151 includes an integral interior and exterior mold provided in the jamb and head extrusions to help the contractor reduce his labor and material costs.—Arcadia Metal Products. **(Item No. 2)**

versatile school walls

Each individual teacher can tailor his wall space to meet the needs of the students and the subject with Moduwall, a series of interchangeable, wall-hung teaching aids. Moduwall is composed of units of chalkboard, tackboard, pegboard, flannelboard, easelboard, wall-hung cabinets, open shelves and utility rails. Each is based upon a 4-ft. wide scale. Components



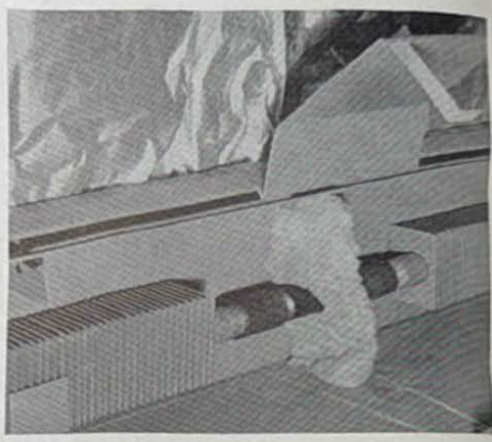
are hooked into place and can be interchanged or hung at higher or lower levels. Sole stationary parts are the wall-mounted standards on which the units are hooked.—The Brunswick-Balke-Collender Co. **(Item No. 3)**

ornamental grills

Flexibility in scale and diversity of application, plus a comparatively low price, are the prime advantages of Aluminum Gridsteel, an ornamental aluminum grill of honeycomb design now being mass produced and offered in stock sizes. Material is furnished in either rigid or flexible panels, for exterior or interior use. It can be employed as sun deflector, in curved or flat screens, wall panels, canopies or imbedded in floors or ceilings. Product is made of aluminum bars on edge formed into a honeycomb mesh. It comes in natural aluminum or in colors, various depths and thicknesses of bars and three panel sizes.—Irving Subway Grating Co., Inc. **(Item No. 4)**

baseboard partition piece

A partition piece which permits installation of full perimeter baseboard systems immediately after the rough flooring is put in and before the partitions are put up has been introduced by Slant/Fin. The partition is expected to materially reduce installation time since the steam fitter is working in an uncluttered and undivided space. Partition piece is equipped with an



angle iron lath support and braces to maintain ⅛-in. clearance and permit full operation of the damper. Lath support allows for the finish plaster to be brought flush to the partition piece for a good finished job. A sound deadener of die cut fiberglass fits over the pipe and fills in the full space between pipe and the enclosure. Product is expected to be particularly suitable for apartment house construction and office buildings.—Slant/Fin Radiator Corp. **(Item No. 5)**

spike heel protector

Latest design of the Speedramp passenger conveyors uses an exit-way specifically designed to eliminate the problem of spike heels. The exit-way is a grooved conveyor belt with a comb plate comprised of tiny fingers that ride in the grooves of the belt, combing out any object that might otherwise tend to get caught.—Stephens-Adamson Manufacturing Co. **(Item No. 6)**

insulated aluminum siding

Heat-saving qualities of aluminum siding have been backed up with foamed plastic insulation and aluminum foil to produce a clapboard siding expected to considerably reduce heating and maintenance costs. The 8-in. siding is coated with DuPont's Lucite acrylic finish, in white, green, gray, yellow and beige.—Aluminum Company of America. **(Item No. 7)**

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glass entrance doors

A line of completely assembled, weatherstripped all-glass entrance doors is designed to provide clean, uncluttered lines and avoid the appearance of screws or dust collecting holes. Weatherstripping is silicone treated wool pile on continuous top and bottom rails. Doors are constructed of ½- or ¾-in. polished plate Tempar-Glas, a heat strengthened, precision tempered product said to have extraordinary resistance to impact. Top corner fittings and continuous top and bottom rails are of anodized aluminum. Accompanying photograph shows installation of one of the entrance doors at Station KVI in Seattle. —Virginia Glass Products Corp.

(Item No. 8)

acoustical formboard

Simpson has expanded its building product line with an acoustical and insulating formboard designed for perlite, vermiculite or gypsum poured roof decks. Product is offered perforated or unperforated, painted or unpainted in various lengths. It consists of a ½-in. thick natural board laminated with a vapor permeable glue to a ½-in. thick asphalt impregnated insulation board.—Simpson Logging Co.

(Item No. 9)

window surround

A wide variety of colors and finishes are available in a line of porcelain enamel on steel window surrounds being offered by Davidson. Surround is manufactured for all standard size window sash, either steel, wood or aluminum, and for any type window. It adjusts to desired projection with the building surface, is easily installed and needs no maintenance.—Davidson Enamel Products Co.

(Item No. 10)

flooring expansion joint

A weather-resistant expansion joint said to virtually eliminate cracking in the seams of terrazzo tile and concrete flooring has been developed by Firestone. Called Flex-Tite, the joint is manufactured in long strips composed of a synthetic rubber compound bonded between strips of zinc. The joint will expand or contract with temperature changes, eliminating cracking and crumbling at the seams. It resists erosive forces of traffic, moisture, oils, solvents and other deteriorating agents which might destroy the bond of tile flooring. Joint is half submerged into the cement as it is being poured. Tile is laid on top of the cement to the height of the expansion joint.—Firestone Rubber & Latex Products Co.

(Item No. 11)

high strength steel bars

High strength billet steel bars in 60,000-psi. minimum and 75,000-psi. yield point minimum ranges are being marketed under the trade name Di-Lok. Both are designed for use in concrete structures requiring steel reinforcing with a higher yield point than that available in the structural, intermediate and hard grade. The bars will serve to reduce column size, save floor space and permit higher design stresses.—Columbia-Geneva Steel Division, United States Steel Corp.

(Item No. 12)

hold-down anchor

To simplify assembly and stripping in prestressed, precast concrete erection, Dayton Sure-Grip has developed a nonrigid hold-down anchor which swivels in the direction from which cable tension is exerted, thus easing pull on the bolt which holds the anchor in position. This action aids in preventing bent bolts and makes more flexible control of cables possible during stressing operations. Anchor also utilizes press-on speed nuts for faster assembly and coil threads that are nonclogging for faster stripping. Anchor accommodates three through seven cable strands.—Dayton Sure-Grip and Shore Co.

(Item No. 13)

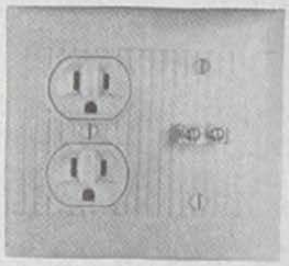
baseboard electric heating

To cut installation time and costs Westinghouse has introduced a line of baseboard electric heating sections that are connected by plugging them together. Units will be offered in 2-ft. sections each of which responds to overheating by automatically turning itself off without affecting operation of the remaining installation. Control sections can be installed to regulate temperature room by room.—Westinghouse Electric Corp.

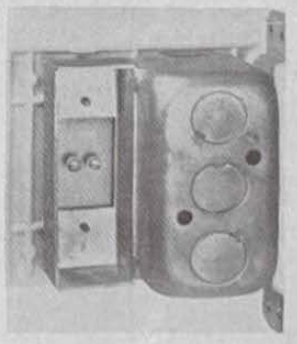
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Another TELE-JAC* 1st

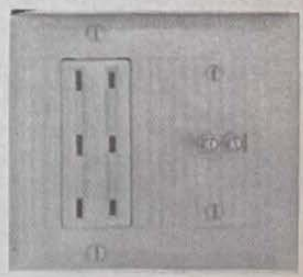
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S-100 CD



Rear View



S-100 CT

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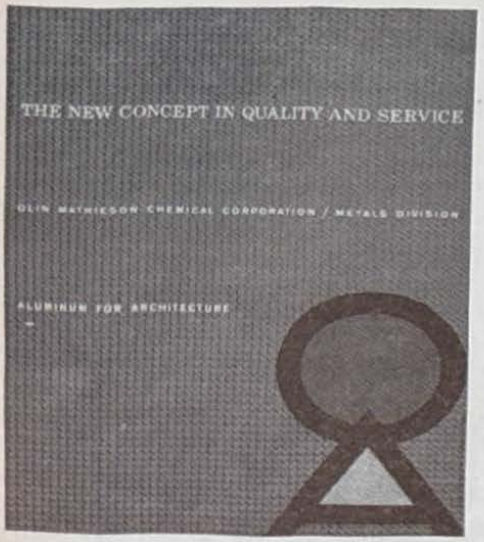
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pa&b pick of the month

To assist architects and others in the selection of aluminum alloys and surface finishes, Olin Mathieson has compiled a guide to mechanical, chemical and applied finishes, describing the various textured, bright or satin surfaces and how they are achieved. A particularly useful section consists of a chart listing the alloys available, their qualities and recommended application. Suggested outline specifications also are included. — Olin Mathieson Chemical Corp., 460 Park Ave., New York 22, N.Y.

pa&b pick of the month

The most talked-about building at the Oregon Centennial Exposition was John Storrs' Forest Products Pavilion. For those who want to know how and why, The West Coast Lumbermen's Association has just published an eight-page brochure entitled "Construction and Analysis of Simple Hyperbolic Paraboloid Shells of West Coast Lumber." First section features step-by-step progress photographs of the pavilion with general construction procedures explained as recommended by the structural engineer on the project, James G. Pierson. Remaining portions of the brochure discuss the construction and design of hyperbolic paraboloid shells of lumber in general from the standpoint of loading conditions, force in perimeter members, stress in sheathing, method of determining twist in perimeter members and other aspects.—West Coast Lumbermen's Association, 1410 S.W. Morrison, Portland 5, Ore.

Mylar-Duralar Drafting Method: reports on experiences of engineering firms using the method, demonstrates drafting technique with Duralar pencils on Mylar film and shows how drawings can be washed. — J. S. Staedtler, Inc., Hackensack, N. J.

No Vacancy: illustrates design ideas for motels using Tectum roof deck and form plank materials; 4 pp.—Tectum Corp., 535 E. Broad St., Columbus 15, Ohio.

Cookson Rolling Grilles (AIA 14-B-6): gives data on steel and aluminum units for industrial plants and other installations; 4 pp.—The Cookson Co., 1525 Cortland Ave., San Francisco 10, Calif.

Efco Lifetime Steel Forms: illustrates line and various form setups; 12 pp.—Economy Forms Corp., Highland Park Station, Des Moines, Iowa.

Lupton Curtain Wall (AIA 17-A): uses excellent color photographs to illustrate typical installations; includes mullion properties and profiles, design data and material on walls with built-in heating-cooling units.; 24 pp.—Michael Flynn Manufacturing Co., 700 E. Godfrey Ave., Philadelphia 24, Pa.

Textolite Laminated Surfacing (AIA 35-C-12 and 23-L): shows patterns and colors in line and several types of installations; 12 pp.—General Electric Co., Laminated Products Dept., Coshocton, Ohio.



OFFICE AID

A calculator for quickly and accurately determining the lens panel square footage necessary for most lighting jobs is being offered to architects and engineers. Calculator is for use in estimating extruded plastic prismatic lens panels either in the design-layout stage or for on-the-job construction estimating.—K-S-H Plastics, Inc., High Ridge, Mo.

Specifications for Metal Lathing and Furring (AIA 20-B-1): includes fire-resistive ratings; design tables; specifications for hollow, solid and sound insulating partitions; ceilings; vertical furring; and centering; 20 pp.—Metal Lath Manufacturers Association, Engineers Bldg., Cleveland, Ohio.

Air Force Academy: Flexicore Facts No. 84 (AIA 4-K): uses drawings and photographs to illustrate fast erection, economy and fire safety of all-masonry construction system used in two Air Force Academy buildings; 6 pp.—The Flexicore Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio.

Steel Doors and Frames: displays complete line of steel hollow metal doors, heavy duty rail and stile doors with drawings on frame sections and installation details; 24 pp. — Amweld Building Products, Plant St., Niles, Ohio.

Arcadia Window Wall (AIA 17-A): emphasizes flexibility of this aluminum floor-to-ceiling system with typical installation details for concrete and steel structures: 8 pp.—Arcadia Metal Products, 801 S. Acacia Ave., Fullerton, Calif.

Hornflex Thiokol LP-32 Sealant (AIA 7-D): describes and gives application directions for this synthetic rubber compound joint sealant; 16 pp.—A. C. Horn Companies, 550 Third St., San Francisco 7, Calif.

Olympic Stains (AIA 25-B-12): gives usage, coverage and application of each type with selected color samples on actual wood pieces; 20 pp.—Olympic Stained Products Co., 1118 Leary Way, Seattle 7, Wash.

Benefire Complete Fireplace Form (AIA 14-E-5): pictures several fireplace design ideas and gives construction details and masonry instructions; 8 pp.—Bennett-Ireland Inc., 53 Exchange St., Norwich, N. Y.

Weldwood Movable Partitions (AIA 36-H-6): describes line with photographs of installations and drawing details; 12 pp.—United States Plywood Corp., 55 W. 44th St., New York 36, N. Y.

Office and Warehouse: uses color photographs and drawings to show how Portland architect utilized Armco steel building and Steelox wall panels in creating warehouse and office; 6 pp.—Armco Drainage & Metal Products, Inc., Middletown, Ohio.

FILMS

Jumbo Shoring. Laurence Myers Scaffolding Co. and Tubular Structures Corporation of America, 61 Bluxome St., San Francisco, Calif. Sound, color, 16mm, 10 min.

Shows application of heavy duty steel shoring in both commerical slab and highway bridge construction.

Armstrong Acoustical Fire Guard. Armstrong Cork Co., Lancaster, Pa. Sound, 16mm, 18 min.

Introduces new tile and shows Underwriters' Laboratories tests conducted to determine fire-resistant capabilities.

Today's Homes: A Special Report. The Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill. Sound, color, 16mm, 14 min.

Stresses benefits of home ownership, shows wide variety of homes and calls attention to the quality construction and modern conveniences that make up today's modern home. While keyed to the general public and specifically developed for showing through television stations as a public service program, prints also will be available to agencies cooperating in its production (NAHB, National Retail Lumber Dealers Association, Home Manufacturers Association and United States Savings and Loan League) and to local builder associations for showing to civic groups.

Fire Barriers By Overly. Overly Manufacturing Co., Greensburg, Pa. Sound, color, 16mm, 8 min.

Illustrates how fire and smoke screen can be placed in corridors of hospitals, schools and other buildings to provide areas of refuge; shows Underwriters' Laboratories fire-testing and applications of the metal and glass screen.

Behind the Red Diamond. Simpson Logging Co., 1030 White-Henry-Stuart Bldg., Seattle, Wash. Slide, color, sound, 20 min.

Starts with logging operations and carries the viewer through all the stages of producing and distributing forest products up to and including sales outlets for acoustical and insulating board products.

The Wonders of Zolatone. Zolatone Process, Inc., 3411 E. 15th St., Los Angeles 23, Calif. Sound, color, 27 min.

Explains development of the multicolor process and shows some of the advantages of this type of finishing.

Modern Timber Construction. American Institute of Timber Construction, 1757 K St. N. W., Washington 6, D. C. 35 color slides. $10 set; loaned free to groups.

Describes the use of glued laminated structural members and heavy sawn timber in schools, churches, bridges, commercial and industrial buildings; shows manufacture and fabrication of members and erection of engineered timber buildings. Comes with 2,000-word script.

Water-Repellent Masonry Insulation. Zonolite Co., 135 S. LaSalle St., Chicago, Ill. Sound, color slide film.

Introduces the company's new water-repellent masonry fill insulation with application sequences, technical data and suggested design ideas.

Good Design. Herman Miller Furniture Co., Zeeland, Mich. 35mm. strip film, 25 min. $17.50 a set.

Depicts today's concepts of good design and their relation to contemporary furniture; originally prepared as a training device for the company's dealers. Accompanying narrative text is provided.

Business and Professional Film Catalog. Modern Talking Picture Service, 3 E. 54th St., New York 22, N. Y.

Lists specialized technical films available through the Service's regional film libraries.

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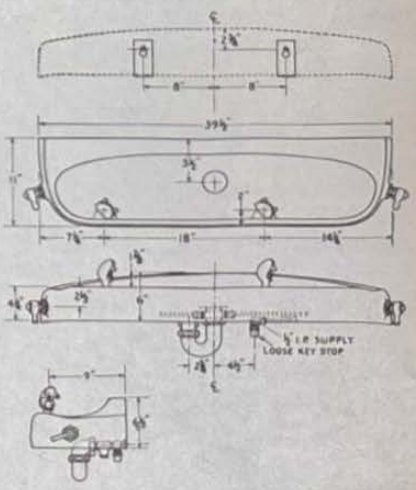
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Corps of Engineers officer looks at working schedules

Quite some time ago a man named Burns wished, in his choice Scotch burr, for the "giftee" to "see ourse's as ithers see us." Contractors of the Pacific Northwest have been afforded that giftee through the appearance of Corps of Engineers officers at recent AGC meetings.

Col. R. P. Young, district engineer for the Seattle District, summarized his views of behind-schedule contracts when he spoke before the Eastern Washington Builders Chapter. Here are his remarks:

"Every month we review the construction progress on every contract. I have been personally reviewing with the chief of my construction division any contract that is more than 5% behind. I have been concerned with the excessive number of our contracts which fall into this category, i.e., being 5% or more behind schedule.

"Through a review of this problem over the past several months, I have concluded that both the contractor and myself as contracting officer must bear the responsibility for the contractor not being on his schedule. On the contractor's side of the fence, I have found that a contractor will frequently submit a schedule only to fulfill the contract requirement that says he must submit a schedule, but with no intention of following it because he has given very little thought to its preparation.

"This contractor has in many cases not consulted with his subs to determine what their capabilities are and he has not properly phased their work into the overall work schedule of the structure. On many of the jobs of this type it turns out that the contractor is run by his subs, and unless he takes a firm hand in coordinating them and insisting on prompt completion of their work, he falls behind on the overall contract and soon gets in the position where only a tremendous effort near the end of the contract could possibly bring him back on schedule.

"Now on the government side of the fence, I think we have been remiss in accepting some of the schedules that have been submitted and, furthermore, I think that we have permitted some contractors to get too far behind on the contract before making a loud and clear request that they take some effective action to get back on the schedule.

"We are taking steps to correct these shortcomings. I have instructed all my resident engineers to carefully review every construction schedule that comes in and discuss it realistically with the contractor. Furthermore, I am insisting that whenever a contractor gets as much as 5% behind on a contract, we call it to his attention and work with him in modifying his construction schedule in such a way that he can bring the contract back on schedule in a reasonable length of time.

"In addition, we are placing a great deal of emphasis on evaluating any delays the contractor suffers not due to circumstances under his control so that any time extension that is due can be granted as soon after the event occurs as is possible. In this way the contract completion date can be promptly extended and the contractor will at all times know the completion date toward which he is working.

"Now please don't misunderstand what I have said; I am convinced that almost 100% of the contractors who work with us have every intention of completing their jobs on time at the time they begin work. However, because of the fact that they have really not planned a workable construction schedule and in some cases because they have not taken adequate steps to coordinate and schedule their subcontractors, they find themselves behind schedule from the start. I am convinced that if we both recognize this as a basic problem we can take effective action to eliminate it as a source of trouble."

Col. Young also stressed safety at the meeting. He said a substantial reduction in accidents "indicates a real effort on the part of the contractors concerned." However, fatalities have occurred. Corrective measures, he added, "will not be an hysterical approach but rather I intend that we shall keep a constant pressure on . . . this very serious problem."

New nailing system reduces light roof framing costs

Contractors and dealers in Washington and Alaska are now being offered a new service to lower construction costs of homes and commercial buildings: the fabricating of light roof trusses with "gang nails."

In its plant at Lynnwood, Wash., Laminated Woods, Inc., whose Panelwood Division holds the franchise for the area, lays out the precut truss

parts on a jig on top of the nail plates. A 4,000-lb. hydraulic press forces the nails into the truss parts, assembling several joints at the same time. The system employs a new type of plate consisting of 14-gage galvanized steel with two $\frac{1}{8}$x$\frac{1}{2}$-in. nails per square inch of plate projecting from its surface. Assembled trusses can be lifted by a fork lift on a truck and delivered right to the jobsite ready for installing.

"There is an approximate saving of $100 to $200 per house in the roof framing materials and labor," comments Robert E. Andrews, company president. "In other words, the builder can get more production with less men on the job, making it possible to get the house under roof faster."

• **Twaits-Wittenberg Co.,** Los Angeles constructors-engineers, has appointed Herbert C. Ball to the position of general manager. Joining the firm in 1934 as a carpenter, he rose to construction manager two years ago.

• **Davis & Butler Construction Co.** is now doing business under the name of Butler Construction Co., with offices at 422 Dooly Building, Salt Lake City.

• **Howard S. Wright Construction Co.** of Seattle has elected Harlan S. Bixby, who has been with the firm since 1947, as vice president in charge of engineering.

• **Harvey R. Livingston,** 87, retired building contractor of Empire, Calif., died unexpectedly of a heart attack March 10.

• **Associated Building Contractors of Colorado** has elected this slate of officers: Max T. Morton of N. G. Petry Construction Co., president; John N. Johansson, vice president; Vincent K. Jones, treasurer; and John D. Longeran, secretary.

Richard O. Hart, outgoing president of the organization, was named winner of the Bate - Petry Memorial Award given to the contractor who contributed most during 1959 toward the advancement of ethics and construction procedures in the industry and for outstanding work in the association.

• **New Mexico Branch, AGC,** is headed by Frank Tatsch of Silver City, who told the group that it should band together for self-protection after the manner of labor unions and that general contractors, subcontractors and materials men should be sought as associate and affiliate members. Other new officers are Wiley Banes, vice president; and J. K. House, secretary-treasurer, both of Albuquerque.

• **Wyoming Contractors' Association** has elected H. W. Julien of Cody as president and Louis C. Rognstad of Casper as vice president.

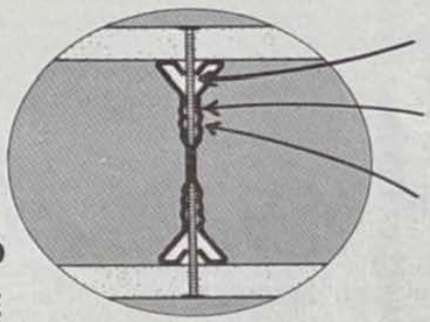
• **Salem Contractors Exchange** has elected R. C. Arthur of Oregon Builders Hardware as its 1960 president. Completing the slate are James Armpriest, vice president; and Frank Brown, reelected secretary-treasurer.

• **Seattle Chapter, AGC,** has named these officers: Arthur S. Hainsworth, president; Lawrence Baugh, first vice president; Ted Teufel, second vice president; Phillip A. Carlson, secretary; and Steve Kolar, treasurer.

• **General Contractors Association of Hawaii** has appointed Elroy J. Chun to the post of assistant manager, succeeding Walter T. Oda, who resigned to accept an appointment as executive secretary of the Pacific Electrical Contractors Association. New president is Frank N. Rothwell.

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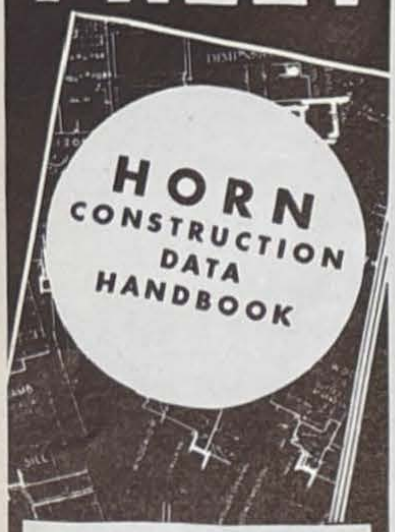
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• **Fentron Industries, Inc.**, of Seattle, has appointed three new vice presidents, Robert M. Cotter, Leon G. Ekman and John M. Pirak, with the company for a number of years.

• **Rockwin Prestressed Concrete Corp.** of Santa Fe Springs, Calif., has elected Steven Galezewski, chief engineer, to a vice presidency in the firm.

• **Lennox Industries, Inc.**, has named Ted Gilles as commercial market engineer in the San Francisco area, specializing in industrial and school equipment.

• **Prescolite Manufacturing Corp.** has named Donald Congdon sales representative for Colorado and Wyoming, working out of new offices in Lakewood, Colo. Congdon previously was with Ryall Electric Supply Co. of Denver. He succeeds Al Thompson, who has been transferred to the home office in Berkeley and will now handle the territory in the San Francisco Bay area.

• **Babcock & Wilcox Co.** has established a boiler division district sales office in Denver, under the management of Robert L. Swinney, formerly in the Chicago office. The Denver operation will take over sales and service activities recently relinquished by The Stearns-Roger Manufacturing Co. upon termination of a sales agency agreement. Area covered will include Colorado, Montana, New Mexico, Utah, Wyoming and parts of Idaho and Nevada.

• **Arcadia Metal Products** announces that Peter Vogel has been named sales manager of the builder division. He previously was executive director of Quality Block Producers, a southern California trade association of concrete block manufacturers.

• **Bethlehem Steel Co.** has promoted John G. White from assistant to district sales manager of the Pacific Coast division, succeeding S. S. Cort, who has been transferred to company headquarters in Bethlehem, Pa., as assistant general manager of sales. White was district sales manager in Seattle until going to San Francisco last November. In his new position he will supervise sales activities in nine western states.

• **Air-Factors, Inc.**, has moved from Monrovia to a newly constructed air distribution and control products manufacturing plant in the industrial district of Covina, Calif.

• **Dow Chemical Co.** starts production this spring at a new polyethylene film plant just south of Fresno, Calif.

• **Kaiser Aluminum & Chemical Corp.** has appointed Custom Rolled Corrugated Metals Co. as distributor for aluminum industrial building products in southern California, Arizona and southern Nevada. The firm already is the distributor for northern and central California. A new office has been established in Los Angeles.

• **Calco Supply Co.**, a subsidiary of the Calaveras Cement Co. Division, The Flintkote Co., has promoted George B. Randolph from sales engineer to sales manager.

• **Timber Structures, Inc.**, has promoted Robert L. Brosy to the post of western division manager with headquarters in Portland. Succeeding him as manager of the Seattle district office is William R. Warner.

• **A. C. Horn Companies**, West Coast division of Sun Chemical Corp., has promoted Clinton B. Grimm to the post of sales promotion and advertising manager. He succeeds Robert T. Flynn who steps up to sales manager.

• **Rilco Laminated Products, Inc.**, started construction in February of a plant for the manufacture of glued laminated wood products at Cottage Grove, Ore. Completion is scheduled for early summer.

• **The Trane Co.** has moved Robert A. McKee from Wichita, Kan. to the Albuquerque sales office where he will be manager.

• **Worthington Corp.** has appointed H. W. King, western regional sales manager with headquarters in San Francisco, as commercial vice president.

• **United States Steel Corp.** cyclone fence department has transferred August L. Bartz from Fort Worth to Oakland where he will be area sales manager for eight western states.

• **Hupp Corp.** has opened a Los Angeles factory branch for its Typhoon Air Conditioning Division, serving 13

southern California counties from Bakersfield to the Mexican border and eastward to Arizona. Manager is Dick Southworth.

• **Reynolds Metals Co.** has named James C. Huckins Jr. to the newly created position of Seattle division sales manager for architectural and building products. He previously has served the company in Phoenix and Los Angeles.

ASSOCIATIONS

• **California Redwood Association** will conduct a series of sales meetings in late spring at Dallas, Rockford, Ill., and Columbus, Ohio, to help wholesale and commission salesmen improve their selling techniques. Based on the successful Redwood Industry Conference held at Santa Rosa, Calif., last year, the meetings will include symposiums on technical aspects of redwood.

• **Gypsum Drywall Contractors International** have elected Rex Olson of Campbell, Calif., as treasurer for 1960. Regional vice presidents include Max Jensen of Salt Lake City and William Thompson of San Francisco. Granville Waggoner of Nashville, Tenn., was elected president at the January meeting in Miami Beach, Fla., succeeding M. E. McColley of San Diego.

• **Sliding Glass Door & Window Institute** has named Frank B. Miller, president of Miller Sliding Glass Door Co., Burbank, Calif., as "Outstanding Member of the Year" for 1959 in recognition of his work as chairman of the technical committee which produced the specifications for doors and screens recently published by the organization.

• **National Particleboard Association,** a new organization formed by manufacturers of this product, has named a westerner as its first president: David G. Greeley, manager of field operations for the Silvatek Division of Weyerhaeuser Co., Tacoma. Other officers include R. L. Rinde, Roddiscraft, Inc., Arcata, Calif., treasurer, and W. H. Cooke, Pacqua, Inc., Dillard, Ore., secretary. Goals of the association, whose main office will be located in Washington, D.C., are to establish industry standards, develop new markets and gain recognition for particleboard by architects.

• **Western Pine Association,** has a new secretary-manager, W. E. Griffee, with headquarters in Portland.

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Vienna-born Richard J. Neutra, whos influence today extends far beyon the borders of the U.S., will be th subject of the second "PA&B Profile (The first spotlighted the work o John Carl Warnecke of San Francisc last July.) The article will focus a tention on a dozen or so building in the West which the Los Angele architect feels have played the mo significant part in the development o his design philosophy, accompanied b appropriate excerpts from his nume ous writings.

Architects will wind up their an nual convention in San Francisco o Friday, April 22, and PA&B will b off the press the following week wit a recap of the AIA highlights. Als the "Preparing the Building Estimate series which has proved so popula with our contractor readers will hav its 11th and final installment.

housing that who designs

"Who is responsible for our reside tial architecture—the architect, th builder or the home buyer?" Tha leading question was posed by Do F. Schlegel in a recent issue of th New Mexico Architect, monthly pub lication of that state's AIA chapte And the associate professor of archi tecture at the University of Ne Mexico continued to answer his ow query by citing some rather disturbin figures. He pointed out that just 1.7 of all money spent for housing i Albuquerque in 1958 was the direc responsibility of architects or, if re duced to housing units, 19 out of a total of 4,322.

Schlegel then raised these questions "Can the builder continue to disre gard the knowledge and ability of the architect in this vital area of our visual environment? Can the archi tect continue to disregard two-thirds of the total amount of construction— housing? Can the home buyer con tinue to disregard the advantages of architectural services?"

Schlegel proposed no startling solu tion to this dilemma, but he did emphasize the need "to increase the architectural education of all the people," beginning at the university level and with every student, not just the architectural majors. This can be done, he said, "by building good archi tecture so that he can experience it; by requiring architectural service courses; by exhibits, lectures and panel discussions." R.E.K.

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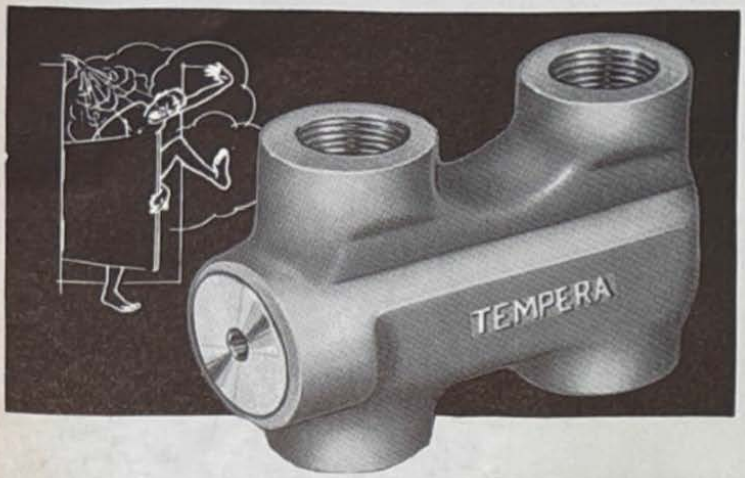
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Quarterly volume shows small increase

Building permit volume for 155 key western agencies i the first quarter of 1960 totals $861,972,264, a gain of $ million over the same period last year. The increas while small, is particularly promising since it shows tha February and March starts have more than made up fo an exceptionally slow January. The states are almos evenly divided in gains and losses. Leading the field i Hawaii with a $20.1 million gain for the quarter. Othe states recording increases are Arizona, up $12.7 million California, $6.2 million; Wyoming, $879,000; Utah, $285, 000; and Nevada, $2,000. Biggest decrease by states is i Washington, down $16.1 million. Other states recordin quarterly volumes below the first three months of 195 are Colorado, down $8.5 million; New Mexico, $5.5 mil lion; Idaho, $1.1 million; Montana, $847,000; Oregon, $54, 000; and Alaska, $15,000.

15 leading agencies

Of the top 15 building permit agencies for the quar ter, 10 are in California, two in Washington and one eac in Colorado, Arizona and Hawaii. Ordinarily Maricop County, Ariz., would be in this list, but a court ruling lat last year held up issuance of building permits by th county until a new ordinance could go into effect. Marc is the first month in 1960 that the county has issue building permits.

	Jan.-Mar. 1960	Jan.-Mar. 1959
1. Los Angeles	$166,766,123	$153,403,228
2. Los Angeles County	67,347,650	60,019,361
3. Honolulu	42,387,696	23,402,068
4. San Francisco	35,428,360	31,403,535
5. San Diego	33,583,683	43,279,290
6. San Diego County	31,963,000	32,853,500
7. Sacramento County	29,588,291	28,392,687
8. King County, Wash.	27,063,525	29,572,765
9. Phoenix	23,823,492	14,306,841
10. San Jose	21,857,488	29,572,765
11. Seattle	20,642,127	36,322,004
12. Long Beach	18,205,320	13,444,305
13. Denver	15,162,385	22,958,108
14. Orange County	13,609,587	18,771,404
15. Torrance	13,247,486	4,939,593

March up by $16.8 million

For the month of March, building permit volume i $362,803,777, an increase of $16.8 million over March 1959 Seven states report increases, led again by Hawaii whos March total is $10.8 million higher than last year. Othe states with increases for the month are Arizona, up $4.5 million; California, $3.9 million; Washington, $359,000; Oregon, $306,000; Idaho, $199,000; and Wyoming, $221,000.

Analysis of typical areas—March

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$16,579,857	$6,905,218	*$ 629,600
Orange County	5,546,933	320,969	884,611
Sacramento County	8,745,982	1,587,776	1,866,007
Las Vegas	1,401,955	626,250	180,000
Denver	2,079,945	1,770,120	.....
Portland	1,051,660	949,150	65,000
Seattle	3,885,975	2,704,292	35,000
King County	8,045,000	1,308,287	3,259,825
Honolulu	6,246,087	4,846,706	3,928,376

*Does not include $1,418,379 for tax-supported schools.

Building Permit Totals for 155 Western Agencies for March

CALIFORNIA	Mar. 1960	Mar. 1959
Alameda County	$ 1,821,550	$ 1,389,675
Anaheim	3,166,674	4,131,649
Bakersfield	1,409,104	1,059,510
Burbank	1,100,517	599,510
Contra Costa County	3,383,319	3,607,161
Fresno	3,358,159	1,323,855
Fullerton	1,996,096	1,582,091
Glendale	1,857,415	2,680,844
Inglewood	1,301,195	1,457,703
Long Beach	10,643,610	4,251,230
Los Angeles	66,221,611	60,209,657
Los Angeles County	24,880,570	27,953,935
Oakland	3,181,765	5,525,541
Ontario	1,311,291	486,114
Orange County	6,959,023	6,536,202
Palo Alto	1,279,224	1,007,514
Pasadena	1,395,898	1,666,581
Pomona	2,289,206	2,229,172
Richmond	1,553,787	1,263,799
Riverside	1,546,596	2,400,185
Sacramento	5,164,251	3,901,138
Sacramento County	12,720,297	12,558,595
San Bernardino	1,427,557	2,269,884
San Bernardino County	6,112,729	8,337,114
San Diego	11,165,535	12,498,778
San Diego County	13,170,700	12,866,300
San Francisco	19,914,763	6,599,437
San Jose	9,705,678	17,027,450
San Mateo	785,643	1,130,380
San Mateo County	1,896,781	2,316,288
Santa Ana	1,785,967	2,019,830
Santa Monica	2,700,788	2,325,241
Stockton	953,944	2,009,043
Sunnyvale	3,153,754	4,230,725
Torrance	6,638,340	2,738,421
West Covina	1,242,153	3,077,189
TOTAL	**$231,236,467**	**$227,267,741**

OREGON	Mar. 1960	Mar. 1959
Albany	$ 250,350	$ 247,095
Astoria	34,150	30,220
Baker	79,638	157,150
Bend	103,395	154,290
Coos Bay	70,915	251,252
Corvallis	644,312	342,300
Eugene	971,070	597,192
Grants Pass	137,150	224,100
Gresham	3,000	88,500
Hillsboro	194,100	143,750
Klamath Falls	77,183	1,128
LaGrande	55,345	29,642
Lane County	1,367,300	882,338
Medford	386,701	828,387
Multnomah County	2,695,749	3,578,223
North Bend	71,365	124,190
Oregon City	110,250	28,500
Portland	5,191,835	4,626,460
Roseburg	214,628	180,460
Salem	460,735	250,058
Springfield	126,084	148,742
The Dalles	79,500	104,060
TOTAL	**$ 13,324,755**	**$ 13,018,017**

WASHINGTON	Mar. 1960	Mar. 1959
Aberdeen	$ 375,688	$ 88,913
Anacortes	79,850	86,760
Auburn	59,400	234,400
Bellingham	510,059	270,474
Bremerton	313,460	865,305
Centralia	38,240	156,316
Chehalis	24,535	84,481
Ellensburg	140,950	55,581
Ephrata	29,140	12,725
Everett	547,532	596,340
Kelso	46,120	52,300
Kennewick	243,050	138,150
King County	12,762,440	11,750,430
Kirkland	137,350	101,100
Longview	275,879	593,730
Moses Lake	87,555	428,222
Olympia	352,390	295,453
Pasco	121,388	270,598
Pierce County	2,367,841	1,943,868
Port Angeles	353,445	93,300
Puyallup	117,712	80,250
Seattle	6,856,972	6,479,851
Spokane	1,369,982	3,915,080
Spokane County	1,301,943	2,625,048
Tacoma	3,501,173	1,861,485
Vancouver	581,564	699,128
Walla Walla	2,036,373	345,729
Wenatchee	245,610	118,112
Yakima	363,475	638,077
TOTAL	**$ 35,241,116**	**$ 34,881,206**

ALASKA	Mar. 1960	Mar. 1959
Anchorage	$ 118,304	$ 190,826
Fairbanks	36,550	23,850
Juneau	16,300	31,050
Ketchikan	8,000	11,000
TOTAL	**$ 179,154**	**$ 256,726**

IDAHO	Mar. 1960	Mar. 1959
Boise	$ 1,070,519	$ 914,293
Caldwell	387,440	106,725
Coeur d'Alene	92,473	110,150
Idaho Falls	742,337	749,136
Jerome	106,100	50,200
Lewiston	312,276	168,407
Nampa	151,845	323,485
Payette	141,415	30,425
Pocatello	131,405	518,500
Sandpoint	86,900	39,142
St. Maries	15,000	8,000
Twin Falls	174,000	193,250
TOTAL	**$ 3,411,710**	**$ 3,211,713**

MONTANA	Mar. 1960	Mar. 1959
Billings	$ 591,800	$ 690,395
Bozeman	152,700	94,050
Butte	11,900	55,742
Glasgow	23,000	10,300
Glendive	17,000	39,500
Great Falls	1,036,940	1,723,109
Helena	244,219	505,726
Kalispell	46,050	54,600
Lewistown	27,000	14,000
Livingston	9,500	27,822
Miles City	78,753	106,530
Missoula	302,040	392,075
TOTAL	**$ 2,525,602**	**$ 3,713,849**

WYOMING	Mar. 1960	Mar. 1959
Casper	$ 912,409	$ 1,383,376
Cheyenne	947,571	352,153
Sheridan	191,731	94,563
TOTAL	**$ 2,051,711**	**$ 1,830,092**

COLORADO	Mar. 1960	Mar. 1959
Aurora	$ 565,021	$ 1,483,013
Boulder	972,865	962,005
Denver	6,124,865	5,873,555
Englewood	364,537	556,024
Fort Collins	394,170	336,900
Grand Junction	54,407	156,280
Greeley	904,685	615,975
Pueblo	753,220	701,104
Trinidad	41,855	11,303
TOTAL	**$ 10,175,625**	**$ 10,696,159**

UTAH	Mar. 1960	Mar. 1959
Logan	$ 444,640	$ 139,300
Murray	1,072,937	482,400
Ogden	631,200	1,921,900
Provo	147,700	457,825
Salt Lake City	1,535,254	1,645,231
TOTAL	**$ 3,831,731**	**$ 4,646,656**

NEVADA	Mar. 1960	Mar. 1959
Elko	$ 32,880	$ 88,533
Las Vegas	2,247,299	2,719,419
Reno	2,156,679	1,685,734
Sparks	814,426	1,101,033
TOTAL	**$ 5,251,294**	**$ 5,594,719**

ARIZONA	Mar. 1960	Mar. 1959
Douglas	$ 41,096	$ 113,347
Flagstaff	184,013	106,660
Glendale	204,155	90,250
Maricopa County	10,597,296	12,939,399
Mesa	1,657,755	857,569
Phoenix	13,268,878	7,141,169
Tucson	2,841,492	2,876,059
Yuma	238,140	328,245
TOTAL	**$ 29,032,825**	**$ 24,452,698**

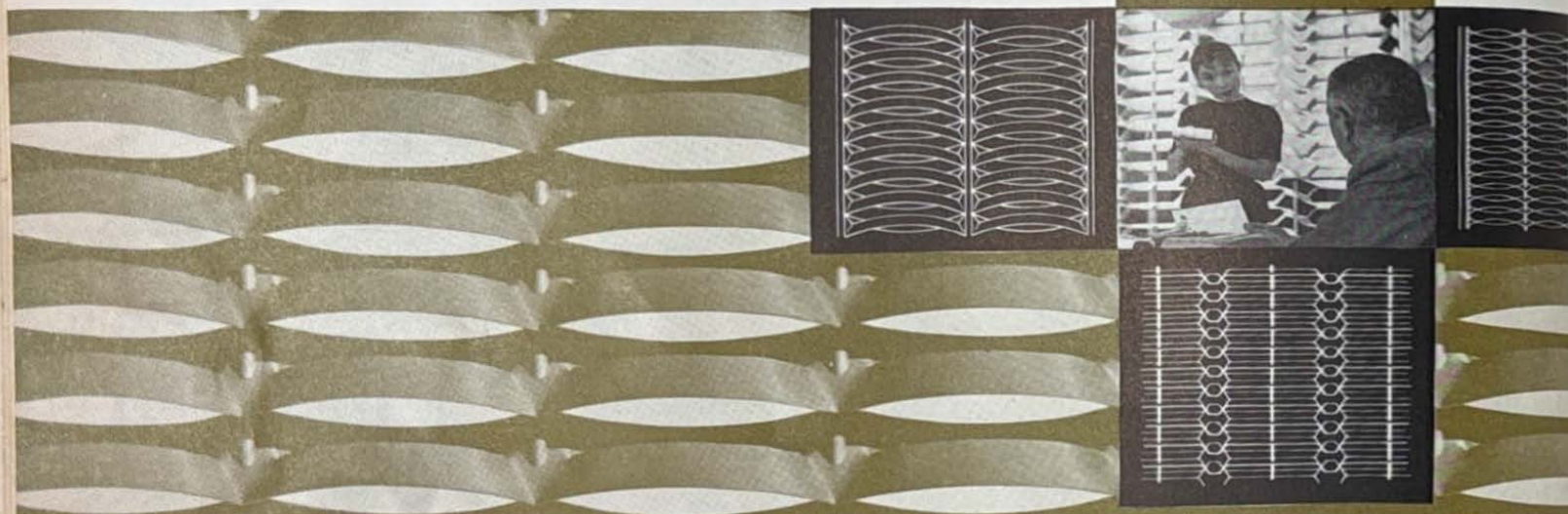
NEW MEXICO	Mar. 1960	Mar. 1959
Albuquerque	$ 3,427,795	$ 4,647,585
Carlsbad	236,745	204,300
Clovis	515,071	615,608
Gallup	209,234	178,429
Hobbs	271,350	332,720
Las Cruces	600,000	540,000
Roswell	503,750	
Santa Fe	226,874	246,399
TOTAL	**$ 5,990,819**	**$ 6,765,041**

HAWAII	Mar. 1960	Mar. 1959
Hawaii County	$ 490,920	$ 304,911
Honolulu (city-county)	19,397,681	9,184,914
Maui County	662,367	170,543
TOTAL	**$ 20,550,968**	**$ 9,660,368**
GRAND TOTAL	**$362,803,777**	**$345,994,985**

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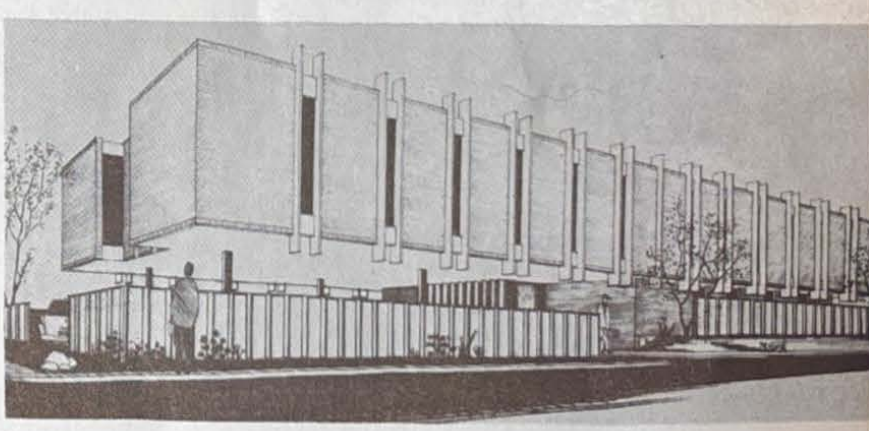
MASTER SITE PLAN

for University of California's School of Science and Engineering at new La Jolla campus will include seven teaching and research buildings, two residence halls, dining commons and recreation building. Construction is expected to begin late this year on the first two buildings, seven-story $4.2 million laboratory and office building and $1.6 million central utilities plant. Architects: Risley & Gould.

PHYSICAL EDUCATION BUILDING

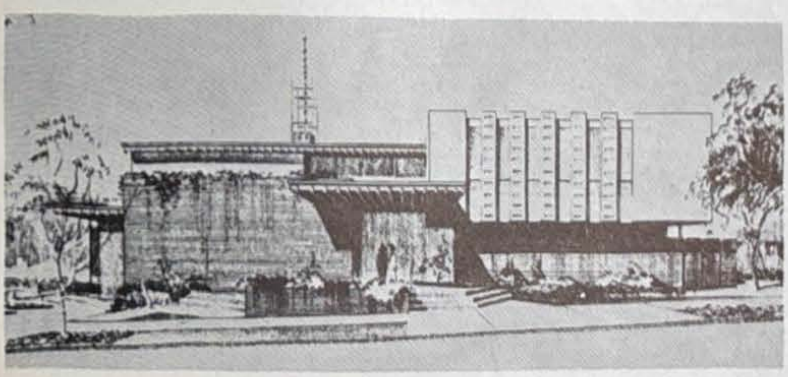
at Eastern Montana College of Education in Billings will have what is believed to be first thin shell concrete roof to be constructed in Montana. Barrels, to be cast in place, will be 30 ft. wide with clear span of 120 ft. and rest on concrete columns. Roof will extend beyond gymnasium, seating 4,000, to cover swimming pool section. Architects: Cushing, Terrell & Associated Architects.





OFFICE BUILDING

now under construction in Denver for Madison Investment Co. has structural steel frame faced with beige brick. Windows will be set between tubular steel projecting fins. Costing $110,000, it will provide 2,000 sq. ft. on ground floor and 4,500 sq. ft. on second floor for accounting firm, two law firms and designer's office. Architect: Donald R. Roark.



INSTITUTE OF RELIGION

for Church of Latter Day Saints' in Seattle will provide social hall, offices, kitchen, lounge and terrace on main floor and library on partial second floor over office area. Building will be 81x80 ft. Architect: Clifford B. Dobson.

San Francisco AIA convention is tops in every regard

Quantitatively and qualitatively, the 92nd annual convention of the American Institute of Architects was a resounding success.

The former is a matter of record for the total registration hit 2,474, making the San Francisco affair the second largest in the Institute's history, surpassed only by the Centennial celebration in Washington, D.C., in 1957. The latter, of course, must be a subjective evaluation but surely a great majority of the hundreds who filed into the auditorium of the Masonic Memorial Temple April 19-22 would concur that they participated in one of the finest professional programs ever assembled by the AIA.

Dr. J. Robert Oppenheimer so captivated his audience which filled the large assembly place that it was indeed easy to overlook the contributions of the other three speakers: Dr. C. Northcote Parkinson, Raffles professor of history, University of Malaya; Dr. Morton White, professor of philosophy, Harvard University; and Dr. Wendell Bell, professor of sociology and anthropology, UCLA.

The program was equally successful in its format. Each of the major addresses, followed by a coffee break and a panel discussion of three architects—and a rebuttal in turn by the speaker—was scheduled for a morning session, allowing the visitors to enjoy the charm of San Francisco and its environs during a week of cloudless skies and to view Bay area architecture. Also commendable: a minimum of organized luncheons and dinners and the hospitality night during which local architects wined and dined their guests in their homes.

Dr. Oppenheimer's profound and moving message was, to paraphrase one of the panelists, like a great symphony which leaves the listener with a wonderful feeling although he does not remember any particular passages. There was, in fact, much disagreement as to what the director of the Institute for Advanced Studies at Princeton University really meant. (A digest of his address begins on the following page.)

The famed physicist was, of course, expounding on the vital role of communication in our complicated society today and if there was any one key to his remarks, it was found—to this writer, at least—in these paragraphs:

"There are between the sciences, between sciences and the fine arts, between all of these and the general public enormous difficulties of communication. There is plenty of unity in this diversity of the sciences as there is also some unity and some analogy between the sciences and the arts. Perhaps the strongest unity is that all creative work, all creative men recognize a kind of analogy in the human aspects of the creative process, in the terror, in the discipline and the essential loneliness.

"Now if it is true that between the sciences and among us communication is difficult, limited, if it is true that with us re-education is a continuous process or we stop being educated at all, it is clear that the problem of the relation of this vast accumulating and interesting and beautiful knowledge to the people who are other sorts of people—lawyers, farmers, people at large, political leaders, the sources of power—will be very much more difficult indeed. There is a kind of alienation between the world of high intellectual achievement so largely limited to the sciences in their broad sense, in their all-inclusive sense, the public world, the public sector of our lives, the common discourse in which all men live. And for this reason we have noticed in this century that the greatest discoveries in science have for the most part hardly been understood and hardly seemed relevant to the general thinking of men."

Speaking at the session devoted to political and economic horizons, Dr. Parkinson, satirist and author best konwn for his "Parkinson's Law," evoked considerable controversy with his views on city life and suburbia in this country today. "Civilization is the art of living in cities" was the underlying theme of his address.

"Here in the United States over 50 million people have come to live in what is neither country nor city," he declared. "Having now had some experience of that life, I have come to



OPPENHEIMER

the conclusion that the American suburbanite, trying to combine the amenities of city and country, enjoys the advantages of neither. . . . This is not true of New York nor of San Francisco, both of which owe much to the limiting effect of their shoreline. But how many other cities would justify a tourist's pilgrimage from Europe? There are few cities worth visiting; and many, after dark, are cities of the dead and a few relapse into disorder and chaos."

Continuing to decry the plight of suburbia, Dr. Parkinson emphasized: "In such a life we are all dragged down to the intellectual level of the PTA meeting. The greatest intellectual and artistic achievements do not spring from suburban lawns."

Dr. White, addressing the session on philosophical horizons, also devoted his remarks to the city but in a somewhat different vein than the earlier speaker. With the exception of one very brief period, intellectuals have always been violently opposed to the American city, he explained. This deep hostility of intellectuals which architects and philosophers find may be partly responsible for the present dilemma of city planners.

Dr. White quoted excerpts from the writings of Jefferson, Emerson, Thoreau, Henry Adams and Henry and William James to prove his contention.

Moving to more modern times, Dr. White noted that John Dewey, Louis Sullivan and Frank Lloyd Wright were all against urbanization, feeling that it created "a lonely crowd." All these critics give little spiritual encouragement or blueprints to the planners of what should be done about the problem, he admitted, but added that something could be learned from the criticisms that have been leveled against cities.

In the opening session on sociological horizons, Dr. Bell limited his comments to the single phenomenon of social power: "that amount of control some men have over others, whether legitimate or illegitimate, responsible or irresponsible." And his

NEW PRESIDENT Philip Will Jr. (right) of Chicago listens attentively as his predecessor, John Noble Richards of Toledo, charges him with duties of office during closing minutes of AIA national convention.





PARKINSON



BELL



WHITE

thesis was that the people who hold the power over public policies in the U.S. are not at all representative of our general adult population.

"Yet we are somewhat closer to our goal than we have been in the past. Women have more rights now than they have had," Dr. Bell explained. "Negroes are increasingly having their rights as citizens upheld. The Catholics are a potent political bloc in our cities. But these things and others have not come without struggle. And there is still a long way to go in achieving the democracy that we revere in our speeches and celebrate in our rituals."

Delegates came to the business sessions in a negative frame of mind and failed to approve two amendments in their original form, one dealing with the structure of the Institute and the other with three new categories of membership.

A substitute motion introduced by Glenn Stanton of Portland resolved that the committee on structure "be expanded to include representation from each region charged with responsibility for studying the board's and other proposals on structure, consulting with the membership and reporting to the board in time for action by the 1961 convention delegates."

Delegates soundly rejected the establishment of national associate and student memberships and decided that the third—professional affiliate—deserves further study. —R.E.K.

Houses of science

A digest of the AIA address by Dr. J. Robert Oppenheimer

I want to talk about some of the things that I see in this age of ours, the scientific age, unparalled in human history. I know that it has thoroughly created quite new problems and quite a few opportunities for the architect. But quite beyond that in our whole culture, in our whole society it has brought traits with which men have lived in the past, for which our tradition is a guide of strictly limited value. It has brought pressure to our society and I speak to you in appreciation of the role which the architect has always historically had of bringing to these lesions a helpful and healing and creative hand.

My theme is really as old as the hills but in a new context. It is the theme of the one and the many in the second half of the 20th century, or rather what the many aspects of the scientific revolution and scientific age have contributed to this. I will be particularly concerned with the growth of science and here I make a distinction which I will have in mind throughout between two images of the science which intertwine and reinforce each other but which are still the same. Science has increased knowledge, understanding, insight into nature and increasingly slowly into ourselves as a part of that nature. On the other hand is the power, or shall I say the ingenuity, to apply this knowledge to practical ends which is technology; and this leads to engineering and is the sound of science that is most visible in our world that creates such obvious physical changes and it provides the architect as it does the engineer with countless new problems and also countless new answers to problems that have not yet been put.

I want to talk of the growth of this double science and its effects on our society and specifically on the contrast between what we as men hold in common, know in common, treasure, believe and love in common and the many things which in this world are in a sense separate—separate not necessarily to the individual, not even to the family, but to communities which may be defined by geography, by special interests, by skill, by special knowledge. The contemporary composers would be a good example, so would the contemporary mathematician or the contemporary microbiologists. This is quite a new situation and I will come to outline some of the things which make it so.

Each civilization has had a high intellectual center, a great tradition. But no civilization has ever put together the Greek notion of proof which makes for large logical structures so that when you find that you are in error you learn a great deal and not just that somewhere in the loose line of reasoning that something has gone wrong. Put this together with the experimental techniques which also existed in Greece, were also known in Egypt, the inquiring gadgeteering techniques and with the ideal of human betterment—the notion that we could fix things so that they were a little more agreeable here on earth. And this has produced an interlocking explosion of new knowledge, of new technology, of economic growth, each feeding back to the other, each enriching the other, but sustained by an ever-increasing, evermore rapidly increasing, expanding fund of insight into the natural world.

Of course, to architects as responsible and as courageous as you in this audience I need not emphasize how many of the applications of knowledge have been thoughtlessly entered into, how many of the new possibilities which the new knowledge has given ought in fact not to be exploited in their most obvious and immediate way, how many of the new applications of knowledge indeed are deeply frightening and devastating. This along with the good.

It is true that architects are necessarily and rightly

Continued on page 12



Stamp honors oldest U.S. public building

Oldest existing public building in the nation, the Palace of the Governors at Santa Fe, N. Mex., will be commemorated on a 1¼-cent U.S. postage stamp to be issued June 27. Issuance of the stamp will mark the 350th anniversary both of the founding of Santa Fe and construction of the building, credited to Don Pedro de Peralta, second Spanish governor and capitan general of New Mexico, in approximately 1610.

The large adobe and timber structure has had a long and colorful history, beginning with its service as a palace - fortress and governmental headquarters for the Spanish New Mexico territory. After it was abandoned in 1680, the Pueblo Indians occupied the town and palace for 12 years until the Spaniards regained

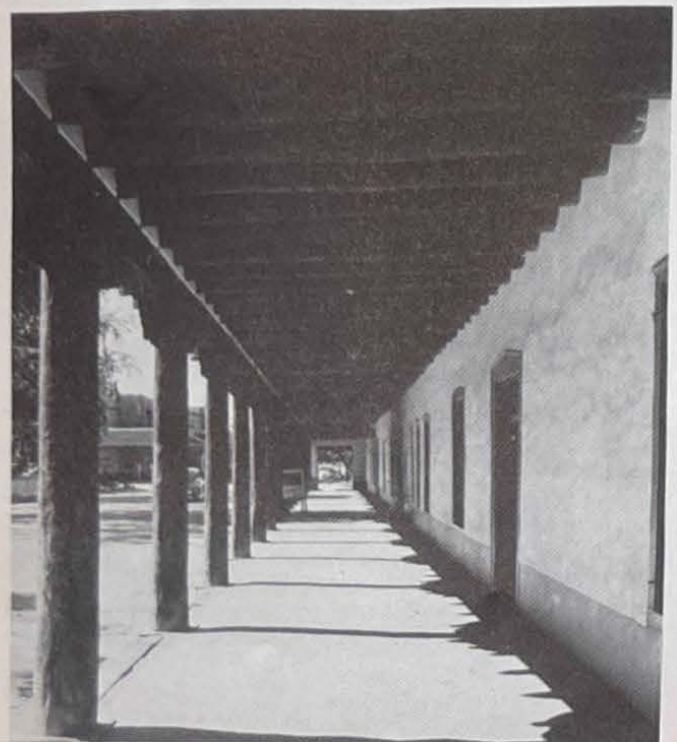
The building has been variously o cupied by military and civil officia of the U.S. and by the New Mexic territorial government. It now hous the Historical Society of New Mexic and the Museum of New Mexic While basically the same structure a existed in the 17th century, it ha gone through numerous renovation and one major restoration in the earl 1900s in which the present portal wa constructed. According to availabl data, it is a near replica of the origina

Designer of the photographic etch ing for the stamp is Tyler Dingee Santa Fe photographer. The stamp itself will inaugurate the new basi postage rate for nonprofit mailin matter.

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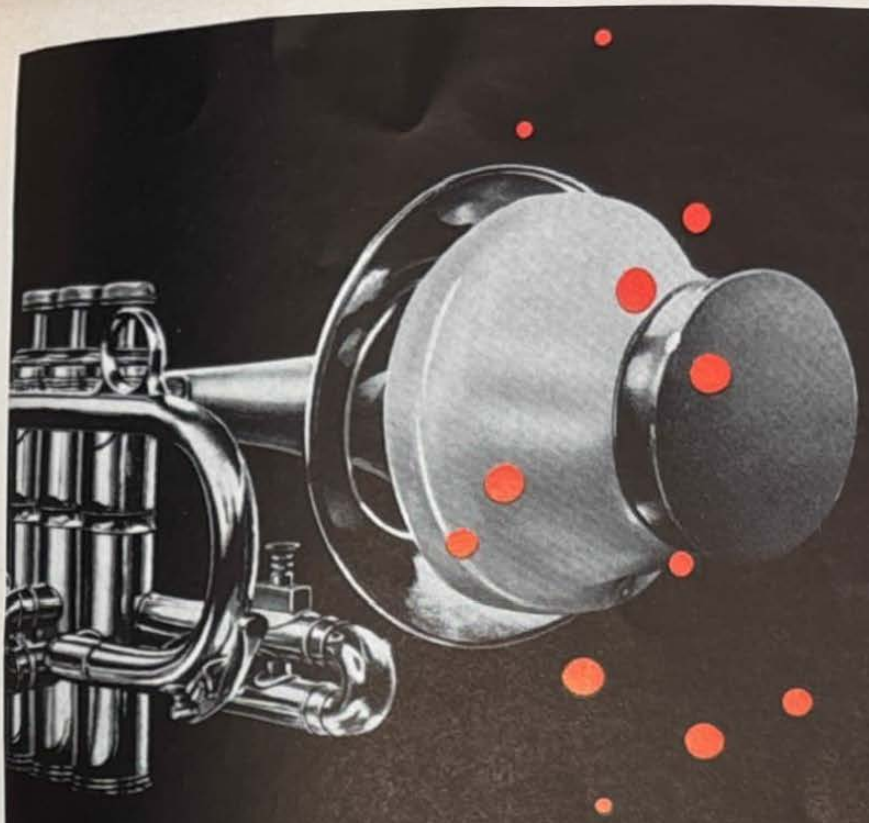


Photos courtesy New Mexico Department of Development



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Houses of science: Oppenheimer (Cont'd from p. 9)

in continuous with the relevant parts of technology, with engineering, with the applied arts in the old days, the practical arts, with engineering today and technology. But their dual and complex function stretches from this to the various other functions. It is a part of their function to give expression and meaning to human aspiration and human life; to recognize and create order and above all a kind of public order, an order which will not be limited to one community but to all who have converse with their buildings, their structures and their cities.

Three years ago I had the privilege of being a member of a somewhat exotic committee but really a very nice architectural jury in this city and I remember from the experience that all of us in deliberating about the highest award gave great weight to the difficulty in today's world of designing public structures which were proper for their function and really beautiful and meaningful and I believe the award we gave went to a public structure. This is more difficult than to design a house for a single family in a forest all by itself.

As I have said, this is a unique time. If I were to try to guess what characterized the takeoff of this modern age compared to all other civilizations I would pick almost a mechanical point and it is important because it will recur in everything that we have to say. It is that early in modern times special attention was given to the integrity, the efficacy, the speed and the unambiguity of communication. The foundation of the Royal Society and imitative but important foundation of the American Philosophical Society in Philadelphia are only instances of men recognizing that for progress in these subjects and in this world they must be able to talk with one another quickly about what they were doing, to describe what they were doing, to have it checked up on them, to have it brought in connection with the work of others and to found not individual enterprise of whatever brilliance but a collective communal tradition. This is the incredible richness of the mutual enrichment of the two great themes—learning more about nature and applying this knowledge to invention. It is not really possible to imagine that the science of today could have come into existence without the technology which was built on the science of yesterday and even without the enormous economy which has grown up on that basis.

One of the most surprising and terrifying characteristics is the growth itself. For science as a whole we know four times as much as 10 years ago and it is not unlikely in some sciences, notably having to do with molecular microbiology, to hear of the past five years having produced more insight into the nature of life than in all human history before it. This sense of enormous growth of what is known is the most vivid experience of those who are part of it. Travel to all parts of the world has made this not the problem of a hundred million people, but of two and a half billion. It also means that the whole structure of our communities, our industry, our work days, our leisure is altered. But besides this, it means that the very substance of our cognitive growth is being changed many times over in a man's life even though when he went to school he learned well and luckily in some fields most of what there was to know; still 20 years later if he stops learning he will be an ignoramus.

It means also that not only mature men today have to lead a life of continuing intellectual vigor and remain students if they are in any way to know what is going on in their specialized field. But between the different disciplines full mutual knowledge is essentially hopeless. All of this development in science starts, of course, with common sense and ordinary human curiosity, with the ingenuity to ask a few questions of nature, the imagination to guess how it might be, to prove it just isn't that way and finally see how it is.

But before long, enough has been learned so that a special tradition is developed apart from the general tradition which we all have in common. And these traditions are for the separate sciences, finally rather separate, branching from one another, using different techniques, different concepts, different words so that it is a matter of serious educational and conversational difficulty for people in fields that are not the same to tell each other what they have discovered, to explain the new things in a serious way. This ramification, this specialization is often deplored and it has its deplorable side and it needs every kind of corrective but it is the essential cutting edge of our society that our traditions are specialized, that what the physicist knows or the astronomer or the biologist is so much more than one can count on finding in anyone else that he has a special power to discover new proof and if desired to apply it. This is what gives the power to the sciences, just this traditional quality. For tradition today is not only the maintenance of our root, it is the very instrument by which we render it obsolete. It is the basis on which discovery is made and therefore the basis of all the upsetting of tradition, good and bad, which the sciences have brought.

And this of course means that there are between the sciences, between sciences and the fine arts, between all of these and the general public enormous difficulties of communication. There is plenty of unity in this diversity of the sciences as there is also some unity and some analogy between the sciences and the arts. Perhaps the strongest unity is that all creative work, all creative men recognize a kind of analogy in the human aspects of the creative process, in the terror, in the discipline and the essential loneliness.

Now if it is true that between the sciences and among us communication is difficult, limited, if it is true that which ups re-education is a continuous process or we stop being educated at all, it is clear that the problem of the relation of this vast accumulating and interesting and beautiful knowledge to the people who are other sorts of people—lawyers, farmers, people at large, political leaders, the sources of power—will be very much more difficult indeed. There is a kind of alienation between the world of high intellectual achievement so largely limited to the sciences in their broad sense, in their all-inclusive sense, the public world, the public sector of our lives, the common discourse in which all men live. And for this reason we have noticed in this century that the greatest discoveries in science have for the most part hardly been understood and hardly seem relevant to the general thinking of men. In physics in this century we think we have found things which shatter our image of human knowledge as profoundly as any discovery ever made, but very few people know about it and our attempts to make this part of the common discourse have not on the whole been successful. The thinking caps of men change, but today the contribution of the high intellectual enterprise of discovery to this change is not very robust, not very honest and not even a very existing one.

For a number of reasons, some of which seem to me the direct result of the scientific age and some the indirect result, that part of our life which we have in common which is public has suffered from the very growth of the sciences which characterize our time.

I have in mind the common culture where we can talk to each other, not just about the facts of nature which we can test and verify, disprove and find wrong, correct and refine, but where we can talk to each other about the nature of the human predicament, about the nature of man, about law, about the good and the bad, about morality, about political virtue and politics in the Aristotelian sense, about the high forms of art, the seat of civilization—that which we could take for granted in each other, that of which we could speak, not necessarily or typically in words in terms meaningful to all, in terms relevant to all.

For this public sector and for this common discourse which the arts have characteristically lived and which they have made possible and enriched, for this there are many preconditions. One, and it's important, is a common basis of knowledge. And what has happened to that? I think I have indicated. One is a shared tradition and a certain slowness of change so that the past is meaningfully present in the present and meaningfully relevant to the future.

And one is something which the sciences have tended to drive out, which is the possibility of rational converse about things which in their nature are not verified. Much of what we talk to one another about is not to communicate facts of nature or facts of history, but to commit ourselves, to bind ourselves, to exhort, to encourage, to approve or to recoil. The enormous change in scene, the size and scale of our world, the impoverishment of the common tradition at the expense of the specialized traditions have all weakened this common sector of our lives. And that this is one of the things which a profession which spans the great arch from the techniques and sciences to the arts and the meanings and the hopes of man would feel, it seems to me, undoubted even if the evidences were not everywhere about.

I have a few thoughts not about how to reverse this trend, because in a certain sense we are unable to become like Athens as we are reluctant to and the scientific age has been responsive to human needs, wants, hopes. It has in this country gone an incredible distance to abolishing poverty. It has put down, made impossible, some of the dreadful superstitions and horrors which mankind has lived through throughout the ages. It has provided even if one cannot say for whom, a kind of virtual, if not actual, enlightment as the founders of our country hoped it would and the French before them. It has done too many good things for us ever to stuff it back in the box. And we cannot become a small society and we cannot regress. But living with this I think we may accept the fact that our culture is not likely to have the architectonic quality that the Europe of the Middle Ages or even the Athens of the 50th century had. It is not likely to be as united, as monistic, as open all to all. It is sure to be pluralistic, it is sure to have parts which are not subsumed by any other parts or any but an imminent whole.

The image I have is one that is of a structure in which the intimate, deep disciplines, the intimate, deep ways of life are bound together by countless bonds, not all of them active, but many of them virtually there, many of them created by friendship, by common purpose, by accidental communion of interest, by logical or emotional congruence and analogy, by affection, by love.

The world is not an incoherent one, but its unity is not the kind to which the study of history would accustom us.

I think also that it's obvious that the new society and the problems that it has created—the need for a common understanding, a common world, a human community—is also beginning to provide some hitherto unknown means of actually advancing and achieving these goals. If it is true that technology rests on science and the economy on technology and if it is true that the economy is beginning to make us an affluent society and to promise us leisure, it is then also true that we have a chance for men at large, not everybody, but many, many people, to accept as one of the glories of life, one of the things for which life was made, a continuing unremitting lifelong intellectual vigor—a kind of participation in the life of the mind which the best of us knew in the best time of our student years and which professional people never lose but which has in the past for practical, economic and even spiritual reasons been thought to be irrelevant to the life of men at large. But I think we will come to see education not as a way of preparing people to take off and live but as a way of preparing people to take off and live and love and know and continue to learn throughout their lives.

I think that one is called upon to have a rather subtle and difficult attitude which combines an unqualified patriotism and loyalty and love of those things in which one is really engaged, those communities of which one is a member, those parts of life which are one's own; not perhaps even as broad as architecture but the architecture of certain styles and certain functions; not perhaps as broad as physics, certainly not as broad as science, but the physics that I know and live in and work with.

I think one has to combine this loyalty and love and protection of its intimate pure quality with a great sense of how ignorant we are of almost all other of the houses of science and houses in which men live and with the great talents and the great affection, the great openness with regard to learning all that our poor strength lets us learn of them. And so we enforce these bonds between the essentially disparate, yet not unrelated parts of human life. None of this can be done without the arts which, apart from keeping their own virtues strong even when there is a limited and specialized audience as the only audience to admire it, have throughout the ages and will always have as part of their aim to enable us to see and see precisely together and in common elements of harmony and order in the world while we treasure and do not do violence to the specific nature and the individual structure of the elements that compose our society, our culture and our life. In themselves, the developments of physics, the developments of painting, to a more limited but enormous extent the developments of architecture, are responsive to the inner logic and inner nature of these fields of human life. But they are bound in some larger relations and harmonies and contrasts. They're not entirely free and they're not entirely bound as man himself is in the great humane vision of the nature of man.

I say this with the utmost diffidence. It seems to me that the greatest hope I can express for your profession is that you will find it possible in your work of design and creation to look with very wide angle lenses at the site in which you are working. Ideally, perhaps, the city itself, the megaloposis or the province and perhaps, not necessarily ideally only, perhaps in reality, anyway at the very least in areas physically large enough to encompass what naturally meets the eye, what one sees in one vision. I think that this may promise the possibility of doing justice to the unique and intimate in the structures you design, that which makes them unlike any other, that which makes them works of art fit for their purpose at the same time that it bears a physical mark of the actual multiple relatedness of human institutions and of human lives; and that in recognizing this relatedness one will not lose but enhance the beauty of its inward, inner quality.

Neutra earns a first place in design competition for Dusseldorf theater

Los Angeles architect Richard J. Neutra (subject of PA&B's second profile beginning on p. 25) has been named a finalist in a competition to design a theater in Dusseldorf, Germany. His entry and those of two German architects are being evaluated to determine which of the three will actually be constructed.

While the theater in any European city is a most important structure to its citizens, this is especially true in Dusseldorf, often called the "theater center of Western Europe." When the city fathers agreed to build a new one, they invited all German architects and three Americans (the other two had not been identified at press time) to enter the competition. Names of architects who submitted designs were not revealed during the judging.

The theater will be located near the tallest, most distinguished, office building in Europe just completed for Rheinrohr, a concern constructing pipelines in Arabia and Venezuela.

The theater will open out on a park of the 18th century and, due to its looming neighborhood, Neutra decided to distinguish it, not by a raised base, but by a sunken forecourt—the court of the original three Muses. They stand in an abstract sculptural chord; the fountain of the Hippocrene and a large mirrored pool enriched it. Visitors promenade over a bridge onto a raised terrace to smoke a cigaret during intermission and to enjoy the park below.

The whole building complex and its surrounding terraces with garden areas and reflection pools will be a social center on many an occasion and the pride of this city which itself harbors few industries, but is the administrative center of the most far-flung technological economics, aiming to evolve global progress.

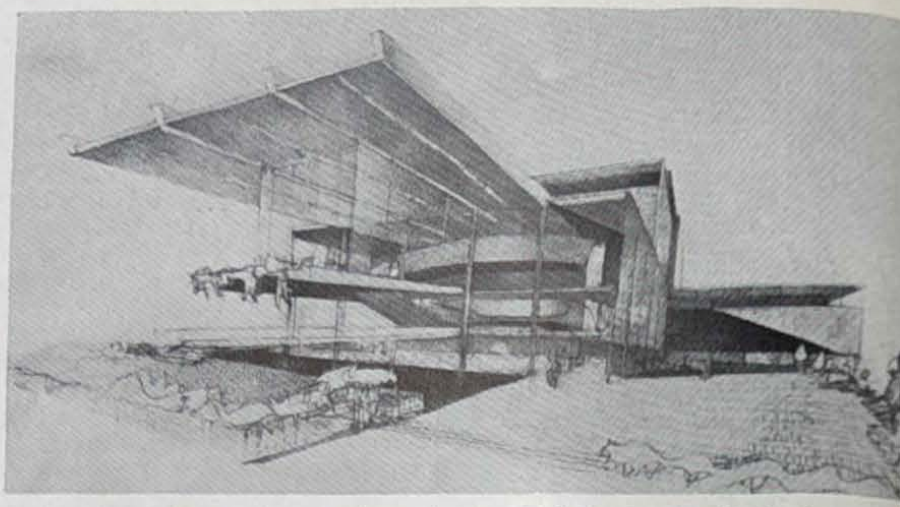
Neutra has preserved every tree in his plan. Extensive parking spaces, particularly under the buildings, are approached from the north and south and relayed by an underground, festively lit, concourse from which the theater guests reach the foyers of both houses and the ticket offices via escalators. An outer ticket office is operated by day for convenient drive-in purchases.

Says the architect: "In Dusseldorf an impressive serpent of luminosity centrally waves toward the middle of the stage from the middle point of a broadly sweeping illumination balcony in the rear of the spectatorship. The interestingly warped ceiling of several tiers is irradiated with increasing or dying down rapture of forward-looking, or still reverberating souls when the lights rheostatically go on or are dimmed off to mark the beginning or end of the inter-act.

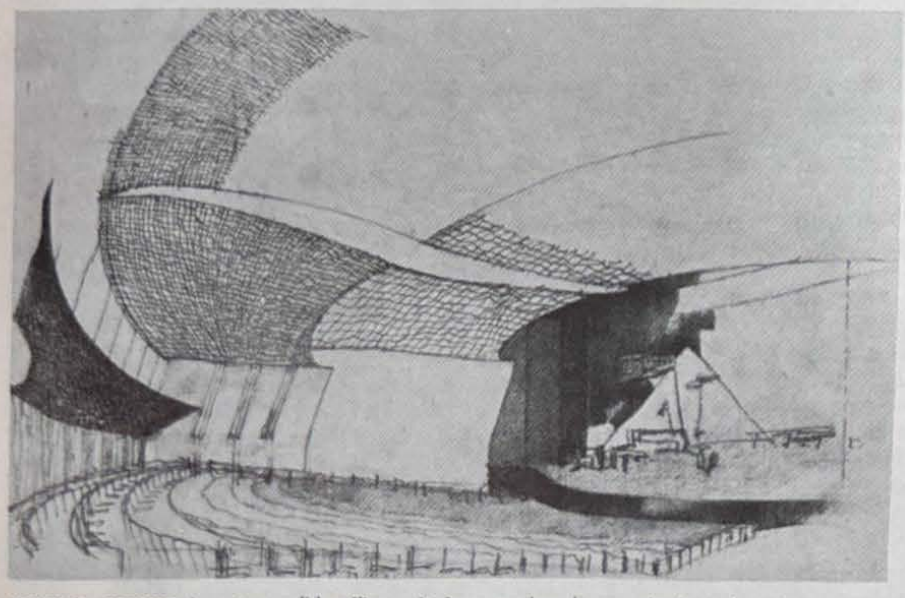
"But this visual ceiling is not a solid ceiling. It is a meshwork, completely independent of the auditive ceiling which is calculated to guide an optimum of reverberations to every seat, at the side or in the middle, front or back. The rear portions of the side wall consist of batteries of parallelepipeds with triangular cross sections and with each of their three faces different in absorption and reverberation characteristics," continues Neutra in explaining his design philosophy.

"Just as push buttons change the illuminative mood during a scene, so this auditive coloring can be regulated and acoustical illumination can be heightened while that battle scene reaches its height or while that ghost speaks his last lines, never to be forgotten. There is no reason why room acoustics should be static during drama and only visual illumination dynamic.

"Germans greet their famous play directors with deep deference, they may applaud their best players and ensembles with up to a dozen curtain calls. They have spent — and are spending — more love and funds on theaters as if they were temples and often call them so. A temple can be venerable but it should have a vista into a future of ever-deepened insight into human nature."



SUNKEN FORECOURT is important element in Neutra's design for Dusseldorf, whose theat has long been one of most prominent publicly maintained legitimate theaters on entire contine This plan is vying with two by German architects in final judgment by city leaders.



"VISUAL CEILING is not a solid ceiling. It is a meshwork, completely independent of the auditive ceiling calculated to guide an optimum of reverberation to every seat. . . . There is no reason why room acoustics should be static during drama."

Los Angeles may find answer to growth in 'urbicluster'

If Los Angeles is to grow into a city of meaning that provides its citizens with the maximum benefits of present materials and methods of construction, the solution must come from within professional groups. With this as a premise, the Southern California Chapter, AIA, has been providing its members with an overview of the total building picture as it stands in regard to planning and code regulations.

At a recent meeting, for example, Edmund McKanna, investment realtor and long-time member of the Los Angeles City Planning Commission, pointed out that Los Angeles is rapidly becoming the "managerial city" of the West, the place where financial and management decisions will be made for the entire region, if not all of western America.

Such development and growth are potentially on the horizon because of the pattern evolving in metropolitan Southern California which McKanna calls "urbicluster." He continued: "The urban revolution is going on all over. We need to solve the problem with a master plan which articulates the goals we are striving to reach and which gives us a city in which we can take pride. We cannot solve the problem merely by moving to the suburbs and ignoring the city itself."

Self-contained communities which are formed when metropolitan shopping facilities move into traditional residential suburbs of the past become a cluster around the central urban core, McKanna explained. In Los Angeles this concept of the pattern of growth is developing because of the degree of personal mobility which enables man to satisfy his desire for maximum personal privacy while, at the same time, finding his work and other life-enhancing opportunities in nearby areas where others are congregated.

Speaking on the same program, Kenneth Reiner, an inventor-engineer who, as a private citizen, is founder of the Council for Better Buildings "in the interest of better buildings for Los Angeles," described for the architects the background of the proposals made by his nonprofit organization.

Reiner said the challenge is to keep up with technological accelerations and to take advantage of new solutions which will provide better buildings. Los Angeles should be able to maintain leadership in its growth by eliminating obstacles which prevent or discourage new ideas, Reiner said.

The CBS proposes an amendment to present building code regulations which would permit "licensed architects and engineers in responsible charge of design to utilize designs, materials and methods certified by them to be equivalent or better than the existing code provisions."

This solution to provide a means for properly responsible and professionally trained people to design without restrictions of rules which are arbitrary and often out of date, is practical and workable, Reiner said. He added that the proposed amendment is compatible with the present building codes of the city but that it places the authority where the responsibility already lies, by legal definition.

On the same program, San Jose architect William Higgins, chairman of the building code committee of the California Council, AIA, explained its program which recommends adoption of a uniform code for the entire state. Such a proposal would provide a single performance code which will take the place of all existing state codes having to do with buildings.



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FIRST PLACE PLAQUE is admired by PA&B threesome: A. O. Bumgardner, consulting editor; Robert E. Koehler, editor; and Roscoe Laing, general manager.

PA&B wins first award for layout and design

Cited as "the outstanding publication for best artwork, layout and design," Pacific Architect & Builder received a first place in the ninth Awards of Merit competition sponsored by the Western Society of Business Publications. Presentation was made at a banquet in Los Angeles April 12, with William G. Quinn, Southern California editor, accepting the plaque on behalf of the magazine.

Said the jury in its official report: "Pacific Architect & Builder's art and typography are clean and to the point, well suited to content. It makes use of no unnecessary tricks or devices. Text and illustration are consistently compatible. The illustrations are consistently pertinent and appropriate. The publication displays judicious and sparing use of editorial color."

Judges were Phil Seitz, West Coast editor of Advertising Age; Fred Olsen, media director of Hixon & Jorgensen; and Frederic C. Coonradt, associate professor of journalism at the University of Southern California and Southern California correspondent for Editor & Publisher.

Forty-one publications entered the competition, open to those which originate in the 11 western states. In journalistic circles, architectural magazines are included in the business publication category.

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2



new offices, partnerships

Donald R. Roark has opened an office for the practice of architecture in the Denver-U.S. National Center. He was chief draftsman for Victor Hornbein and more recently was employed by James H. Johnson & Associates, both Denver firms.

Charles A. Metcalf has established his own architectural office at 2925 Fuhrman St., Seattle. A graduate of the University of Washington, he most recently was associated with Harmon, Pray & Detrich.

Noel D. Cooke has opened an office for the practice of architecture at 2003 State St., Santa Barbara, Calif.

Architects Associated is the name of a partnership formed by Roy Richards Silver and Arnold Jack Ehlers, both University of Utah graduates, at 2056 E. 33rd South, Salt Lake City.

John Chopas and Robert L. Starkovich have formed an architectural partnership under the name of Chopas & Starkovich in Phoenix, with offices at 341 E. Camelback Road. Both men have practiced in the city for several years.

Lee Wiley Bold, architect and landscape architect, and John Merchant, civil engineer, have established a partnership to be known as Bold & Merchant, with offices at 888 N. First St. in San Jose and 126 W. 25th Ave. in San Mateo.

Holman J. Barnes and Albert Hilgers have formed an architectural partnership known as Barnes & Hilgers, with offices at 233 S.W. Front Ave., Portland.

James L. Payne and Wayne Struble have become partners in an architectural office at 1005 E. Main St., Medford, Ore. The partnership status does not apply to the headquarters firm in Salem which operates under the name of James L. Payne & Associates.

Edward B. Kress and Edward W. Kress, architects, and Leonard Winston, civil engineer, have formed a partnership known as Kress & Winston, Inc., with offices at 363 Park Ave., San Jose.

SAN FRANCISCO RECEPTION FOR AIA PRESIDENT



1

1. Intermountain District delegation includes Betty Pustarfi of Central Arizona Chapter's staff in Phoenix; Jimmie R. Nunn, president of that chapter; Mrs. Nunn; and architect DeVon M. Carlson of Boulder, Colo.

2. Pacific Northwest is represented by Seattleites Mrs. Bain; Mrs. Johanson; Perry B. Johanson, newly elected fellow; James W. Cawdrey, immediate past president of AGC; Mrs. Jones; and architect Victor N. Jones.

3. Among new AIA fellows from Southern California are A. Quincy Jones of Los Angeles, Lutah Maria Riggs of Santa Barbara, Burton Romberger of Newport Beach and Paul R. Hunter of Los Angeles.

3



firm changes

George Wellington Stoddard has retired from the firm of George W. Stoddard-Huggard & Associates, Seattle architects-engineers, which continues under the name of Stoddard & Huggard. A graduate of the University of Illinois, Stoddard set up offices in 1920 with his father, operating as Stoddard & Son until the death of the former in 1929. Huggard, who received his degree from the University of Washington, joined Stoddard in 1943, became a partner in 1955 and was made managing partner in 1958.

Brenner & Arnold is the new name of the architectural firm formerly known as John Brenner-McIntire-Arnold, with offices remaining at 97 W. Lynwood, Phoenix.

Tician Papachristou and Charles A. Haertling are no longer associated in the practice of architecture in Boulder, Colo. Haertling's new office is at 1305 Spruce St., while Papachristou remains at 2000 Walnut St. and also retains the office at 847 E. 17th Ave., Denver.

The Phoenix office of Fred M. Guirey, architect, is now known as

Fred M. Guirey & Associates with the addition of Richard M. Arnold of Santa Fe, N.M., and Milan Srnka of Cleveland.

The Honolulu firm of Austin & Towill, Ltd., consulting engineers, is now known as Austin, Smith & Associates, Inc.

new associates

Rush J. McCoy has become an associate in the Lakewood, Colo., office of architect Paul W. Rader. A graduate of the University of Nebraska, McCoy has been employed by several Denver architectural firms and most recently was in the regional architectural department of F. W. Woolworth Co.

Arthur T. Auburn, formerly chief associate of Ralph D. Peterson & Associates, Denver architects, now is associated with Richard B. Williams, architect-engineer, in the same city.

Leach, Cleveland & Associates, Los Angeles architectural-planning-engineering firm, has given associate status to Harry R. Wilson, architect.

Albert Hunter Jr., Oakland architect, has named Shig. Iyama as associate, with offices in a new location, 384 First St.

Gerald Lou Allison and Gregory M. B. Tong have been made associates in the Honolulu firm of Wimberly & Cook Architects, Ltd.

new addresses

Hayslett & Essert, architects, to 1211 Jefferson St., Delano, Calif.

T. J. Moore Jr., architect, to 393 Corona St., Denver.

Albert Criz, architect, to 9808 Wilshire Blvd., Beverly Hills, Calif.

James P. Labarber, architect, to 3936 Mayette Ave., Santa Rosa, Calif.

George F. Schreiber, Inc., architects, to 217 West Palm Ave., Compton, Calif.

Richard L. Dorman & Associates, architects, to 113 N. San Vicente Blvd., Beverly Hills, Calif.

Sutton & Stephens, architects, to 25 California St., San Francisco.

Edward Miyamasu, architect, to Room 308, 931 University Ave., Honolulu.

Robert Beall & John Garritson, architects, to 208 Vine St., Santa Maria, Calif.

Jacob Tracht, architect, to 8344 Melrose Ave., Los Angeles.

appointments, elections

Worley K. Wong of San Francisco has been appointed to the California State Board of Architectural Examiners, replacing Wendall R. Spackman, also of San Francisco, whose four-year term has expired.

C. A. Sundberg of Idaho Falls has been reappointed to the Idaho State Board of Examiners for Architects for a term which extends to January 1964.

Two California architects have been appointed to state commissions by Gov. Edmund G. Brown. They are George L. Willox to the State Planning Commission and Charles Luckman to the Governor's Commission on Metropolitan Area Problems.

Albert B. Thomas, architect, has been elected vice president of the Sacramento Builders Exchange.

Ken H. Pfeiffer, industrial designer, has joined the Los Angeles architectural-engineering firm of Charles Luckman Associates, as director of store interiors.

Utah Chapter, AIA, has picked this slate of officers: Ashley Carpenter, president; Nathan Woolley, vice president; John Sugden, secretary; and Bruce Dixon, treasurer. All practice in Salt Lake City except Dixon whose office is in Provo.

honors

Joseph L. Young of Los Angeles, whose mosaic murals have helped to initiate a new direction in contemporary architectural art, will be awarded an honorary doctor of literature degree on commencement day, June 6, by his alma mater, Westminster College, in New Wilmington, Pa.

Washington State Chapter, AIA, last month cited 11 artists and craftsmen for their outstanding contributions to the field of architecture, all nominated by the architects responsible for projects in which they have participated. Certificates for Superior Design and Execution were presented to Harold Balazs, Spokane, for sculpture in the Norton Building; James H. FitzGerald, Seattle, for stained glass in the chapel addition, University Christian Church; Philip McCracken, Guemes Island, for sculpture in the Norton Building; and Norman G. Warsinske, Seattle, for metal sculpture in the University Unitarian Church and miscellaneous metal lamp shades.

Certificates for Superior Craftsmanship went to these Seattle area men: Ray Hungate for commercial painting, Richard Lynn for finish millwork, John M. Pirak for direction of curtain wall engineering, fabrication and installation on the Norton Building, Stanley Waldowski for construction and coordination of bank fixtures, Grant E. and James W. Welden for carpentry and millwork and M. P. Wilson (currently field superintendent for Riley Pleas, Inc., general contractor for the headquarters building which PA&B will share with its publisher) for execution of construction.

Roy A. Lippincott, Santa Barbara architect, has been awarded the Bishop's Award of Merit of the Episcopal Diocese of Los Angeles.

Architect Minoru Yamasaki will return to his native Seattle in June to receive the University of Washington's "Most Distinguished Alumnus" award for 1960. A principal of the firm of Yamasaki, Leinweber & Associates, with offices in Birmingham, Mich., he has a number of award-winning projects among his design credits. He is a member of the university's Architectural Commission and is architect for the federal government's Hall of Science which will be constructed for Seattle's Century 21 Exposition.

competitions

Entries in the eighth annual industrial and institutional landscaping awards competition must be received by September 1. Among the 1959 winners were three West Coast firms: Stuart Co., Pasadena; Valley National Bank, Phoenix; and Washington Water Power, Co., Spokane. For details write: Dr. Richard P. White, American Association of Nurserymen, 635 Southern Bldg., Washington 5, D.C.

miscellany

An annual lecture series sponsored by Irvan F. Mendenhall, president of Daniel, Mann, Johnson & Mendenhall, Los Angeles architects-engineers, was inaugurated March 16 at Harvey Mudd College in Claremont, Calif. Initial lecturer was Dr. Ernst Weber, authority on microwave technology, who discussed "Preparing for the Unexpected."

California Association of Landscape Architects will be dissolved at the end of its fiscal year on June 30, "with the intention that the membership shall as a group of individuals join with the American Society of Landscape Architects." The organization is not to be confused with the California Council of Landscape Architects, which has selected Riverside for its 1960 convention from October 20-23.



OVERALL DEVELOPMENT of airport facil will include parking lot, ticketing buil connected to waiting unit by passenger b and loading ramps.

Two-level planning segregates airport functions for booming Las Vegas

Construction will begin this fall on airline terminal facilities at McCarran Field to serve Las Vegas. Project will include two two-story buildings, passenger loading fingers with 16 gate positions which can accommodate the largest jet airlines, a control tower, fire station and parking lot for 1,400 cars.

The $4.5 million complex has been designed by Welton Becket & Associates and John Replogle to eliminate as much as possible any bottlenecks at the airport and to match terminal facilities with jet transportation. To this end, pedestrian bridges are used and two-level planning separates passengers from airport ground operations.

Key structure in the group will be a two-level hexagonal passenger waiting building with tri-planned, thin shell concrete roof providing a vaulted 25-ft. high ceiling. Top level will contain passenger waiting facilities, a restaurant - coffee shop, cocktail lounge, nursery, concessions and restrooms. It will be glass enclosed and low interior partitions will enhance the effect from the outside of a completely open appearance. Ground floor of the 38,850 sq. ft. structure will house mechanical equipment, including the air conditioning system for the entire terminal, kitchen for the restaurant, staff cafeteria and storage areas.

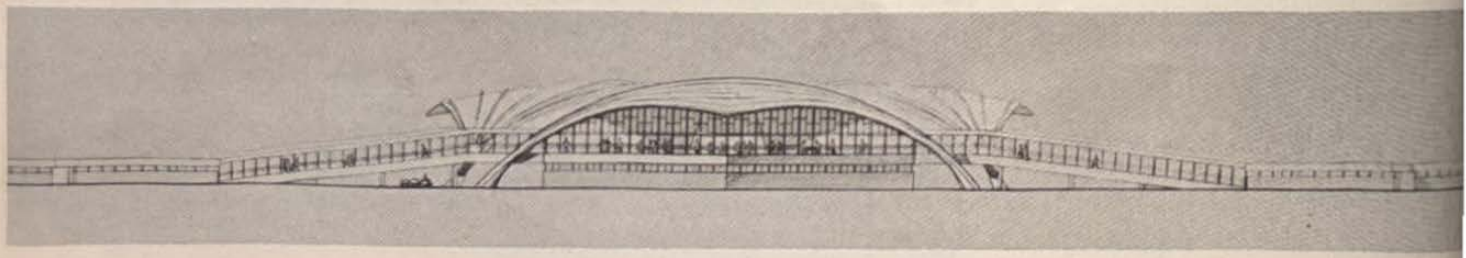
Roof will be formed of three identical thin shell vaulted concrete segments, each describing an arc from the ground to a peak of 40 ft. and then back to the ground. Segments will be poured in place, using the same form three times, and then joined back to back, leaving three sculptured spines between them at the top. These will lead to the ticketing building and loading fingers.

Ticketing building will be a 500-ft. long and 90-ft. wide open V. Ticketing desks, baggage claim racks and concessions will occupy the main floor on the west side with airline office space on the mezzanine, while on the east side is a two-story high open concourse. Structure will be steel frame and masonry construction. Full-length metal canopy on the front will provide cover for automobile and bus passengers. Above the canopy the building will be faced with a precast concrete slab screen over a glass wall.

From the ticket building, the passenger will take a short escalator at center of the building to a bridge which spans the area ticketing and the waiting building. When ready to board he will walk down one of t ramps to the one-story loading finge Baggage and service trucks will tra under the bridge and the ramps the level of the lower floor of central terminal and the west side the ticketing building. Complete p senger complex encloses 159,150 ft. of space.

Project as approved by voters i recent bond election also includes 95-ft. high control tower, designed the architects with central elevat four supporting concrete columns a a precast concrete screen around t office and equipment house atop t tower (a repeat of the screen us on the ticketing building); one-sto steel frame fire airport station; a parking lot. All will be located on t east side of airport. Present faciliti on the west side will remain for u by private and scheduled aircra These were built in the days wh McCarran Field accommodated flights daily with a total of 35,1 passengers (1948). Last year the were 99 flights daily with a total 959,603 passengers, reports the Cla County Board of Commissioners.

PASSENGER WAITING BUILDING, two-lev hexagonal, is focal point of terminal. It wi be glass enclosed so as to provide command ing view of airport and surrounding landscape





Steel makes possible a new trend in Western architecture

Its hallmarks are spaciousness, flexibility, and new lines of contemporary beauty

Watch for buildings or homes with a fresh look . . . a light-filled look . . . a rhythm and a boldness of line. This is the touch of steel in Western architecture.

Its distinction is in added length of span, added lightness of scale, added textural opportunity. In the architect's imaginative hands, steel is bringing wonderful new features to Western buildings, schools and dwellings . . . and with them, new economies.

The speed of steel framing, simplifications of steel construction, applications of glass and other panelling materials with steel have all brought about attractive design and cost advantages. On the following pages are some strong examples.

A portfolio of Western architecture prepared by United States Steel



Whelan Building, Palo Alto, Calif. / Architect: Knorr-Elliott Associates, San Francisco

flexible space...

Enter this office building and you sense the pleasant spaciousness born of steel. There are no heavy, load-bearing walls. Instead, the whole building is "contained" in a decorative cage of steel—which was framed in four days, allowing other construction trades to complete the job faster. Interior walls are movable to provide for flexible office planning.



Simple beauty in this steel-framed Post Office building was admired at the U. S. exhibit in Moscow. The modular design is outlined in exposed steel. Facade panels are blue concrete blocks, a striking combination of color and texture. Equally startling is the low cost of this Post Office, which was architect-designed and competitively bid.

ARCHITECTURAL DETAIL: *Whelan Bldg. stairway floats on a single 8" WF beam of USS Structural Steel. Steel trays of exposed aggregate form treads. Stringers are curved, triangular ribbons of USS Steel Plate.*

Westchester Station, Los Angeles Post Office / Architect: Craig Ellwood Associates, Los An



Justice Street School, Canoga Park, Calif. / Architect: Roy Donley & Associates, Los Angeles

functional efficiency...

ARCHITECTURAL DETAIL: *Thirteen Vierendeel trusses of USS Structural Steel support 335'-long gymnasium roof at Mills High School. Justice Street School is framed in columns, beams and purlins of USS Structural Steel.*

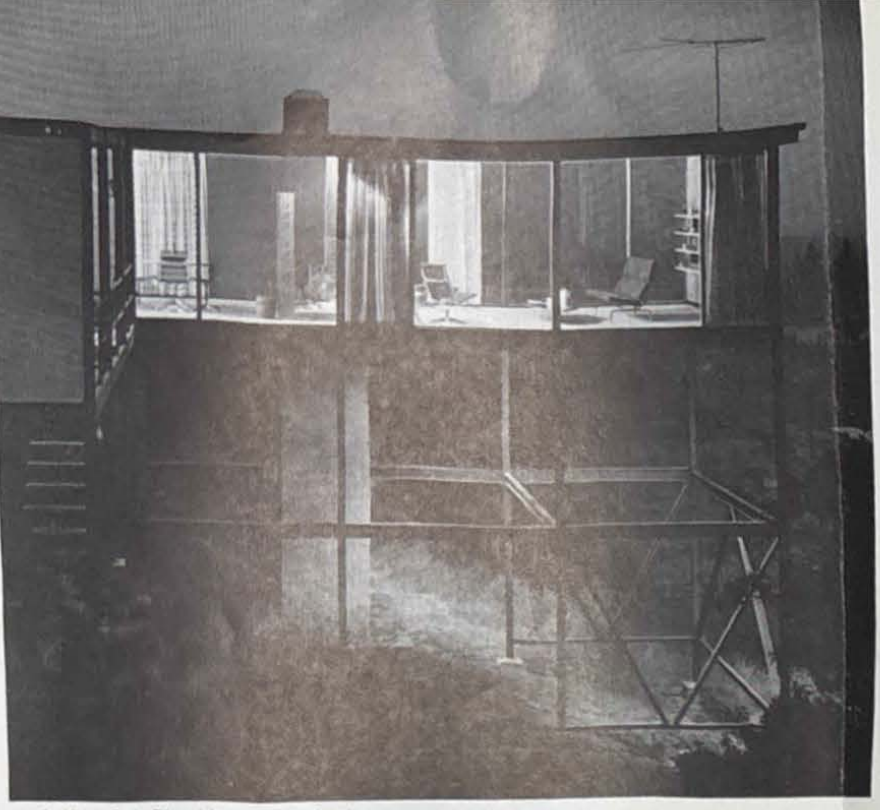
Roof floats independently above classroom curtain walls which bear no weight. Exposed steel framing carries the roof and walls—permits changes in classroom planning at minimum expense and yields 100% use of interior floor area. Doors, windows and walls are all interchangeable.

Today's school in steel emphasizes light, airiness, protective strength. Wide-span steel roof decking forms shady, sheltered concourses. Classroom space increases because of thin steel walls—insulated and sound-proofed. This fireproof, earthquake-safe school costs no more per square foot than many non-steel schools built the same year. One of more than 500 steel schools built in the West by Calcor Corp., Huntington Park, Calif.

Mills High School, Millbrae, Calif. / Architect: John Lyon Reid & Partners, San Francisco



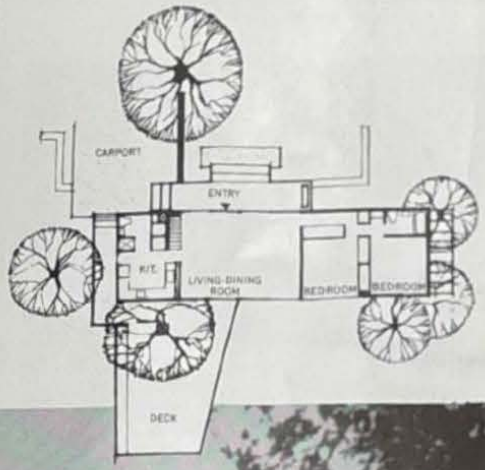




Architect: Craig Ellwood Associates, Los Angeles

"Impossible" building site becomes *magnificent* with steel. Poised on 28' steel columns, this home juts out from the street to exploit the breath-taking view of beach-city lights and the ocean. Versatile steel framing here will also permit addition of master bedroom suite beneath living-dining area at a later date.

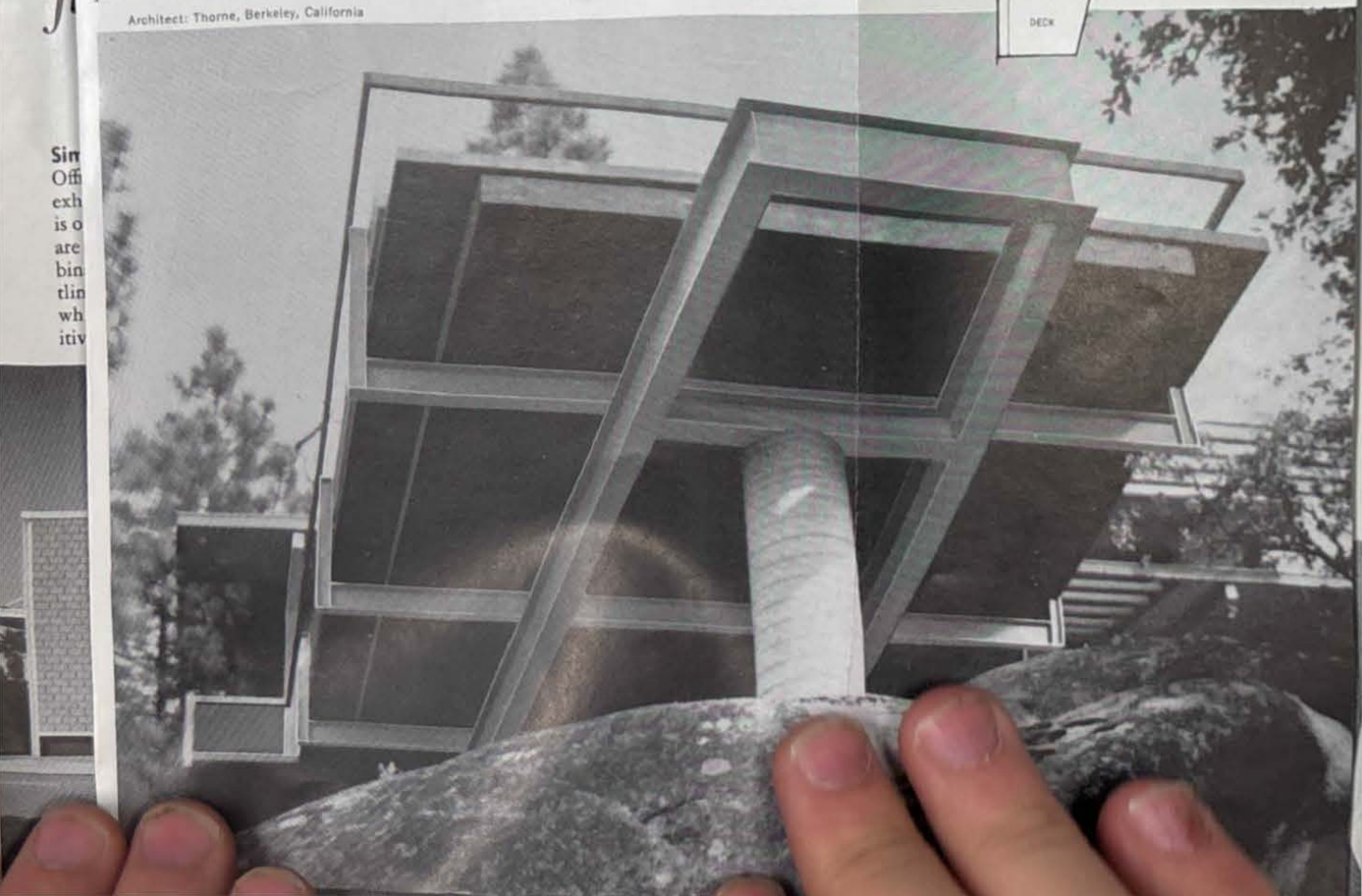
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expandable planning...

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Architect: Thorne, Berkeley, California





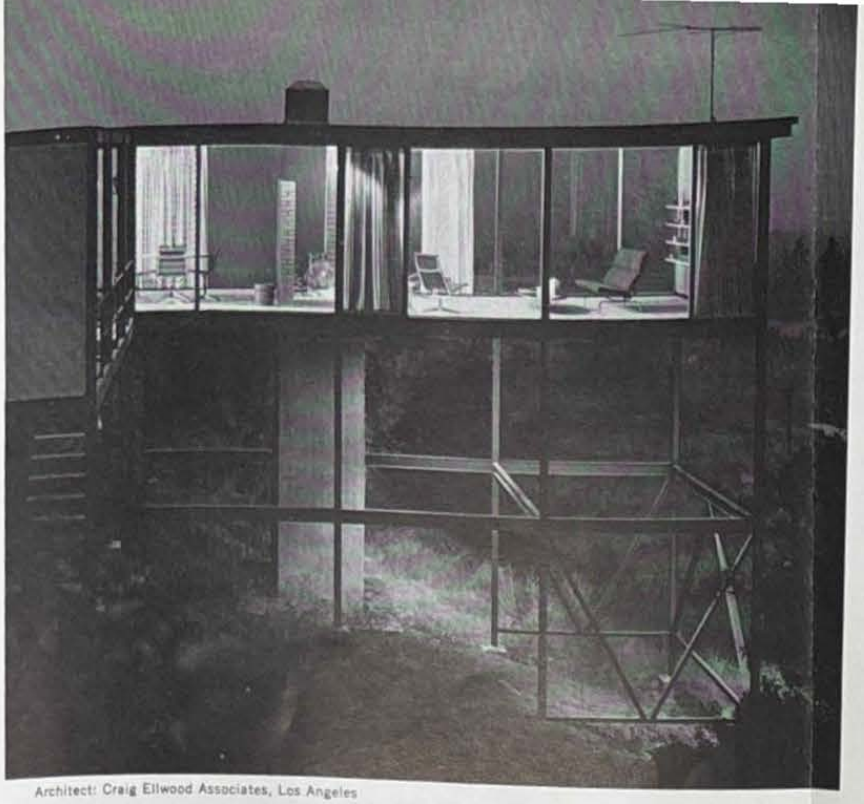
pa&b profile: Richard J. Neutra

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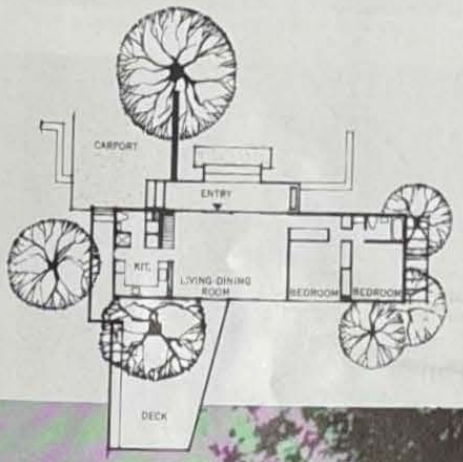




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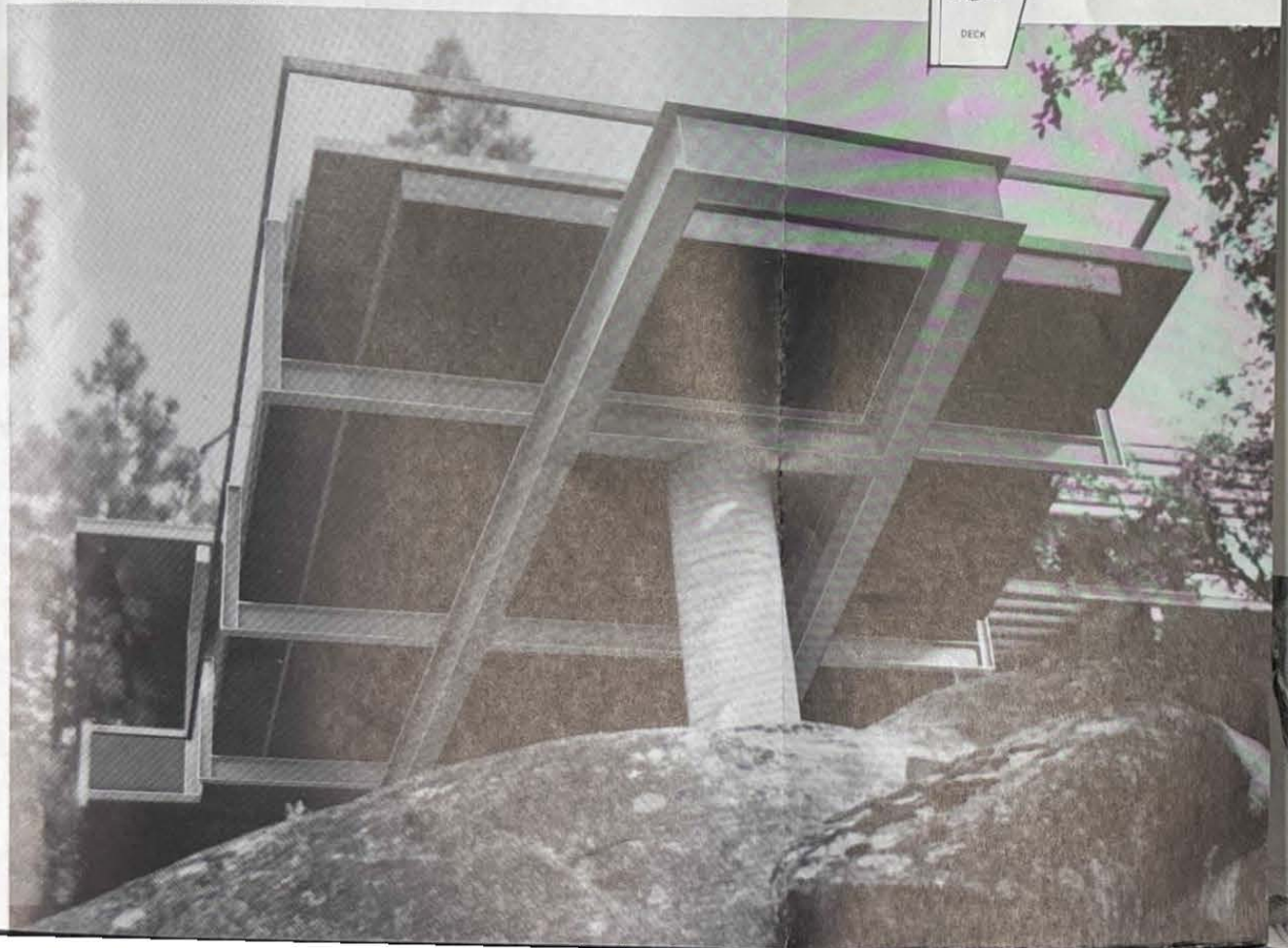
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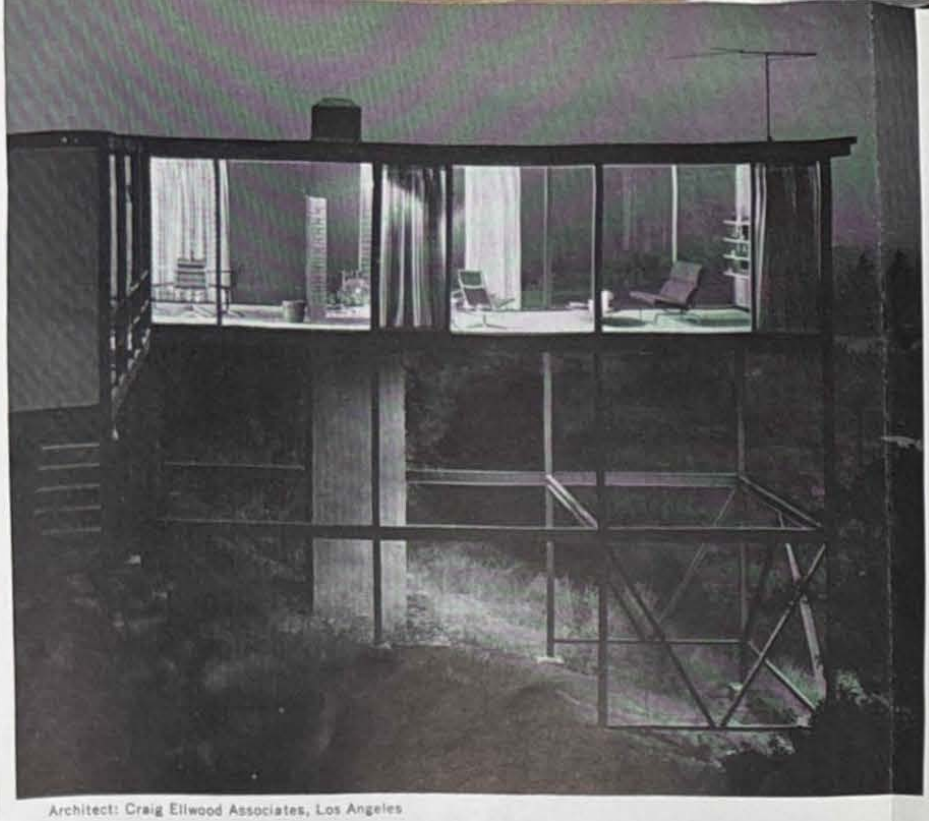
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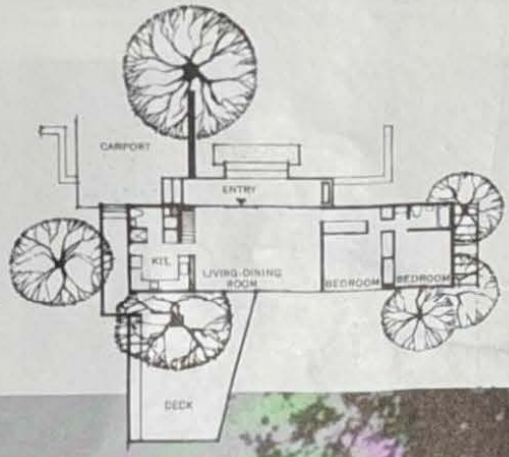




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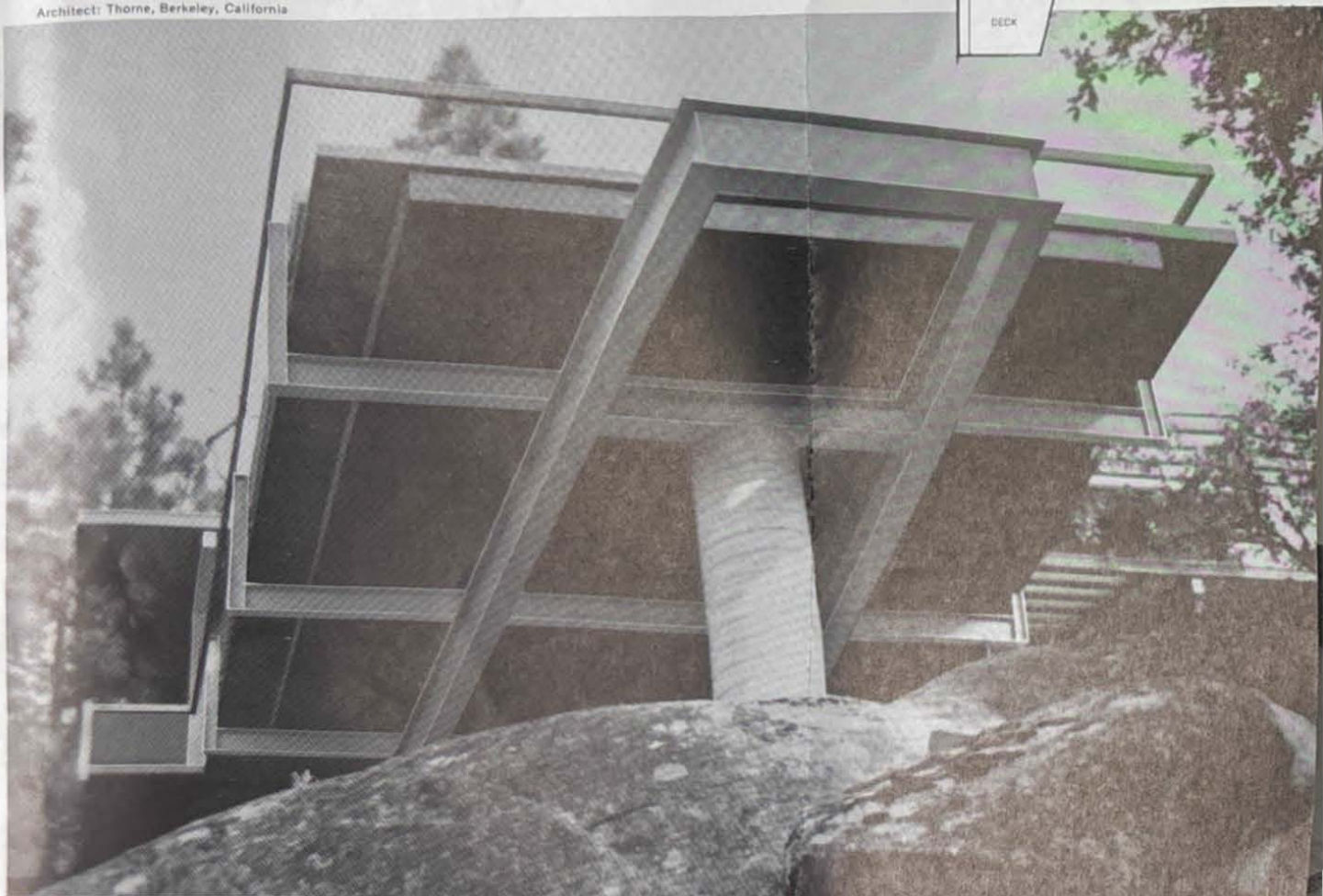
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Westchester Station, Los Angeles Post Office / Architect: Craig Ellwood





Architect: Wexler & Harrison, Palm Springs



Architect: Craig Ellwood Associates, Los Angeles



Architect: Smith & Williams, Pasadena,



Architect: Naramore, Bain, Brady & Johanson, Seattle

Only steel

1 Expandable All-Steel School—The Cathedral City School, near Palm Springs, Calif., has ample space for students today, but as the community grows—so grows the school. The 8′ module means classrooms may be expanded 4′ or 8′ with minor framing and construction changes.

2 Major Savings from Vaults of Steel. This high-style steel office for CFP in South Pasadena, Calif., is crowned with a graceful series of high vaults of steel to shut out 100% of the hot south sun and admit 73% of the north light, thus cutting air-conditioning costs by nearly one-third.

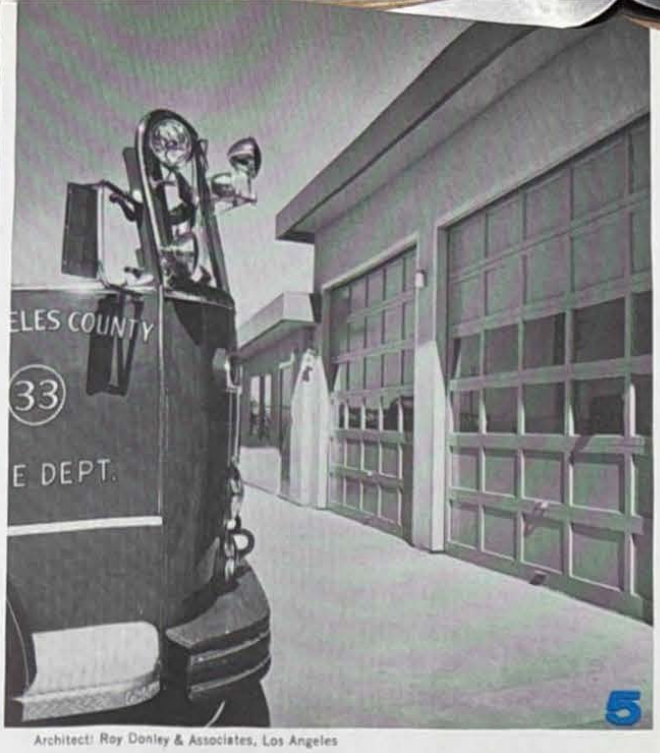
3 Inviting Steel Portal attracts customers. The South Bay Bank building, Manhattan Beach, Calif, is a striking example of the symmetrical beauty of steel framing, complemented with an airy light-weight grillework around the entryway.

4 Budget-Aid Steel School. The Queen Anne High School addition, Seattle, Washington, saved on its building and maintenance budget with USS Steel. Less framing, faster assembly, lowered labor and maintenance costs made it possible.

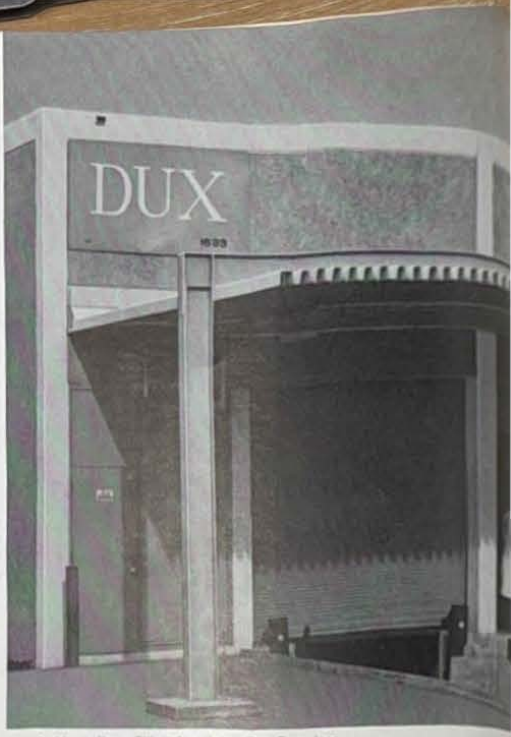
5 All-Steel Fire Station, Lancaster, California, blends functional versatility with economy. It is architect-designed with a rigid, pre-engineered frame and durable roof and wall panels of USS Steel. Ideal answer for modern low-cost municipal buildings in fast-growing communities. Built by Calcor of Huntington Park, Calif.

6 Steel-Framed House of Glass. This owner-designed steel house in Salt Lake

see inside



Architect: Roy Donley & Associates, Los Angeles



Architect: Knorr-Elliott Associates, San Francisco



Architect: Dean L. Gustavson Associates, Salt Lake City.



Architect: Richard Neutra, Los Angeles

can do so many jobs so well...

City takes full advantage of its beautifully wooded Utah site. The frame of steel, with columns exposed, eliminates bearing walls. Through walls of glass, the owners enjoy a colorful picture of changing seasons from their warm and comfortable home of steel.

7 Protective Canopy Designed in Steel. Supported by twin steel columns, this furniture loading dock canopy at Burlingame, California, is welded to the *bottom* of the beam to provide maximum clearance for high trucks. An imaginative touch of steel to complement the over-all design.

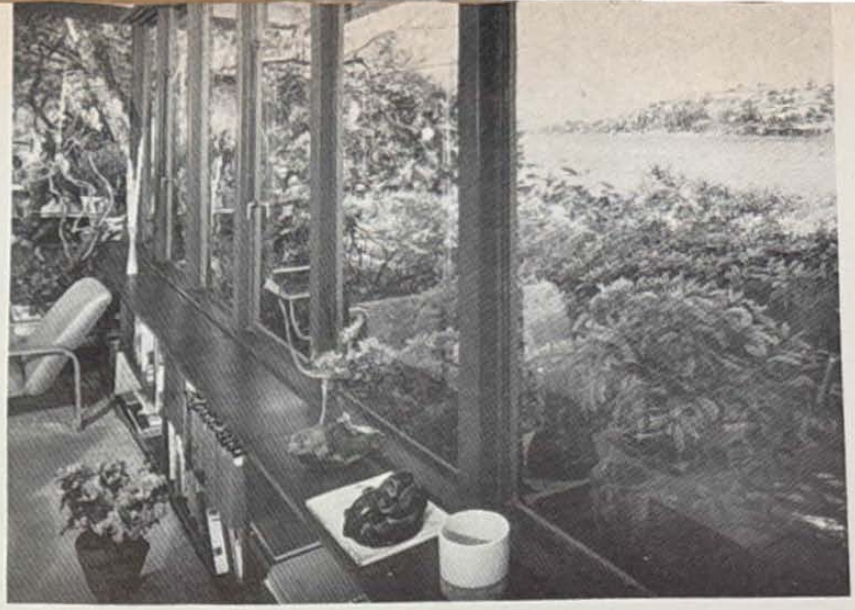
8 Suspended Canopy of steel decking shelters the broad windows of Northwestern Mutual Insurance building from sun and rain. This Los Angeles building also demonstrates the compatibility of steel with other materials for clean and crisp design.

Architects... engineers... businessmen... school officials and home planners, before you build—consider the advantages of trend-setting steel. Find out more about steel—and compare it with other materials.

USS

Columbia-Geneva S
Division of
United States Stee

USS IS A REGISTERED TRADEMARK

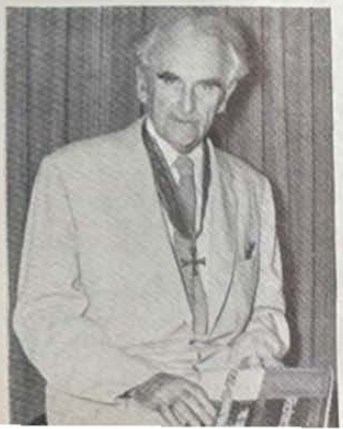


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Julius Shulman photos (except as noted)

"In 1927 the Western Hemisphere was pretty bare of contemporary architecture except for Mr. Wright's design. A Japanese book in Tokyo had a good and gracious idea to put this building side by side with a Saturday Evening Post advertisement of 'the new Studebaker President 8' of the same year. Caption under the Studebaker ad read: 'Richly appointed, strikingly modish body lines—as striking a car as ever skimmed the boulevards.' That miracle car has long since disappeared from all auto wrecking places but the building has no trace of obsolescence and sold for a good multiple of its price a couple of years ago. Architecture MUST and CAN endure in an age of quick turnover."

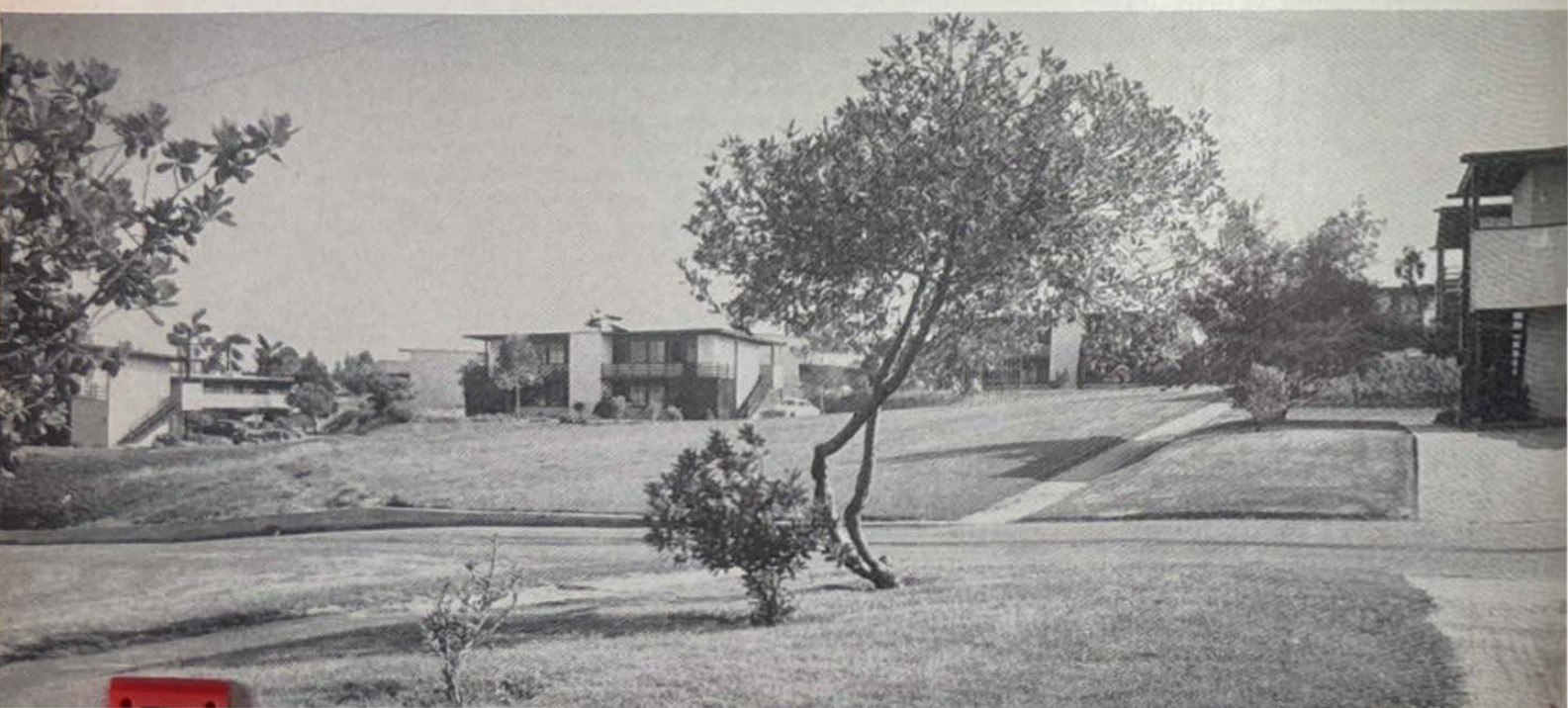
HEALTH HOUSE, LOS ANGELES, 1927



Luckhaus Studio

"For a long time I harbored a warmest wish to see a whole neighborhood properly designed. I am happy that I could be the architect for such a job in a really lovely but complicated site overlooking the Pacific Ocean."

CHANNEL HEIGHTS HOUSING PROJECT, SAN PEDRO, 1942





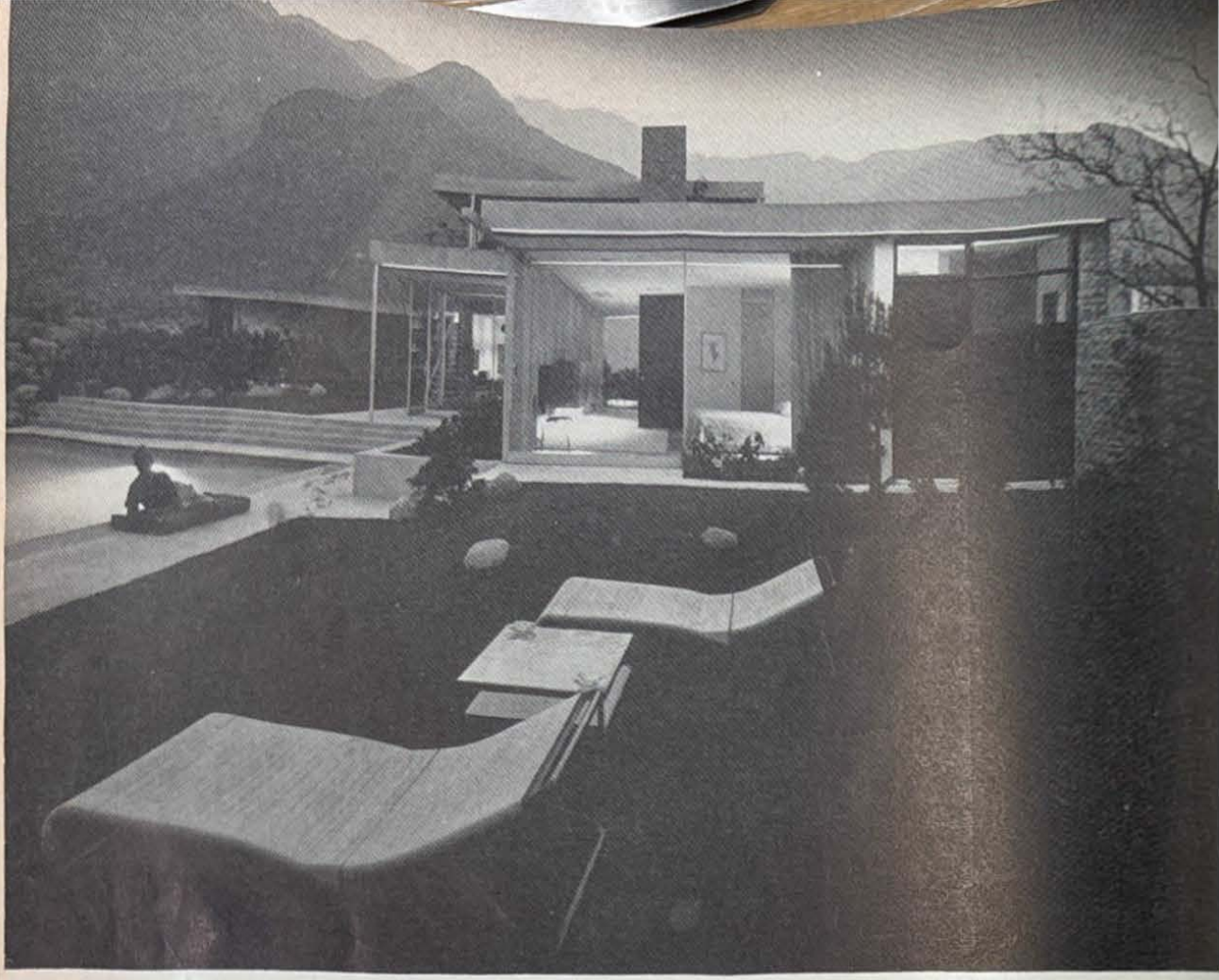
CORONA SCHOOL, BELL, 1935

"A couple of years ago Time magazine hoped that I could furnish information on exemplary schools and interviewed me. The writers developed a fine story and all was well except that the photographer went to the wrong place and the picture which appeared was of a school 10 years old. No harm was done. Good architecture ought to be a good news story even 30 years later. Some people need that much time to pay the mortgage."

A statement by Neutra

THE PHYSICAL SCIENCES and their offspring, industrial technology, are in their stupendous progress, characteristic for the past hundred years of our Western civilization. Every month an architect is alerted by the advertising pages of his trade papers and the professional magazines that "progress" is on the march. Our world is full of enticing frills and studded with technical novelties. Assembling them is an ever new breathless job, almost like the job of a fashion designer.

But the architect's and city planner's work is very different from that of a designer in the ladies' apparel business, which calls for something new



EDGAR KAUFMANN RESIDENCE, COLORADO DESERT, 1947

"Mr. Kaufmann, a benefactor to his home city of Pittsburgh which needed rebuilding, was a wonderful client of Frank Lloyd Wright and later of myself. This is a very different setting—the desert."

"It was touching to see a whole board of directors become humanly devoted. I am grateful for the experience."

NORTHWESTERN MUTUAL INSURANCE CO. BUILDING, LOS ANGELES, 1951



every spring and fall season. The architect's work is concerned with long-range investments. Here, people use all their available funds, all their savings, strain all their credit and often enslave themselves for a lifetime to pay debts and interests. If the architectural satisfactions are not eternal, they at least should be very long lasting. The architect has a perpetual humanitarian and social responsibility.

Designing buildings into the landscape means dealing with nature and natural factors, which change only very slowly over thousands of years. Alive human nature, as the nature around human beings for endless ages, is remarkably steady. It is in reality the main, the most fascinating and sensitive material with which the architect has to deal.

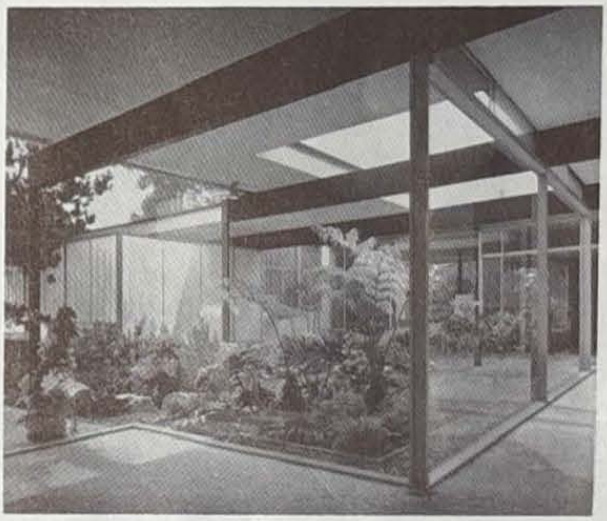
Last year almost a hundred thousand research papers were published in serious journals around the globe in the vast field of the life sciences alone. We know immensly more about the reactions of human beings and their organic responses to the setting which we design for them and which we call buildings, neighborhoods and towns. We "know

man" much better than Aristotle or even the 19th century knew him. We must support and supplement our intuition with this knowledge if, as architects and planners, we want to serve man; we must respect nature to serve him. As a scene for living and thriving, she cannot be recklessly replaced by a fast and fashionable jumble of fabrications. Only design, when it is most understanding of nature in us, will not make her rebel or wither.

To fit a house into a landscape and to a well understood inhabitant is much more than engineering. It is a task of engineering to know the strains and stresses in steel and concrete. To appraise the strains and stresses in a nervous system in all the senses, in the miraculously fused organic entity—the soul of a human being—is very much a job of the architect. He, by design, arranges all the many stimuli of a constructed environment around us. He will harm or help life processes. He will aid the appeal of a given setting or he may ignorantly, insensibly, barbarously defile it. It is a wonderful life to be an architect and, with all intuition and knowledge one can muster, serve life and its happy survival.

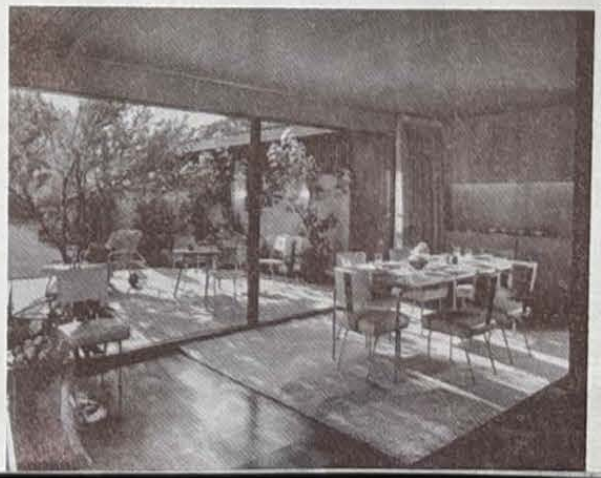
"The owner of this house has constructed thousands of American low cost homes in various parts of the country. He is married to an English wife who has grown up in the shadow of the Cathedral of Canterbury. The experience to design for this couple enriched my life."

HERBERT KRONISH RESIDENCE, BEVERLY HILLS, 1954



"A retired president of a manufacturing firm can withdraw with his wife to Beverly Hills with the feeling that the architecture might rejuvenate him so that he cannot sit still and becomes reactivated. Perhaps relaxation is NOT the ONLY meritorious result of architecture."

MAURICE HELLER RESIDENCE, BEVERLY HILLS, 1951



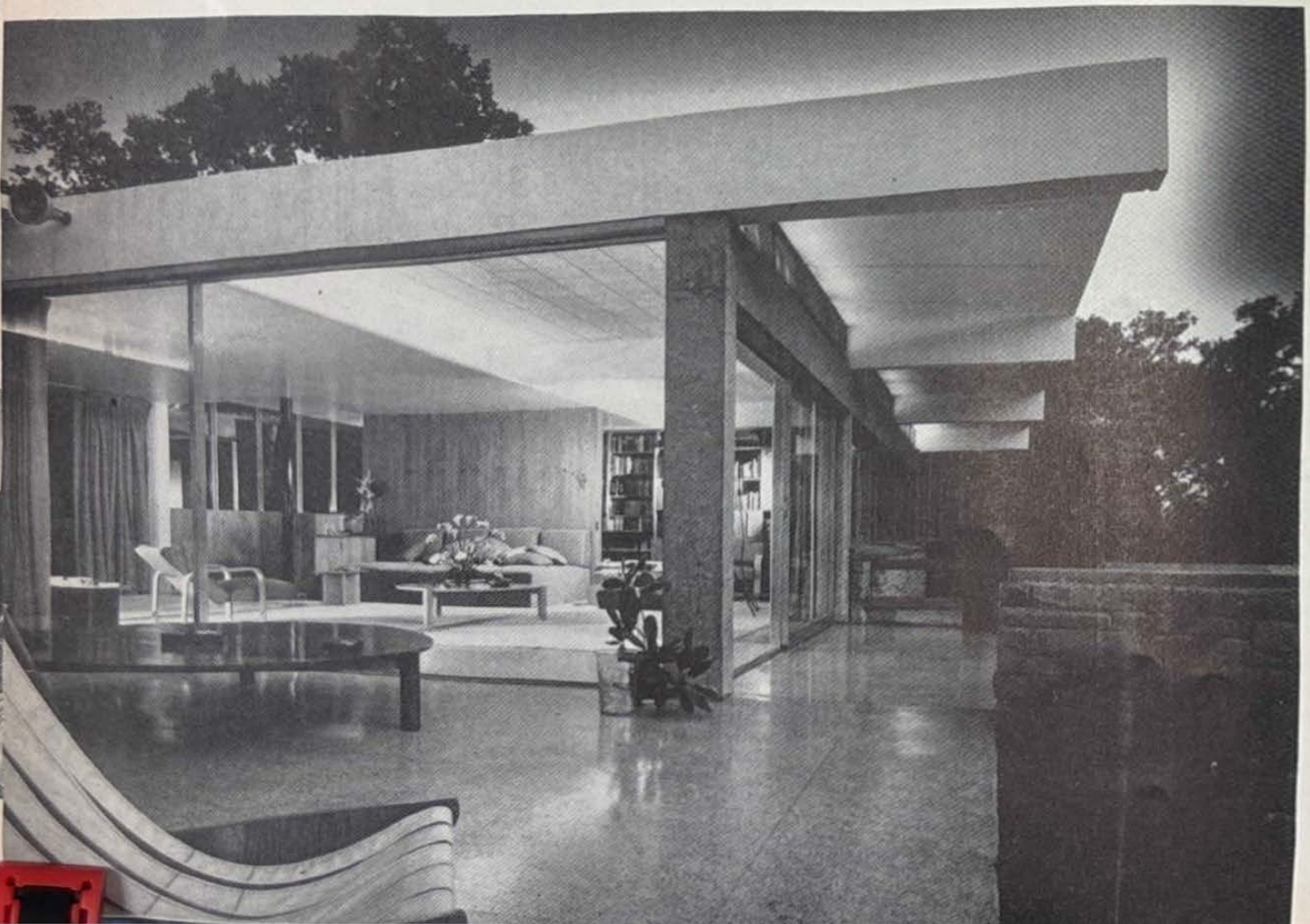
ILLUMINATION IN ARCHITECTURE

"Illumination may expand a room into the night. Evening is the time of most subtle human responses to the natural setting. Nightfall, for endless ages, has been associated with relaxation from daily activity. Artificial illumination is anthropologically a late development of only a few thousand years. Now it can be counted technically along the most significant design potentials and instruments in all the history of the man-made world.

"The ceiling roof is a luminous lid, plastically modulated by illumination from concealed sources in upper and lower ceiling, lighter and darker strata that extend outward over the supporting framework. The polished terrazzo floor forms a subdued reflection pool, underlying the structure, dematerializing its firm foundation and echoing more faintly the play of light overhead. This becomes the major theme of the composition when the day is gone."

"This is the house of a client who grew up as the son of a General Electric Co. president and naturally is interested in electric lights. His wife is from New Orleans where people love to spend evenings in illuminated patios. Architecture can expand into the outdoors night and day."

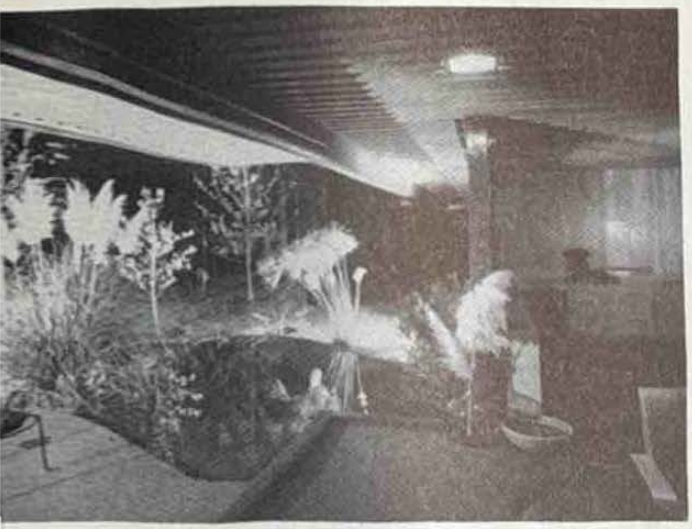
WARREN TREMAINE RESIDENCE, MONTECITO, 1948





John Rados Residence, San Pedro, 1958

"Mr. Rados is a shipbuilder and he likes to look out onto the port where his ships are moored. His crew built a stainless steel fireplace hood and many other craft features."

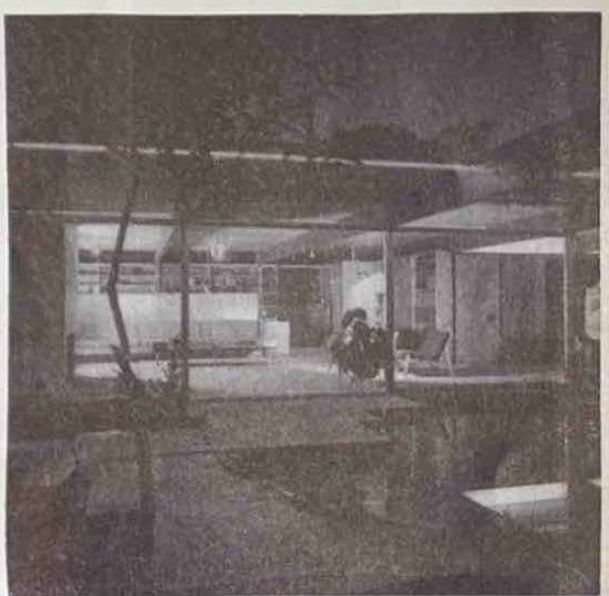


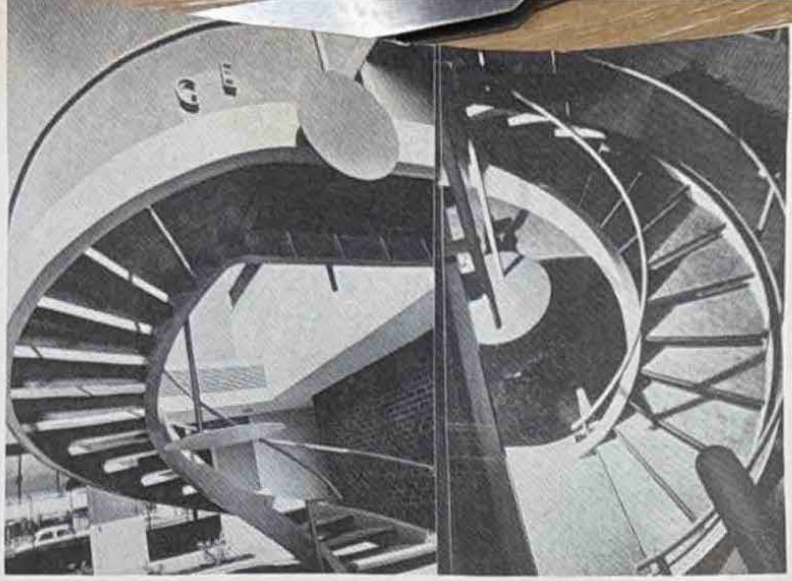
Dr. Max Goodman Residence,
San Bernardino, 1952

"The owner is a pediatrician who in his profession has preserved sufficient childishness to look at illumination not only for reading the newspapers but as a mysterious refreshment of the soul. Anyone who sees the real room at night knows no more than anyone who sees this photograph as to whether the pool is outside or inside the glass."

"People can have five little children and a reflection pool without drowning accidents but with a great deal of illuminative reflection. The youngsters use the mirroring pools for wading and navigating their sailing vessels."

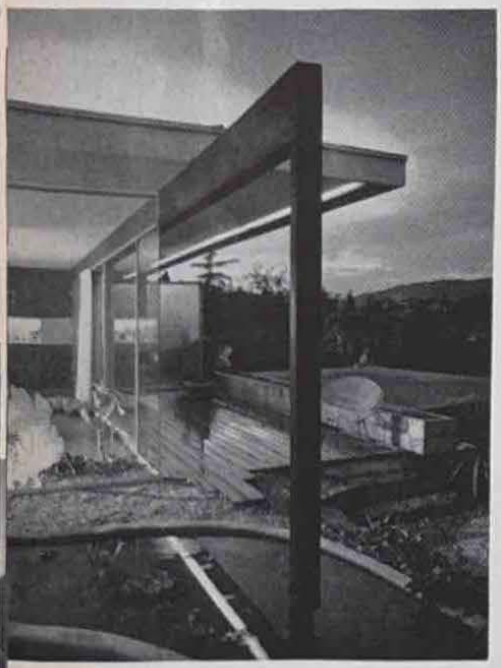
Sidney R. Troxell Residence,
Pacific Palisades, 1955





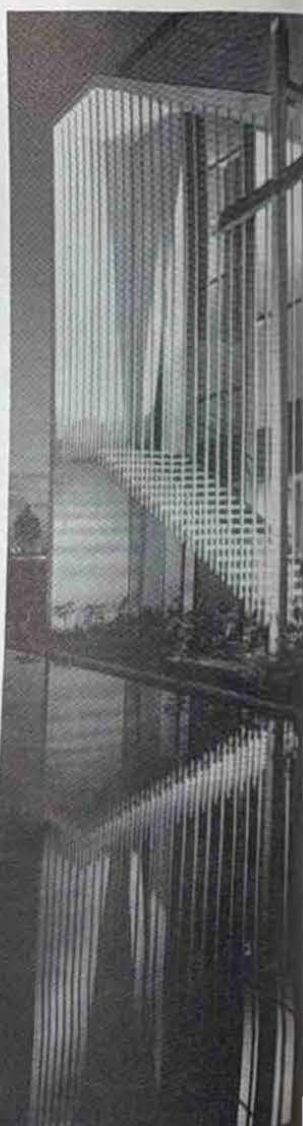
Gemological Institute (stairway), Los Angeles, 1955

"The experience of ascending a spiral stairway may serve as an example of a truly architectural experience. It can't be reproduced by a still photograph or even by a comprehensible motion picture. The breathing lungs, the palpitating heart, the equilibrium sense in the inner ear while we turn and rise; the muscle senses in our legs, middle foot and toes; the touch and temperature of the winding metal rail—sensations fused with a multitude of memories and past experiences to egg on emotions, irritations, fatigues or happy satisfactions, all largely hidden to clear consciousness. Architecture—the designed setting—has not only eye appeal; it speaks every second and over the years to the totality of the human being."



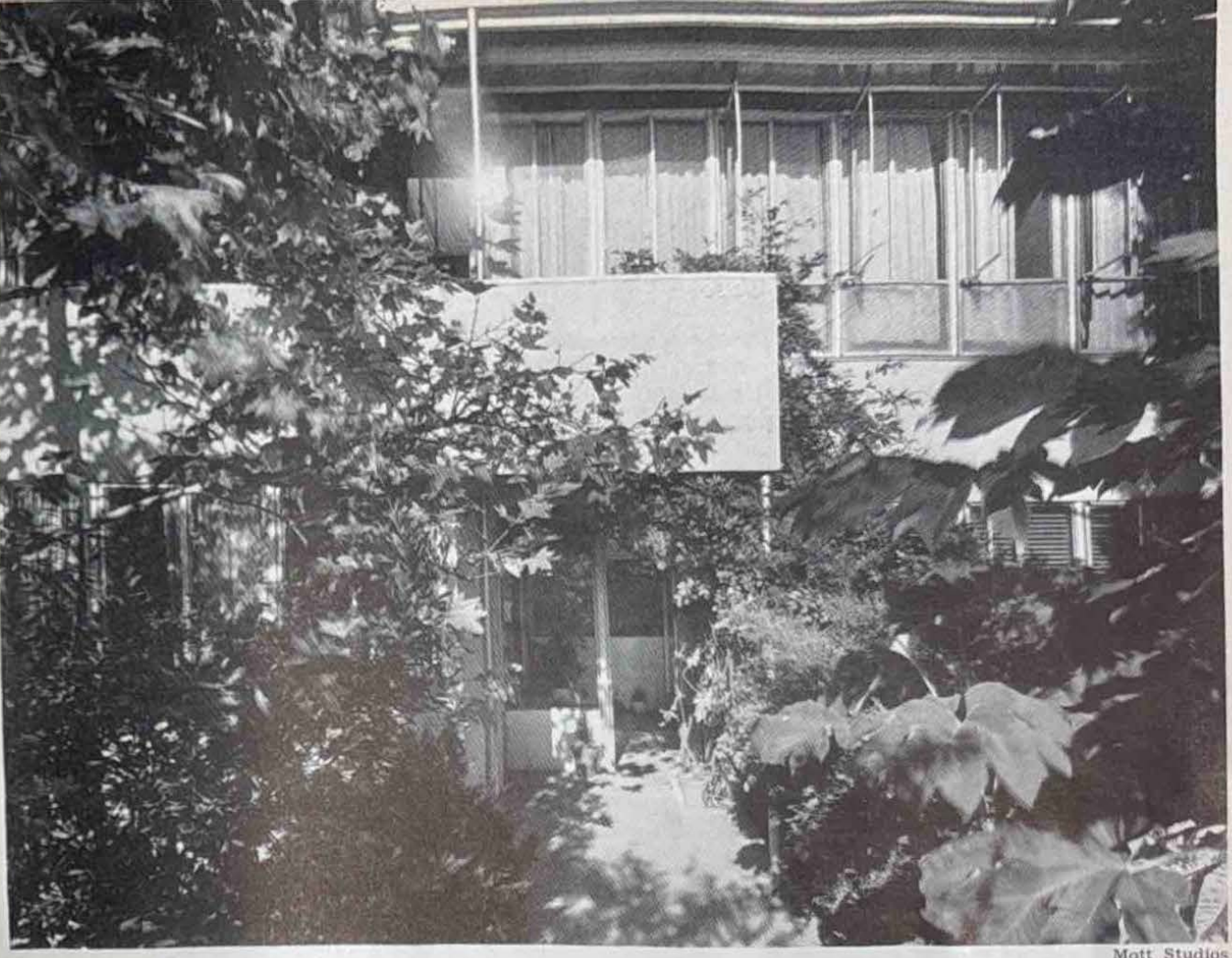
Constance Perkins Residence, Pasadena, 1954

"The owner is a teacher and she loves her work. She has a long kitchen counter reaching into the living quarters and enjoys serving a long row of soda pops simultaneously. This and good conversation supplements her teaching."



Miramar Chapel, La Jolla, 1957

"The Miramar Chapel was built for navy flyers. I did this job with Robert Alexander. The building casts a prayerful eye to aviators when they rise for a dangerous mission unto the upper reaches or return across the Pacific to get to their home base."



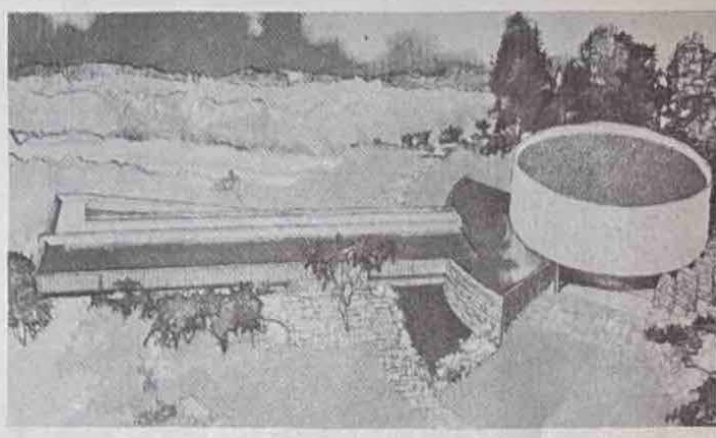
Mott Studios

VDL Research House, Los Angeles, 1932

"This house is really my own as I've paid off all debts and cannot be evicted. C. H. Van Der Leeuw, president of one of the greatest industries of the then Dutch Empire, made a flying trip around 1930 to see me over a day and visit the Health House in Los Angeles. I brought him in my second-hand Chevrolet to the Ambassador Hotel. Before slamming the car door, he said: 'Why don't you build a house for yourself that way?' I merely blushed and he understood the tactlessness. Then he took out a checkbook and asked: 'What do you need?' I knew I was talking to a Dutch uncle. I replied: 'Are you serious? You don't think I can accept this!' His response: 'All right, you pay me 2%.' I called a figure out of the air, he wrote a check and since that day I have called the house VDL. I built in every conceivable progressive feature. After 28 years nothing has changed. My wife still loves it and its lake view. My three boys still love it although they are long gone and I've trouble persuading clients that it was built nearly 30 years ago."

Lincoln Memorial at Gettysburg

"The Gettysburg center is now under construction for the Department of Interior and its National Park Service on the famed battlefield some 200 yards from where President Lincoln made his speech. It might really be looked upon as a memorial to the greater union prevailing over any political area. The ideals of mankind underlie the great address. A project of the firm of Neutra & Alexander, it nestles into historical Ziegler's Grove, almost a stone's throw from the horrifying spot where the contest found its climax."



Designed with a view to privacy

INDIVIDUALITY AND PRIVACY were the foremost requirements in planning the garden court apartments in a residential area just outside Portland. High land costs necessitated the use of two-story buildings, creating a privacy problem between upper decks and the lower patio areas. This problem was mitigated by opening the lower units to the side into individual private courts and the upper units to the front to an outdoor view deck. By splitting the eight-plex into two four-plexes, the entry alleys of floating decks and handrails allow a more intimate and individual approach to each apartment.

Development consists of two identical eight-plex units with one and two bedrooms. One-bedroom units have a double-use den or guest sleeping area which can be shut off by sliding shoji doors. Interiors have walnut stained hardwood floors, walnut cabinets, cedar wall paneling and off-white painted sheetrock. Upper apartments have a rough sawn 2x4 laminated roof deck and hooded fireplaces. Two-bedroom units have about 800 sq. ft. of space and one-bedroom, 700 sq. ft. Total cost was $150,000.

AWARD OF MERIT WINNER in recent design competition of Oregon State Chapter, AIA, project was cited by jury for its "intimate scale" and "good use of materials and textures."



Iron House Apartments
Oswego, Oregon

DONALD BLAIR
and ZAUL SAIK
Architects

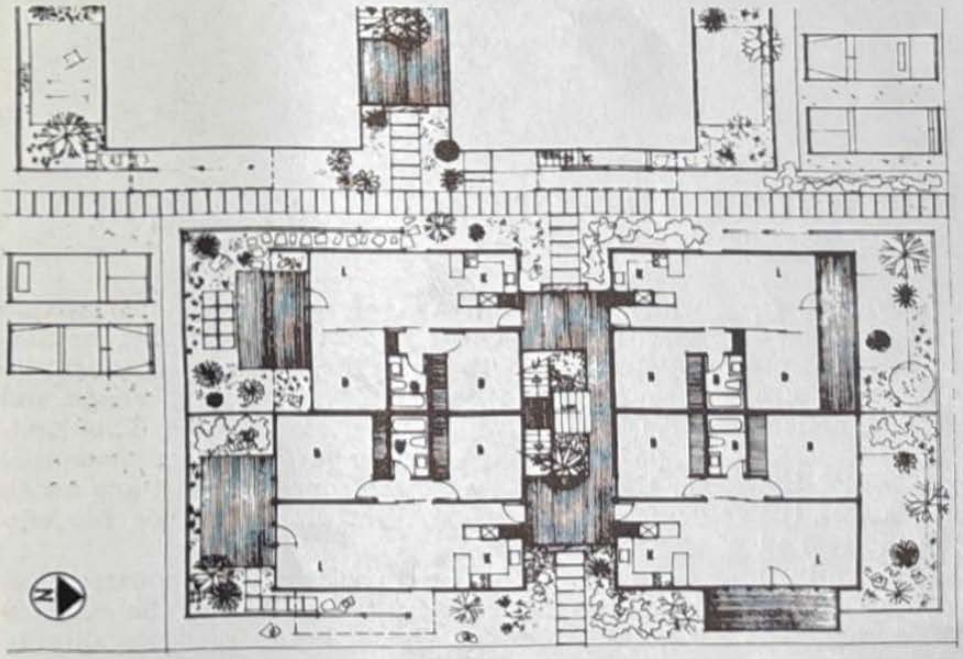
WILLIAM LEER
General Contractor

HOODED FIREPLACES are featured in all upper units.

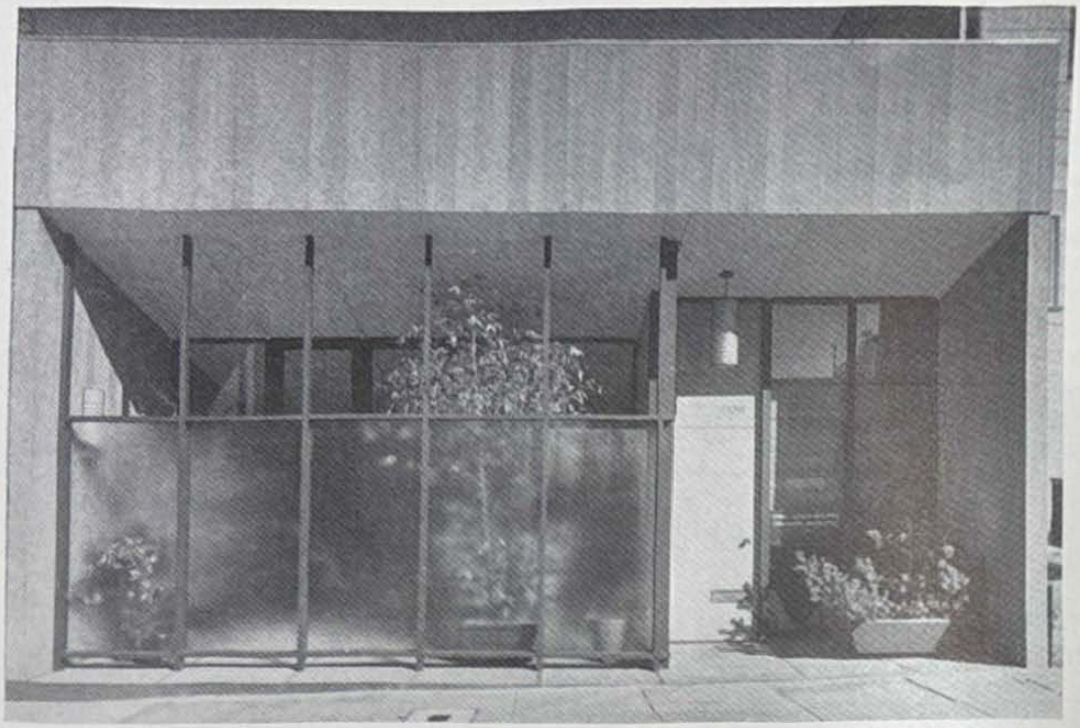




Tom Burns Jr. photos



FIRST FLOOR SECOND FLOOR



CONFERENCE ROOM to left of entry is separated from street by small court and opaque glass screen.

Office Building for
Eckbo, Dean & Williams
Landscape Architects
San Francisco, California

•

CAMPBELL & WONG
WORLEY K. WONG
Architect
JOHN CARDEN CAMPBELL

Remodeled structure grows in stature around courts

THIS BUILDING actually encloses only 1,911 sq. ft. but two garden courts and extensive use of glass make it seem much larger. Project was a combination remodeling and addition to a structure which formerly was divided into two small offices with typical indented entryways.

Since it was necessary to use as much of the original structure and substructure as possible, the architects brought back the building line to rest on an existing concrete foundation wall. This in turn created a small court between the conference room and the street. It is shielded from traffic noise and curious pedestrians by an opaque glass screen, open at the top for visual reach.

Also along the street is the main reception room which opens into two drafting areas to provide space for 12 employees. To the rear, a unit containing drafting and storage facilities was added in the form of an L, the foot of which wraps around and forms the end wall of the second court. This landscaped area serves a triple purpose: as a showplace for the client's work, as a source of light and air to drafting rooms and as a pleasant place for employees to relax.

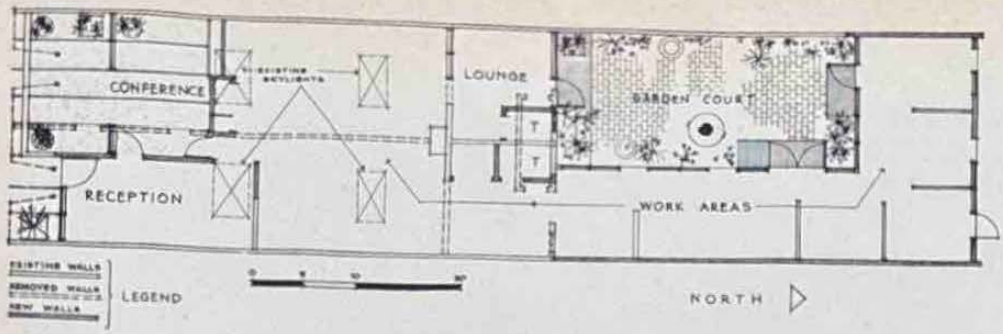
New structure is of post and beam construction with a 2x4 t&g roof sheathing. Part of the exterior is resawn redwood finished with creosote shingle stain in charcoal and eucalyptus green. Inner court is made up of window walls with painted plywood panels below the sills.

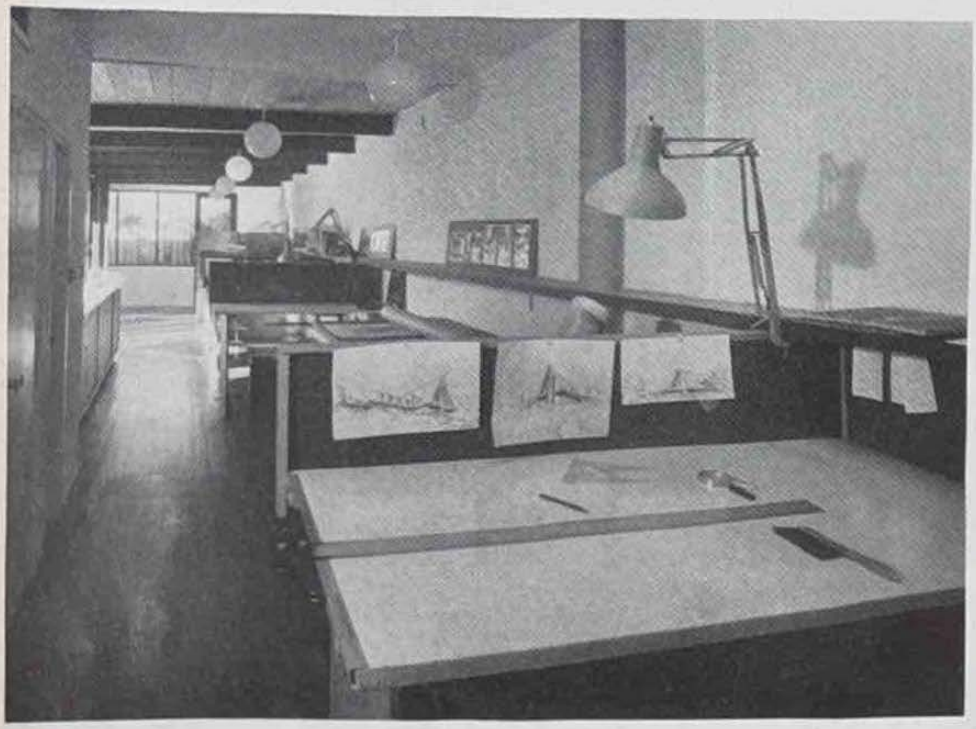


ENCLOSED GARDEN FLOOR is made up of rectangular blocks cut from old railroad ties; fence is 1x2 rough sawn redwood on edge with ⅜x4½ sawn between. Planters repeat redwood which is used extensively inside and out.

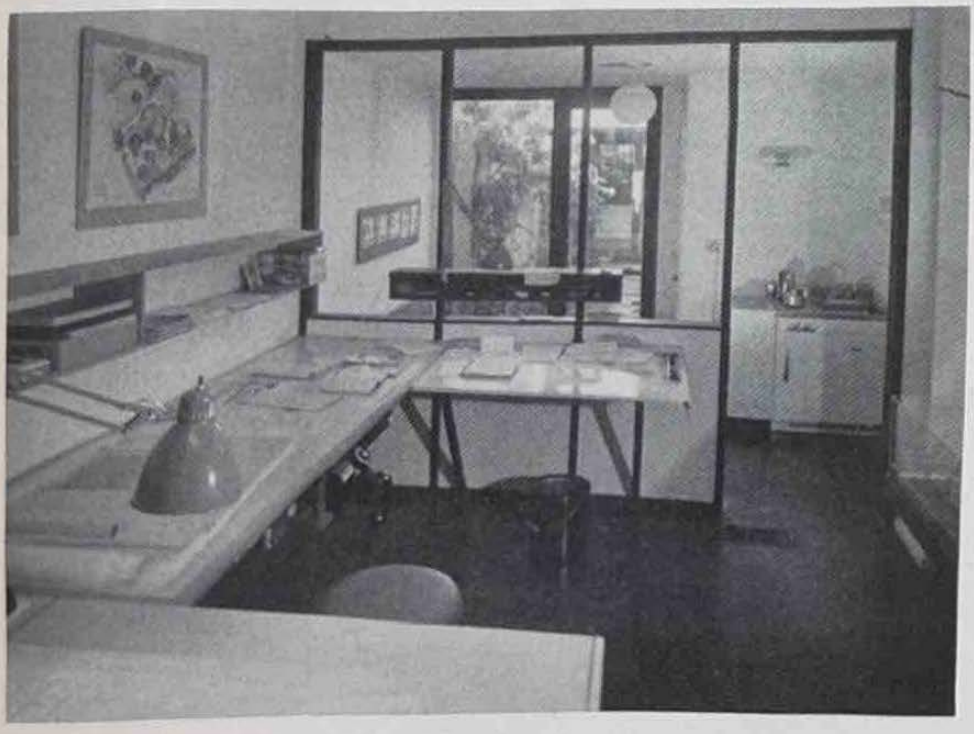


Phil Palmer photos





DRAFTING AREA forms L around inner court, provides 12 working tables and ample storage space.



OUTLINE SPECIFICATIONS

Structure (new portion): foundation: continuous reinforced concrete; frame: post and beam; roof: t&g sheathing.

Exterior Finish: resawn redwood with creosote shingle stain in charcoal and eucalyptus green—Samuel Cabot, Inc.; window walls with painted plywood panels around court—(Duraply) United States Plywood Corp.

Roof Surfacing: tar and gravel.

Windows: wood casements and fixed glass.

Doors: wood.

Floor Surfacing: asphalt tile.

Interior Finish: t&g vertical redwood paneling; other surfaces painted.

Ceilings: exposed 2x6s in new portion; painted fiberboard in old.

Lighting Fixtures: fluorescent.

Heating: gas fired, forced air—Western Furnace Co.

Plumbing and Sanitary: fixtures—American-Standard; water heater—Holly-General Co.

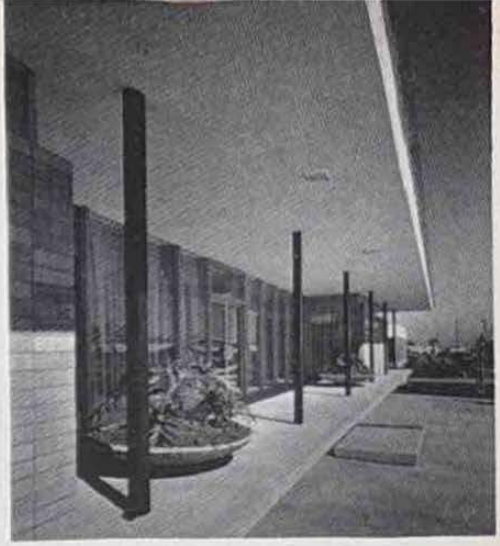
Total Area: 1,911 sq. ft.

Regional Office Building
Buick Motor Division
General Motors Corp.
Burlingame, California

•

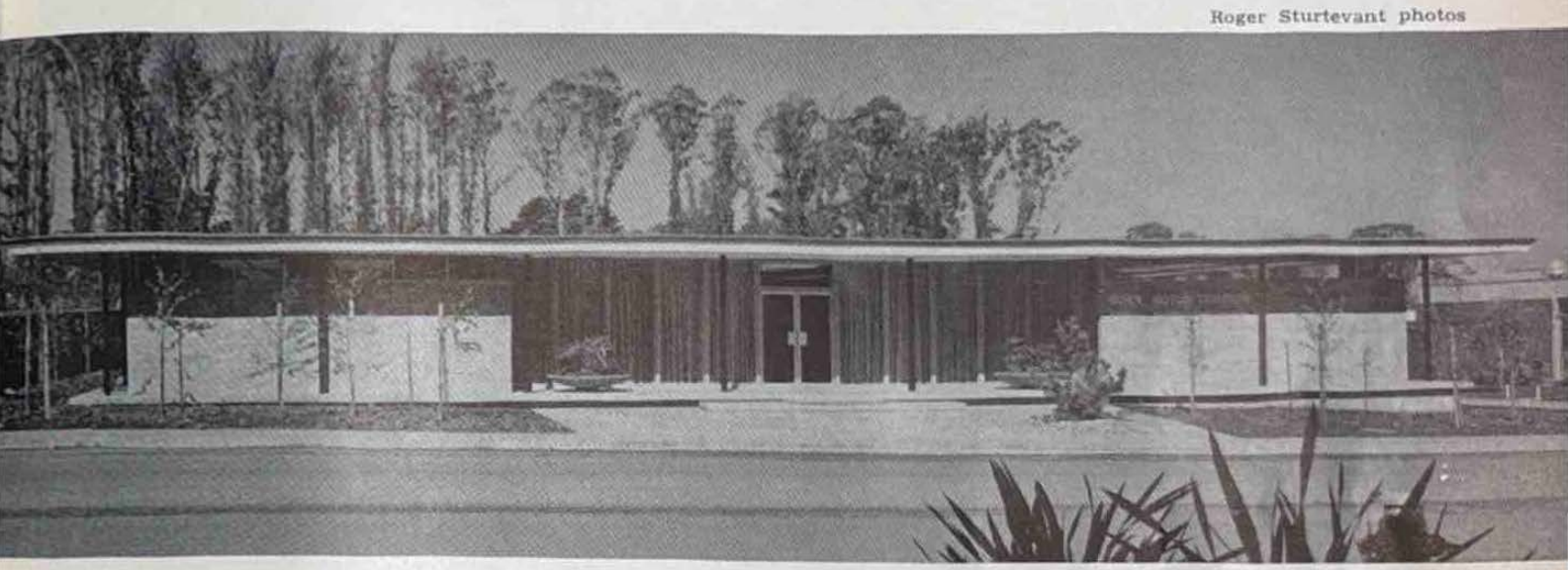
HERTZKA & KNOWLES
Architects

MORRIS DALEY
General Contractor



Planned with built-in expansion

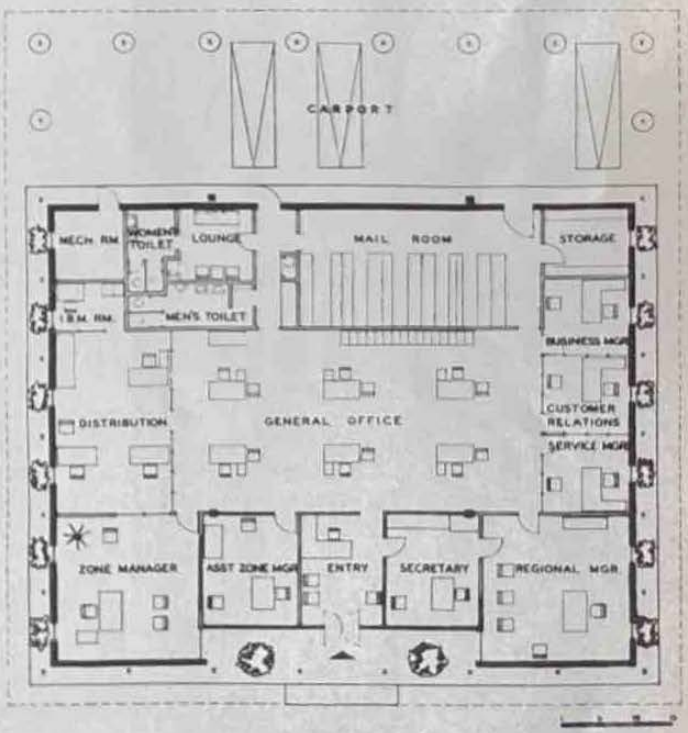
Roger Sturtevant photos



FUTURE EXPANSION without changing the basic structure has been provided for in the design of this small suburban office building at present leased to a national automobile manufacturer for a regional office. Carport at the rear was specifically planned so that it could be used for enlargement of the office area.

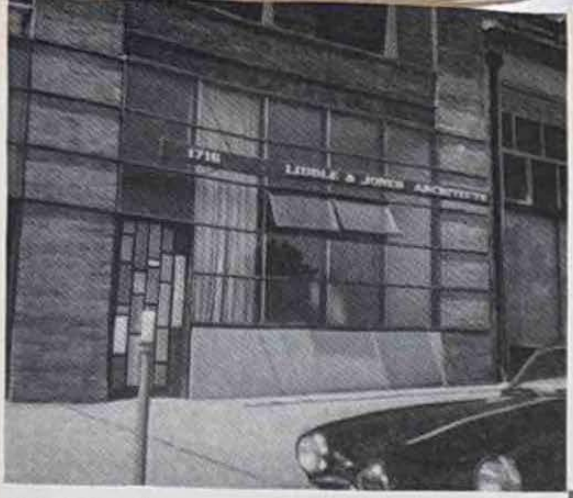
Building is a structural steel frame on concrete footings with reinforced concrete floor slab on rock fill. Moment connections at four interior columns provide resistance to lateral forces. Walls and partitions are nonstructural. Fissured acoustical tile ceiling on a spline suspension system is hung from roof rafters.

Exterior walls are tan reinforced brick block with aluminum windows and jalousies. Partitions are plaster and gypsum lath on wood stud or sheet glass framed in Philippine mahogany. Ductwork is in ceilings. A slight hip in roof framing, not discernable in the completed roof, provides sufficient duct space without thick eave. Wide eave, 6 ft. 4 in., reduces the solar heat load and glare in continuous transom windows. Electrical outlets and telephones are connected through an underfloor duct system.



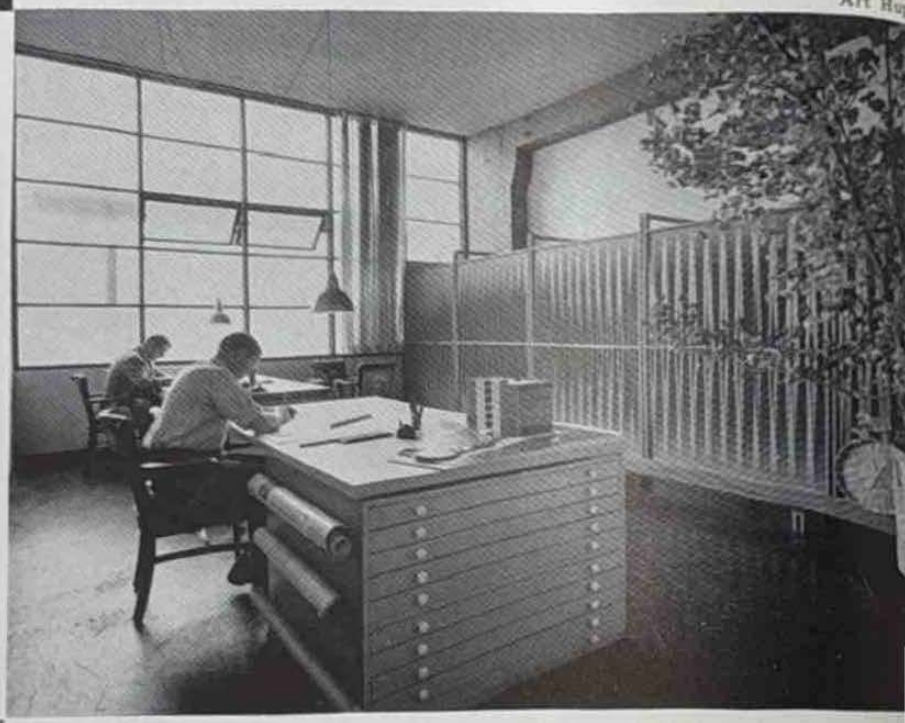
Where architects hang their ha

LIDDLE & JON
Tacoma, Washing

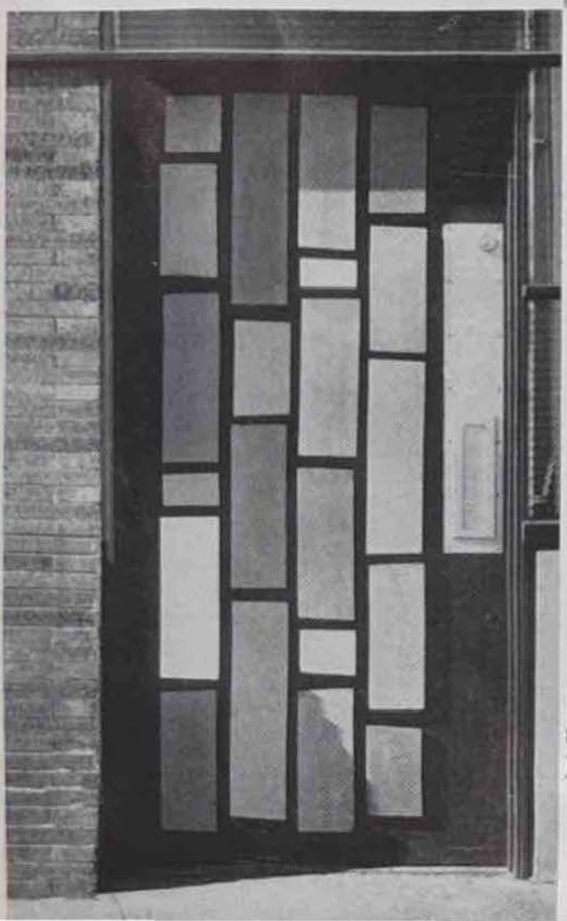


EXTERIOR reflects semi-industrial area. Plywood screen in drafting room is one of several designs firm did for Douglas Fir Plywood Association.

Art Hu



COLORFUL PLYWOOD PANELS decorate door.



Art Hupy

PICKING an office site in a semi-industrial part o town has proved to be advantageous for a number o reasons, even though the building is located in wha borders on being a blight area. Structure has a high ceiling, loft type space which serves as excellent back ground for design work. It is within walking distanc of city center and fronts on a major arterial with th corollary benefits of the large amount of traffic tha passes by the sign. Rent is low and parking ample

Pleasant character of the area also played a par in selecting the location. It is across the street fron the Union Depot, considered by the architects to b one of the best of the old buildings in town and is handily, next door to an Italian delicatessen. Othe buildings in the area have not been, as Alan Liddl comments, "inoffensively remodeled as is the case i the better parts of town."

Few changes were made in the space since th front had already been remodeled slightly. Door o multicolored plywood panels serves as an attention getter. Concrete floor is surfaced with a black indus trial covering, ceiling is painted light blue and the brick walls, white.

by GLENN M. CANADAY

Last in a series: General Overhead and Profit

Low profit margin demands accurate computations

With the completion of estimating divisions 1 through 34 the estimator should have accounted for all costs directly applicable to the particular job. Only two more items remain to be considered in arriving at a bid price: central office or general overhead and profit. The average estimator groups these costs together and calls them "fee" or just "profit."

The actual percentage of net profit realized by the general contractor (I refer to net profit before payment of income taxes) is small in comparison with that earned by many businesses. To compensate for this, the general contractor's volume in relation to capital investment and financing costs is relatively large. Because of this low profit margin, the estimator must compute all his costs with as much accuracy as possible.

Central office or general overhead is one of these costs. It is as real and as inescapable as any other. The contractor's volume of work may vary greatly from year to year but the actual dollar cost of general overhead is quite stable, varying only slightly from season to season.

To arrive at a percentage to apply to total direct job cost, an estimate based on the percentage of general overhead cost to the annual volume of work completed must be made. This is a forecast based upon expected volume. It is evident that if more work is done than anticipated, the percentage of overhead will be lower; if less work is done, the percentage will be higher. The risk and uncertainty is not unique to the construction industry—all businesses must plan overhead costs in advance.

To arrive at a percentage that can be applied to each job, first total all fixed general overhead costs for a year's operation. The following list will serve as a guide:

- Building depreciation and taxes (or rent)
- Building repairs and maintenance
- Utilities
- Office equipment and furniture
- Automobiles
- Office and engineering supplies
- Telephone and telegraph
- Advertising, charitable donations and association dues
- Accounting and legal services
- Salaries of central office personnel
- Traveling expense
- Entertainment
- Insurance
- Interest

The cost items included in general overhead should apply to the contractor's operation as a whole and not to individual jobs. Between the job overhead items (divisions 31 through 34) and general overhead items, all indirect costs should be covered. The exact line of division must be worked out by each contractor to fit his own operating and accounting procedures.

Now divide the total estimated annual overhead cost by the planned annual construction volume. The result is the general overhead percentage. For example, $100,000 (annual general overhead expenses) ÷ $4,000,000 (planned construction volume) = 2.5% (general overhead percentage). This is an actual cost item that must be included in the fee.

Profit, our next item for consideration, is usually added according to what the contractor is willing to work for and what he thinks he can get. The exact amount is influenced by:

- Risk inherent in the particular job
- Equipment requirements
- Percentage of labor to total job costs
- Percentage of subcontract and material bids to total job costs
- Contractor's existing work load
- Contractor's anticipated future work load
- Climatic conditions
- Time requirements
- Labor situation
- Materials market
- Financial requirements
- Job location
- Plans and specifications
- General desirability
- Competition

The contractor will think of other conditions that affect the amount of profit for which he is willing to work. Consider all conditions with the utmost care. Profits have been lost by contractors who failed to give appropriate weight to unfavorable circumstances, and profitable jobs have been missed by not recognizing advantageous job conditions. The above items are now covered in greater detail.

Risks. All jobs contain inherent risks—but not in the same proportion. Jobs concerned with underpinning existing structures, remodeling old buildings, excavating in wet areas, rock excavation, etc., deserve more profit than clean, straightforward construction jobs because the risks are greater.

Equipment Requirements. If a large amount of new equipment must be purchased for the new job, the job must absorb a large enough percentage of the cost to protect the contractor against possible loss in disposing of the equipment after the job is completed or integrating this equipment into other parts of his operation after the job is completed. On the other hand, the contractor may have idle equipment in his yard that he is willing to put on the job at a below normal depreciation write-off.

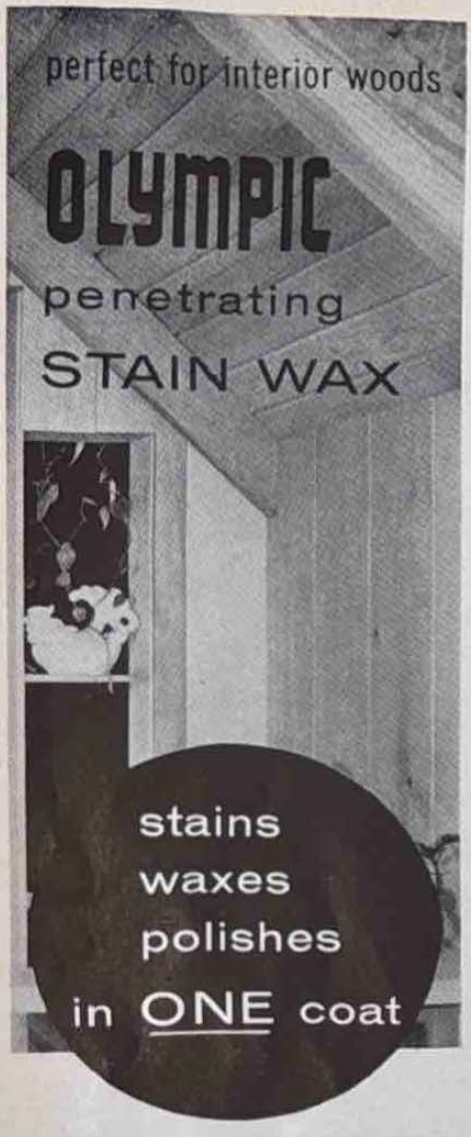
Labor Percentage. Labor estimates always entail greater risks than other parts of the estimate. Generally, the greater the proportion of labor, the greater the risk. The jobs which require small amounts of labor are usually low risk jobs.

Subcontract Percentage. Subcontracting portions of the work spreads the risk. A job constructed principally by subcontractors can safely be done with a lower profit margin than if done by the contractor's own forces. This assumes, of course, that the subcontractors are substantial, dependable competent firms.

Existing Work Load. A contractor out of work is tough competition. It may be advisable at times to take a job to hold the organization together and to defray the general overhead costs; but the contractor must be cautious about taking on so much low profit work that he ties up his organization to the extent that he is unable to bid or do other more profitable jobs. The contractor should analyze all factors involved. It is often better to concentrate on bidding and securing potentially profitable jobs rather than to tie up one's operation and administration with no-profit or low-profit projects.

Anticipated Work Load. All contractors are faced with the problem of keeping work lined up for a year-round operation. Complete shutdowns are a severe blow to the potential effectiveness of the contractor's organization. Good men are often lost to other firms and the contractor is faced with rebuilding his organization. It is sometimes good policy to bid the right kind of job with a less than normal margin of profit in order to prevent laying off key personnel or carrying them on the payroll while idle.

Climatic Conditions. Climatic conditions and weather are such import-



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ant factors in certain jobs that the contractor's interpretation of their effect on the job practically establishes the low bidder. If adverse weather conditions are certain, additional costs should be added in the applicable divisions of the estimate. However, because weather is so unpredictable and can so drastically effect job production and profits, it must be considered here where establishing the amount of profit to be added to the estimate.

Time Requirements. Construction time involved in completing a job also is related to risk and profit. A job with a short time limit and heavy penalties may force the contractor into an unexpected amount of overtime work, air freight and other expenses. There are also other sides of the time angle to be considered. Is the size of the job reasonable in relation to the time required for completion? If a $50,000 job can be completed in 30 days with a reasonable amount of supervision and risk, it may be quite desirable. On the other hand, a $200,000 job that requires 1½ years for completion may be undesirable. In general, a job that can be completed in less than a normal amount of time in relation to its value is more desirable because it frees the contractor's organization for additional jobs.

Labor Situation. Labor conditions deserve careful and serious analysis. Find the answer to these questions:

Is a plentiful supply of good local labor in all trades available?

What are the union rules in regard to overtime, travel, jurisdiction of work and fringe benefits?

If workmen must be brought in from other areas, what are the applicable union rules in regard to the wages, fringe benefits, overtime, travel, and subsistence? Is the labor supply such that it is reasonable to assume that men can be obtained at normal rates or may it be necessary to pay premium wage rates?

Is there a possibility of strikes?

Are you likely to encounter a raise in labor rates or fringe benefits during the progress of the job?

Materials Market. Are the materials prices that you used throughout your estimate sufficient? Have you taken into consideration possible raises in the materials market

Financial Requirements. Most contractors are willing to work for less profit if the initial investment is low, if monthly financing costs are reasonable, if monthly payments may be expected promptly and if retained percentages are at a reasonable figure. A job with 15% retainage and final payment delayed until 90 days after acceptance will get a cold reception from many contractors, especially if the architect has a reputation for delaying final approval. Low investment and quick turnover are as important to a contractor as to any other businessman.

Job Location. Jobs which are located at considerable distances from the contractor's base of operations are generally more difficult to properly supervise and therefore more undesirable. They require a wider margin of profit to make them safe jobs.

Plans and Specifications. Good plans and clear, concise specifications are greatly appreciated by the estimator. If the estimator cannot read the plans or if there are omissions and contradictions parts of his estimate will be "guesstimate." Plans and specifications prepared by one architect and interpreted by another may also result in misunderstandings. Jobs supervised by an agency or individual who has a reputation for unreasonable and prejudiced interpretations usually command a wider profit margin. Good plans and specifications can be bid closely because the contractor knows that his estimate is a reliable interpretation of the job he will be expected to construct.

General Desirability. Some jobs are generally more desirable than others to certain contractors. The contractor who specializes in a certain type of work or has personnel and equipment available which fits a particular job would be more interested in that job.

The percentage which is added to cover the cost of central office overhead is not an exact forecast for the particular job but is an average. The contractor must always anaylze each job and consider its effect upon his central office operation. A job which demands more than average amount of attention from the central office operation deserves more than an average amount of profit; the reverse is also true.

Competition. The astute contractor anaylzes his competitor's position carefully and bids accordingly. A businessman charges as much for his product as the traffic will bear. This does not infer that he overcharges; customer resistence and competition hold him firmly in line, but he does anaylze his position at the moment in relation to his competitor's and adjusts his percentage of profit accordingly. The profit percentage realized by general contractors throughout the U.S. is at this time low. It is, in fact, this narrow margin of profit that dictates the preparation of accurate, sensible and level-headed estimates and bids so vitally important to a contractor's success.

Ed. note: This concludes the series of 11 articles which began last July.



High strength bearing bolts introduced in West

A team of bolting specialists for United States Steel Supply Division is now touring the country to demonstrate a new structural bolt which is being billed as a cost saver that combines the desirable features of a hot driven rivet and a standard high strength bolt. Demonstrations have been given to structural engineers, architects and contractors in four western cities: Los Angeles, San Francisco, Portland and Seattle.

Designed and produced by Lamson & Sessions Co., the high strength bearing bolt is made of heat treated high carbon steel. Rows of specially formed knurls on the shank are formed in a spiral pattern to reduce the driving load and produce a body-bound fit when the fastener is driven or wrenched into place. Bolt head is shaped like a driven rivet to permit driving with standard tools. A separate washer is not needed under the button head. Nuts are indentical to those supplied with regular high strength bolts.

New Mexico project

One of the first uses in the West was at Loving, N. M., where Patterson Steel Co. constructed a rigged frame arch storage warehouse for United States Potash Co. R. W. Mauthe, contracting engineer for Patterson, says that employing the bolts instead of driving hot rivets enabled the contractor to reduce crews aloft from three to two men and that instead of needing a ground man for each crew, one man on the ground could keep both crews supplied with material.

"This method realized a savings of 10 cents per fastener on a job using 9,000," Mauthe declares.

In addition, it was unnecessary to rely so greatly on the skill of the riveter to ensure that the fastener had the correct bearing. Because of the knurled body, when the bolt was driven through a structural hole slightly smaller than the bolt itself, the bolt filled the holes as a rivet does. This insured complete contact between the structural parts and the full length of the bolt and provided rigid connections from member to member, resulting in the proper bearing to give the strength needed for high stress applications.

The warehouse measured 150x600 ft. and was designed so that the shape conforms to the natural flow of the potash stored there as it is funneled to floor areas from conveyor belts. Highest point of the arch is 57 ft. above the foundation floor. The bolts are used in the principal structural members, the main and end ribs and the conveyor frames.

Three sections of wide flange I-beams make up each of the mild steel ribs and the bolts secure gusset plates for the flanges and the web. Maximum thickness of the plates is 2 in. The sections they join vary. Bottom section is 27 in., 94 lb. per linear foot; center section, 24 in., 75 lb. per linear foot; top section, 21 in., 62 lb. per linear foot. Ribs are supported by reinforced concrete pilasters. A continuous wall 10 ft. high, also of reinforced concrete, joins the pilasters, but the building has no center supports. Galvanized corrugated iron encloses the structure.

On the structural members, the bolts employed were ⅞ in. in diameter; ¾ in. bolts went into the conveyor system frame. Both categories varied in length from 1½ to 3 in. Number of bolts used in a structural connection of gusset and beam depended on the location. Lower connections took 45 bolts and the number diminished to 40 in the highest gussets and webs. Applying the fasteners required two men, one to drive the bolts into their holes, the other to place the washer over the projecting end where the nut is then secured.

The conveyor frames on which the ¾-in. bolts were employed support two 200-ft. belt conveyors, one attached to each end of the building. Potash loaded outside the warehouse enters on the belts which distribute it throughout the structure. Trippers release it from the conveyor belt and funnels channel it down to the floor area. The arch design was picked to accommodate this method of loading and storage.

Mauthe designed the building in collaboration with the client.



STORAGE BUILDING in Loving, N.M., employs high tensile bearing bolts for all major connections.

What the architect should expect from his metal curtain wall fabricator

Prepared by
ALBRO METAL PRODUCTS CORP.

Metal curtain wall has matured and in the wake of its 10-year climb to architectural prominence, there has been born a vital new branch of building technology — the metal curtain wall fabricator.

Working in liaison with the architect, the fabricator can help him avoid some of the problems that he might encounter in the design and construction of curtain wall.

Even as the architect learns more about the advantages and pitfalls of this exciting new structural system, he is turning increasingly to the fabricator for qualified solutions. He recognizes that the experienced fabricator can help him circumvent problems of air infiltration, water leakage and other malfunctions all too common with the improperly engineered and constructed wall.

More than ever, the architect's logical safeguard is the reputable fabricator: the metal engineering expert with the insight and the facilities to assume total responsibility for every phase of curtain wall development.

But what is it that you should rightfully expect your metal curtain wall fabricator to do for you to achieve the best job for the least expenditure? The answer to this lies in these yardsticks by which an architect can measure a curtain wall fabricator's merit:

Preliminary consultation. Technical advice on the mechanical considerations of curtain wall designs should be made available to the architect at the very outset. Just as you confer with heating engineers or structural engineers, the highly complex aspects of curtain wall design, engineering, fabrication and installation demand the early attention of specialists.

Engineering know-how. The ability to preserve the architect's aesthetic desires, while building structural integrity into his curtain wall system, is expected of the reputable fabricator. Engineering modifications must not dispute design but must support it completely without making their presence known.

Alloy selection. Whatever metal your design demands, whether aluminum, bronze or stainless steel, the question of alloy selection arises. Structural requirements and finishing treatments such as mechanical finishes, porcelainizing, anodizing, as well as other special finishes, will respectively demand particular alloy types. The fabricator who is abreast of new developments on the metals scene has current information at his fingertips that can help you select the best and most economical alloy for your use.

Detail drawings. When the architectural design is finalized, the fabricator must submit practical suggestions for realizing the structural requirements of the system. To make the architect's design function properly, the fabricator should be consulted to analyze problems regarding the best types of material to employ, considerations for expansion and contraction, matters concerning finishes, the factors in sealing and the preferable types of protective coatings. To accomplish this, fabricator must have engineering, testing and production facilities to support these suggestions and to assist in preparing correctly detailed drawings.

Finishing information. The technical intricacies of the various finishes are in the professional domain of the fabricator. He must be able to put forward feasible solutions to problems of achieving uniformity in panels and exposed curtain wall members.

Budgeting. Costs must be thoroughly aired before any absolute conclusions can be reached on a proposed curtain wall design. Assisted by the fabricator, the architect can assemble price data to translate his conception into an economically realistic wall. The estimating department of the fabricator, therefore, can help the architect develop the best curtain wall system consonant with price.

Specifications. Curtain wall specifications are the crux of a successful end-product. To prevent false interpretations and unwanted deviations from the architect's design, the curtain wall fabricator can participate to insure the proper development of the wall. The fabricator's engineering staff should be used to help define the wall in the specifications that are written.

Testing recommendations. Are tests necessary or are they not? If they are, what dynamic or static test procedures inform you with accuracy whether your system will perform as expected? The fabricator should be responsible for advising on "reasonable" tests and when they are applicable to either standard or custom wall systems. He should be able to build adequate mockups and conduct exacting tests with suitable equipment and trained technicians.

Shop drawings. When the job is awarded, the fabricator chosen must prepare working drawings from the detailed drawings available to him. No arbitrary changes can be allowed; it is the fabricator's duty to report to the architect any alterations that he might consider necessary.

Fabrication. Facilities, technically trained personnel and qualified supervision must be provided. The fabricator must be equipped to produce in accordance with specificatons. Above all, the structural quality of the fabricated product must surpass the minimum test requirements established for it.

Job coordination. The fabricator must be intimately familiar with his joint responsibilties to the architect, the general contractor and the owner. His work must be correctly coordinated with the construction timetable by maintaining production and delivery schedules.

Workmanship. Since leakage is the major problem in curtain wall construction, applying sealants is the single most crucial stage of the erection process. While other phases of installation are conducted in a workmanlike manner, anything less than perfection in preparing sealants, in cleaning surfaces for good adhesion and in applying the material properly can result in premature failure and costly resealing. The fabricator must be well acquainted with the practice and theory of what contemporary sealants can do.

Installation. The fabricator should be capable of executing all phases of erection with care and thoroughness. Total responsibility over the appearance and performance of the curtain wall can rest with him only if all operations are under his control.

Guarantee. The installed system must successfully endure two weathering cycles before the fabricator's obligations cease. The proper functioning of windows, panels and glass — provided they have been engineered to meet ambient requirements — is his responsibility until then.

Experience. For engineering validity, trust to the test of time. The fabricator who points with pride to a lengthy and active career of work with leading architects has amassed an inventory of experience of immeasurable benefit to you, the architect.

Dependability. A productive association with your fabricator can ensue only out of mutual respect and confidence. Look for reliability as a keynote to your relationship. Only the

fabricator with past proven abilities should be accepted for consultation and fulfillment of your project needs.

Financial stability. The fiscal health of your fabricator will tell you whether your job is safely entrusted. It will tell you whether your confidence is well placed and whether you can rest secure that the project will be executed perfectly. A structurally sound, firmly established organization has achieved its eminence through satisfactory service.



Fire-safe materials listed in bulletins

First of a series of bulletins listing materials, equipment, methods of construction and installation of equipment conforming to the fire and panic standards of the California Administrative Code are now available on a subscription basis from the California State Fire Marshal's Office.

The publications are the result of legislation sponsored in the 1959 legislature by the California Council, AIA. A special advisory committee appointed by the AIA has been working with the fire marshal in developing the program.

It is expected that the service, supplied at cost, will considerably reduce time spent by architects and engineers in research on materials and manufacturers' claims and will eliminate delay and expense that could occur by rejection of materials or methods incorporated in work already under construction.

Cost of the initial subscription is $25 and present plans call for an annual renewal fee of $25.

Prefabricated homes gain 20% in 1959

Prefabricators' share of the home construction market has showed steady gains the past two years, according to a survey by the Home Manufacturers Association. A record breaking total of 132,054 manufactured homes were produced by an estimated 400 firms in the U. S. in 1959. This is a gain of 20% over the previous high of 110,080 in 1958.

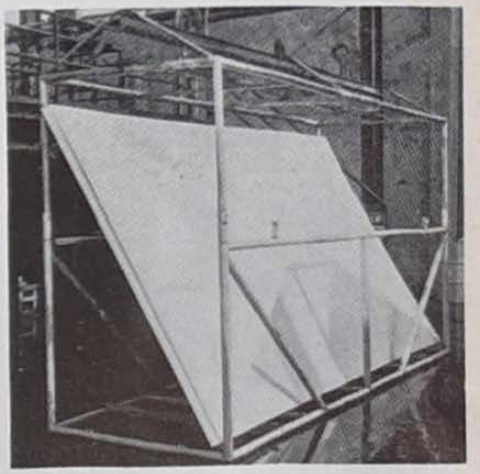
The association reports that prefabricated homes accounted for 12% of all single family housing started last year in the nation. While the bulk of these starts were centered in the eastern states, prefabrication is also growing on the West Coast. The survey showed that 14 home manufacturing firms are now operating in California, 14 in Oregon and 21 in Washington.

Chemical milling used in commercial design

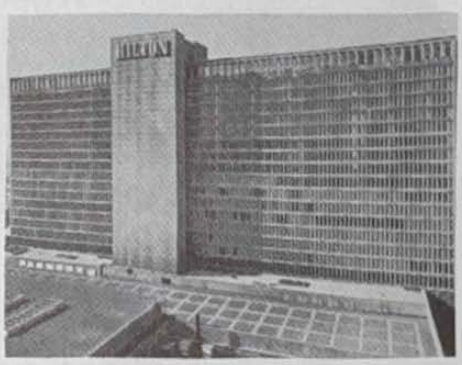
A chemical milling technique borrowed from missile and aircraft projects is being applied in the field of metal panels for both interior and exterior building construction.

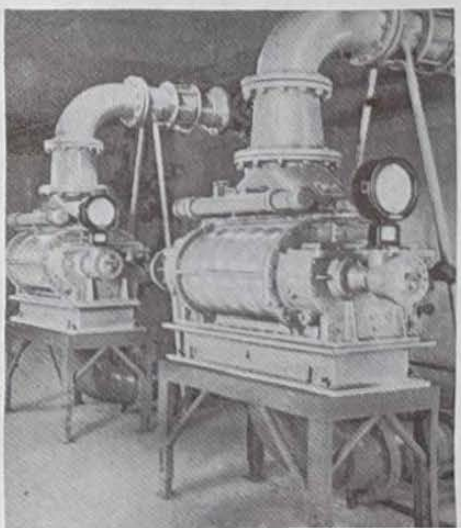
The process was used recently for 24 panels of aluminum fronting the $2 million Gelson's Food Center in Encino, Calif., designed by architect R. Leon Edgar. The 12x8-ft. panels were dipped in a special aluminum milling solution and then immersed in a smut-removing solution to produce a satin-smooth finish. Panels were placed in a continuous row across the front of the building above the windows.

According to United States Chemical Milling Corp., this process can be used on virtually any metal and can produce patterns and cuts in the metal as well as decorative finishes. Since one man can control the chemical milling of a number of parts at one time, the method is more economical than hand finishing of individual parts.



FOOD CENTER EXTERIOR features continuous row of 12x18-ft. aluminum panels, one of which is shown after chemical milling.



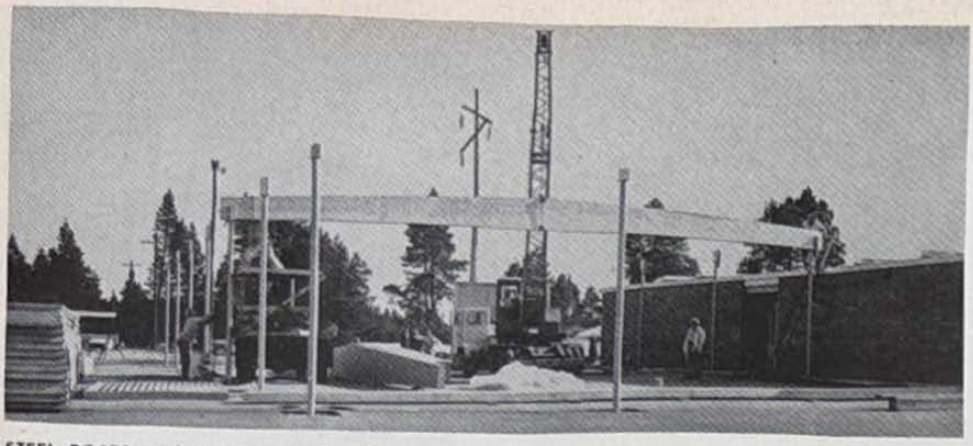


Gas meters reduce cost, save space in hotel

Two rotary gas meters have been installed in Denver's Hilton Hotel to handle a gas load that averages more than 200,000 cfh. Rotary type was selected because it cut the cost of equipment, considerably reduced floor space requirements, meant simpler installation and reduced the equipment weight.

It is estimated that metering gas fuel for this installation with diaphragm type meters would have required 20 or more, weighing over 10 tons. The two 10x30 Roots meters are used in connection with four gas fired boilers providing some 140,000 lb. per hour of 200 psig. steam for space heating, turbine driven centrifugal air conditioning and other hotel services, with substantial surplus steam for resale to nearby commercial buildings through the utility company's steam distribution system.

DENVER HILTON has two rotary positive gas meters, largest such installation in U.S. hotel today, to take care of any load fluctuations.



STEEL POSTS sunk in concrete furnish support for laminated wood beams being placed into position by mobile crane. Panels are secured with screws to girders.



COMPLETED PLAY SHELTER is light, airy structure yet offers protection on rainy days so typical of Northwest. Windbreaker walls are formed by 14-ft. wood louvers at either end.

Play shelter roof completed in five hours

Stressed skin plywood panels with an interlocking Z-type joint cut construction time and costs for a 5,000-sq. ft. play shelter erected recently at the Mountain View Elementary School in Shelton, Wash.

The shelter consists of a roof, one protected side, partially protected ends and a blacktop surface. Panels used are similar to a hollow core door, only much larger and with a load carrying core and skin. Each panel is a structural element with the finish materials on both sides acting integrally with its framing members to actually carry part of the load.

Factory fabricated, the panels feature the interlocking Z-type joint created by architect S. C. Horsley which makes it possible to assemble the units at the building site without cutting and fitting. Panels are sealed along the interlocking edges.

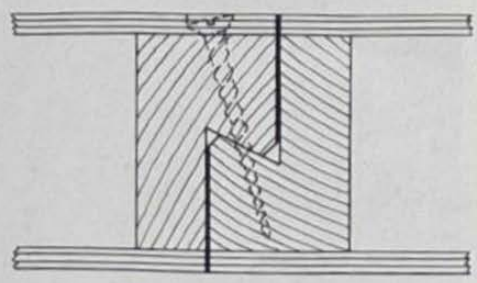
For the Shelton job, pipe columns first were placed in concrete footings. Then two plywood box beams were placed in position at either end. Five 52-ft. laminated beams were then hoisted onto the pipe columns.

Five workmen assembled the roof in five hours, using 4x16-ft. panels which were lifted onto the girders laid in place and secured with screws. Cost of erection, including labor, mobile crane, glue and screws, was $211 or four cents per foot.

Shelter ends have an L-shaped wind break made of stressed skin panels and a fabricated 8x12-ft. louver tilted into place.

The unique joint makes the Simpson-Horsley system particularly suitable for demountable structures. Since the panels are secured to each other by screws, they can readily be taken apart and reassembled at another location.

Box beams and panels were fabricated by Simpson Engineered Wood Products Co.



DETAIL of Z-type interlocking joint. Stressed skin panels are secured by screws and in case of permanent structures, glue is applied along interlocking edges.

New form-release agent allows cleaner concrete

A new type of form-release agent which has been employed in northern California is resulting in cleaner concrete surfaces, smoother parting, longer-lasting wood forms, easier application and overall savings in labor and materials.

Shell Oil Co's especially formulated Form Compound is a water emulsion material mixed at a central station in a ratio of one part compound to 15 parts of ordinary tap water. The mixture is then stored in 55-gal. drums. When the solution is needed at the various jobsites, paddy wagons pick it up in 5-gal. containers. Workmen use ordinary spray tanks to coat the forms, but on big decks the solution is mopped on before the steel goes down. Cost of the emulsion works out to about 20 cents per gallon.

Form Compound is being used in the fields of prestressed concrete structures and in concrete block production as well as on job-placed concrete. In both cases the search for an effective form release has been active due to the high cost of the product, the need for production speed and the necessity for smooth, attractive concrete surfaces.

Until recently the release agents in use were confined to waxes, form oils and fats, each of which has certain disadvantages. This new product has been compounded to meet the special requirements of concrete placement at moderate cost for materials and application.

In prestressed concrete, use of Form Compound has permitted production of architectural and structural grade beams with high gloss surfaces.

After using this agent on bridge decks and columns, culverts, retaining walls, highway forms, headers and abutments for the Walnut Creek Freeway in California, Charles L. Harney, Inc., San Francisco contractor, predicts that the material will be applied to all of its concrete forms in the future.

Robert Waylett, structural superintendent, says that wood forms now last longer and can be used repeatedly because checking has been eliminated. He also notes that moisture has no effect on Form Compound. After forms for the first bridge deck had been coated, rain fell heavily for two weeks before concrete could be poured. Nevertheless, the forms stripped easily, leaving the concrete surface clean and smooth.

When conventional agents were used on overpass columns, it sometimes was necessary to yank the forms loose from the cured concrete.

Reinforced plastic forms domelike structure

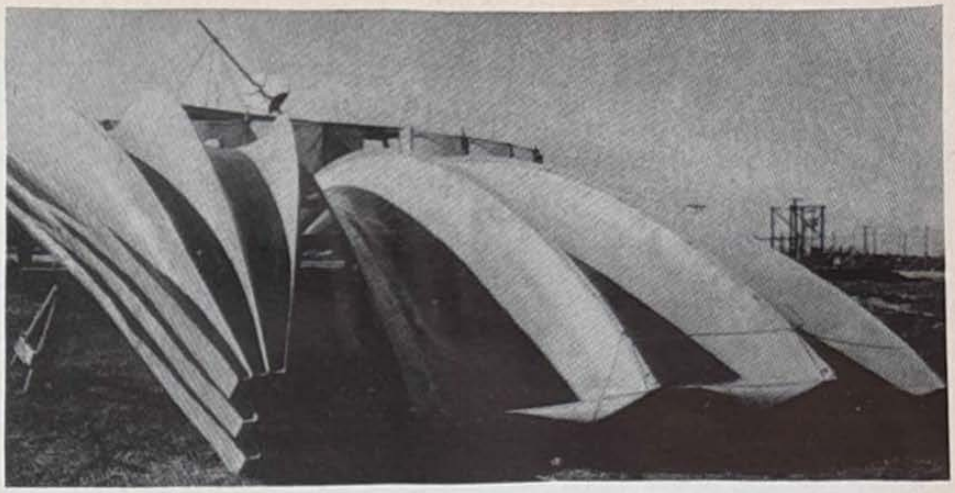
A high strength, ultra lightweight structure formed completly of reinforced plastics was recently designed and produced by Architectural Plastics Corp. of Eugene for Convair, a division of General Dynamics Corp.

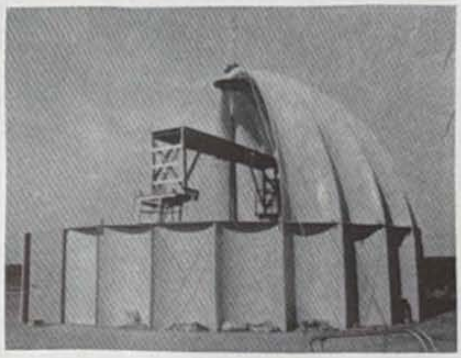
The 36-ft. diameter circular structure comprises large, tapered segments 24 ft. in length, assembled on the jobsite. The very thin shells were engineered to support a 2,000-lb. capacity rail hoist from the shell skin and withstand 100-mile winds. Prestressing fibers were employed within the laminate.

The structure weighs 2,000 lb. and can be picked up by a single lifting eye at the center. Color is translucent white.

While this particular structure was designed for a classified use, the company reports that similar shells in various forms and colors are being produced as separate structures or building components, in single skin or sandwich form.

Costs may vary from $3 to $10 per square foot of floor in single skin forms and from $8 to $25 in sandwich shells.







TAPERED SEGMENTS are assembled on jobsite to form 36-ft. diameter structure.



the label to look for

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complete sound system

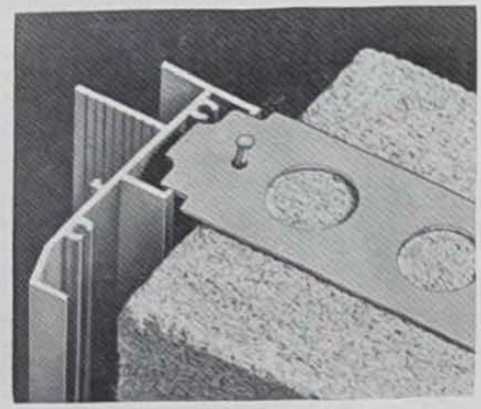
A line of compatible custom sound components can be combined to fill a wide variety of needs from a simple paging system to a complete system of music distribution and area or general paging, with mutiple microphone inputs, automatic muting of music while paging and emergency priority on microphone channels. All are installed in one compact rack. Units in the line, designed for commercial, industrial or institutional use, include an AC power panel, relay panel, input and output panels, record changer, amplifiers, speakers, etc.—Webster Electric Co. **(Item No. 1)**

lightweight roof system

A lightweight roof system that eliminates a suspended ceiling, reduces wall height and combines fireproofing and acoustical correction in one material has been awarded a two-hour fire rating by Underwriters' Laboratories. The assembly consists of a 2-in. slab of vermiculite insulating concrete over a vented corrugated steel deck supported on precast joists. Corrugated sheets are welded to steel plates cast into the top chord of the joists. Underside of the deck is fireproofed with ⅞ in. of vermiculite acoustical plastic sprayed directly to the steel. Joists also are sprayed. System permits electrical wiring to be run in thin wall conduit on top of the metal sheets.—Vermiculite Institute. **(Item No. 2)**

all-climate window

An aluminum sliding glass window with special anchor and full sill for masonry installations has been developed by Radco. The anchor positions the window in accurate align-



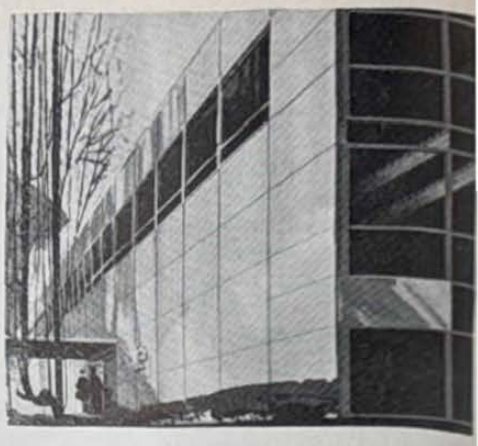
ment and ties it to the masonry at both the sill and the left and right jambs. Series 500 has both high mohair and vinyl weatherstripping, stainless steel track and nylon weepers within the sill at each end to prevent entrance of moisture and dust. Similar units in the series are designed for use in other types of installations.—Radco Products, Inc. **(Item No. 3)**

matchable trim moldings

Trim moldings to match such vinyl materials as Masland Duraleather, Columbus coated vinyls and others are now being produced by Keller Products. Moldings are manufactured with the actual vinyl permanently bonded to an aluminum extrusion in shapes to meet varied wall and partition requirements.—Keller Products, Inc. **(Item No. 4)**

load-bearing wall system

For one and two-story structures, Stran-Steel has developed a panel wall system consisting of a light weight load-bearing steel structure, colorful porcelain curtain wall panels that slip into place on the structure and aluminum extrusions and attachments, all in one package for a single source of supply. Stran-Wall is expected to offer construction savings by eliminating need for heavy structural beams and columns, reducing foundation needs and simplifying



erection procedure. Framing is assembled by welding or with self-tapping screws. Panels are slipped into slots and grooves in the framing. A distinctive nailing groove in the steel framing simplifies attachment of collaterals to exterior or interior walls. Aluminum mullions, jambs, sills and headers can be snap-fit or attached by concealed screws.—Stran-Steel Corp. **(Item No. 5)**

portable plan file

For the architect, builder, surveyor and others who must carry plans from place to place, Plan Hold is offering the Roll-Pack, a lightweight case consisting of four durotubes mounted in a steel housing with spring latched door. Standard model accommodates four plans of 24-in. width; weighs only 8 lb.—Plan Hold Corp. **(Item No. 6)**

ceilings heater

Ceiling mounted radiant heater from Nutone extends only 3½ in. from the surface and has a square-mesh grill said to improve diffusion and eliminate cold spots. Fan pulls air up through center of unit and disperses infrared heat around outer edge. All exposed parts of Model 9290 are anodized aluminum.—Nutone, Inc. **(Item No. 7)**

sound-resistant folding doors

For schools, churches and other installations where sound protection is an important factor, Holcomb & Hoke is offering the Soundguard folding door featuring complete perimeter sealing to prevent noise from passing around jambs and operating edges. Body of partition is insulated on each side of the frame with building board panels laminated to a vinyl coated flexible membrane. Resilient seals are used at deep-nesting post moldings and at all perimeter edges. Seat at floor and ceiling is reinforced by flexible rubber sweep strips.—Holcomb & Hoke Manufacturing Co., Inc. **(Item No. 8)**

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colorful steel fence

Chain-link fencing is getting more colorful and less institutional-looking all the time. Latest company to offer colored, plastic covered metal fencing is a Canadian producer of electrical cables which has established a subsidiary for manufacture of the product and distribution in the U.S. Beautylink fencing is made of vinyl plastic covering extruded over the galvanized steel wire prior to weaving. It is said to permanently withstand rust, cracking and peeling. Six standard colors are available. Special colors to match company trademarks and the like can be custom woven.—Beautylink Fence and Wire, Ltd., of Standard Wire & Cable, Ltd. **(Item No. 9)**

light and air diffuser

Mobilex-Troffer ceiling diffuser combines fluorescent lighting with engineered air distribution for air conditioning. Conditioned air is diffused through slots along both sides of the light fixture. A 5-ft. expanding cone damper for controlling air volume is accessible by unlatching the bottom of the diffuser. Discharge air is completely separated from ballasts, fluorescent tubes and reflecting surfaces. Diffuser is available in 1x4-ft. and 2x4-ft. sizes and two, three or four fluorescent tubes. — Barber-Colman Co. **(Item No. 10)**

decorative waterfall

The popularity of patios, courts and landscaped garden areas in the home building field has spawned many side industries. One of the latest entries is a self-circulating garden waterfall made of a series of colorful fiberglass bowls with mother-of-pearl inlay. The Fibrez line is designed to be lighted from beneath, has a strong, welded frame and comes complete with pump, hose and noncorrosive fittings.—General Fiber, Inc. **(Item No. 11)**

'self-healing' tackboard

School tackboard walls and bulletin boards should reap the greatest benefits from Cork-Tex, a vinyl-on-cork material that heals itself from punctures and cuts. The material has been tested in some 2,000 classrooms in California and will be placed on the market in May. It consists of a cork sheet ¼-in. thick permanently bonded to 18-gage vinyl offered in eight different colors in a linen finish from stock or in more than 100 shades and textures on special order. It will be sold in rolls or in preframed boards. The combination of vinyl and cork was picked because vinyl can be produced in a wide range of colors and textures and is washable. It was found that the cork backing would contract the vinyl after removal of a pointed instrument, closing the laceration and leaving the material to appear as good as new. Cork-Tex is also suggested for display surfaces for offices, stores and industrial plants and as wall sections in children's rooms. — Bond Crown & Cork Division, Continental Can Co., Inc. **(Item No. 12)**

thermal insulation cement

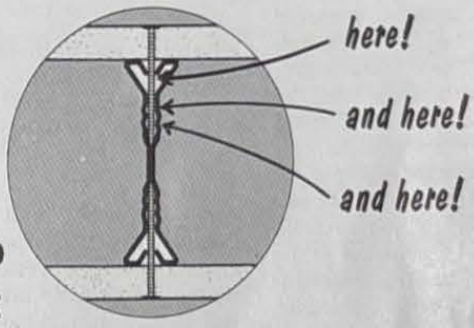
A castable, quick-set, one-coat insulation cement is being marketed for such hard-to-cover materials as fiberglass board and blanket, rock cork board, foam glass block, rock wool blanket, etc., without the use of hex wire. Manufacturer says it will not shrink, blister or drip, can withstand freezing with no deteriorating effects and produces a smooth, hard finish. It can be packed by hand, troweled, injected, palmed, sprayed or poured and the set materials can be reused.—Thermold Products Co. **(Item No. 13)**

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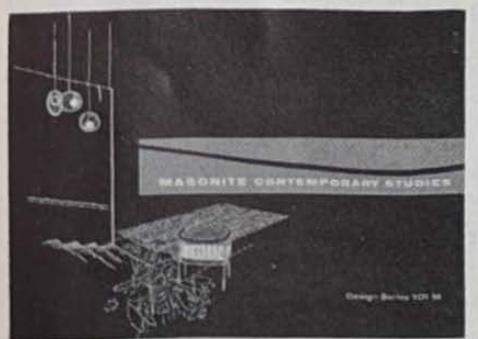
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pa&b pick of the month

All the data needed to design industrial heating jobs using direct fired heaters has been gathered together in an "application manual" prepared by M. H. Stern, Lennox industrial market manager. The comprehensive 64-page text covers definitions of terms, explanation of direct fired heaters, heat loss calculations, air distribution, single and multiple installations, door heating, process heating, fuel piping design and controls. Also included are conversion tables for pressure, temperature, weights and measures. — Lennox Industries, Inc., Marshalltown, Iowa.



pa&b pick of the month

Twenty full-page imaginative design sketches present ideas for utilizing hardboard panels in homes and offices. The booklet is a reprint of artwork by George Alfred Parenti of Chicago which appeared as design series 101M in advertisements by Masonite during 1958 and 1959. Application detail drawings have been added to the original material. Other than a listing of the company's products employed in each sketch, there is no advertising.—Masonite Corp., 111 W. Washington St., Chicago 2, Ill.

1960 Floor Fashions: handsomely illustrates company's line of linoleum and vinyl linoleum yardage and tiles; 56 pp.—Pabco Floor Covering Division, Fibreboard Paper Products Corp., 475 Brannan St., San Francisco 19, Calif.

Church Heating: promotes electric heating for churches with photos of installations and brief cost case histories; 4 pp.—Edwin L. Wiegand Co., 7500 Thomas Blvd., Pittsburgh 8, Pa.

Plywood Catalog 1960 (AIA 23-L): parades line of standard and specialty plywoods (redwood, pine, Douglas fir, hardwoods, high and medium density overlaid and hardboard faced) with grade, physical characteristics and excellent color photos of each type; 20 pp.—Simpson Logging Co., 1032 White Bldg., Seattle 1, Wash.

Micarta Panel Wall: depicts step-by-step installation of the plastic panels, shows typical installations and patterns; 8 pp.—Westinghouse Electric Corp., Micarta Division, Hampton, S.C.

Air Conditioning and Refrigeration Equipment: catalogs complete line, including new high pressure and humidity control air-handling units in loose-leaf heavy-duty binder; 221 pp.—Drayer-Hanson Division, National-U. S. Radiator Corp., 3301 Medford St., Los Angeles 63, Calif.

Twin-Mill Roofing, Waterproofing and Traffic Deck Surfaces: gives complete architectural specifications for butyl rubber laminates reinforced with woven glass cloth; 78 pp.—Twinsburg-Miller Corp., Box 207, Twinsburg, Ohio.

Timber Construction Standards (AIA 19-B): gives revised standards for selection of adhesives, structural timber framing and new treating standard in three brochures; 13 pp. altogether.—American Institute of Timber Construction, 1757 K St. N. W., Washington 6, D. C.

Facts on Floors in School Shops: reports on a survey of 57 selected school districts which seem to indicate a preference for hardwood strip; 20 pp.—J. W. Wells Lumber Co., Menominee, Mich.

Stadium and Auditorium Concrete: describes and pictures 16 projects in which Pozzolith was used, including the Albuquerque Civic Auditorium, Bakersfield College (Calif.), Stadium and additions to the Rose Bowl; 20 pp.—The Master Builders Co., Cleveland 3, Ohio.

Derusto Protective Coatings: catalog line with actual paint chips to aid color matching and data on rust preventive applications; 16 pp.—Master Bronze Powder Co., Inc., 538 W. State St., Calumet City, Ill.

Current Designs in Lighting (AIA 31-F): provides installation information, lighting curves and lighting intensity estimating charts for line of built-in fixtures plus sections on types of installations; 104 pp.—The Kirlin Co., 3435 E. Jefferson Ave., Detroit 7, Mich.

Lightweight Fire-Resistant Insulating (AIA 21-A-5): gives fire ratings, mixing instructions and specs for Permalite expanded perlite plaster aggregate; 8 pp.; similar brochure (AIA 4-E-13 and 37-B-2), covers roof decks and floor fills; 8 pp.—Perlite Department, Great Lakes Carbon Corp., 612 S. Flower St., Los Angeles 17, Calif.

School Sound Systems: charts typical systems used in schools requiring 16 to 150 more classroom speakers; Du-Kane Corp., St. Charles, Ill.

Designs for School Buildings: depicts four design solutions utilizing Armco steel buildings; 4 pp.—Armco Drainage & Metal Products, Inc., 13659 Curtis St., Middletown, Ohio.

LITERATURE WINNERS

Top winners in the 1960 building products literature competition, co-sponsored by the AIA and the Producers' Council and judged by an all-architect jury—Harry B. Tour, Edward G. Conrad, George Bain Cummings, James B. Newman and H. Griffith Edwards—are:

Class I (primarily basic technical information on design, specifications, etc. by individual manufacturers or associations)—**Douglas Fir Use Book** by West Coast Lumbermen's Association.

CLASS II (technical information concerning building product or products of a single manufacturer, with technical and informative data on use and application)—**Armstrong Floors: Technical Data** by Armstrong Cork Co. and **Architectural Specifications Manual** by Pratt & Lambert, Inc.

Class III (not for the consumer, but primarily promotional to bring the producers' name and product to the architects' attention)—**Laminated Plastic Specifications** by Formica Corp.

Class IV (space advertising directed primarily to the architect)—**Vinyl Cork & Corlon Tile** by Armstrong Cork Co.

Masters of World Architecture (six books) under general editorship of William Alex. George Braziller, Inc., 215 Fourth Ave., New York 3, N. Y. 1960. 123 to 136 pp. $3.95 each.

These are essentially exhibitions of the work of six architects—Antonio Gaudi, Pier Luigi Nervi, Ludwig Mies Van Der Rohe, Alvar Aalto, Le Corbusier and Frank Lloyd Wright—presented in photographs and drawings spanning their careers. Brief text makes no attempt at a definitive biography, but each author has obviously approached his subject via extensive research (and not a little awe) and does an able job of relating the architect to his time and place and the influences both upon him and emanating from him. Artwork is excellent, though color unfortunately is confined to eight pages in the Gaudi book. Authors are Corbusier, Francoise Choay; Wright, Vincent Scully Jr.; Nervi, Ada Louise Huxtable; Gaudi, George R. Collins; Mies, Arthur Drexler; Aalto, Frederick Gutheim.

Lighting in Architecture. By Wassili Luckhardt and Dr. Walter Kohler. Reinhold Publishing Corp., 430 Park Ave., New York 22, N. Y. 1959. 223 pp. $15.

Architect Luckhardt presents "Light as an Element of Structure" in a 96-page pictorial section with only the briefest of captions, illustrating the use of lighting in every conceivable type of structure. Illuminating engineer Kohler then takes up the subject from the technical viewpoint. Third section describes existing installations with pertinent criticisms, both good and bad. Book is a translation from the original German edition with only minor changes in the text to clarify terminology or convert various standards to their American counterparts.

Aluminum in Modern Architecture—'60. Edited by John Peter. Reynolds Metals Co., Richmond 18, Va. 116 pp. Free.

A pictorial review of some of the more outstanding creative uses of aluminum in construction throughout the world during the past several years. Featured are the 1958 and 1959 winners of the R. S. Reynolds Memorial Award: the Transportation Pavilion at the Brussels World Fair and the Sidney Meyer Music Bowl in Melbourne, Australia. Western United States is well represented among the other 28 buildings depicted. These include the Las Vegas Construction Center, designed by Adrian Wilson & Associates; Torrington Manufacturing Co., Van Nuys, Calif., Marcel Brewer & Associates; South Bay Bank, Manhattan Beach, Calif.; Craig Ellwood; Air Force Academy, Skidmore, Owings & Merrill; Valley Presbyterian Hospital, Van Nuys, Calif., Charles Luckman Associates with William Pereira; and the May-D & F Shopping Center, Denver, I. M. Pei & Associates. Other material includes discussions on the future of aluminum in architecture by four heads of architectural schools. This is the second supplement to the original two-volume book published in 1956. Requests for copies should be made on company or school letterheads, the publisher states.



THE MASTERS: Le Corbusier, Meis, Wright (top) and Gaudi, Aalto, Nervi.

Residential Construction Management. By Ernest L. Buckley. John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N. Y. 1959. 193 pp. $7.95.

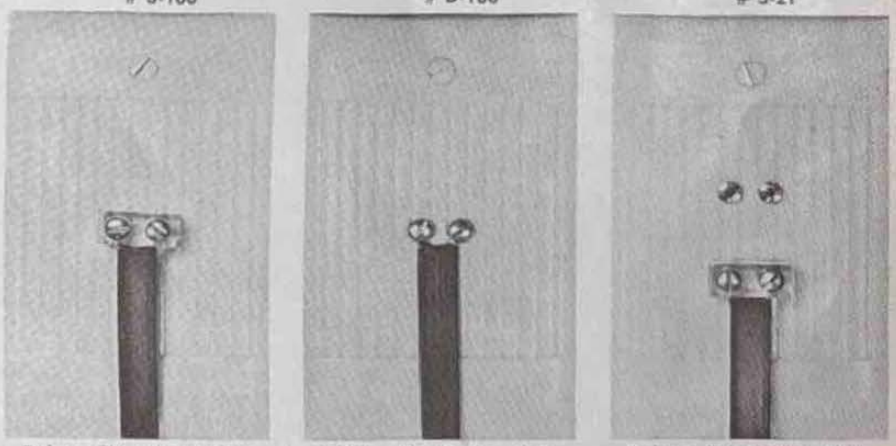
For the small businessman interested in enlarging his operations or the established builder seeking greater economy and quality in his organization, this publication should prove invaluable. Geared to the problems encountered in medium and high volume tract housing construction, it offers sound advice for all phases from first-step organization and planning on up through the sales promotion campaign. Buckley emphasizes the advantages of retaining an architect, calling it false economy not to do so. Careful scheduling also receives a great deal of attention and one system is described in detail. Photographs have been used extensively to show the results of both good and poor management.

Building Construction Roof Framing. By Alonzo Wass and Gordon A. Sanders. Prentice-Hall, Inc., 70 Fifth Ave., New York 11, N. Y. 1960. 170 pp. $5.75.

Designed to be used either as an instruction manual or reference book. Text integrates the simple graphic or pitchboard development method and more technical framing square method in covering the subject of roof framing from the most simple to the com-

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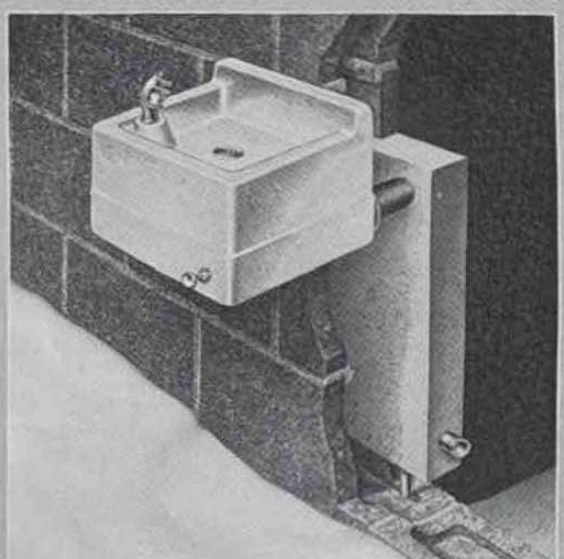
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plex. Some 200 drawings illustrate the material. Author Alonzo Wass is instructor in the building technology department of the provincial Institute of Technology and Art at Calgary, Alberta, and Gordon Sanders is examinations technician for the Department of Labor, Alberta.

An Introduction to the Dynamics of Framed Structures. By Grover L. Rogers. John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N.Y. 1959. 335 pp. $10.25.

Written with the particular problems of the designers of buildings and bridges in mind, this book is an introductory exposition of the theory of structural dynamics as it pertains to the special problems of beams and rigid frames. Text deals with such field problems as stresses and strains in structures during and after earthquakes; action of moving loads; deflections and bending movements. Author is director of the department of engineering science, Florida State University. The book is written for the practicing engineer or advanced student who is conversant with the statics of framed structures and is interested in the application of mathematical methods to such structures.

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Practical Prestressed Concrete. By H. K. Preston. McGraw-Hill Book Co., Inc., 330 42nd St., New York 36, N.Y. 1960. 335 $11.50.

Purpose of this book by a member John A. Roebling's Sons is to furni the busy structural engineer with sim plified information on the design safe, economical structures of pr stressed concrete. Basic principle design procedures and numerical ex amples are presented in terms of sim ple arithmetic and standard stress an moment formulas. Properties strands, wires and bars are tabled Appendixes include specifications an recommendations for prestressed con crete design.

Office Building and Office Layout Planning. By Kenneth H. Ripnen. McGraw-Hill Boo Co., Inc., 327 W. 41st St., New York 36, N.Y 1960. 200 pp. $10.

Practical information on the basi factors involved in designing office such as space required for variou kinds of work, lighting, air condition ing and the like, is combined wit more general information in the realm of management decisions. Latter sec tion goes into determining the valu of building or renting, site location modernization and related material Author has headed his own firm o architects for the past 30 years and i known particularly for his work i this specialized field. He emphasize the importance of integrating th functional, physical, structural an mechanical elements in office design

The Housing Jungle and Your Pocketbook. By Oscar H. Steiner. University Publishers Inc., 59 E. 54th St., New York 22, N.Y. 196 180 pp. $3.95.

Here is an unusual approach to slum clearance — construction of coopera tive garden type apartments to be sold to low income families and in volving in no way a federal subsidy The author, a successful Clevelan manufacturer, who came out of retire ment to prove his theories, describe three developments now in operation in Cleveland. It is possible that the book would have been even more in teresting and valuable to the build ing community if the author had gone into greater detail on the projects rather than devoting more than half the space to a semi-sociological dis cussion of the slum problem. However Steiner does outline the method of financing (a group of savings and loan organizations provided the money at 4½% interest), type of apartments put up, down payments, monthly pay ments and approximate maintenance costs to buyers. Steiner also discusses the importance of pride of ownership in keeping developments from revert ing to slums.

Oregon union is rapped in readymix case

A teamsters local in Oregon has been found guilty of unfair labor practices by an NLRB examiner because it signed separate labor agreements with two Corvallis sand and gravel firms. The union has been ordered to bargain with the Cascade Employers Association, a group representing readymix firms in the Willamette Valley, and the contracts it executed with the Corvallis Sand & Gravel Co. and the Builders Supply Co. have been declared null and void.

The association was formed in 1946 and is composed of about a dozen companies in the Salem-Corvallis area engaged in the sand, gravel and readymix business. It has represented the employers for many years in labor negotiations with the employees, represented by Local 324 of the Teamsters Union.

When a three-year labor agreement expired December 31, 1958, the union and the association held a number of meetings and by May 8 had agreed on many provisions of a new contract. It was agreed that the association would draft a package proposal which would be submitted to the union membership. On May 11, while the proposal was being mimeographed for submission to the union, the union started picketing the plant of Corvallis Sand & Gravel Co.

John Gallagher Jr., manager of the plant, testified that union representatives presented him with a contract on the morning of the 11th and demanded that he sign it by noon. When Gallagher told the union representatives that the association was representing his firm in labor negotiations, the labor representatives told him the union no longer was dealing with the association but with the individual company.

When Gallagher refused to sign the agreement, pickets appeared at the plant and work was suspended. The next morning the strike spread to the plant of Builders Supply Co., although no demand had been made there for a separate contract. Thereupon the association decided that "a strike against one was a strike against all" and all members of the association suspended operations. The association filed a complaint against the union charging unfair labor practices.

Negotiations on a labor agreement continued and on June 20 the two parties were in substantial agreement on a contract which would have raised wages 25 cents an hour in 1959 and 15 cents more in 1960. A few days later John Gallagher Sr., 84-year-old president of Corvallis Sand & Gravel Co., signed a separate agreement with the union giving a 25-cent increase in 1959, 20 cents in 1960 and 20 cents more in 1961, with other fringe benefits. He testified that he signed the agreement because he was concerned with the welfare of some of his longtime employees and because the company was losing money at the rate of $500 to $1,000 per day due to the picketing, which has been continuous for about 60 days.

Gallagher knew his company belonged to the association and had taken no steps to withdraw the company from the association, believing that he was free to sign a contract with the union. As soon as he signed, the pickets were removed and full-scale operations at the plant were resumed.

A few days later Builders Supply Co. capitulated and signed a separate agreement with the union, but the strike continued at other plants of association members. A few days later union representatives offered similar contracts to Central Paving Co. and Valley Concrete Co., both members of the association, but they refused to sign.

The NLRB trial examiner recommended that the union be ordered to cease coercing any individual members of the association, that it bargain with the association and that it post a notice stating that it will not attempt to enforce the contract with Corvallis Sand & Gravel and Builders Supply Co.

BRIEFS

• **Montana Building Chapter, AGC,** has elected W. R. Waddell of Helena as state chairman, succeeding George E. LaRue of Billings. Other officers: C. W. (Bill) Fuglevand, Havre, vice president; E. F. Matelich, Kalispell, treasurer; and William J. Bowman, Billings, reappointed secretary-manager.

• **Walter F. Dillingham,** who founded Hawaiian Dredging & Construction Co. on borrowed capital in 1902, has received Seattle University's 1960 Award for Economic Statesmanship. It is estimated that one-third of Honolulu is built on land reclaimed by Dillingham's company.

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• **Hawaiian Cement Corp.** has named Howard R. Starke as executive vice president and general manager. Starke, who previously held executive positions with both the Hawaiian firm and Riverside Cement Co. in California, will now devote his time to the Hawaiian operations.

• **General Electric Co.** has named two new wholesale distributors for Textolite plastics; The Jasco Materials Co., Santa Ana, Calif., for the Orange County area and Lester E. Houser Distributing Co., Billings, for southern Montana and northeastern Wyoming.

• **Ajax Hardware Corp.** has completed its move to a new plant in the City of Industry, near Los Angeles, which will triple the firm's production capacity.

• **Builders Brick Co.** of Seattle has acquired the retail masonry distributorship known as Mutual Materials Co., also of Seattle, and will operate it as a separate company. R. C. Houlahan, president of Builders Brick, has been named president of the subsidiary and E. R. Coats, former president of Mutual, will serve as vice president and general manager.

• **Pacific Zellcrete** announces a new address, 2524 N. San Gabriel Blvd., South San Gabriel, Calif., and a new distributor for Elastizell cellular concrete in Washington, John T. Broadfoot Co. of Seattle.

• **Kaiser Gypsum Co., Inc.,** has appointed Brent F. Crosby technical sales representative for the northern California sales division. He will headquarter in Oakland.

• **Worley & Co.,** a division of Ekco Products Co., has moved to new office and plant facilities at 802 Whittier Blvd. in Whittier, Calif.

• **Weyerhaeuser Co.** has appointed the following distributors for panel products manufactured by the Silvatek Division: Harbor Plywood Corp., Oakland and San Francisco; Al Disdero Lumber Co., Portland; and Modern Materials, Inc., Los Angeles.

• **Westinghouse Electric Corp.** has named Carlyle B. Stitt to the post of South Pacific district agency and construction manager for the apparatus division with headquarters in Los Angeles and John R. Read as Los Angeles metropolitan area sales manager. Both are veteran employees of the company.

• **Liquid Tile Corp.** has established a western branch in San Francisco under the name Liquid Tile of California, Inc. Director of the new operation is Gunter Silmar. Jack Baser will represent the company in Los Angeles. The firm also has awarded a franchise in the San Francisco Bay area to Cook Tile Co. and in the Los Angeles area to G. C. Hewitt Co.

• **Simpson Timber Co.** reports the retirement of C. H. (Chris) Kreienbaum, vice chairman of the firm since 1950 and a veteran of 48 years in the lumber industry. Kreienbaum also has been a leader in such organizations as the West Coast Lumbermen's Association which he served as president in 1946, the National Lumber Manufacturer's Association and California Redwood Association.

• **American Sisalkraft Corp.** has promoted Philip L. Paulsen from Bay area sales representative to assistant manager of the western division in the San Francisco western headquarters office.

• **Perry Kilsby, Inc.,** of Los Angeles, distributor of steel and aluminum tubing and piping, has changed its name to Kilsby-Tubesupply.

• **United Industrial Corp.,** a Los Angeles corporation heretofore primarily engaged in the electronics field, has purchased Southern Pacific Milling Co., a California producer of construction materials, and will operate it under the present management team.

• **Ideal Cement Co.** has presented the University of Washington with a $2,500 graduate fellowship grant for advanced work in subjects related to cement and concrete technology.

• **Colortone Pacific, Inc.,** has been organized by Bill Neunzig for the wholesale and retail distribution of paint and building specialties in Hawaii. The firm will handle Schorn paint and Beadex Manufacturing, Inc., products.

• **Chicago Hardware Foundry Co.** has named several factory representatives for CHF stools and tables. They are Cox & Hadley, Seattle; Jack D... Santa Monica, Calif.; and James ... Kennedy, Denver.

• **Vermiculite of Hawaii, Inc.,** ... been formed to handle the Zonol... vermiculite brand and associated pr... ducts in Hawaii. The firm takes ov... a franchise formerly held by Ve... miculite of Hawaii, Ltd., which w... recently dissolved. President is Ro... ert K. Smith, formerly associated wi... Kaiser Gypsum Co. John C. York ... vice president in charge of sales an... Ernest (Bill) Hamburger has been ap... pointed sales engineer. Both were a... sociated with the previous distributo... Offices and plant facilities will be e... tablished at 842-A Mapunapuna St. ... Honolulu.

• **Integrated Ceilings, Inc.,** of L... Angeles has changed its name to In... tegrated Ceilings and Grilleworks, In...

• **Columbia Steel Casting Co., Inc.** of Portland has named William ... Nelson as southwestern sales repre... sentative covering central and south... ern California, western Nevada, Ar... zona, New Mexico and western Texa... out of Los Angeles headquarters.

• **United States Plywood Corp.** ha... elected G. E. Karlen, managing par... ner of Karlen-Davis Co., Tacoma, ... the board of directors.

• **The Flintkote Co.** has elected fiv... vice presidents, including three wh... head divisions on the West Coast... Kennedy Ellsworth, U.S. Lime Pro... ducts Division, Los Angeles; Willia... Wallace Mein Jr., Calaveras Cemen... Division, San Francisco; and Noel J... Redmond, Blue Diamond Division, Lo... Angeles.

• **Ador Corp.** of Fullerton, Calif., ha... appointed B. J. Morris as genera... manager of all operations. He pre... viously was president of his own... building products firm.

• **Prescolite Manufacturing Corp** has transferred Al Thompson to th... home office in Berkeley where he wil... serve as Bay area sales manager. Suc... ceeding him as sales representative... in the Wyoming-Colorado area wil... be Donald Congdon headquartering in... Denver.

• **Dyna-Therm Chemical Corp.** of Culver City, Calif., and **Highland Stucco & Lime Products, Inc.,** of Van Nuys, Calif., have organized a building materials company for the manufacture and marketing of plastic plaster...

acoustical type ceiling materials and liquid plastics for wall coatings. Firm name is Hi-Kem Corp. The products will be manufactured in Culver City and marketed through Highland's licensees in southern California.

• **Safway Steel Products, Inc.,** has purchased Beatty Scaffold Inc., of San Francisco and will operate it as a division from the same locations as before in San Francisco, Oakland and Seattle. Distributor organization in 11 western states will remain unchanged.

• **Fibreboard Paper Products Corp.** has completed an expansion program at the Newark, Calif., Pabco gypsum products plant that has doubled production capacity for gypsum board. The firm also has just completed a new plant for processing gypsum rock at Apex near Las Vegas.

• **Gladding, McBean & Co.** has elected C. W. Planje chairman of the board. Planje has been with the firm since 1936 and president and a director since 1955. He will continue as president.

ASSOCIATIONS

• **Douglas Fir Plywood Association** has picked David R. Countryman for the new position of manager of research and engineering. Countryman joined DFPA in 1941 and has been serving as manager of applied research.

• **Acoustical Materials Association** announces the appointment of Robert W. Boltz to a newly created post of technical secretary in the New York City headquarters office. Boltz is a graduate of the University of California and was associated with the Owens-Corning Fiberglas Co. branch in Santa Clara, Calif., for 11 years.

• **Western Pine Association** has re-elected James D. Bronson, Yakima, president, and R. A. Rehfeld, Phoenix, treasurer. New vice presidents are Kenneth R. Walker, Anderson, Calif., and J. B. Edens, Phoenix.

• **United States Red Cedar Shingle Industry, Inc.,** has reelected President Robert J. Batley, head of Phoenix Shingle Co., Seattle, and Treasurer Paul R. Smith, head of the M. R. Smith Lumber & Shingle Co., Seattle. R. D. Mackie, Aberdeen, has been elected vice president for Washington; Mel Lester, Sweet Home, vice president for Oregon; and E. C. Newberg, Lebanon, Ore., secretary-manager.

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The Waikiki Shell construction seve al years ago was one phase of t master plan for Kapiolani Park, public area fronting on Waikiki Beac which includes such recreational f cilities as tennis courts, polo an archery fields and picnic spots. Ac ceptance of the shell itself has bee dramatically proven by high attend ance at all functions there, especiall the summertime concerts performe by the Honolulu Symphony Orchestra Because of this popularity, recent aug mentation of a ticket booth, comfor station, concession facilities and perm anent seats has been mandatory. Bu the architects explain: "The grassy hillside remains, however, the majo seating arrangement of the shell." We'll take a look in our June issue.

When the Washington State Chap ter, AIA, held its 1959 Honor Award program, it cited, for the first time two older projects. One of them con sisted of the delightful cottages whic architect Ellsworth Storey built "t provide low rental homes in a good neighborhood" and there has never been a vacancy since then. Victor Steinbrueck, a member of the Uni versity of Washington's architectura faculty who, by the way, lives in a Storey-designed house, will describe some of the details which have en deared these cottages in the hearts of Seattle area professionals.

An interesting application of con crete bents in a California public in stitution will be one of several methods articles.

happy home hunting

Representing the architects at the sec ond annual Home Buyers' Forum in Seattle early last month was A. O. Bumgardner, PA&B's consulting edi tor. Along with E. B. Vaughters, builder, and Edward B. Sand, plan ning director for King County, he spoke to an audience of about 1,000 on the topic of "Buying a Home Can Be Fun" at the initial session. The second evening's program was devot ed to legal and financing aspects. Bumgardner, who has his own studio and living quarters in a house which he is remodeling, had this to say: "Older houses have their good points —they are usually in an established neighborhood, close in and close to schools, shopping and bus lines. But don't remodel to the point you de stroy the character of your old house. Cosmetics, attractive to a young wo man, can ruin an elderly grand mother."

R.E.K.

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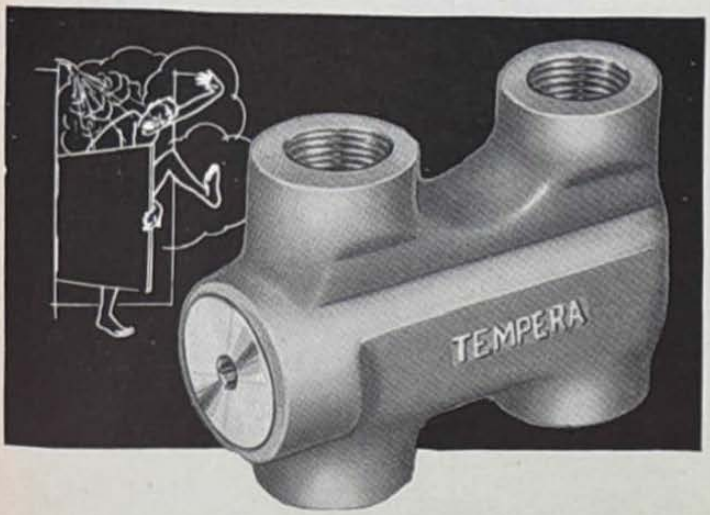
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April takes 38.8 million drop in West

Building permit volume for the 13 western states in April totals $317,787,680, dipping $38.8 million below the same period in 1959. Tabulation of key agencies by states shows eight slumping below April 1959 and five with increases. States reporting higher totals are Hawaii, up $9.4 million; Nevada, $5.6 million; Alaska, $1.2 million; Wyoming, $540,000; and Montana, $353,000. Those reporting decreases are California, down $24.3 million; Arizona, $10 million; Washington, $9.6 million; Colorado, $4.5 million; Oregon, $2.6 million; Utah, $2.5 million; New Mexico, $1.5 million; and Idaho, $907,000.

Reason for the low April score can be seen in the tabulation of 15 top agencies for the month. Only four—Los Angeles County, San Francisco, Las Vegas and Honolulu—have a higher dollar volume compared to April 1959. All the rest drop from $1.2 million to $7.8 million apiece. Among the top 15, eight are in California, two each in Washington and Arizona and one each in Colorado, Nevada and Hawaii.

15 leading agencies

	April 1960	April 1959
1. Los Angeles	$47,121,288	$53,765,643
2. Los Angeles County	22,789,584	19,713,459
3. Honolulu	19,132,132	9,690,764
4. San Francisco	14,546,524	5,325,748
5. San Diego	12,513,617	15,603,072
6. San Jose	10,822,480	12,107,922
7. Phoenix	9,383,777	11,808,434
8. Sacramento County	9,042,806	14,392,594
9. San Diego County	8,742,000	14,961,900
10. King County, Wash.	8,289,457	11,668,835
11. Las Vegas	6,763,355	1,944,272
12. Seattle	6,367,054	7,780,088
13. Denver	6,318,395	11,061,680
14. Maricopa County	5,935,466	13,800,024
15. San Bernardino County	5,875,496	7,331,051

Four-month total takes drop

Up until now the year's volume had been running slightly higher than 1959, but the slump in April ate up this lead and then some. Four-month total for the 155 agencies is $1,179,759,944, a drop of $30.7 million from the January through April dollar volume of last year. Totals for five states are still ahead of last year. They are Hawaii, up $29.5 million for the four months; Nevada, $5.6 million; Arizona, $2.7 million; Wyoming, $1.4 million; and Alaska, $1.2 million. States showing decreases for the year are Washington, down $25.8 million; California, $18 million; Colorado, $13 million; New Mexico, $7 million; Oregon, $2.6 million; Utah $2.2 million; and Idaho $2.2 million.

Analysis of selected areas—April

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$18,836,775	$2,260,286	*$ 855,838
Orange County	3,607,849	723,721	29,000
Sacramento County	6,332,143	2,322,860	169,361
Las Vegas	4,899,180	1,808,877	———
Denver	2,281,970	1,887,745	———
Portland	2,121,720	842,435	154,000
Seattle	3,287,994	2,716,200	200,000
King County	6,350,225	897,880	842,732
Honolulu	11,677,588	6,244,737	1,365,166

*Does not include $480,384 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for April

CALIFORNIA	Apr. 1960	Apr. 1959
Alameda County	$ 995,000	$ 2,368,585
Anaheim	3,057,108	5,863,499
Bakersfield	1,818,657	1,355,725
Burbank	537,774	1,564,670
Contra Costa County	3,190,677	4,228,967
Fresno	2,207,179	1,122,750
Fullerton	1,708,407	2,248,936
Glendale	1,677,811	2,250,426
Inglewood	724,127	1,559,521
Long Beach	4,099,865	4,728,340
Los Angeles	47,121,288	53,765,643
Los Angeles Couny	22,789,584	19,713,459
Oakland	4,368,546	6,465,517
Ontario	812,050	803,130
Orange County	4,622,107	5,876,991
Palo Alto	3,147,866	1,657,224
Pasadena	1,471,766	3,790,131
Pomona	1,150,133	904,693
Richmond	685,124	800,577
Riverside	2,827,957	2,585,739
Sacramento	3,513,664	4,229,962
Sacramento County	9,042,806	14,392,594
San Bernardino	1,602,204	2,094,016
San Bernardino County	5,875,496	7,331,051
San Diego	12,513,617	15,603,072
San Diego County	8,742,000	14,961,900
San Francisco	14,546,524	5,325,748
San Jose	10,822,480	12,107,022
San Mateo	894,967	1,270,051
San Mateo County	1,352,492	1,262,258
Santa Ana	5,698,628	3,002,034
Santa Monica	701,107	1,802,559
Stockton	1,541,099	2,151,047
Sunnyvale	3,427,742	3,687,545
Torrance	2,019,832	2,556,460
West Covina	563,192	751,057
TOTAL	$191,870,876	$216,182,899

OREGON	Apr. 1960	Apr. 1959
Albany	$ 153,090	$ 264,001
Astoria	7,300	17,418
Baker	72,725	154,010
Bend	176,145	99,795
Coos Bay	191,583	127,695
Corvallis	374,950	415,070
Eugene	2,169,080	729,750
Grants Pass	120,225	182,950
Gresham	31,000	63,590
Hillsboro	287,355	295,200
Klamath Falls	288,175	168,010
LaGrande	27,501	95,980
Lane County	1,874,691	1,159,975
Medford	680,389	322,902
Multnomah County	3,553,668	2,959,565
North Bend	23,572	334,343
Oregon City	8,290	65,450
Portland	4,409,895	9,821,770
Roseburg	229,009	122,163
Salem	469,970	321,192
Springfield	87,025	99,776
The Dalles	85,108	106,040
TOTAL	$ 15,320,746	$ 17,926,645

WASHINGTON	Apr. 1960	Apr. 1959
Aberdeen	$ 293,480	$ 125,887
Anacortes	273,468	60,310
Auburn	592,177	244,640
Bellingham	1,274,311	795,665
Bremerton	212,580	225,440
Centralia	49,241	141,485
Chehalis	29,408	67,305
Ellensburg	79,187	84,737
Ephrata	770,677	37,812
Everett	287,876	294,483
Kelso	38,564	31,600
Kennewick	339,730	156,195
King County	8,289,457	11,668,835
Kirkland	54,250	83,150
Longview	164,881	239,004
Moses Lake	40,676	110,760
Olympia	267,450	172,197
Pasco	192,640	215,285
Pierce County	2,238,345	2,041,333
Port Angeles	82,795	34,020
Puyallup	88,950	134,945
Seattle	6,367,054	7,780,088
Spokane	1,672,184	6,493,791
Spokane County	1,797,970	2,405,781
Tacoma	1,525,840	1,955,963
Vancouver	1,130,162	2,001,881
Walla Walla	101,779	371,552
Wenatchee	433,040	264,041
Yakima	424,510	421,725
TOTAL	$ 29,112,682	$ 38,759,910

ALASKA	Apr. 1960	Apr. 1959
Anchorage	$ 1,657,498	$ 494,697
Fairbanks	106,050	32,358
Juneau	39,750	1,475
Ketchikan	31,000	34,000
TOTAL	$ 1,834,298	$ 562,331

IDAHO	Apr. 1960	Apr. 1959
Boise	$ 289,351	$ 656,237
Caldwell	85,340	151,700
Coeur d'Alene	170,300	92,040
Idaho Falls	709,912	998,067
Jerome	28,900	23,625
Lewiston	138,990	351,800
Nampa	233,507	167,055
Payette	30,600	38,025
Pocatello	297,720	263,685
Sandpoint	39,050	106,134
St. Maries	35,900	23,300
Twin Falls	167,450	266,530
TOTAL	$ 2,227,020	$ 3,134,198

MONTANA	Apr. 1960	Apr. 1959
Billings	$ 1,866,050	$ 442,603
Bozeman	75,625	559,250
Butte	39,400	22,793
Glasgow	120,600	97,200
Glendive	41,150	62,900
Great Falls	403,757	835,774
Helena	381,510	269,935
Kalispell	38,060	250
Lewistown	29,800	21,000
Livingston	31,300	174,410
Miles City	94,688	119,405
Missoula	106,569	269,300
TOTAL	$ 3,228,509	$ 2,874,820

WYOMING	Apr. 1960	Apr. 1959
Casper	$ 897,845	$ 1,106,291
Cheyenne	1,267,734	693,061
Sheridan	230,202	56,138
TOTAL	$ 2,395,781	$ 1,855,490

COLORADO	Apr. 1960	Apr. 1959
Aurora	$ 1,166,389	$ 698,750
Boulder	493,885	
Denver	6,318,395	11,061,680
Englewood	264,727	465,059
Fort Collins	534,050	1,080,922
Grand Junction	94,973	254,325
Greeley	419,673	427,655
Pueblo	1,294,283	1,098,032
Trinidad	18,315	22,363
TOTAL	$ 10,604,690	$ 15,108,786

UTAH	Apr. 1960	Apr. 1959
Logan	$ 309,900	$ 1,010,840
Murray	342,810	707,085
Ogden	945,800	1,182,700
Provo	292,595	705,250
Salt Lake City	1,048,657	1,908,360
TOTAL	$ 2,939,762	$ 5,514,235

NEVADA	Apr. 1960	Apr. 1959
Elko	$ 119,530	$ 89,082
Las Vegas	6,763,355	1,944,272
Reno	2,679,923	2,003,949
Sparks	473,207	326,179
TOTAL	$ 10,036,015	$ 4,363,482

ARIZONA	Apr. 1960	Apr. 1959
Douglas	$ 119,798	$ 81,137
Flagstaff	239,947	501,420
Glendale	254,700	120,600
Maricopa County	5,935,466	13,800,024
Mesa	1,858,269	1,033,852
Phoenix	9,383,777	11,808,434
Tucson	2,509,862	3,028,248
Yuma	280,575	222,995
TOTAL	$ 20,582,394	$ 30,596,710

NEW MEXICO	Apr. 1960	Apr. 1959
Albuquerque	$ 4,423,000	$ 7,174,000
Carlsbad	438,218	177,096
Clovis	340,610	388,665
Gallup	194,102	127,880
Hobbs	150,164	427,350
Las Cruces	500,000	540,000
Roswell	923,164	
Santa Fe	549,025	225,309
TOTAL	$ 7,518,283	$ 9,060,300

HAWAII	Apr. 1960	Apr. 1959
Hawaii County	$ 474,690	$ 602,840
Honolulu (city-county)	19,132,132	9,690,764
Maui County	509,346	397,346
TOTAL	$ 20,116,624	$ 10,690,950
GRAND TOTAL	$317,787,680	$356,630,756

PROJECT PREVIEW



APARTMENT DEVELOPMENT

in Los Gatos, Calif., will feature 3.5 acres of parklike recreation area, including putting green and badminton courts and two swimming pools, one of which will be enclosed with 65-ft. diameter fiberglass and aluminum frame geodesic dome. Three-story split level, wood frame apartment building for $1.6 million development will have 123 one- and two-bedroom units. Architect: Bob McCabe.



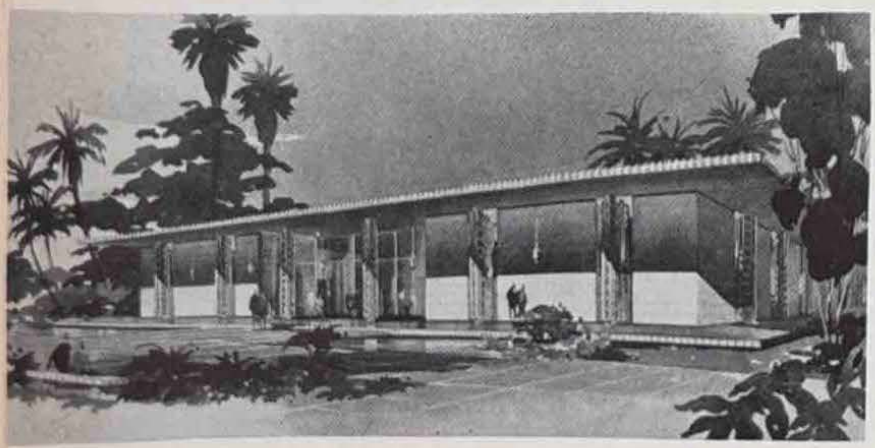
CHAPEL AND BELLTOWER

for Colorado Woman's College in Denver will be constructed of gray-buff stone and brick in contemporary expression of Gothic style. In addition to 800-seat chapel and 70-ft. high tower, $675,000 development will include amphitheater and garden. Architect: Stanley E. Morse & Associates.



GOOD SHEPHERD HOME

to be built in Spokane will serve as prototype for similar protective institutions for girls operated by religious order in other areas. To provide facilities for three separate but related groups, semicampus design has been used for $1 million project, including 15-unit dormitories for 60 teen-age girls, convent and quarters for nuns and another for their cloistered order, gymnasium, three-nave chapel and service building. Architects-engineers: Culler, Gale, Martell, Norrie & Davis.



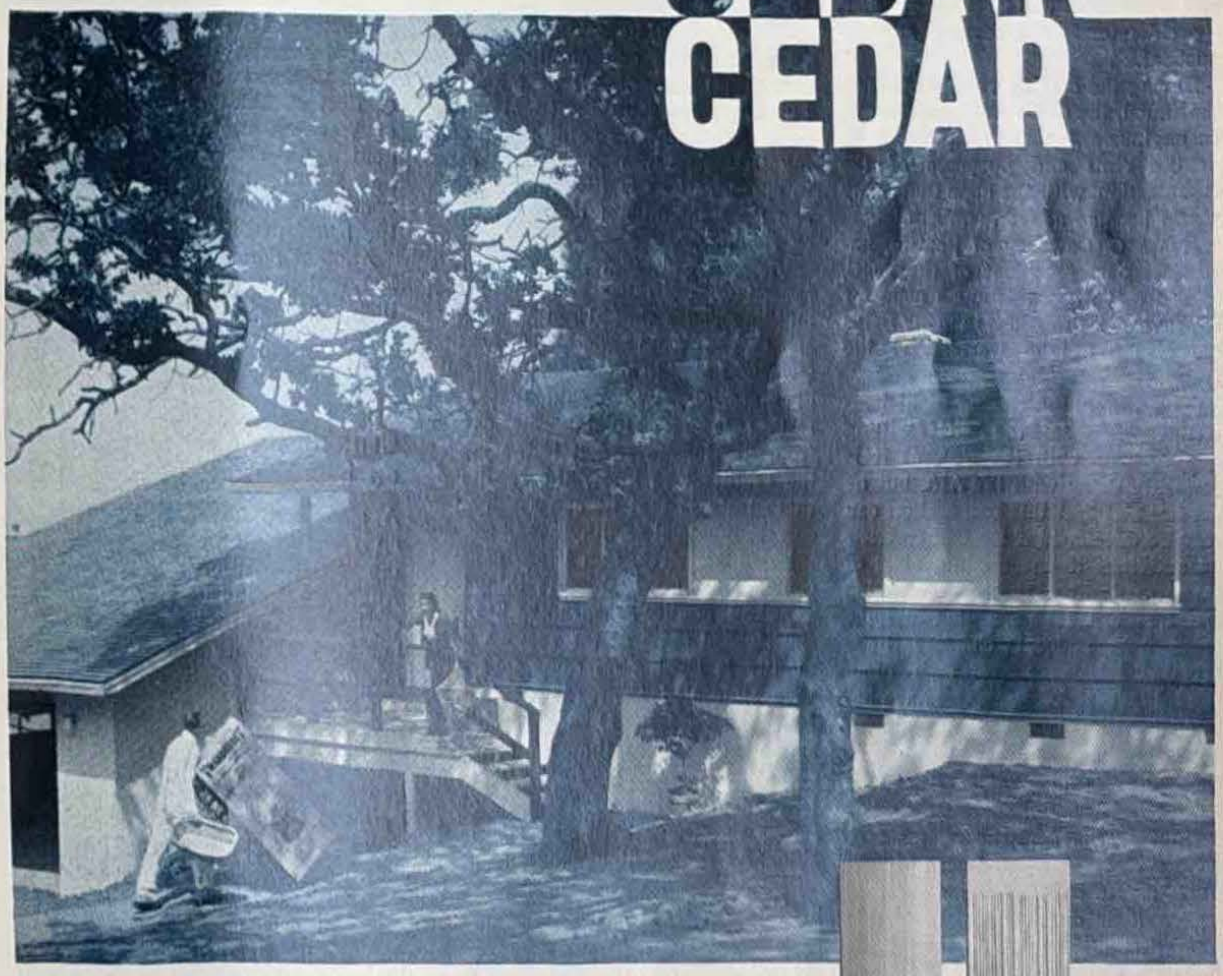
FIRST STRUCTURE

in town center for Santa Fe Springs, Calif., will be this concrete block and glass panel library raised slightly above ground level and floodlighted beneath to give floating effect. Ultimately it will be surrounded by municipal buildings. Other sections of center are earmarked for financial and professional offices, commercial area and town houses. Church will be in center of landscaped site. Architects: William L. Pereira & Associates.

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Palo Alto sessions reveal healthy growth for CSI

Rapid growth in strength and membership of the Construction Specifications Institute was reflected again this year at its fourth national convention as registration broke all previous records. Total attendance estimated at 900 included 452 members.

Sessions were held April 25-27 at Rickey's Studio Inn in Palo Alto, following the national AIA convention in nearby San Francisco.

In his acceptance speech, the newly elected president, Glen H. Abplanalp of New York, said he expects to see the CSI continue to grow and noted that specifications are needed in other fields than that of building, which is now getting most attention. The day soon may come in the CSI, he pointed out, when there will be three divisions —architectural, engineering and industrial.

During the coming year, Abplanalp continued, the CSI should concentrate on engineers, trying to interest them in the aims and purposes of the organization, with the hope that many would become active members.

James C. Cawdrey of Seattle, immediate past president of the AGC, agreed that there was much need for improved specifications in many fields but issued a mild warning to the group.

Speaking at the closing night banquet, Cawdrey said the AGC is willing to cooperate with the CSI, as it is presently doing with the AIA, but he emphasized that this cooperation can only be developed if the CSI restricts its activities to the original aims of the organization: that of improving specifications. He noted that in some areas where local chapters have broadened the scope of their functions, the local AGC chapters have become a little hesitant about full cooperation.

Cawdrey said the specifications writer is becoming increasingly important in the construction team of architects, engineers and general contractors. He asked CSI members to realize their duty as a part of this team that makes up the largest industry in the country and to aid other members of the team in trying to keep legislatures completely informed about industry problems and achievements so that restrictive legislation can be kept at a minimum.

Two of the more interesting technical sessions were panel discussions, one on the topic of "Control of Construction Quality" presented by the Los Angeles and San Diego chapters, and the other on "Integration of the Contract Documents" by the Dallas and Houston chapters.

Herman Light, Los Angeles architect and panel moderator, commented that there seems to be fairly general agreement that quality work depends on adequate laboratory and field testing of materials, experienced supervision and good specifications.

Max W. Strauss, zoning administrator of Beverly Hills, said that building codes should never be thought of as specifications for a specific job. He noted that many building materials and methods which are acceptable under building codes will not give the finished product that is needed to protect the owner's investment. Building codes, he said, are designed to protect the community, not the individual owner. All or a part of building codes should not be included in specifications, he pointed out, stating that reference to building codes in specifications is like telling someone they should not commit murder or robbery.

Victor Wulff, San Diego architect, agreed with Strauss and added that building codes should not be used as an escape from good specification writing. Later, in speaking specifically of materials, Wulff said that most testing is done in laboratories far from the jobsite and it is the job of the architect to know the results of these tests so that he can specify the correct material for any need.

Floyd Finnerty, San Diego general contractor, also had some things to say about quality of workmanship. He first traced some of the reasons why quality is lacking on some jobs and then suggested improvement in the following areas: 1) the architect should allow more time for contract completion; 2.) parts of old specifications should not be used in new ones unless they have been given careful study; 3.) the architect should assume responsibility for his work as well as requiring the general contractor to do so; 4.) the architect should know the owner and his budget and not overspecify.

In introducing the topic for another panel, Dallas architect Terrel R. Harper pointed out the trend to use the term "construction documents" rather than "contract documents," thereby indicating the preparation of documents for construction purposes rather than for legal entities.

H. L. Murchison, Houston architect, noted penalties that come to everyone in construction from inadequate documents. He listed these as being the conflicts resulting from ommissions, duplications and overlappings.

This year marked the beginning of a new award, the CSI President's Cup. It was awarded to Region II with George S. Wilson of Sacramento accepting, on behalf of that chapter's "unequaled technical work."

Other officers for 1960 are Harry C. Plummer of Washington, D.C., re-elected secretary-treasurer, and Redmond Cohland of Los Angeles, James C. Bort of Chicago and Edwin Pairo of Washington, D.C., all vice presidents. Architect Vincent Raney of San Francisco, who presided at the opening day luncheon, was named to the board of directors.

Another San Franciscan, Robert W. Harrington, was a member of the national convention committee. Next year's sessions will be held in New York.



RANEY



HARRINGTON

Californians map conferences on housing, urban renewal

A statewide Governor's Conference on Housing will he held June 13-15 at the Statler-Hilton Hotel in Los Angeles. Object of the conference is to explore California's most pressing housing problems and develop recommendations for positive action on local and state levels, says Gov. Edmund G. Brown.

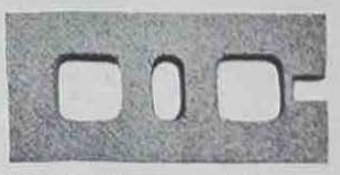
Participating in the conference will be the California Council, AIA; Home Builders Council; AGC; and International Conference of Building Officials.

An urban renewal workshop for community leaders has been scheduled for June 17-18 in Harris Hall on the University of Southern California campus.

The Portland Cement Association is sponsoring the workshop in cooperation with the Southern California Chapter, AIA; Southern Section, American Institute of Planners; Citizens Urban Renewal Advisory Committee of Los Angeles; and SC's School of Architecture.

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Jurors review Golden Gateway proposals: a personal report



GATEWAY PANELISTS Yamasaki, Anderson, Kahn, Churchill, Ketchum, Kramer.

The week that followed the national AIA convention might well be considered one of the more significant in the architectural future of San Francisco.

That was the week when eight of the nine proposals that had been made for the 20-acre Golden Gateway redevelopment project (see PA&B for April '60) were reviewed by a panel of six architects and a mortgage banker. The ninth was withdrawn the day the jury began its hearings as the sponsor declined to offer detailed plans in the manner that they have been submitted by the other developers.

The architectural sessions are just one set of a series that will thoroughly examine every angle of the large project. But the men who will eventually make the decision on what will be built on the site—the members of the San Francisco Redevelopment Agency—have stated as their policy that the development must have an architecture that would create "a place where citizens can live and work with enthusiasm and dignity."

The area to be developed is so large and commands such a strategic position in the city that it seems entirely possible the architecture of the development could set a style for years to come.

All the presentations were conducted within a formal framework of time, but the discussions between the jurors and the architects representing the developers were often informal, sometimes convivial and occasionally biting.

During the first presentations the jury members appeared to be somewhat reserved in their comments. But by the middle of the hearings they had warmed to their job and nearly redesigned some of the proposals with their criticisms and suggestions. At the final two sessions it appeared as if they suddenly felt they had been too outspoken and again restraint crept into their comments and questions.

The seven jurors were selected, said Everett Griffin, chairman of the agency, "because they are internationally recognized as leaders in their respective fields and together their experience and accomplishments reflect widely diversified outlooks." Headed by chairman Mario J. Ciampi of San Francisco, the other architects are Lawrence B. Anderson, chairman of the department of architecture, MIT; Henry S. Churchill and Louis I. Kahn, both of Philadelphia; Morris Ketchum Jr., New York; and Minoru Yamasaki, Birmingham, Mich. The seventh member is mortgage banker Fred Kramer of Chicago.



CIAMPI

At the beginning of each presentation the sponsors and their architects were cautioned that they had exactly 30 minutes in which to discuss their proposal. They were asked to confine remarks to architectural aspects and site-to-city relationships.

Ciampi, in his initial introduction to the 30-minute question and answer period which followed each presentation, warned the sponsors' representatives: "You might find our questions and comments somewhat incisive, but please understand that we must do this in order to judge properly."

And the jurors did get incisive at times. General comments ranged from "a strong and daring solution" to "I'd be nervous to have to come home to this group of buildings each night."

Considering the diverse viewpoints of some of these men, one of the more outstanding features of the hearings was that the entire panel seemed to react in similar ways to the various projects. Griffin and Ciampi in statements made after the hearings reported this unanimity carried on past the public presentations into the closed discussion periods that followed each presentation.

But it likely will never be known which of the projects the jury preferred. In the first place, the agency requested the jury not to compare one project against another. It was asked to take each project separately and examine its merits and shortcomings.

In the second place, the remarks of the jurors made during the closed sessions may not be published.

And in the third place, agency representatives will consider other factors than architectural design and quality in making the decision as to what will be done with the Golden Gateway site.

It is even possible that none of the projects now proposed for Area E will be constructed. Even the jury came to the conclusion, while discussing the final presentation, that it might be a good idea to take a portion of two or more proposals and combine these on the site. As Ketchum put it that final day: "It is important for the city to realize there could be more than one good solution."

Griffin, in a statement to PA&B, said the jury caused the criteria which must guide the agency's ultimate selection to emerge sharply. They are, in the form of questions:

- Is variety and intimacy of living pattern desirable? Or uniformity and impersonality?
- Should open spaces be large and public? Or small and private?
- Can the auto be separated from the pedestrian? Or isolated or integrated in relation to the project and the area?
- What is the character of the Golden Gateway area?
- How do these considerations align themselves with the apartment dwellers' attitudes and habits?

If the present schedule is carried out, the agency's members must find answers to these and the economic questions by July 1.

—Ward Lindbeck

AIA HEARS KAHN

Addressing the Northern California Chapter, AIA, during his visit to San Francisco to serve on the Golden Gateway advisory panel, Louis I. Kahn stated his definition of architecture as being the "realization of form" and the "meaningful and thoughtful creation of space." The professor of architecture at the University of Pennsylvania put out many other beliefs he holds that all contribute to his larger, more complex and unspoken idea of what architecture must do and how architects must feel and think.

"Form is that aspect of any art which is not visible and has no dimensions," he said. "Form leads to a design and design is the means of bringing something to being. . . . Design is a circumstantial act; form is not. Design changes with conditions."

Gruen describes 'murder' of cities to U.S. mayors

Private automobiles used for mass transportation are threatening to kill our cities, Victor Gruen, Los Angeles architect, said last month in a speech before the U.S. Conference of Mayors in Chicago.

Although cities have withstood disasters such as enemy assaults, burning, earthquakes and floods without being destroyed, infiltration by the auto is poisoning them, he pointed out. "The murder plot is promoted by those who insist on pumping endless streams of cars into densely built-up city areas."

Poorly planned street widening, sidewalk narrowing and other measures contribute to downtown congestion, Gruen commented. "The facilitators of automobile traffic are also the gravediggers of mass transportation. At a time when automobile traffic is being subsidized with billions expended for highway, bridge, and tunnel construction, railroads and other public carriers are heavily taxed."

Gruen also was critical of slum clearance programs. "We are not removing slums but only moving them," he declared. "When blighted structures are demolished to make way for renewal projects, their inhabitants are forced into areas which become new slums."

Some housing programs have created a new evil, he said, "in increased stratification of the urban population into economic and ethnic groupings."

The architect outlined seven steps needed to help solve urban problems:

1. Separate human traffic from mass transportation with areas in the city created solely for the pedestrian.
2. Improve existing public transportation.
3. Build concentric ring roads with massive parking facilities adjoining them.
4. Construct vast amount of low and moderate cost housing.
5. Apply zoning principles to streets as well as to buildings.
6. Liberalize rigid bans against intermingling of "con-disturbing" uses. An electronics plant of today may be quieter than a school and therefore could be placed close to the residential area in which its personnel lives.
7. Form metropolitan federations of all municipalities within a metropolitan area.

Victor Gruen Associates is well known in the field of municipal planning. An excellent example, implementing many of the proposals listed above, is the master plan for the central area in Fresno, Calif., recently completed by the Gruen firm.

Plans call for creation of superblocks for the downtown area and potentially in other commercial, residential and industrial districts. The superblocks would be a combination of several standard blocks from which vehicular traffic is eliminated except for emergency and service vehicles. In the business core the superblock would combine six east-west blocks and three north-south blocks into a 65-acre pedestrian preserve with one long main mall and several crossing secondary malls. This superblock and other active business areas would form a compact inner circle around the existing county park.

The master plan visualizes completion of a freeway loop in triangular shape around the central area, construction of a new bus terminal, parking structures and a convention center and use of small "pedestrians" to carry pedestrians within the mall system. Sidewalk cafes, fountains, exhibit areas, resting areas, small kiosks, sculpture and varying heights of buildings will provide visual effect along the mall area.



LANDSCAPED FREEWAYS leading to central area are envisioned by Gruen in his master plan proposals, such as one for Fresno.

PROPOSED FRESNO REDEVELOPMENT

CIVIC CENTER (left) with new buildings grouped around landscaped plazas will be closely connected to new 7,500-seat convention hall. Area for new offices and hotels will be created south of park.

FULTON MALL (lower left) is broken into series of related spaces by varying building lines and by low structures constructed in area. In this way, valuable land has been reclaimed for commercial use.

COUNTY PARK (below) will be retained but new high-rise office building will take advantage of landscaped area. Pedestrians ride in small vehicles which circle civic center. Passengers enter superblock by means of graceful ramp, which might be substituted for tunnel, depending on design for Van Ness underground garage.





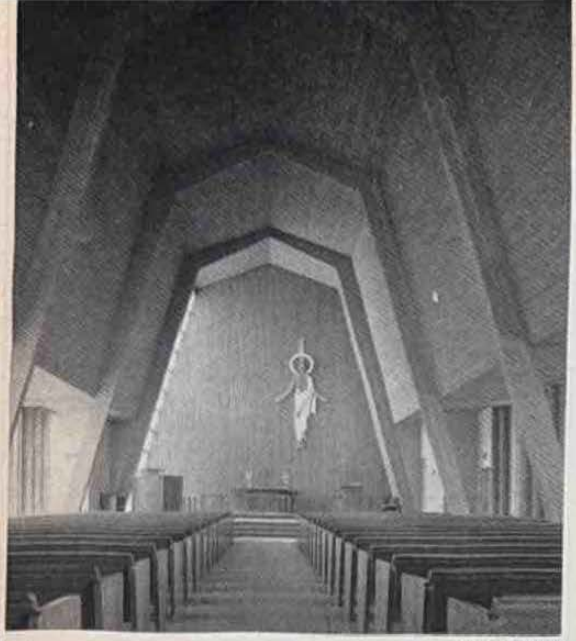


Church Architectural Guild cites three western projects

Of the 17 awards—all of equal stature—presented by the Church Architectural Guild of America in its annual design competition, three went to West Coast buildings: two in Washington by the same firm and one in California.

Worthy of mention is the fact that 11 of the citations were made to projects located in the Midwest, with Harold Spitznagel & Associates of Sioux Falls, S. D., taking three awards.. Two churches in the South and one in the East rounded out the winners.

The ecclesiastical craft exhibition, which was inaugurated at the Los Angeles conference in 1959 with 11 entries, this year drew 22. A faceted glass panel and a sculptured entrance door by midwestern craftsmen received the two awards which were given during the Minneapolis sessions in May.



Art Hupy

FAITH LUTHERAN CHURCH, Bellingham, Wash.: Durham, Anderson & Freed, architects. "Meets program in fresh, creative way."



CENTRAL METHODIST CHURCH, Sedro Woolley, Wash.: Durham, Anderson & Freed, architects. "Qualified award for plan only."



GOOD SHEPHERD CHURCH, Coral de Tierra, Calif.: Germano Milono, architect. "Specially commended. Interesting program met in fresh, creative and constructive manner; fine use of materials; excellent detail."

Colorado school, California chapel win top awards

First Awards in two categories—an elementary school accommodating 400 or more and a church seating no more than 400—have gone to buildings in the West in the sixth annual architectural competition sponsored by Catholic Property Administration magazine. Three other projects received similar citations and eight more were runners-up.

This year's program was co-sponsored by the Wisconsin Chapter, AIA, headquartered in Milwaukee where the judging took place.

SACRED HEART OF JESUS SCHOOL: Boulder, Colo.: Langhart & McGuire, architects. "Good workable plan; fresh approach."



QUEEN OF THE SNOWS CHAPEL, Squaw Valley, Calif.: J. Clarence Felciano, architect. "Wonderful sense of character, use of materials."



Northwest conference looks at contemporary church

"Since the church at its best is contemporary, church architecture tends to be contemporary." Speaking at the Pacific Northwest workshop on church building and architecture in Seattle May 11-12, the Rev. Scot T. Ritenour, director of the Department of Church Building, National Council of Churches, added: "Modern design requires flexible space to meet the changing needs of the community."

Following close on the heels of the national Church Architectural Conference in Minneapolis, the regional meeting drew about 200 delegates—church leaders and a sprinkling of architects—from Washington, Oregon and Idaho.

Mr. Ritenour noted that church architecture in the Northwest notably is free from traditional influence and his belief was visually substantiated during tours of 10 religious buildings, representing a variety of denominations and design approaches.

The Rev. Edward S. Frey, executive director of the Department of Church Architecture, United Lutheran Church in America, whose address dominated the national conference in Los Angeles last year, restated his premises that there is "no church architecture without a church" and that there will be a "better architecture when there are better Christians."

Mr. Frey went on to say: "The proper way to approach the problem is to first examine the church's faith and mission in the community. That is the raw material of church design. The building designs come after this."

The four workshops, each with an architect on the panel, were devoted to the building program in general; how the type of worship affects the shape of the architecture; how the teaching philosophy affects teaching space; and the place of art and music in the church. In addition to conference chairman Robert L. Durham, architects who participated were Oliver Olson, John Rogers, John Detlie, Arden Steinhart, Merrill Rich, Seth Fulcher, Felix Campanella, Robert Chervenak, Omer L. Mithum and Austin Grant. Walter Damon of Youngstown, Ohio, also attended.

An innovation at this year's workshop was a case study of the building program of a church—First Methodist Church of Mount Vernon, Wash.—presented by a member of the architectural firm, Aaron Freed, and the pastor, the Rev. Carroll Sprague.

During the sessions the participants were presented with a list of do's and don'ts in writing the building program for worship: The 10 pointers:

- Do have a reason, a liturgical reason, for everything that is to meet the eye.
- Don't provide anything "just for pretty."
- Do think and plan under the discipline of the liturgy. This is to say that all things should be decided with the thought uppermost in mind of the function of the room for corporate worship.
- Don't let whim or sentiment prevail in making design decisions. In the placing of the choir, for example, reasons of custom, prejudice or architectural convenience should not be determinative.
- Do insist that in the spacing and location of all liturgical furnishings their significance and use in corporate worship be given first consideration.
- Don't leave questions concerning the organ unanswered until the plans are finished. The organ and its place must be determined and known to the architect before he begins his studies.
- Do think and plan with what we do in worship uppermost in mind in providing for a meaningful use of fine arts.



Courtesy Seattle Times

CHAIRMAN Robert L. Durham, Seattle architect, shows panel of prize-winning church to Rev. Scot T. Ritenour and Rev. Edward S. Frey, speakers at Northwest conference.

- Don't leave your architect in the dark about the exact nature of the activities the nave and chancel are to house.
- In general, do always involve as many members as possible in the preparatory studies for the writing of the church program so that many are given an opportunity to learn all that is possible about the church and its worship.
- Do keep the building program up to date as changes are made and as the plans develop.

Engineers will spend $95 million in Alaska

Army Engineers will spend about $95 million on projects in Alaska this year, Col. William C. Gribble Jr., district engineer, told the Anchorage Chamber of Commerce recently. This is about $15 million more than the average amount spent in the Alaska District.

He said that 96 different projects are now under contract in Alaska, from Annette Island to Shemya and from Anchorage to Cape Lisbourne. The contracts are held by 42 different firms.

Col. Gribble said that when the Alaska District was established in 1946 much of the district engineer's time was spent in getting contractors to bid on jobs. Now it is very seldom that only one bid is obtained on a job. The district has about 750 employees and an annual payroll of around $6,600,000.

Col. Gribble estimated that about 40 cents out of each construction dollar goes for labor and that more than half of the labor force lives in Alaska the year around. He said that the bulk of construction supplies still are purchased outside Alaska, but the percentage available locally is growing.

Bob Knox, who has been in charge of the information program for the Alaska District for the past 3½ years, left his post last month for an extended trip through the U.S. and several foreign countries. He has been succeeded by Pat Wolfe, who was named acting chief of the Technical Liaison Branch, effective April 29. Wolfe, who has been Knox' assistant for the past 18 months, previously worked for the Anchorage Daily News.

Hospital official bemoans 'uneconomical' building

The Association of Western Hospitals convening in Los Angeles April 25-28 was warned about the current helter-skelter construction program, at least as far as one state is concerned where the result has been "a flock of small, uneconomical hospitals dotting the beautiful Washington countryside."

The charge was made by John Bigelow of Seattle, executive secretary of the Washington State Hospital Association, who predicted that more will close than will be built in his state in the next few years.

Greatest danger of overbuilding of hospitals, Bigelow declared, is "in new areas where there are no established patterns of hospital usage and every subdivision wants to be a community and every community wants the convenience and prestige of having its own hospital."

Urban transportation is in spotlight on coast

ACTION's board of directors will hold its first meeting on urban transportation in San Francisco June 6. Principal speaker on the program, officially entitled "Efficient Urban Transportation in the American City," will be Sen. Alan Bible of Nevada who recently chaired the hearings on urban transportation of the joint congressional committee on Washington metropolitan problems.

The program also will include descriptions of the Bay area's programs for highway development, off-street parking and rapid transit. Participants will be transportation specialists, carriers, major shippers, city and regional planners and public officials.

Other developments in the urban transportation field:

Engineering consultants for the five-county Bay Area Rapid Transit District presented their initial report on a 132-mile rail system costing an estimated $1,199,695,000. The price includes cost of the 4-mile underwater tube between Oakland and San Francisco for which financing already has been provided by the state legislature. In that 132 miles of private, grade-separated routes would be 27 miles of subways or tunnels, 35 miles at ground level and 65 on aerial structures. The engineers, Parsons Brinckerhoff-Tudor-Bechtel, also proposed construction of spacious pedestrian mezzanines between street and subway levels beneath Market and Post streets in San Francisco and Broadway in Oakland.

In Seattle, officials of Century 21 Exposition signed a 60-day preliminary agreement with Alwac International for construction of a one-mile, $3.5 million monorail from downtown Seattle to the exposition site. Alwac, a Swedish firm, will receive financial assistance from Century 21 through a 25-cent surcharge on each paid general admission to the exposition. Upon completion of the exposition the monorail can be purchased by the city.

C. M. Gilliss, executive director of the Los Angeles Metropolitan Transit Authority, outlined plans for a rapid transit system which would speed lightweight cars over a 150-mile network of grade-separated lines radiating out from downtown Los Angeles. Gilliss described the plan, which will be integrated with bus feeders operating on city streets and highways, in a talk at the western regional conference of the American Transit Association. At the same time he urged private and government operators to heal their differences and unite in striving toward a combination of mass transportation systems that will be the most efficient, convenient and economical for all.

Lighting engineers voice plea for recognition

Importance of increasing the professional standing of illuminating engineers and of educating the public to the needs and benefits of good lighting were emphasized by several speakers at the 1960 South Pacific regional conference of the Illuminating Society, held last month in Los Angeles.

National IES President Joe Browder of Georgia Power Co. called for an all-out program by members to encourage colleges and universities to offer degrees in illuminating engineering and for states to recognize such degrees in professional registration.

"Of what value is all this vast lighting knowledge, these hundreds of thousands of man-hours wrapped up in the recommended practices, the handbook, and the researches, if the architects, the consulting engineers and the general public know nothing of them or will not accept them?" Browder asked. He also proposed an IES fixture labeling service.

Edward Rambusch of Rambusch Decorating Co., New York City, also took up the professional status problem in his talk on decorative lighting. While illuminating engineering has developed to "a high degree of perfection," he said, "the art of illumination has not followed suit and cannot come into its own until colleges teach this subject and the various professions take an active interest in the subject."

Other speakers who commented on technical advances included Charles L. Amick, executive director of research, Day-Brite Lighting, Inc., St. Louis. Amick warned that to get full value for the higher footcandle installations "we must give careful attention to the entire visual environment, making sure to minimize direct and reflected glare which otherwise might reduce the effectiveness of the many lighting systems or produce visual discomfort and distractions." Even under ideal visual conditions, he explained, about one-fourth of a person's bodily energy is consumed in the task of seeing.

Aspen to host 10th design conference this month

"The Corporation and the Designer" is the subject selected for the International Design Conference at Aspen, Colo., June 19-25, according to chairman George Culler of the San Francisco Museum of Art.

Speakers for the 10th anniversary conference will include senior executives of leading international corporations and experts in the fields of design, science and technology design, science and technology. Among them will be Craig Ellwood, Los Angeles designer and lecturer at Yale University, and Eliot Noyes, New Canaan, Conn., architect and IBM design consultant.

2,000-home development planned for Juneau

A $45 million development which will include 2,000 homes and a resort will be constructed just out of Juneau, Alaska, by Stone & Schulte, Inc., San Jose, Calif., building firm. The 475-acre site is located just ½ mile from the Mendenhall Glacier.

Two-and three-bedroom homes will be in the $18,000 to $25,000 price range. This part of the development will be a planned community with churches, schools and park areas. In the resort area, a 330-room hotel is planned, along with a ski run, golf links, tennis courts, swimming pool and yacht club. Site preparation has begun and actual construction is expected to start soon. Name of the architect had not been released at press time.

Arterials to receive architectural touch

The Seattle Board of Public Works has approved a proposal by City Engineer Roy W. Morse to hire architectural consultants to help design arterial and traffic improvements to be constructed with funds from a $26.4 million bond issue.

The program will include bridges, viaducts, expressways and traffic interchanges. Morse said that hiring the consultants would not only expedite the projects but would ensure their being planned as attractively as possible and with integrated landscaping.

And in Olympia, Gov. Albert D. Rosellini last month said that the state should hire one or two landscape architects to develop plans for approach routes to the second Lake Washington bridge. The west approach will pass through the University of Washington arboretum.



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Technical data on products compiled in AIA register

To assist the architect in selecting his building materials without plowing through volumes of product literature, the AIA has compiled a handbook of building products that gathers together in one spot the technical data needed for comparison and to find the best material suited to the job. Architect Theodore W. Dominick is editor of the work which has been under development by two committees since 1951.

Called "Building Products Register AIA," the key section is presented in tabular form which shows at a glance such features as distribution on national or geographical basis, recommended uses, strength, fire resistance, sizes, number of years in production and other salient data. Each section also carries a list of associations; manufacturers segregated according to subcategories; abstracts of standards furnished by government agencies, testing laboratories, producers associations, etc.; and summaries of association literature.

The handbook is available on a yearly subscription basis at $25 a year. This includes, in addition to the book, periodic supplements, a new product newsletter and a reporting service on successful and unsuccessful installations. Additional information on the service can be obtained from the Building Products Registry Service, The American Institute of Architects, 1735 New York Ave. N.W., Washington 6, D. C.

Las Vegas will host AIA directors in September

The fall meeting of the national AIA board of directors will be held in Las Vegas, Nev., September 26-30. Last year's sessions were held in the Northwest, with Portland as the host city.

Among the four new regional directors who were formally elected at the San Francisco convention in April (see PA&B for May '60) is Malcolm D. Reynolds of Oakland, representing the California region.

The growing influence of the West in AIA affairs on the top national level is clearly evident this year with the election of Henry L. Wright of Los Angeles as first vice president and James M. Hunter of Boulder, Colo., as second vice president. Wright was unopposed for his post while Hunter won a three-way contest.

In addition, James J. Chiarelli of Seattle will head the nominating committee for 1961.

new offices

James Martin Harris has opened an office for the practice of architecture at 623 St. Helens Ave., Tacoma. A graduate of the University of Oregon, he was project engineer with Busch-Copenhagen Co., Portland contractors-engineers, and more recently was associated with the office of Robert Billsbrough Price.

Bates Elliott has established his own practice of architecture in Santa Cruz, Calif., with offices at 202 Lincoln St. He was formerly associated with the office of Leslie I. Nichols, Palo Alto architect.

Walter A. Gathman has opened an office for the practice of architecture at 2745 San Mateo N.E., Albuquerque. A graduate of Yale University, he has been associated with the offices of Flatow, Moore, Bryan & Fairborn, E. C. French and James S. Liberty.

Francis E. Leighton has opened an office for the practice of architecture at 3028 Greenwood Ave., Sacramento.

Wallace P. Hagestad has opened an architectural office at 406 Governor Bldg., 408 S.W. Second Ave, Portland. He was formerly a partner in the firm of Sundeleaf & Hagestad.

Stanley G. Gould has opened an office for the practice of architecture at 1026½ Lincoln Ave., San Jose, Calif.

Spokane architects-engineers Culler, Gale, Martell, Norrie & Davis have opened a branch office at 314 Elder Bldg., Coeur d'Alene, Idaho, headed by Fulton G. Gale Jr.

Robin M. Towne, formerly with Stern & Towne, Seattle consulting engineers, has opened his own office at 120 W. Harrison St. Known as Robin M. Towne & Associates, the firm is specializing in acoustical problems.

new partnerships

Raymond Harry Ervin, Denver architect, has formed a new partnership known as Piel, Slater, Small & Spenst under his consulting direction. The four principals—Alfred H. Piel, Seymour M. Slater, John I. Small and A. Aubrey Spenst—have been associated with Ervin for several years and under the new arrangement will also accept commissions of their own. Ervin will continue to maintain offices in the Denver Club Building, as will the new partnership, and serve as consultant on present and future work.

new associates

Leach, Cleveland & Associates, Los Angeles architectural-planning-engineering firm, has given associate status to Russell J. Moon.

John M. Eldridge has joined the Denver architectural firm of Roland Wilson as an associate. He most recently was with the office of Jared B. Morse.

Spokane architect Victor L. Wulff has two new associates: Laurel E. Carlsson and E. Norman Sylvester, with the firm 8 and 13 years, respectively.

firm changes

The Seattle architectural firm of McCool, Morgan & Associates is now known as Blaine McCool & Associates. Charles Morgan his left the firm to establish his own office in Portland.

John Gaw Meem has retired from the firm of Meem, Holien, Buckley & Associates, Santa Fe, N.M., architects, but will continue as a consultant to the reorganized firm of Holien, Buckley & Associates. He also will continue a limited consulting and private practice.

George Nickum, Daniel Lamont and Lester Fey, partners in the Seattle architectural firm of Nickum, Lamont & Fey, are now operating as two independent firms: Lamont & Fey, architects, and W. C. Nickum & Sons, engineers. Both firms continue to practice at 71 Columbia St.

new addresses

Glenn A. McCollum, architect, to 77 W. Chicago, Chandler, Ariz.

Wilton Smith & Associates, architects, to 2145 19th Ave., San Francisco.

Parker & Parker, architects-structural engineers, to 1227 W. Temple St., Los Angeles.

retirements

Fred B. Stephen, who practiced architecture in Seattle for 52 years, retired last month. Specializing in school design, he maintained offices in the Smith Tower for the past 31 years. A graduate of the University of Pennsylvania in 1907, he was in partnership with his father, James Stephen, until 1926.

deaths

Burnham Hoyt, 73, nationally prominent architect who designed the new Denver Public Library and Red Rocks Park, died April 6 in Denver. A native of that city, he was a graduate of the Beaux Arts School of Design, and taught at New York University where he became dean of the School of Architecture. A fellow of the AIA, he returned to Denver in 1936 to head his own firm until his retirement five years ago. In 1953 he was elected to membership in the National Academy of Design and was the recipient of an honorary doctor's degree from Denver University and the Civic Princeps award from Regis College.

Virginia Stoddard Valentine, 37, an interior decorator associated with her father's architectural firm, George W. Stoddard-Huggard & Associates, from 1946 until last September, died May 2 following a heart attack. A graduate of Scripps College, she also attended the New York School of Interior Decoration and worked primarily on commercial building interiors.

Emerson Knight, San Francisco landscape architect who championed a flexible postwar master plan for that city, died May 10 at the age of 77. A native of Cincinnati, he created Monterey's master plan and was a consultant to the National Park Service, the California State Park Commission and the Federal Highway Commission.

appointments, elections

Newly organized Northern Utah Architects Association has named this slate of officers, all from Ogden: Kenneth W. Jones, president; Robert D. Hodgson, vice president; and Sterling R. Lyon, secretary-treasurer.

Wyoming State Board of Architectural Examiners has elected Jan Wilking, Casper, president; George W. Tresler, Cody, vice president; and Frederic H. Porter, Cheyenne, secretary-treasurer.

Boulder (Colo.) Junior Chamber of Commerce is well represented by architects on the executive level. David E. Rowland has been elected president; Robert W. Kindig, external vice president; and William G. Heinzman, director.

Architect William L. Pereira is the new board chairman of the Los Angeles County Art Institute.

T. K. Kutay, architect, has been appointed as vice president and member of the executive committee of Daniel, Mann, Johnson & Mendenhall, architects-engineers of Los Angeles.

Gilbert Mandeville, Seattle engineer, has been elected chairman of the Puget Sound Regional Planning Council.

New appointments to the California State Board of Landscape Architects are Theodore Ole Osmundson of San Francisco and Courtland Paul of Glendora.

Architect Nathan Wilkinson Jr. is heading a committee formed by Allied Arts of Seattle to work with the Central Association in promoting the rehabilitation of Pioneer Square, a historic downtown area.

Charles G. Gable has joined the Los Angeles architectural-engineering firm of Charles Luckman Associates as a project architect.

honors

Thomas L. Hansen, professor of architecture at the University of Colorado, has been awarded a faculty fellowship for study of housing for the aged and cooperative housing in Stockholm and Copenhagen. He will leave for Europe after the first five-week summer session and return to Boulder at the beginning of the fall term. During the 1954-55 academic year, Hansen had a leave of absence to work with the U.S. Foreign Operations Administration in India and as a consultant in architecture and city planning.

Stanley W. Bryan, assistant professor in the School of Architecture and Allied Arts at the University of Oregon, has received a Fulbright research award for the year 1960-61 to study wood utilization in Finnish architecture. He will be affiliated with the Institute of Technology in Helsinki.

A special award for service to the Utah Chapter, AIA, has been presented to R. Lloyd Snedaker. A partner in the Salt Lake City firm of Snedaker, Budd, Monroe & Associates, he was chapter president in 1945, chairman of the Western Mountain regional convention in 1956 and program chairman of the Utah Chapter last year.

exhibitions

Eighth annual architectural exhibition sponsored by John Breuner Co. in Sacramento will get underway on the store's third floor with a reception for architects and their staffs June 9, the day preceeding the opening of the display to the public. It will feature the work of the Central Valley Chapter, AIA, in the form of models, photographs, drawings and other media. Francis E. Leighton is this year's chairman.



ANNUAL EXHIBITION in Sacramento is aimed to raise cultural standards of community and to introduce public to functions, professional requirements and services of architects.

"Design for Today," an exhibition arranged by the Southwest Washington Chapter, AIA, with John V. Austin as chairman, opened in the Tacoma Art League's Broadway Gallery May 24. It includes photography, sketches, models of several local homes and contemporary furniture arrangements.

miscellany

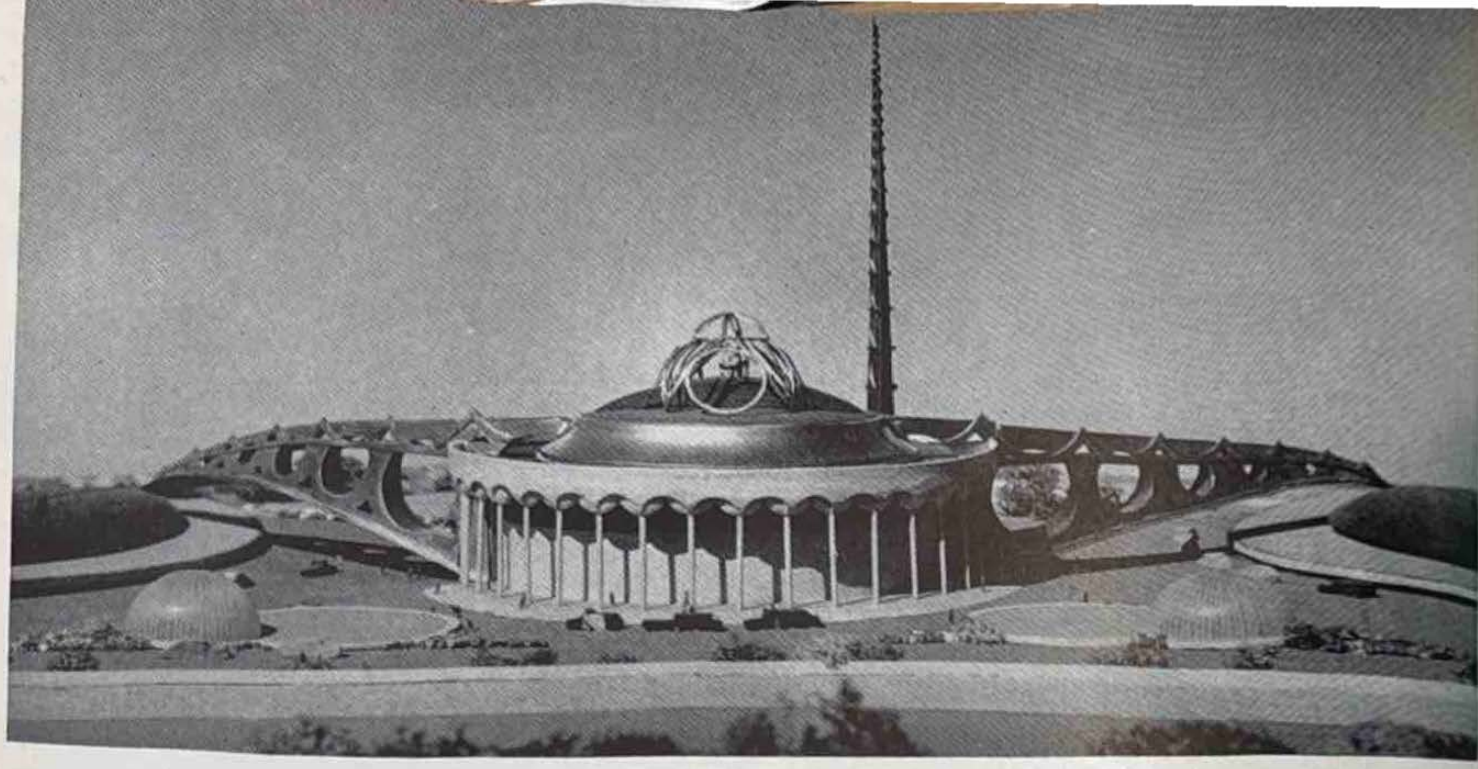
Tician Papachristou, Boulder, Colo., architect, will conduct a 30-day tour to Europe and Greece, leaving September 14 from New York and returning October 14. Born and reared in Athens, Papachristou plans to lecture before and during the trip, emphasizing points of architectural, archeological and civic importance.

Two consulting engineers from the West—Milo S. Ketchum of Denver and Louis Corbetta of Los Altos Hills, Calif.—were among the speakers at the seventh University of Illinois Short Course in Architecture last month, devoted to "Explorations in Creative Architecture and Engineering."

POSITION WANTED

ARCHITECTURAL AND INTERIOR DESIGNER

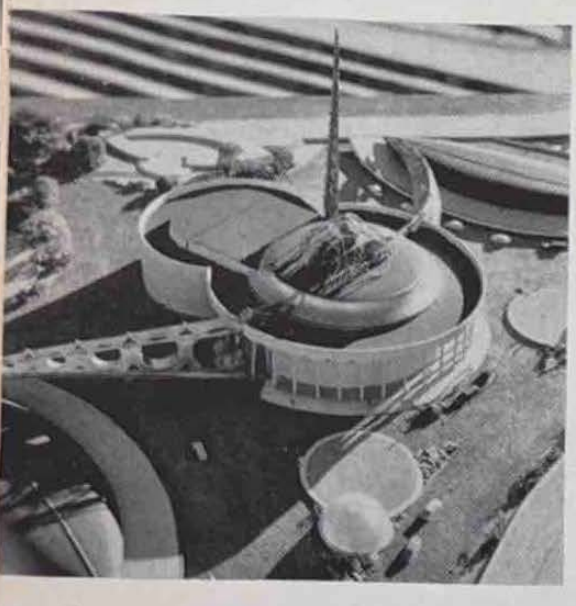
M.I.T. Graduate, 12 years varied experience in client contact, design, presentation, detailing and administration. Accustomed to high quality production, wide responsibilities and thorough coordination. Presently project manager for leading N. Y. designer. Desires relocation to West Coast into executive position or association. Write P. O. Box 2424, Grand Central Station, New York 17, N. Y.



CIRCULAR AUDITORIUM is partly supported by orante, steel bridges which terminate in sunken parking areas. Stage also is housed in circular unit, as indicated in photo of model at lower left.

JOB OF THE MONTH

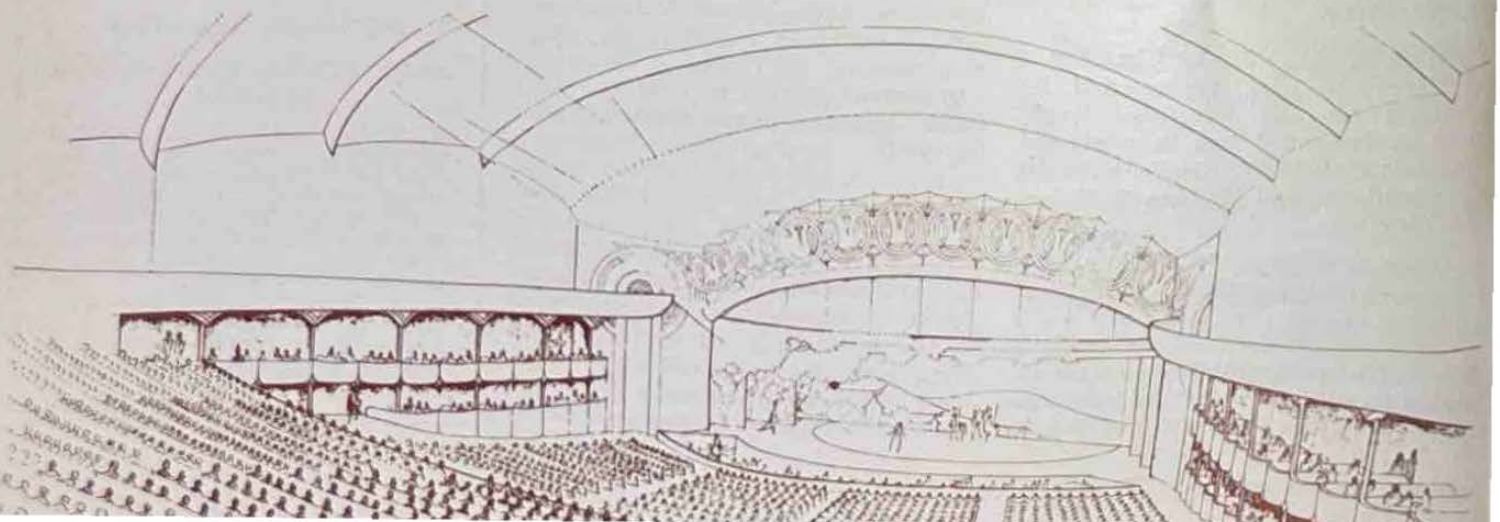
FLLW's legacy to Arizona: a cultural center for ASU



University of Arizona Board of Regents has approved preliminary sketches for a fine arts center and given the go-ahead to architects from the Frank Lloyd Wright Foundation to proceed with the design of the main building, a 3,000-seat auditorium which will serve Phoenix as well as the university. The project will be based on sketches made by Wright just before his death a year ago and will be the only public buildings of his design to be constructed in Arizona where he lived for so many years.

The $2.5 million auditorium will be constructed of concrete with two great steel crescents connecting the hall to parking domes on either side. The domes will protect the cars from the strong Arizona sunshine. Passengers may pass from their cars to the hall along the steel arch bridges. A large revolving stage and full theatrical facilities will be provided (see sketch below).

The entire development will be set in a spacious park of pools, small water domes, lawns and gardens, offering an impressive new entrance to the campus. Other proposed buildings, also to be of poured reinforced concrete, metal and glass, include a 300-seat recital hall, with revolving stage, rehearsal classrooms and workshop areas; music department with classrooms, offices, practice rooms and an outdoor bandshell; and an art gallery which would house permanent art collections at both ends of an egg shaped structure, an area for changing exhibitions at the center and an educational gallery on the lower level. Total cost is estimated at $7.5 million.



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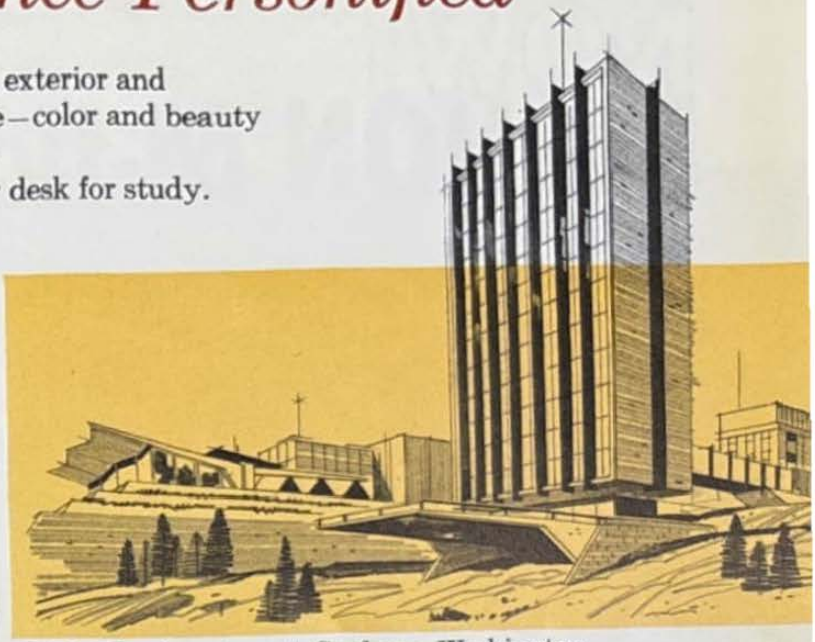
The structures illustrated represent significant exterior and interior applications of Mosaica. Their promise—color and beauty forever at moderate cost. A call to your nearest Mosaica representative will place facts on your desk for study.



Turquoise Matte



Grey Facet



High Rise Apartment, Spokane, Washington.
Mosaica facing covers the end elevation with contrasting Mosaica panels in the wall system.
Dayton N. Holloway & Partners, Architect



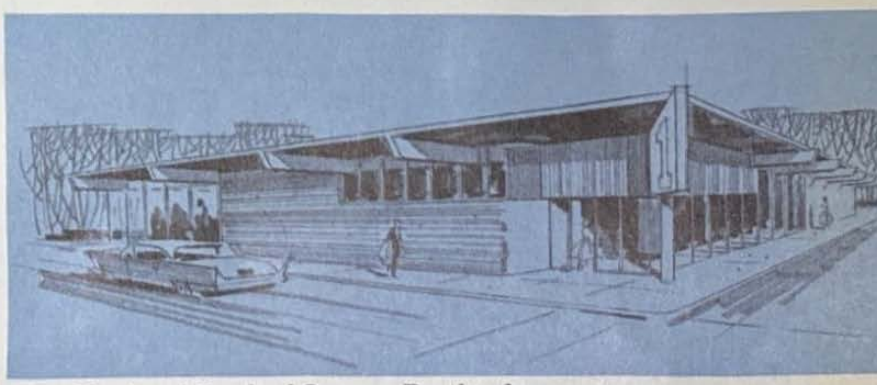
Office building, Los Angeles. Tower faced in black facet.
Lane & Schlick, A.I.A., Architects



Black Facet



Gold Facet



First National Bank of Oregon, Portland.
Exterior wall facing and entrance way column surround.
Jensen & Gilham, Architects

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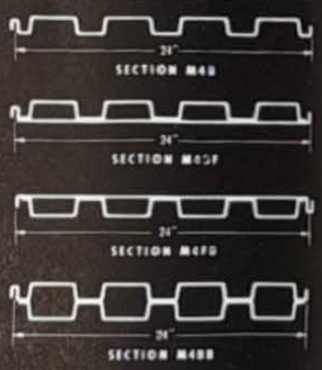
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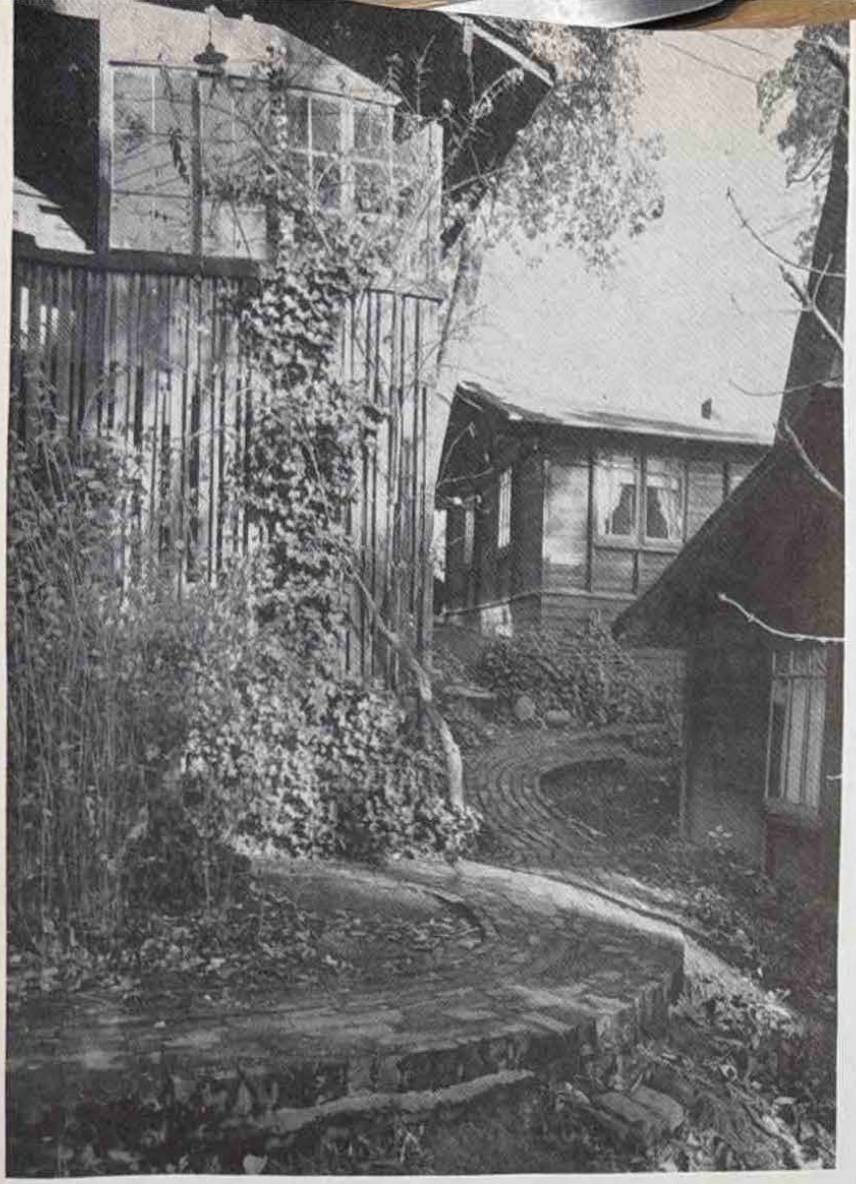
REPRESENTATIVES IN ALL PRINCIPAL CITIES



Art Hupy photos

Seattle's Storey Cottages

If Puget Sound architects were to prepare a list of their favorite works, surely the Storey Cottages would rank high in the compilation. Constructed between 1908 and 1910, 11 of the 12 original structures still remain. The Washington State Chapter, AIA, in a special award last year cited the cottages as "significant for their simple, direct use of local materials, complete absence of stylized mannerism, fine scale, excellent proportion and for the architect's skillful site planning which has made the difficult hillside topography a positive advantage to the development." In the following article, Victor Steinbrueck, professor in the College of Architecture, University of Washington, who lives in a Storey-designed house, describes the construction of these cottages and attempts to define the qualities which give them their particular charm.



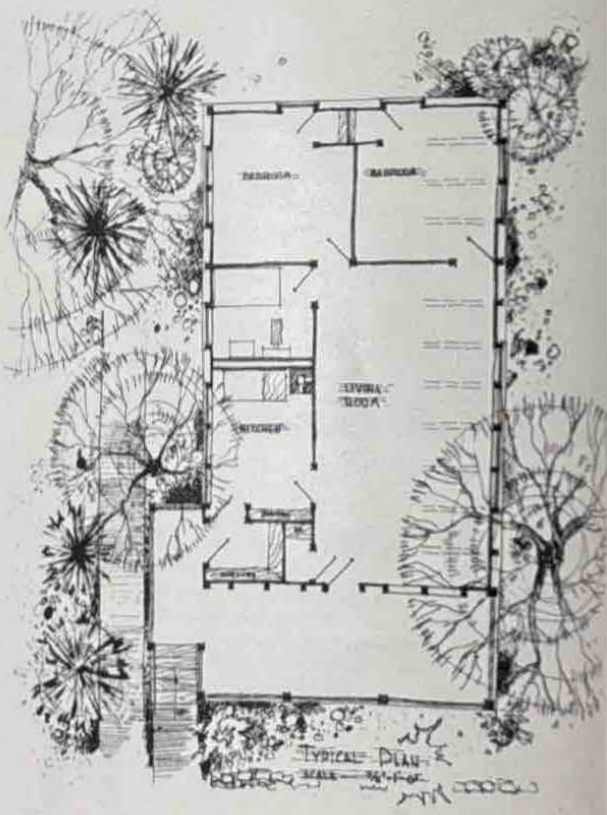
"OBSERVER meanders up a windin
brick path to and from the house

STOREY COTTAGES

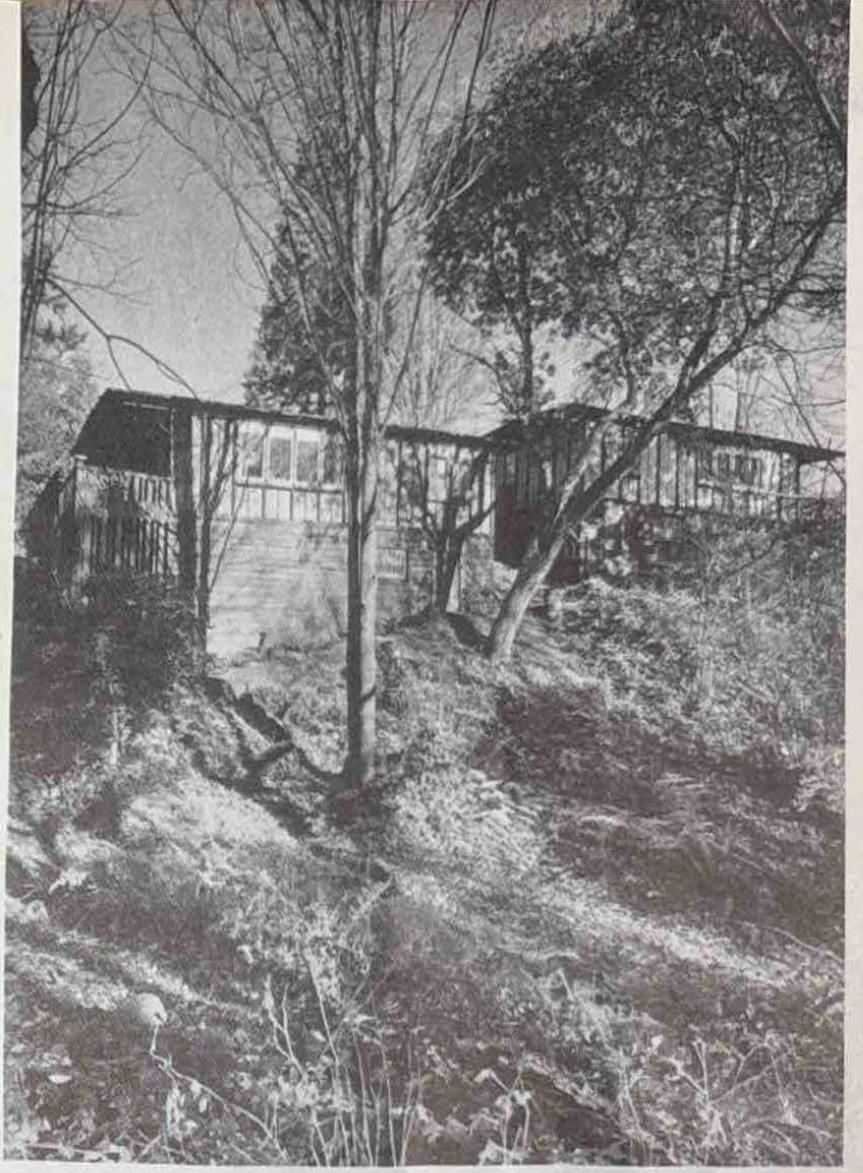
ARCHITECT ELLSWORTH STOREY moved to Seattle from Chicago in 1903 to live in his new home on Dorffel Drive in the Denny Blaine Lake Park District. He was 23 years old, newly married and fired with the zeal of Frank Lloyd Wright.

The houses on Dorffel Drive were his first work on his own, although he had worked for architects in Chicago. Mr. Storey had just been graduated from the University of Illinois and had also recently spent a year traveling through Europe where the stone and wood chalets and the more natural dwellings greatly impressed him. The Chicago School, Frank Lloyd Wright and the anonymous architecture of Europe all had their influence.

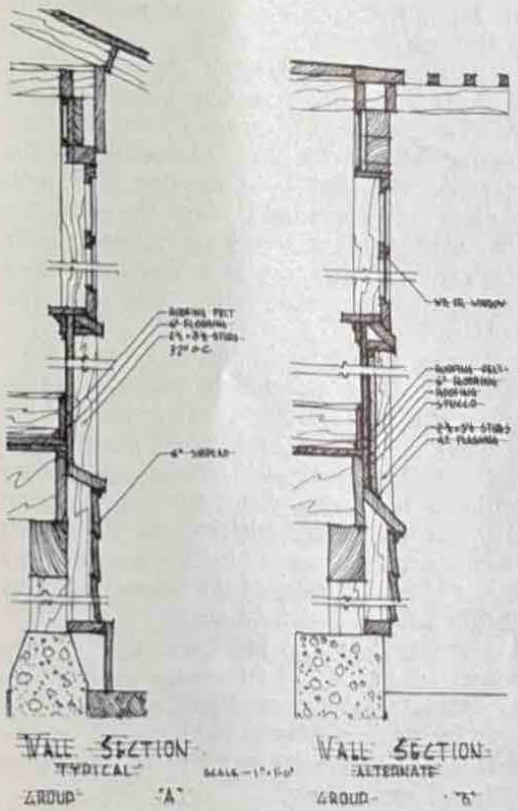
Booming Seattle provided numerous residential commissions for the talented young architect. Many of the homes were near his own along the shores of Lake Washington. His work at this time showed a real skill and sensitivity in the use and



Drawings are by student D. O. Harris, College of Architecture, University of Washington.



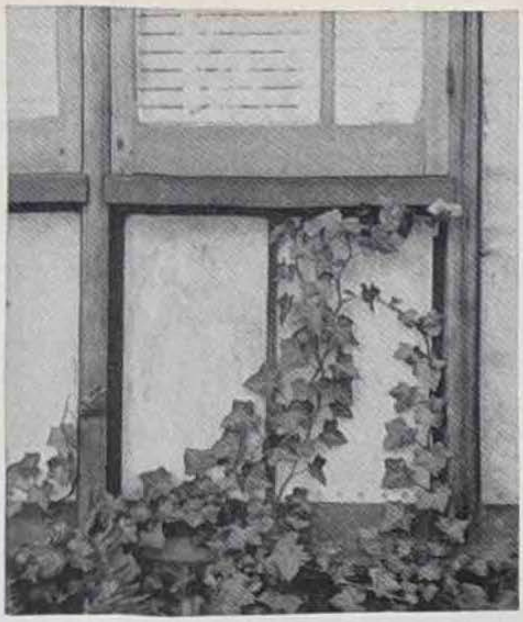
"PLANTING is very natural and mostly unrestrained by tenants."



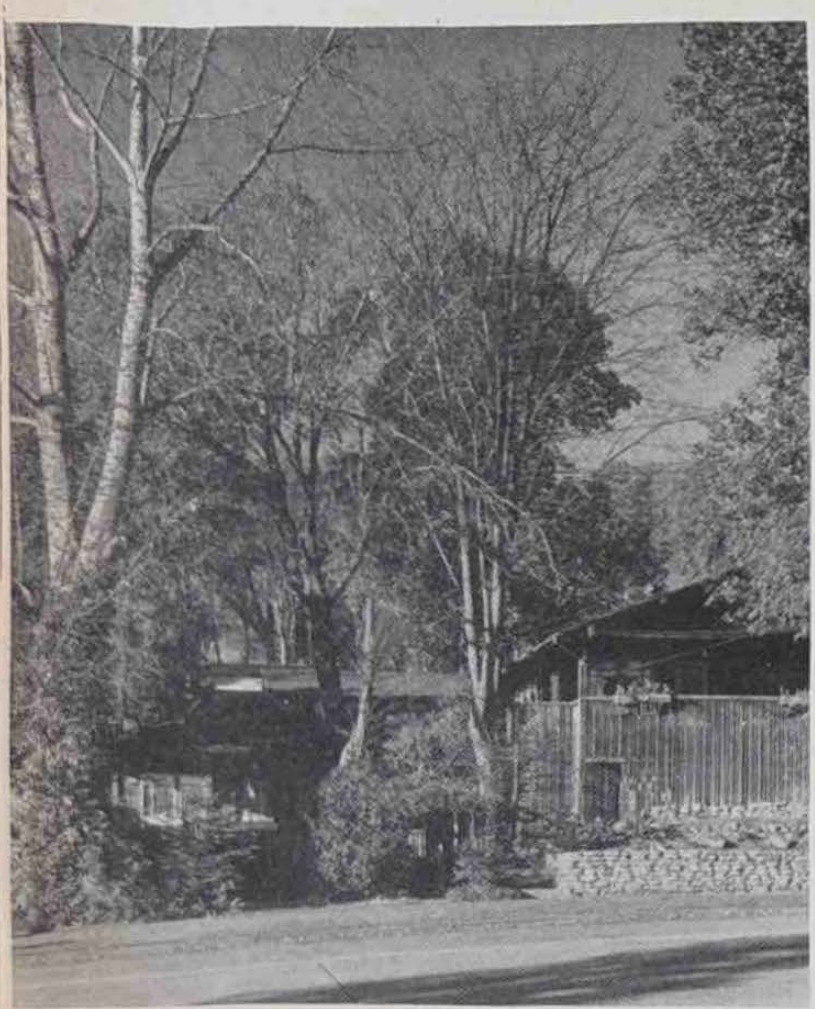
original detailing of wood. Many of his details would make a present-day architect proud because of their directness and good design qualities. He often used a series of boards or slats to form a decorative porch screen or panel or stair rail much in the contemporary manner. He avoided moldings, especially the popular curved moldings of the day, wherever possible.

Frequently Mr. Storey would detail doors and windows so that no trim was required in the weathertight shingle or wood siding exterior. Window sash could be very decorative in an almost Oriental spirit — simple square wood stiles and glass divisions. Usually all of the windows in a home were operatable for ventilation. Fascia boards and roof edges were handled in a decorative manner and very wide sweeping eaves were his usual trademark. Often the roof joists were expressed as details in the verge board. Sometimes the roof overhangs were varied in width in relation to the height above ground. Posts and beams were not false but related in a decorative and yet structural manner. Good carpentry was enjoyed!

In many cases, the woods—usually Douglas fir and occasionally western red cedar — were left natural or at least never more than stained



"WINDOW SASH could be very decorative in an almost Oriental spirit—simple square wood stiles and glass divisions."



"RESTRAINT used in a pleasant, cheerful manner might be said to be one of the main qualities of these buildings."

with a dark weathering stain. The wood exteriors still look well after 50 years of weather, expressing the enduring quality of good design.

With the development in the Mount Baker area, Mr. Storey bought a few lots facing south along Colman Park and built eight of these small two-bedroom cottages "to provide low rental homes in a good neighborhood." This was in 1908 and a few years later, he built four more flat-roof cottages a little to the west of the first group. The cottages were rented at a minimum and the tenants were expected to maintain their homes. This has been the policy every since. Some tenants have been living in their homes for many years and there is a waiting list, including a few young architects.

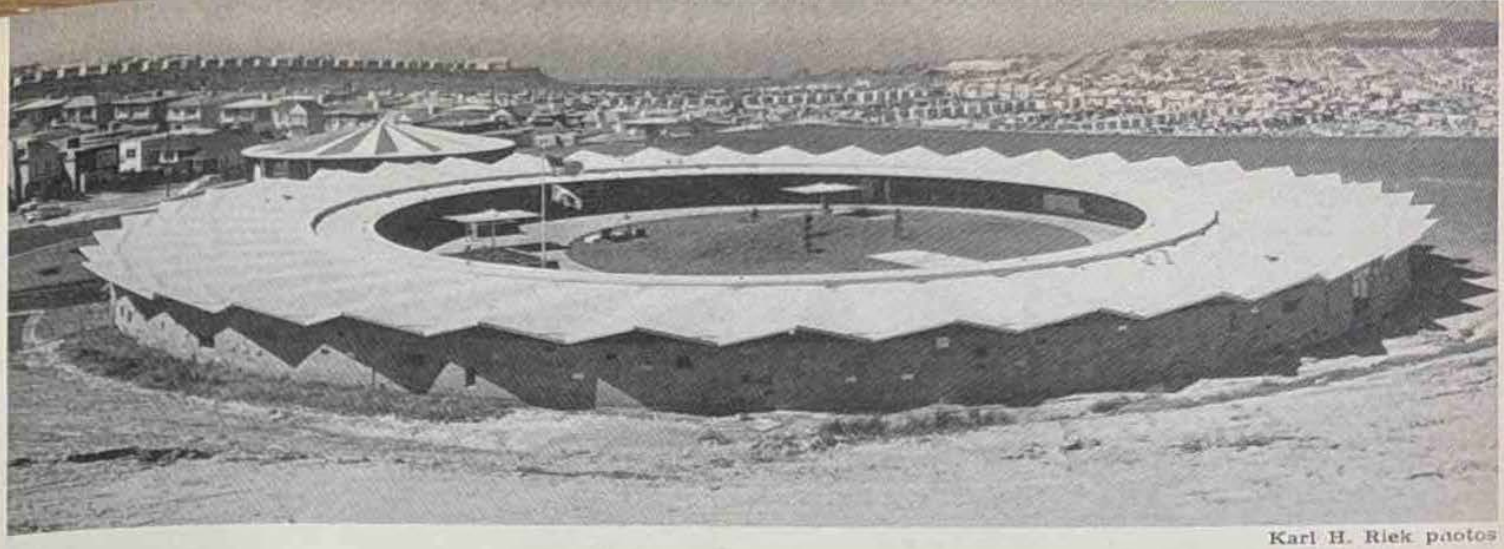
The houses are "single construction"—that is, there is only one thickness of t&g fir boards set inside of the 32-in. o.c. 3x4 studs. The space heaters or floor furnaces seem to keep these small, lightly constructed homes surprisingly warm. Each cottage has an 8x20-ft. covered front porch. The living rooms are 12x21-ft.; the kitchens, 8x10-ft.; and the two bedrooms are 10x10-ft. each. Storage is provided in the unexcavated dirt floor spaces under the houses and in attic spaces. Many of the houses have settled on their post foundations and are now being repaired.

The charm of these cottages is a little elusive because of the honesty and simplicity of the architecture, but the charm surely exists. Many architects hold these little cottages to be their favorite bit of Seattle architecture. Restraint used in a pleasant, cheerful manner might be said to be one of the main qualities of these buildings. Perhaps the real honesty of construction and purpose have shown through as well.

It is surprising to note that the cottages are placed in an even row bouncing up the wooded hillside since one has the sense of the buildings meandering through the park. Actually, it is the observer who meanders up a winding brick path to and from the homes and through the madronas and firs. The planting is very natural and mostly unrestrained by the tenants. A few large trees need to be removed before they take over the development.

Mr. Storey, who was residing in Ithaca, N.Y., near his older daughter when he passed away as this article was going to press, was inclined to belittle his cottage project in favor of some of his more serious efforts such as the chapel and rectory at the Church of the Epiphany, the old Unitarian Chapel in the University District, the Sigma Nu fraternity house, or perhaps his later work for the state parks when he designed the tower on Mount Constitution and the nearby camp.

A thorough study of his work will provide inspiration and additional knowledge of architecture appropriate to this area and climate. One wonders why we do not try to learn more from the past that still lives on with us; why we don't take the advice of our fathers.



Karl H. Riek photos

Imaginative solution livens humdrum development

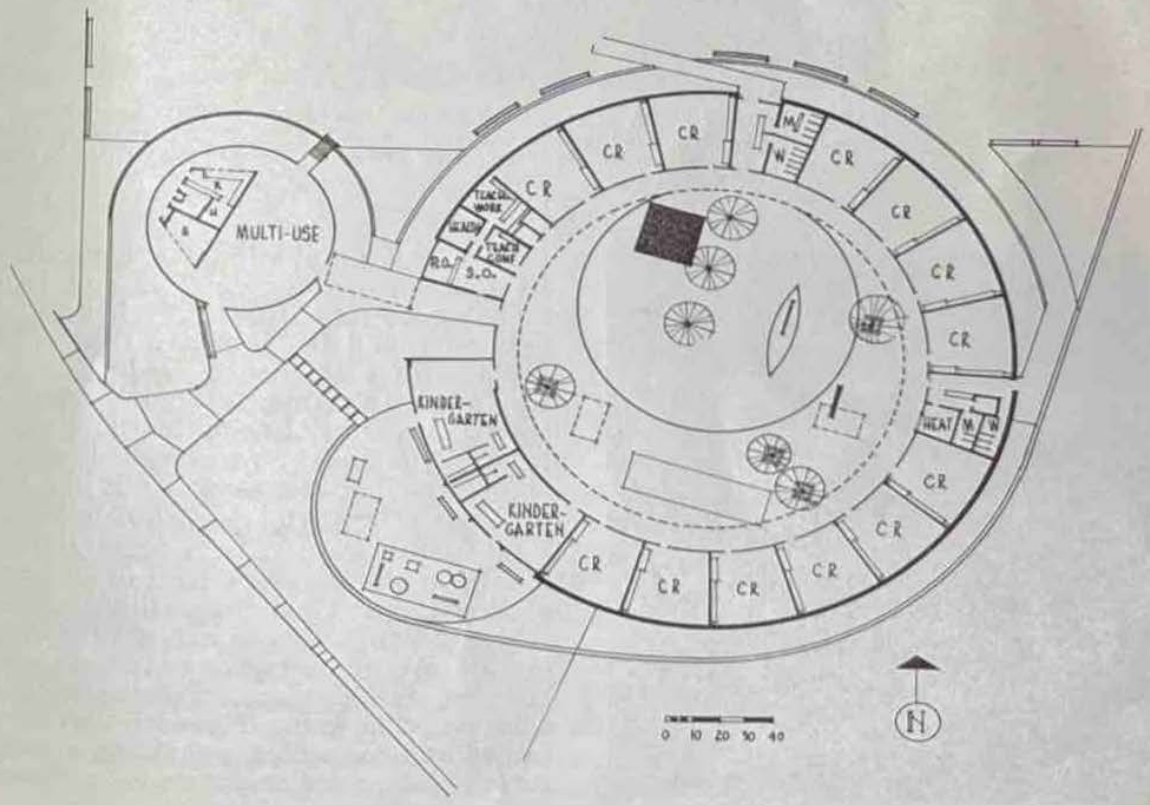
Vista Mar Elementary School
Daly City, California

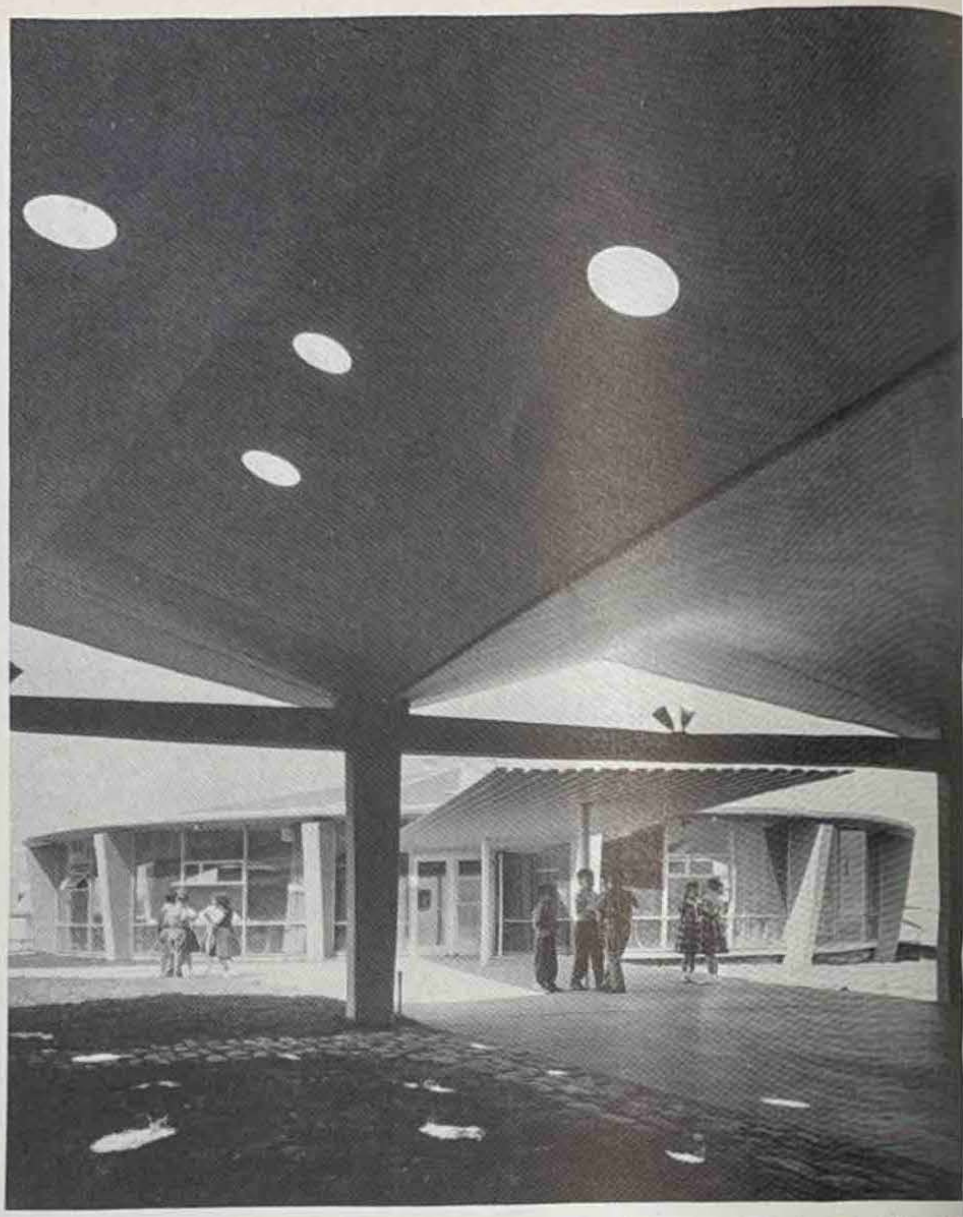
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MARIO J. CIAMPI
Architect
ALLYN MARTIN
PAUL REITER
Associates

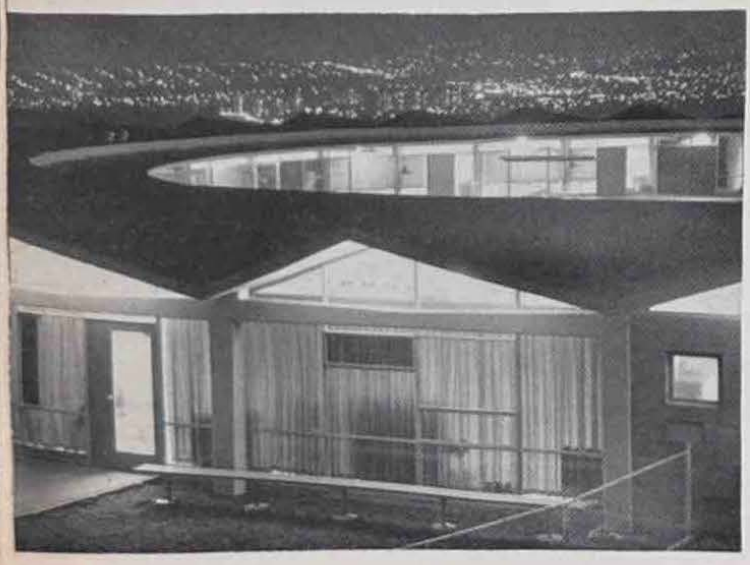
ISADORE THOMPSON
Structural Engineer

HART & HYNDING
General Contractors





MAIN BUILDING'S ROOF, as seen looking toward multipurpose unit, is constructed of precast thin shell hipped plate vaults erected in place over masonry walls and precast concrete rigid frames. Shelter here and those in interior garden are of light steel and corrugated decking painted in brilliant colors.



LIKE a gay, giant carousel this school nestles into its site, providing contrast and relief from the monotonous repetition of the housing developments that surround it. Circular shape also solved the problem of a steep and wedge shaped site which was graded so that the building was placed in a bowl approximately 60 ft. below the upper street level. Due to the stereotyped grid plan of the speculative builders, it was felt that the view down onto the school was most important.

School is located in a densely populated urban area near the Pacific Ocean in an extremely foggy section of the city. Prevailing winds are always cold and damp. Problems of vandalism and maintenance were also serious factors to be considered. Here again the circular shape provided the best solution. The central garden can be easily maintained and controlled, providing a pleasant outlook for all classrooms and a sheltered area for outdoor



TEACHING AREAS turn toward generous central court, logical derivative of climatic conditions. Site justifies circular plan.

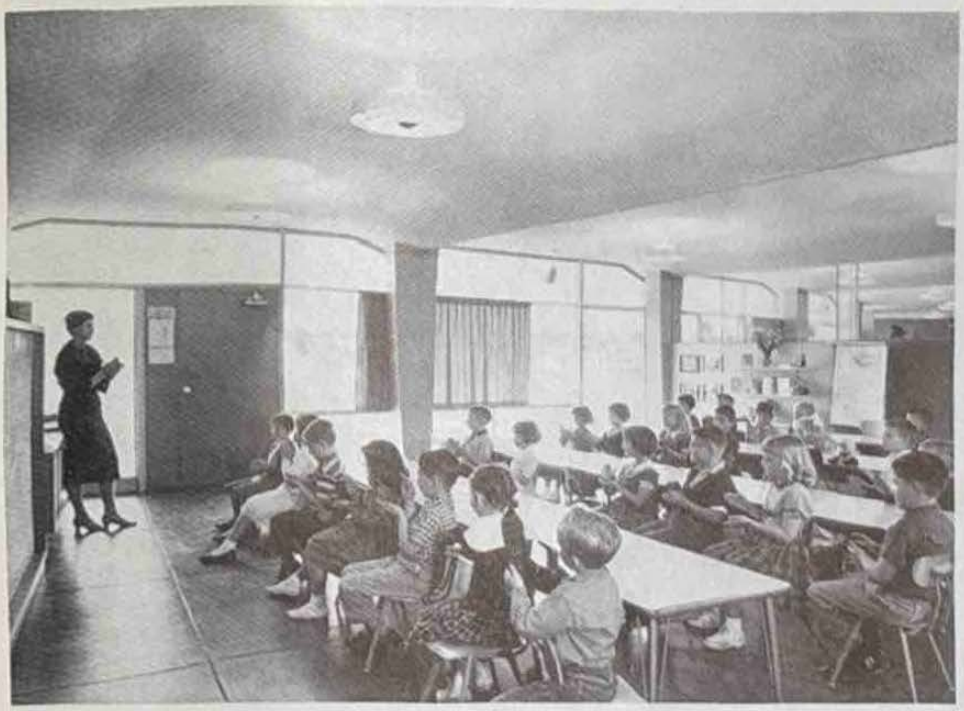
activities. Multipurpose unit is also circular in form to relate to the larger classroom building and is designed to double as a community center.

School includes 12 classrooms, two kindergarten rooms, special activities room, administrative unit and dependent facilities in addition to the multipurpose unit. Since the site is limited, no provision could be made for expansion, but flexibility has been provided in the partitions which are nonstructural and may be easily moved if required.

Project has received a Top Award from School Executive magazine and a Gold Medal in Engineering from the New York Architectural League.



CIRCULAR MULTIPURPOSE UNIT at top left provides continuity, is used for drama, music and dining and doubles as adult community and recreation center.



ACOUSTICAL PLASTER is sprayed on ceiling surfaces; concrete floors are surfaced with waxed colored cement brush. Cabinetwork is of Douglas fir plywood with sliding doors.

OUTLINE SPECIFICATIONS

Structure: frame: reinforced concrete; roof: precast thin shell hipped plate vaults; walls: brick (Brik-Blox); concrete block—(Basalite) Basalt Rock Co.; floors: concrete slab.

Exterior Finish: steel sash—Michel & Pfeffer Iron Works; wire glass—Mississippi Glass Co.; clear glass—Libby-Owens-Ford Glass Co.; panel partitions—Apco Porcelain Co.

Roof Surfacing: built-up with colored emulsion finish—Pioneer-Flintkote.

Floor Surfacing: colored concrete—Contrad Sovig Co.; asphalt tile—Kentile, Inc.

Interior Finish: masonry cabinets; natural plywood—Douglas Fir Plywood Association; painted plaster; ceramic veneer—Gladding, McBean & Co.

Ceilings: sprayed acoustical plaster—California Stucco Products.

Heating: radiant in floor slab of classroom buildings; gas fired space heaters—Modine Mfg. Co.; controls—Minneapolis-Honeywell Regulator Co.; boiler—Ajax; forced ventilation with unit heaters in center of multipurpose unit.

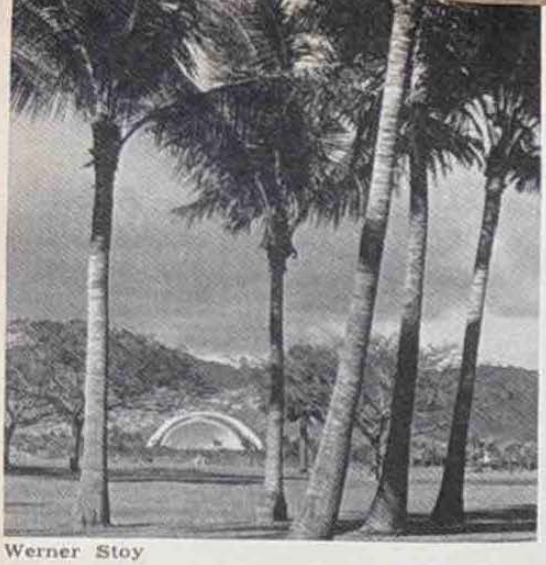
Plumbing and Sanitary: fixtures—American-Standard; drinking fountains—Haws Drinking Faucet Co.

Total Area: 26,585 sq. ft.

Total Cost: $480,000 (including sitework).

Cost per Square Foot: $14.56.

Date of Completion: 1958.



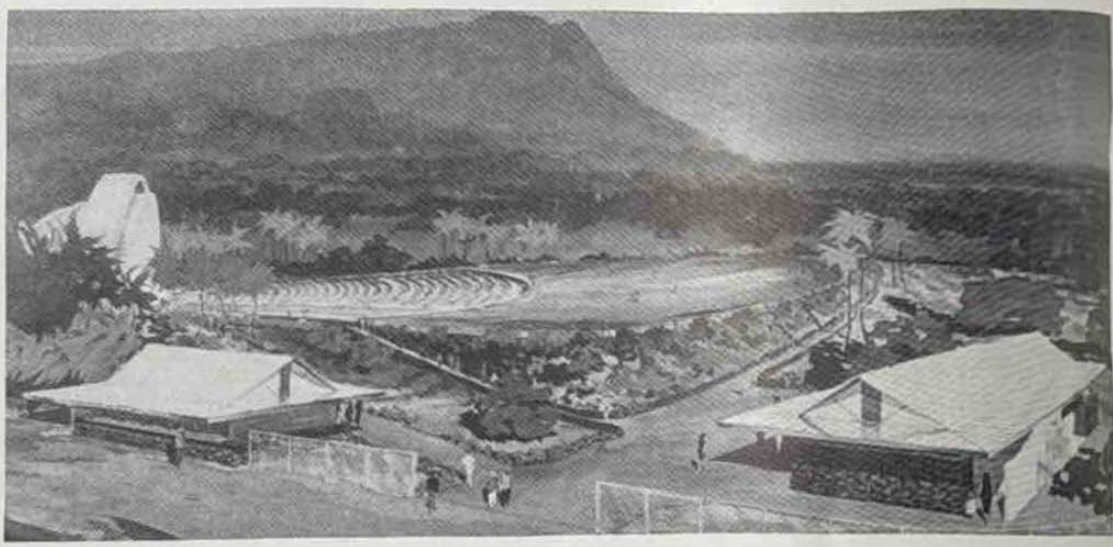
Werner Stoy

Waikiki Shell
Honolulu, Hawaii

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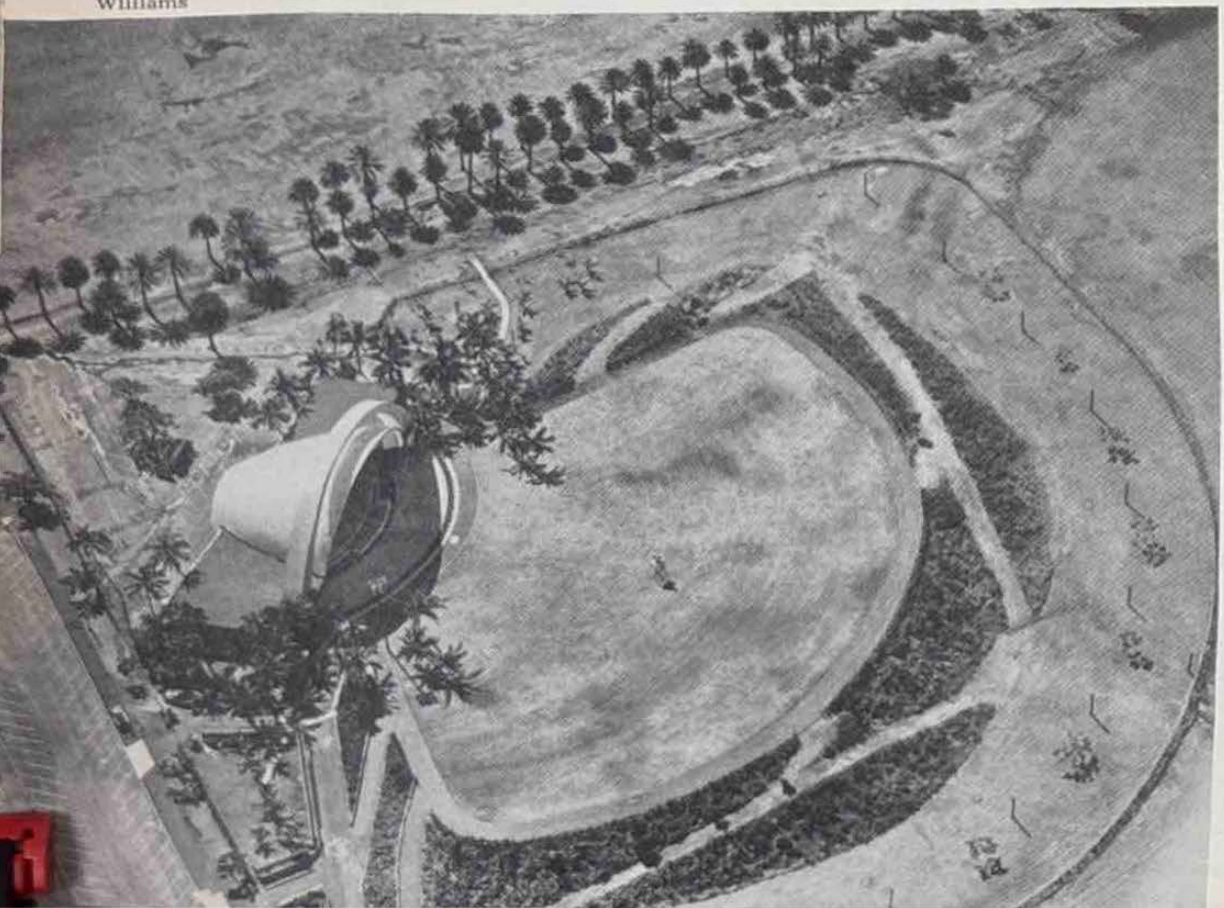
LAW & WILSON, LTD.
Architects

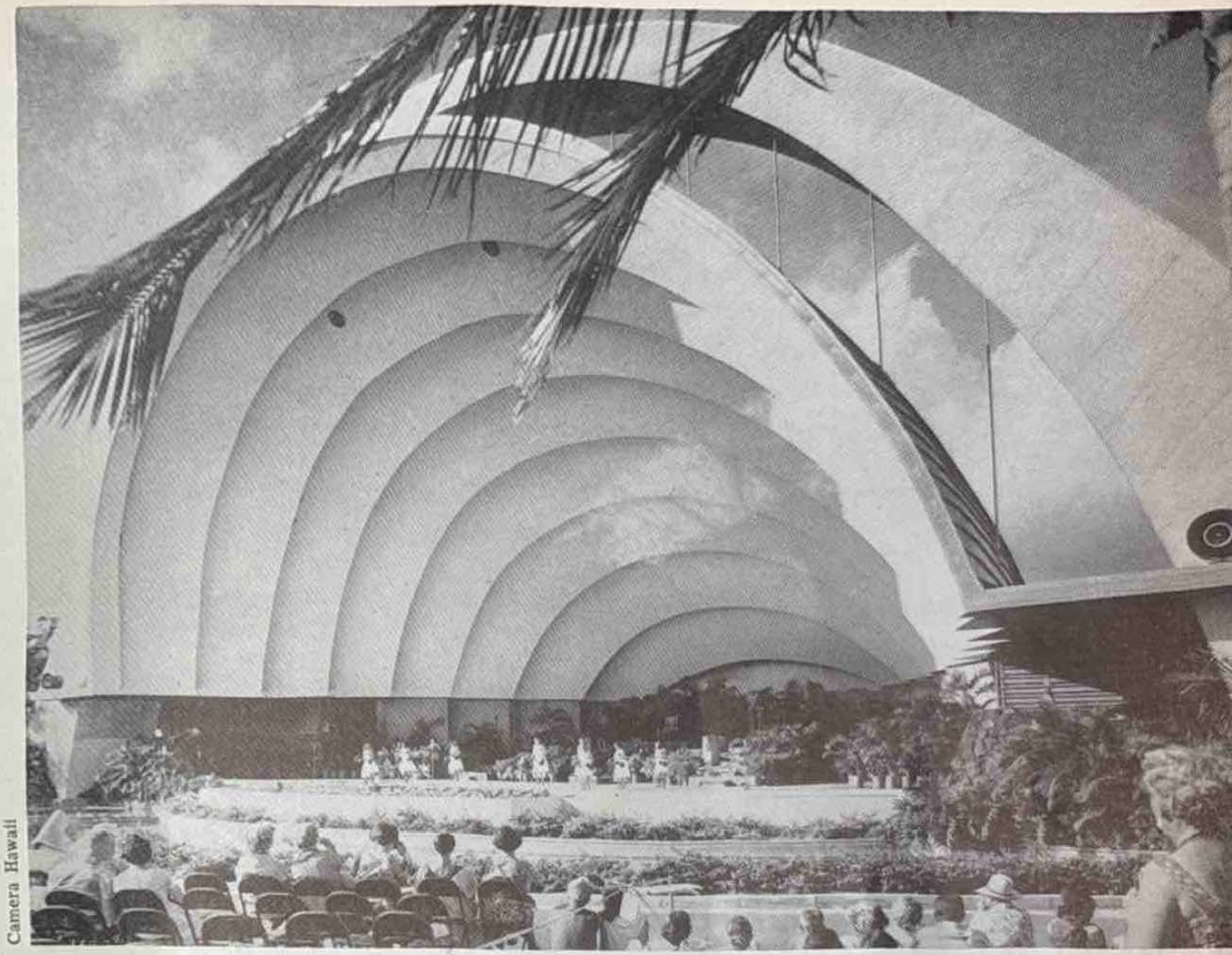
J. M. TANAKA
Prime Contractor



SECOND INCREMENT of Waikiki Shell development includes permanent seating on concrete pads (photo below was taken prior to installation), ticket booth and restrooms repeating lava rock and redwood of shell wings.

Williams





Camera Hawaii

A new landmark for Kapiolani Park

ONE PHASE of a master plan for Kapiolani Park, fronting on Waikiki Beach, the Waikiki Shell produces a striking effect, both esthetically and acoustically. Suspended above the stage from a 72-ft. aluminum covered steel arch, the shell is a steel trussed frame surfaced with a standing seam aluminum roof.

Interior is fitted with plaster rings critically placed at varying degrees from the center of the stage to obtain maximum acoustical throw. A spoken word or a symphony orchestra can be heard with equal clarity from any point in the seating area. The staggered plaster rings also conceal the lighting with which may be color selected for varied effects. Stage itself is 88 ft. wide, 58 ft. deep and 52 ft. high at the center. Wings of lava rock and redwood abut the stage to accommodate dressing rooms, storage, carpentry shop, locker rooms, sound control and lighting control booths.

Major seating is on the grassy hillside (on the customary lauhala mat), although the popularity of such programs as the summertime "Concerts under the Stars" by the Honolulu Symphony Orchestra has necessitated adding stadium type seats on concrete pads up front to provide for 1,900 persons.

Immediately in front of the stage is a reflecting pool 20x88 ft. with provisions for a water fountain and water curtains at a later date. All walkways are illuminated by fixtures recessed in lava rock walls.

Latest construction has been separate buildings to house the box office and concession-restroom facilities. These too are of lava rock and redwood with aluminum roofing to conform with the overall architectural design.

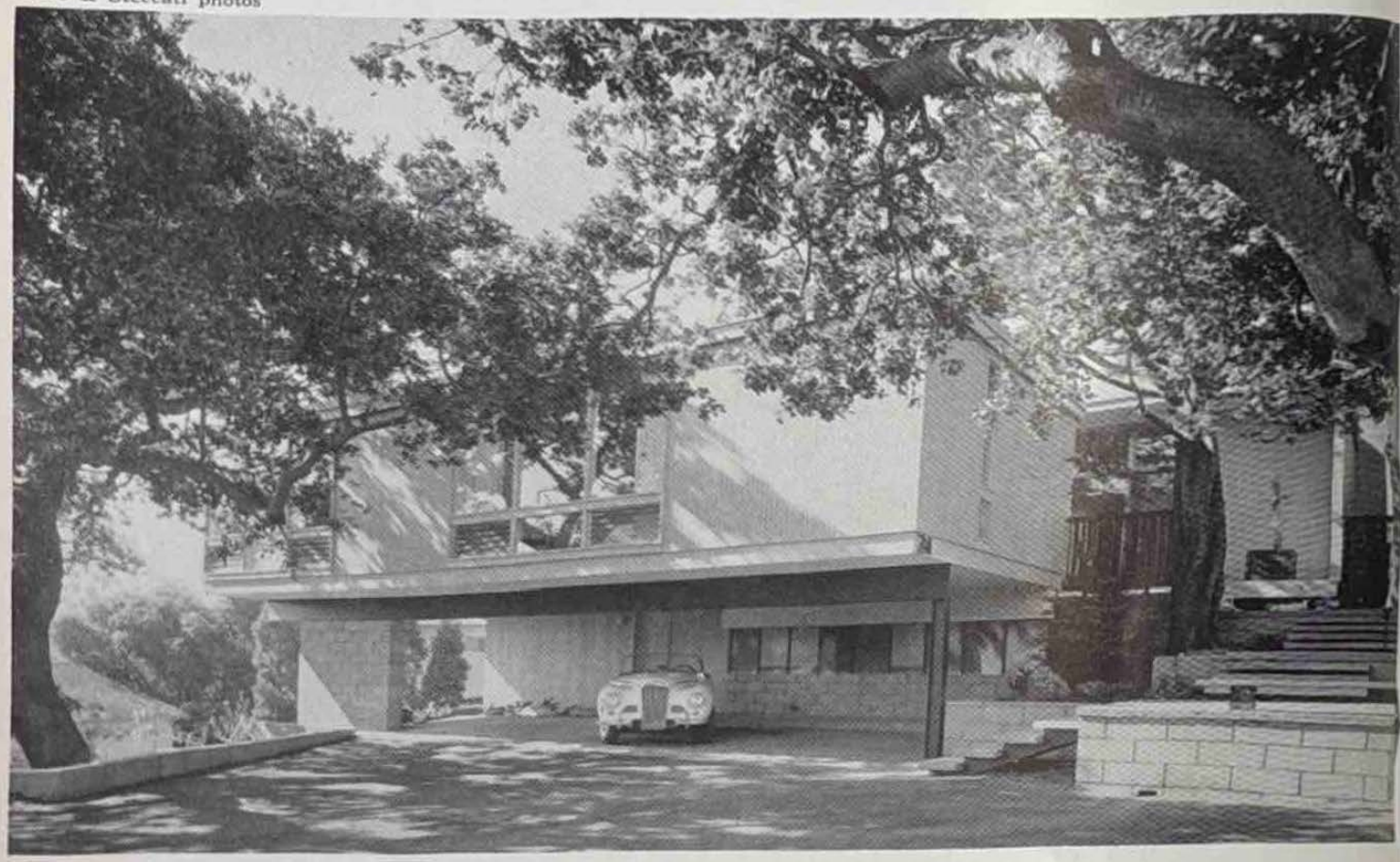
Iwao Miyake served as consultant for the acoustical design; Thompson & Thompson were landscape architects for both the shell and Kapiolani Park master plan.

Robert H. Dreher Residence
Oakland, California

JAMES HAMILTON HOFMANN
Architect

KENNETH I. McKAY
Contractor

Stone & Steccati photos



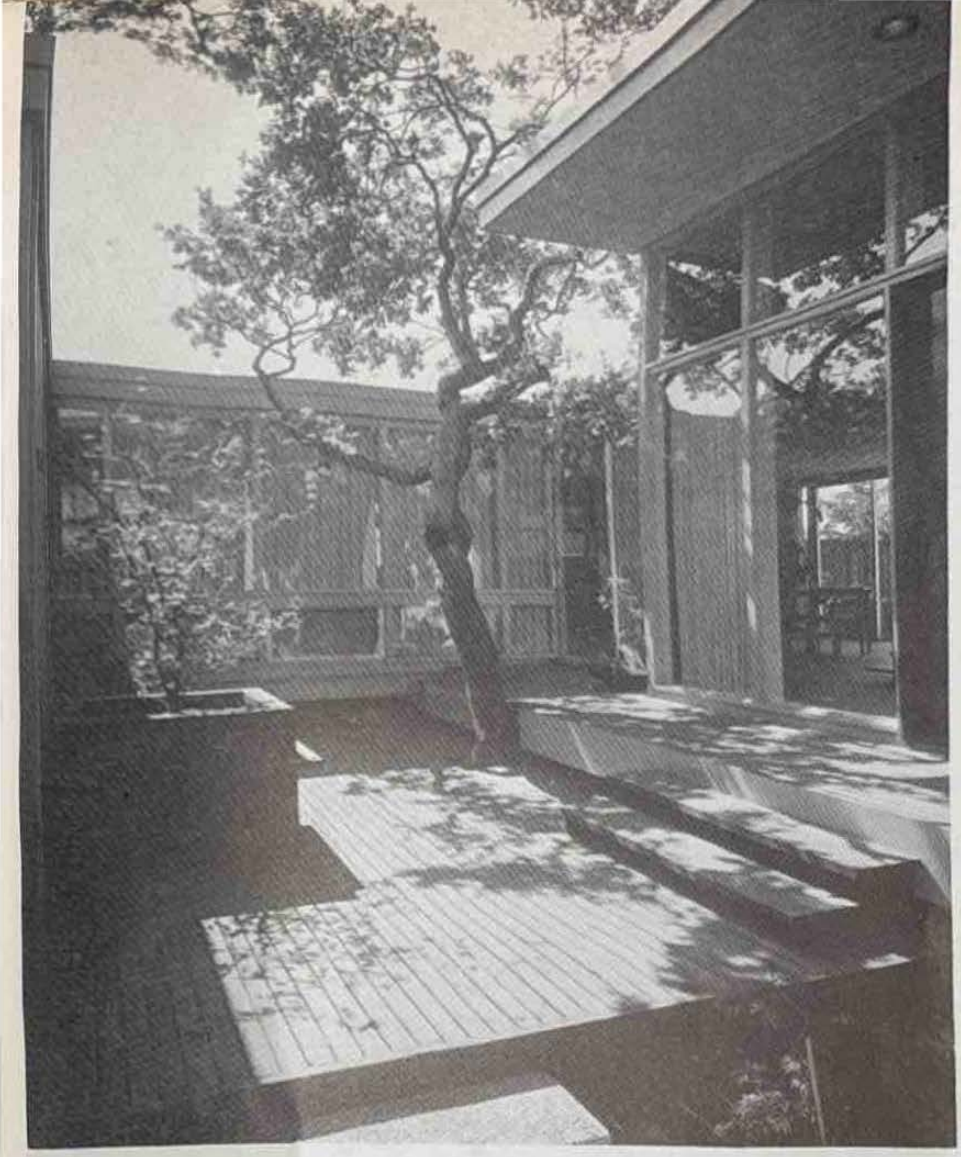
Design cashes in on site's natural assets

THREE OLD OAKS, a magnificent view and a sloping site in effect dictated the design of this house. Perched high and to the rear of the lot, wrapped in and around the trees, it was possible to achieve an open design without sacrificing privacy or the trees.

Starting with the basic needs—living areas, three bedrooms, two baths and maid's room—the architect provided a maximum flexibility in space arrangements. The living room and dining room can act as one large space or be separated into smaller areas by sliding shoji panels. The boy's bedroom can be opened to gain the added dimension of the hall, stair and inner patio and the girl's room can be divided into two smaller rooms.

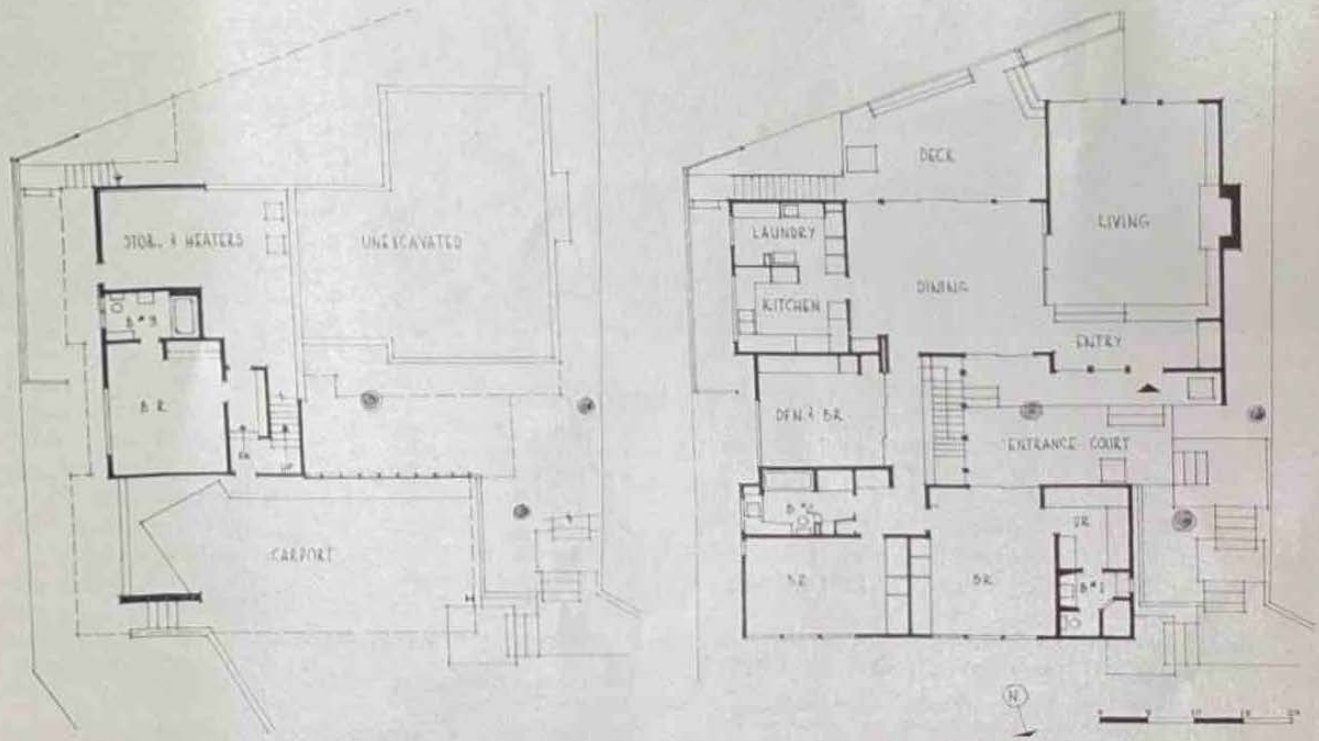
Setting the house back on the high portion of the lot, also provided a basement area for the maid's room, storage and three-car shelter under one wing. The fairly level front portion of the lot can be used for off-street parking, a necessity on the very step access road. Short runs of stairs and larger landings give a gentle approach to the main level.

Much of the lot is covered with decks and paving, thus simplifying gardening. An unusual amount of built-in storage in all rooms provides tuckaway space for such usually cluttering items as wood storage, card tables, cameras, hi-fi, etc. Mosaic tile in the oversized fireplace is carried out into floors of the entry and dining room.

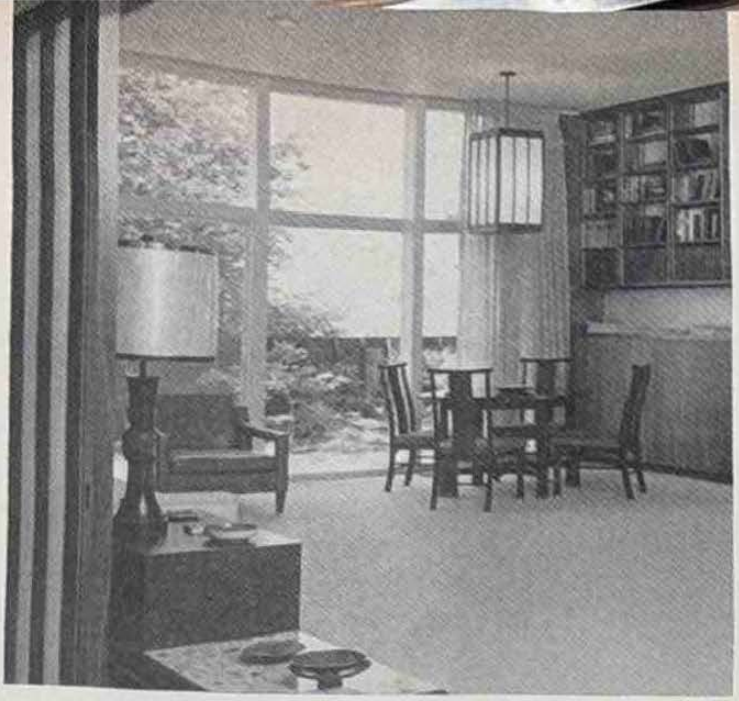


BEDROOM can be thrown open to gain added dimension through view past entrance court, created by U-shape of house. Landscaping is work of Robert Murikami.



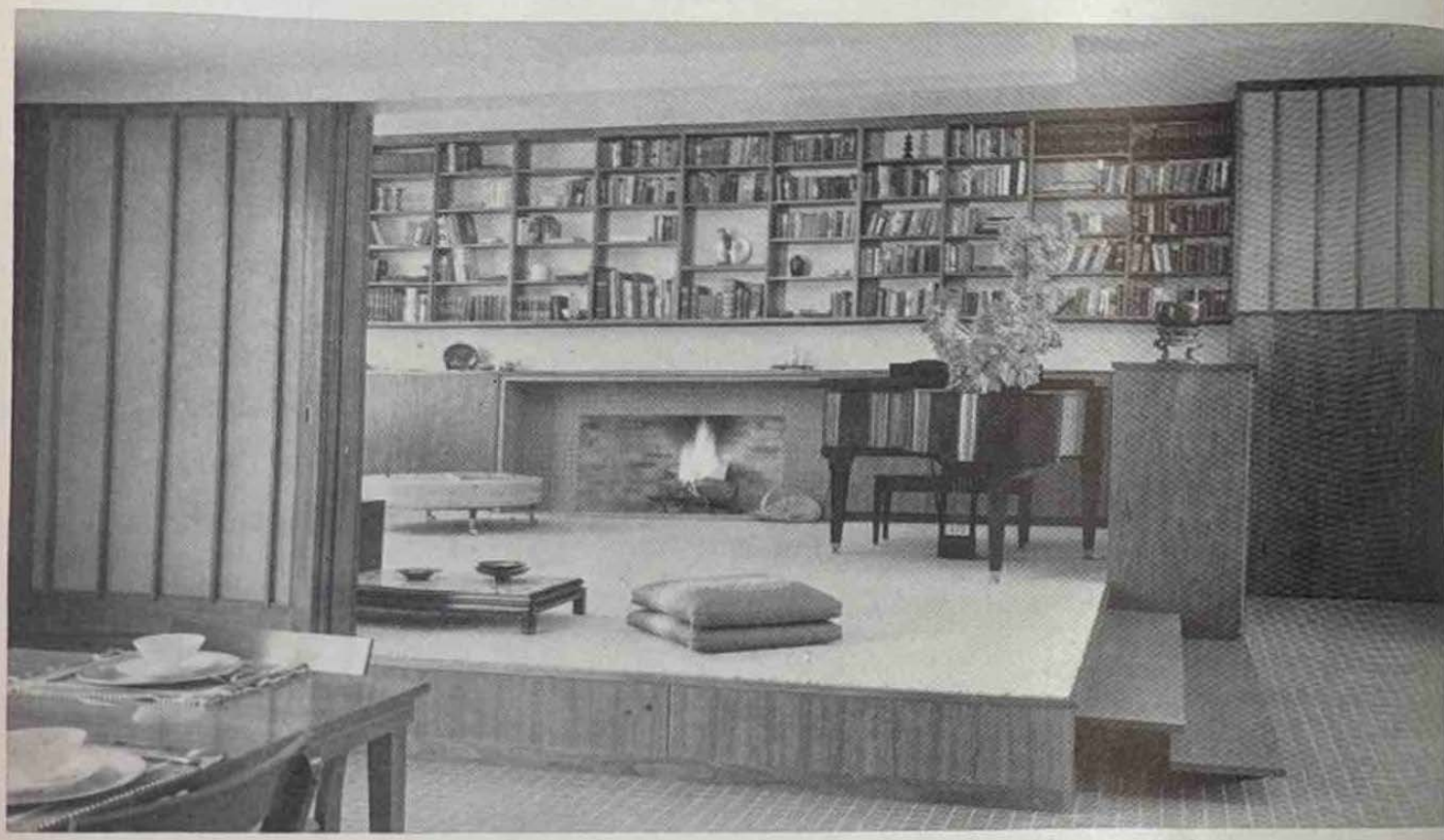


BASEMENT **MAIN FLOOR**



DREHER RESIDENCE

LIVING ROOM VIEW sweeps out over deck. Oriental ga den and Lake Merritt. Slight rise segregates living ar from dining room. Shoji panels give more definitive d vision when desired. Paneling and built-ins are walnu



OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: Douglas fir plywood; roof: plywood sheathing; walls: plywood sheathing; floors: plywood on main floor, concrete in basement.

Exterior Finish: stained redwood.

Roof Surfacing: built-up—Pioneer-Flintkote.

Windows: aluminum jalousies—Kelco Division, Wells Aluminum Co.; aluminum casements.

Doors: exterior: sliding aluminum—Arcadia Metal Products; interior: flush hollow core.

Floor Surfacing: mosaic tile—American-Olean Tile Co.; vinyl and linoleum—Armstrong Cork Co.; vinyl-asbestos—(Hako) Hachmeister, Inc.

Insulation: rock wool.

Partitions: Douglas fir plywood.

Interior Finish: walnut plywood; grass cloth; tile—(Hermosa) Gladding, McBean & Co.

Ceilings: gypsum board—(Gypboard).

Lighting Fixtures: recessed — Prescolite Manufacturing Corp.

Heating: perimeter system—(Utility) Gaffers & Stattler.

Plumbing and Sanitary: American-Standard.

Total Area: 3,000 sq. ft.

Total Cost: $47,000.

Cost per Square Foot: $15.50.

Date of Completion: February 1959.

Technological horizons

by BURNHAM KELLY

A digest of a panelist's remarks following the address by Dr. J. Robert Oppenheimer at the AIA convention

DR. OPPENHEIMER has brought home to us the mounting problems facing the architect as he struggles to maintain his bridge across the widening gap between the familiar values of art and tradition and the exploding new universe of discovery. He offers by his whole character a sense of the desire among the discoverers to devise effective communications channels along which support may be sent back to those who are bringing up the traditions.

Let the architect beware, however. The discoverers will not do his work. They cannot be expected to have either the patience or the inclination to backtrack to an idle fancier, answer all his questions, gently point out the questions he should have asked and then answer these too. Furthermore, of the typical problems faced by a designer, many contain too many variables to offer much yield for an economically justified effort of science and many more call for value judgments and policy agreements that are not the subject of discovery at all. As the legal writers like to point out, it does not much matter whether we drive on the right or the left side of the street, but it matters very greatly that the point be decided. Furthermore, the discoverers are rarely normative; they rarely say this is how *it should be*, but the design professions can never escape this heady responsibility.

But this task is growing even more complex and you may want to hear from time to time a view from the gentle heights of the ivory tower regarding some of the topographical features of the terrain ahead of us. I would like to confine my remarks to three matters of urgent concern.

First, the emergence of the *clinical* approach to architecture. As is true in the other practice professions of medicine and law, the universe of discovery may be reduced to manageable proportions by the cooperative efforts of a group of specialists who have learned to communicate together over a range of problems far beyond the understanding of any one of them. But this must go beyond the retaining of expert advisers or even the building of expert services right into the professional office. The clinic is characterized by the attempt to develop a full and equal creative responsibility over an entire problem spectrum and by the constant feedback from experience to broadened inquiry. It learns to identify the key questions and to phrase them in language convenient to the discoverers and so to advance the frontiers of performance. This is not a matter of size so much as attitude and I confidently predict the growth and success of very much broadened group practices in architecture.

Second, the rapid enlargement of project *scale*. The doubling of our physical structure is coming not only in very few years but also in very large chunks. The trial and error mentality, the Edisonian experimental approach, is less than ideally suited to a day when large urban districts are demolished and rebuilt in one fell sweep and communities of thousands spring up along the interstate highways in a single intensive development effort. Clients for these jobs are tough, able and fast-moving; many of them are institutional and most have a strong flavor of mixed enterprise, with the governmental representatives of the public interest heavily armored to direct negotiations with its architectural representatives. It seems clear to me that procedures of design and tools of regulation are undergoing radical changes, in fact, long before a rational basis has been worked out for protecting the long-range public interest. We must live a long time with the projects that are designed so quickly and small errors may become tragedies when magnified to the current scale.

Third, and this you would expect from me, the *rapid vertical integration* in building production. I need not dwell again on the production and distribution characteristics of the new materials and methods, on the entrance into the field of large producers and on the new industrial frontier that will lie open when resources have been combined to bring reason out of the forest of localized restrictions and practices that are our inheritance from the days of craftsmanship. I dwell rather on the simple fact that new methods realize their full potentials only when they are considered from the start as a basic element of design and on the perfectly obvious corollary that a sharp concern for the final design must be carried back up the production line into the hands of industrial management. There is no time to comment on the adaptations of the profession of architecture and its ethics that may be required to meet these conditions.

But I would like to emphasize one essential point. The integrated industrial operation is in the building field to stay and it will be giving shape to a large part of our physical environment.

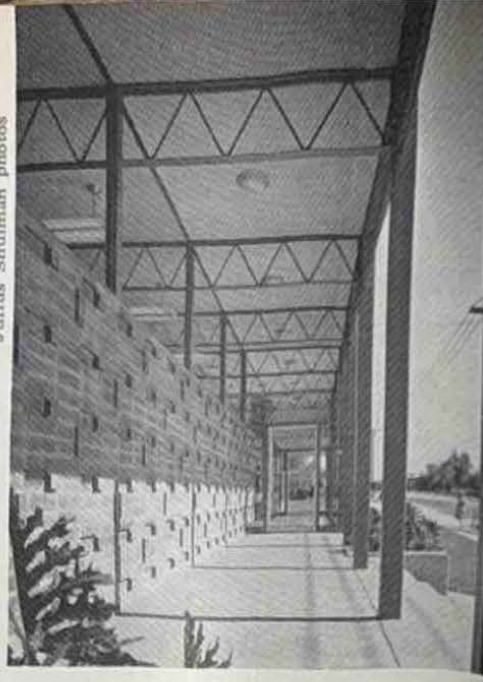
No one in this room is happy about what American industry has made of the motor car. Perhaps we can escape full blame for that. Certainly we seek to distinguish ourselves from it by buying and praising foreign designs.

But we can't duck when it comes to our urban physical environment. Or perhaps we can and 20 years from now we can joke over our martinis about the monstrosities from the Midwest and brag about the well-designed building elements we buy in Europe. Is that where we're heading? Will we import sensitivity, freshness and creativity as a kind of cultural concentrate to give flavor to our bland, risk-free perceptual diet? Or will we find a way to work with the discoverers to bring new fields for architecture?

The author is on the faculty of the School of Architecture and Planning, Massachusetts Institute of Technology.

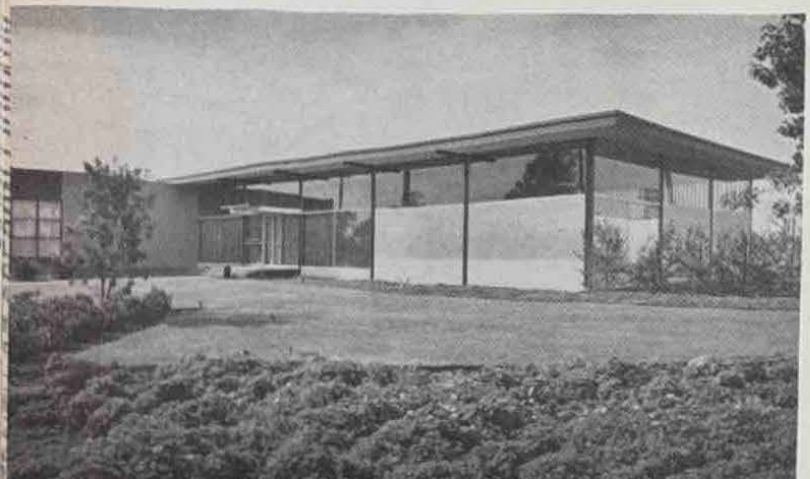
Project roundup

Three branch libraries in Southern California



Julius Shulman photos

PANORAMA CITY BRANCH, LOS ANGELES: This branch was designed to serve an area which has grown from virtually nothing to an extremely vital and thriving community in a very short time. The small site fronts on a wide major boulevard and is one block from a 66-acre shopping center. Although the already existing parking space was available a short distance away, the necessity of setting a good civic example and zoning ordinances dictated developing as much on-site parking as possible.



RUTH BACH BRANCH, LONG BEACH: Two sim
rectangles in a T-shape make it possible
sharply delineate reading rooms and ser
area. Long section contains main reading ro
The other section houses offices and serv
rooms, including story room and auditori
Exterior of the $142,000 building features
posed decorative steel columns with brick p
els and liberal use of glass. Interior finish
California redwood is visible from outsi
There are two patios. One, adjoining the ch
dren's reading center, affords a quiet spot whe
adults can read aloud to youngsters. The oth
opens off the staff room. Ceiling-high displ
device at entrance lends itself to an infini
variety of shelf arrangements. Capacity is 35
000 volumes, 25,000 more than could be accom
modated in a small rented branch library
1,000 sq. ft., which served the city in nearb
Lakewood Village since 1953. The new struc
ture contains 7,000 sq. ft.

MARCY BRANCH, RIVERSIDE: The idea of a circular building developed from schematic drawings prepared by the library staff to indicate relationship of areas and functions. Circular design solution provided center supervision of all public sections, well-defined traffic areas, maximum amount of wall space on building perimeter and minimum amount of ductwork. Building is constructed on cement slab with the outer course of Norman brick setting below floor level and the inner course on floor slab itself. Twelve laminated wood beams cantilever toward and radiate from the center, supporting the roof. Beams are exposed both in the ceiling and above the roof and are supported by steel columns. In the children's area a portion of the wall consists of 10 panels made of an exceptionally durable new material — a combination of glass and ceramic enamel — in shades of blue and gray to add a contrasting touch of color to the exterior.

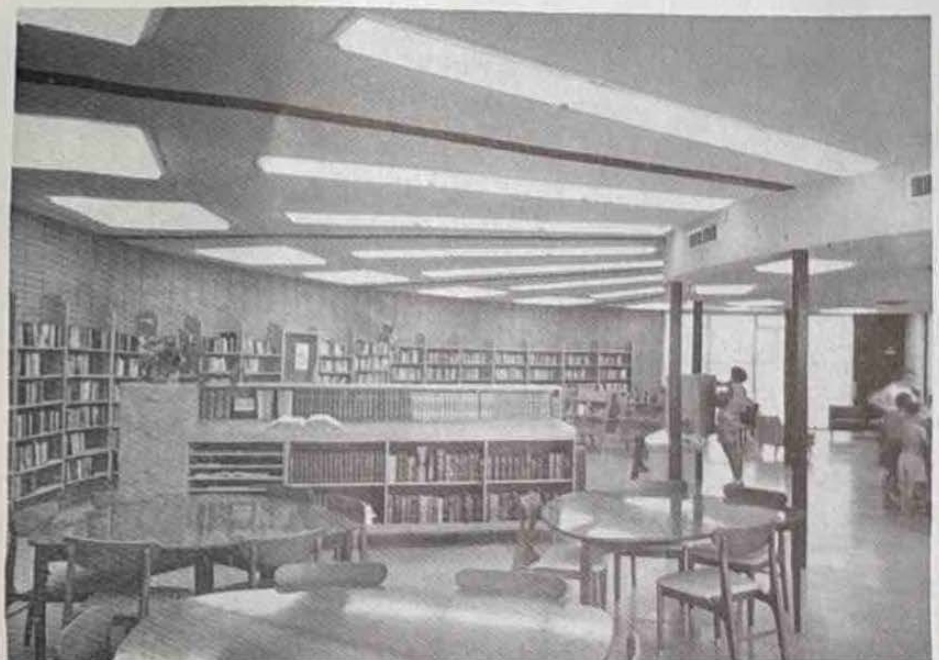




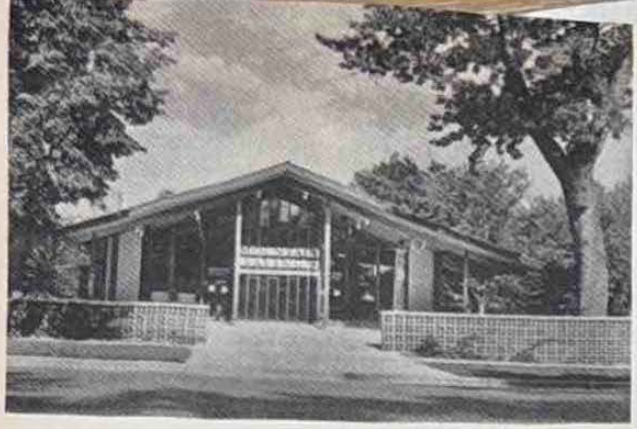
Plan of the Panorama City Branch placed the work room close to the circulation desk with access from both children's and adult's sides. Building is on concrete grade slab with exposed reinforced brick walls, concrete walls in children's room, exposed steel joists and fissured mineral acoustical tile ceilings. The $106,800 building is air conditioned through ceiling diffusers in children's room and stacks and high wall registers elsewhere. Colors range from light warm gray to dark gray-blue with the exception of the wall between the foyer and desk which is chartreuse. Sign utilizes opaque silhouetted letters of porcelain enameled steel matching the adjoining fascia. *Architect:* Graham Latta; *contractor:* James Denham.



Architect-designed furniture and fixtures for the Ruth Bach Branch are primarily in lighter shades, with cabinets, tables and chairs in light-finish hardwood. Room colors are in various combinations: light tans, grays and blues in the main reading room, light cocoa blend in auditorium walls and drapes and restful greens in staff rooms and offices. A cozy corner in the main reading room provides a relaxing space about 14x20 ft. furnished in living room manner. Circulation desk, set up on legs for light, airy appearance, is built in three separate sections so that it can be moved and interchanged as needs dictate. Floors are covered with an all-vinyl tile with a cushion base for ease of standing and walking. *Architect:* Louis Shoall Miller; *contractor:* Julian Construction Co.



Behind the charging desk in the center of the Marcy Branch is a workroom shielded by louvers for privacy without loss of supervision. A translucent dome 7 ft. in diameter over the desk provides natural daylight plus design interest. Dome is an aluminum cloth laminated between plastic. The $80,320 structure, with 25,000 volume capacity, includes reading and studying area, divided by reference case; children's room furnished with sloping tables and brilliantly colored oversize hassocks; 35-seat auditorium; staff lounge; and patio. Ceilings are off-white acoustical plaster with flush fluorescent lighting fixtures. Specially designed furniture features triangular tables. *Architect:* Herman O. Ruhnau; *contractor:* Hoefer Construction Co.



Roberts photos

Where architects hang their ha

HOBART D. WAGEN
Boulder, Colora



ARCHITECT'S OFFICE is located at rear of upper level of savings and loan build ing. Loosely woven curtains cover end wall.



BECAUSE of the anticipated rapid growth of the organization, Mountain Savings and Loan Association wanted its new home to enclose an area twice the size as that required for present needs. Additional space is temporarily used for rental, with an "office building" entrance on the south, and among the tenants is the architect who was responsible for the project.

Structure is sited so as to obtain sufficient parking convenient for customers on the south and for employees at the rear. Existing trees were not disturbed. Entrance porch aids in sun control and the projecting bay permits doors to open from the north and south, protecting them from frequent strong winds in this area. The sloping site—9 ft. to the east side—allows much of the lower floor to receive full natural lighting.

Containing 6,000 sq. ft. and constructed for $77,000, the building in its materials and textures conveys the friendly and informal approach which typifies the home loan company's operation. Western red cedar used for exterior siding is repeated on all ceiling surfaces, exposed wood beams support the cedar shake roof and interior walls are finished with fir plywood. Clay building tile is laid with core exposed for all interior and exterior masonry walls.

Brass fixtures, 110 in all, provide an extremely flexible lighting system. Customer lounge at the west end features a fireplace. In summer the offices are air conditioned by means of gas fired furnaces for heating and evaporative coils for cooling. Distribution is through continuous perimeter baseboard diffusers.

Ketchum & Konkel were structural engineers; Francis Stark, mechanical engineer; Swanson-Rink & Associates, electrical engineers; and Marvin Wilkins Co., Inc., general contractor.



label of a quality home... HANDSPLIT CEDAR SHAKES

In today's architecture, all eyes are on the roof. In today's market, all eyes are on quality. Put the two together . . . and you see why handsplit shakes are selling as fast as craftsmen can produce them. When you top off your homes with handsplits, you're offering the finest. A roof that will last for generations. A roof with natural character and good looks. A roof of proven acceptance. Put the compelling texture of genuine handsplit cedar shakes on your next roof. It's like having another salesman on the ground!

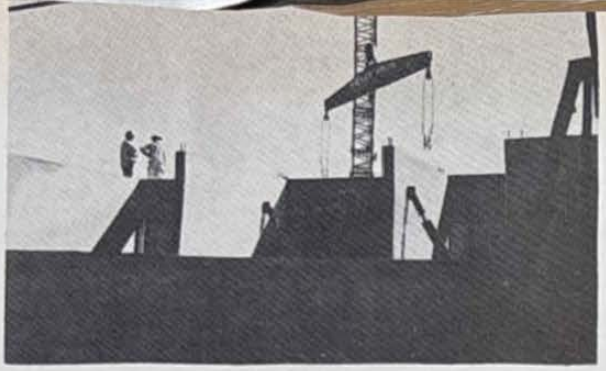


For complete handsplit shake application details, see your Sweet's File, or write . . .

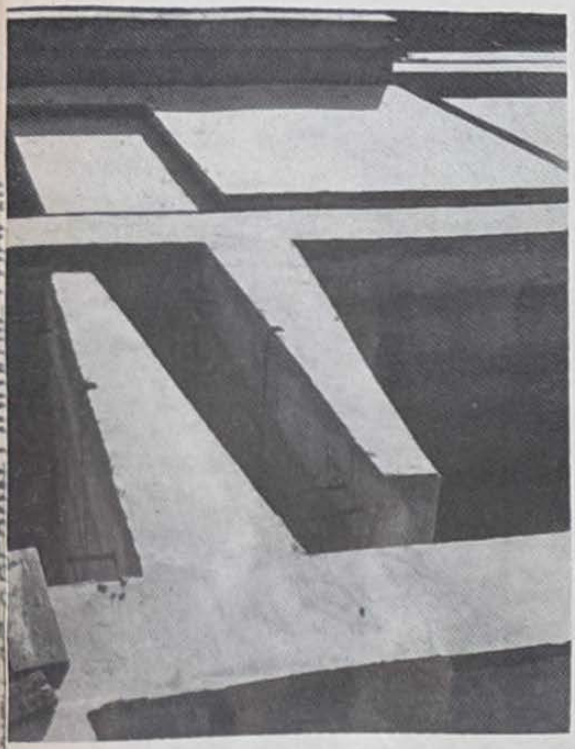
RED CEDAR SHINGLE BUREAU

5510 White Building
Seattle 1, Washington

550 Burrard Street
Vancouver 1, B.C.



WALL PANELS of precast concrete in 8x10-ft. sleeping rooms support concrete roof slabs.



CONCRETE BENTS are cast in stacks up to five bents high. Typical bent, 28 ft. long, 13 ft. high and placed 12 ft. o.c., is set on concrete footing pad below.



Bents cast together, then peeled off

Most juvenile homes built recently in California have been of concrete block due to the fact that the buildings are constructed to confine people and therefore must meet requirements of Type I construction.

In the case of the Monterey County Juvenile Home at Salinas, architects Fred Keeble and George Rhoda decided to employ a method of precast concrete panels and bents which they felt would provide a better building without any additional cost. The method paid off. In fact it paid off so well that it was possible to build three units containing 72 sleeping rooms, instead of two units containing 48 sleeping rooms.

Concrete bents were poured on top of each other, then peeled off and lifted into place. As many as 16 frames were poured at once. In contrast to the relatively small 8x16-sq. in. concrete blocks normally used for that type of construction, some of the sections poured for the Monterey building were as large as 30 ft. across.

In the administrative portion of the building, in which are located the kitchen, dining areas, offices and classrooms, a structural system relying on precast concrete bents and precast roof and wall panels was used for the structure with interior partitions of plaster on metal studs. Partitions of 2½-in. solid cement plaster on metal lath and channels were employed wherever security was a problem in order not to complicate the structure by pouring very small precast panels.

In the rear portion, which consists almost entirely of small holding rooms, the interior partitions were made of precast concrete. The precast roof slabs were set directly on these partitions.

Cost per square foot, exclusive of site development, was $18.70, $3.30 below the state average for this type of building. General contractor was F. V. Hampshire; structural engineers, Carter & Slattery; mechanical-electrical engineer, Clyde E. Bentley.



JUVENILE HALL, scheduled for completion this month, will house 48 boys and 24 girls.

Precast operation saves six weeks' construction time

Both design and construction time factors dictated the use of a six-section folded plate precast concrete roof for the Lytton Center in Los Angeles. In addition to the interesting design pattern of the roof, the folded plates form a rigid, lightweight covering for the 76-ft. span. Although it was more costly, the precast method was selected because it saved six weeks in construction time.

The building, constructed on the site of the old Garden of Allah Hotel, is the first phase of a $5 million commercial and business center for Lytton Savings and Loan Association, designed by Kurt Meyer of Hagman & Meyer, with Johnson and Nielsen as structural engineers. First structure is 29,500 sq. ft. on three levels. Each of the six V-shaped concrete slabs which form the roof weighs 47 tons, is 100 ft. in length and 6 ft. in height with a 20-ft span. It required two 80-ton truck cranes to hoist them in a difficult and tricky operation over the top of the building and lower them into place.

The operation began with the casting of 12 Mo-Sai sections which are cantilevered 12 ft. beyond the outside wall in both the front and rear of the building. The exposed aggregate sections were delivered to the site where they were poured integrally to become part of the folded plate section.

Each of the six slabs is 4 in. thick and heavily reinforced with steel. A liquid bond breaker material was sprayed on the surface of each slab before the following section was poured on top to ease separation at time of the lifting.

Each slab had to attain a minimum compression strength of 4,000 psi. for lifting. California Testing Laboratories measured stresses in the units continously during the lifting process. Air was forced into small holes bored in the concrete sections to minimize suction at time of initial lifting.

Five specially built erection brackets which also acted as strongbacks were attached to each concrete roof slab at it was to be lifted. Cables from the 70-ft. booms of the two cranes were attached to the two end brackets. Following the initial lift, the three middle brackets were removed and three braces were placed underneath to prevent any unnecessary stress during erection which would cause the huge concrete slab to crack. Placement of the roof slabs took two days. Wailes Precast Concrete Corp., a subcontractor for prime contractor William Simpson Construction Co., manufactured the Mo-Sai and the folded plates and did the installation work.

When placed, the six sections formed the entire roof except for a 12-in. beam which was poured in place between each section to form a valley for drainage. The only structural connection other than the poured-in-place strips are small steel plates at each end of the concrete section to allow welding. The plates are placed at three points, peak and sides, where the Mo-Sai joins the rest of the precast unit.

Facing on Sunset Boulevard, the Lytton Center will feature wide expanses of glass. A sunken garden in the foreground will open into a park-like plaza dominated by a pavilion housing a scale model of the old Garden of Allah and other memorabilia of the once famous Hollywood hotel.

Work will begin later this year on the second phase, a 12-story office tower and one-story stores.



TWO HUGE CRANES hoist 47-ton folded plate concrete slab into place for roof of Lytton Center. There are six sections in all.

Plywood industry experiments with delta frame

A new construction method called a delta frame for low cost service buildings was unveiled to members of Plywood Fabricator Service, Inc., at the organization's first annual meeting in Tacoma, where a prototype structure is in the process of being developed.

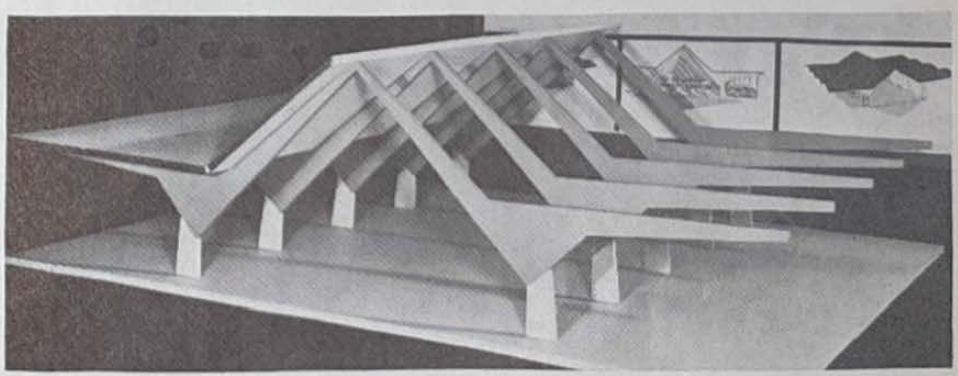
As described by its designer, Robert Waring, staff architect for the Douglas Fir Plywood Association, the delta frame can be used in either square or rectangular buildings or in circular plans. It resembles an A-frame with dihedral wings. Span of the cantilevered wings can be varied and the building can be enclosed or open, or a combination.

It was developed in an attempt to provide a building design with a wide variety of uses in all sizes of service buildings, without being confined to a boxlike stock design and limited choice of conventional roof lines. The new frame, in combination with stressed skin panels and other components, is adaptable to nearly 500 building types, Waring told the fabricators.

The group also saw a loading test of Trofdek, a new lightweight component for use over long, clear spans. (PA&B for April '60 described an application.) Tested over a 40-ft. clear span, the material failed at a point more than four times design load.

Other discussions centered on methods of calking exposed roof joints, development of permanent coatings for prefinishing components and developments in sandwich panels.

The organization was formed in April 1959 by the DFPA. Representatives of 26 member fabricators attended the two-day meeting.



DELTA FRAME is adaptation of plywood box beam; decking is stressed skin panels.

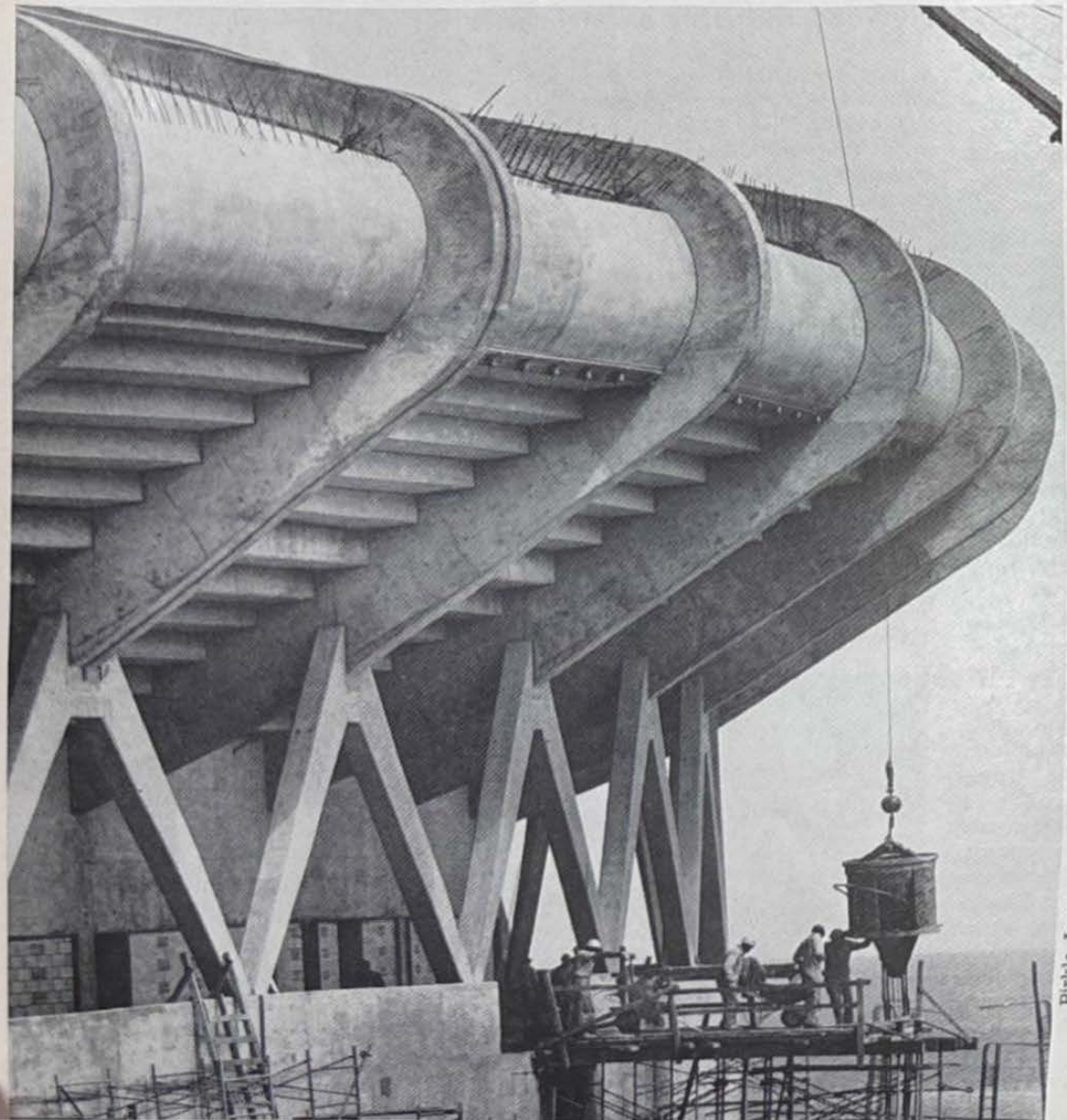
San Francisco's Candlestick Park



Pirkle Jones

A-FRAMES of concrete and reinforcing steel precast on jobsite a hoisted into position for 42,000-seat stadium. Tolerances are very clo

WIND BAFFLES sweep in gentle arc around top of stadium. A-frames supporting baffles are designed so that they move as structure moves. This is accomplished by slip connections on one side and by adjusting one leg of A-frame so that it will slip on this lubricated connection. Other leg of A-frame is rigid.



Pirkle Jones

When the National League Giants opened their second season in San Francisco in April, they turned out in a spanking new stadium, just a little more than a strong arm's throw from the Bay. Since then taking pot shots at Candlestick Park has become a popular sport with local newswriters and sportscasters. Main bone of contention deals with the orientation of the stadium in relation to the prevailing northwest wind which hails from the vicinity of left field. How architect John S. Bolles attempted to overcome this problem will be discussed informally by PA&B next month. E. Elmore Hutchison was consulting engineer; Charles L. Harney, Inc., general contractor; and MacDonald, Young & Nelson, subcontractor for the concrete work.



Ken McLaughlin

SEAT SUPPORTS of second level are constructed of prestressed concrete cast by Ben C. Gerwick, Inc., in its Petaluma yards. Vertical uprights consist of structural ship shafting utilized to obtain small but very strong members. Each has bearing capacity of 500 tons.

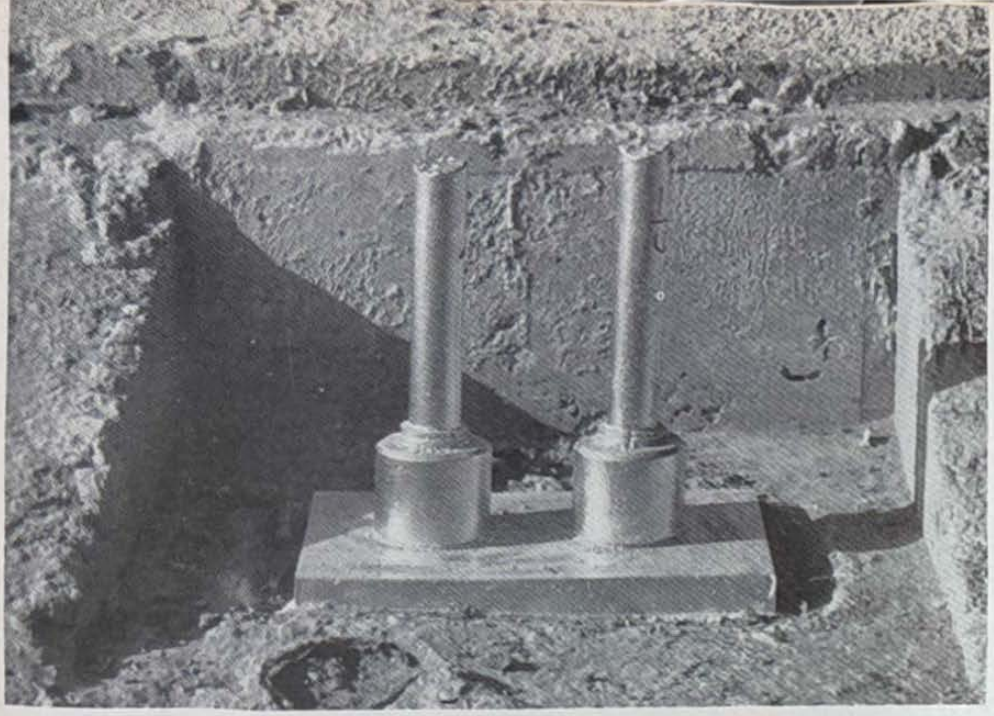
Ken McLaughlin



UPSWEEP OF OUTER RIM provides better sight lines and gives fans feeling of greater space.



John Gorman



STRESSRODS with Howlett grip nuts and anchor plates in position to hold loose dirt slope near Walnut Creek, Calif., are put under 50 tons of tension with hydraulic jacks.

Soft earth stabilized with anchor-connection unit

Even dirt can be stressed with a newly patented anchor and connection system developed by Rods, Inc., of Berkeley, Calif. The firm manufactures a high tensile alloy steel rod and anchorage system for prestressed concrete, known as Stressrods, which can be used to induce stress into dirt or almost anything else.

The secret of the process is a unit known as the Howlett grip nut and coupler, manufactured by Howlett Machine Works in Berkeley.

The versatility of the Stressrods system was demonstrated recently in a slope stabilization problem at Oakvale Road overcrossing in Walnut Creek, Calif., but the application to major building projects is obvious. Constantly shifting soft earth provided no support to hold heavy columns for the overcrossing. Moving the road to a spot where solid footings were possible was out of the question due to right-of-way restrictions. A solid footing had to be created from the soft slope.

Three rows of 14 holes, each 73 ft. deep, were dug in the slope. Stressrods were inserted in sheet metal tubes and anchor plates fastened to the ends and held in place with Howlett grip nuts. The covered rods were then inserted in three rows of holes and the holes filled with concrete to a depth of 40 ft. The remaining 33 ft. were filled with gravel and the entire pattern of holes covered with concrete, leaving the ends of the Stressrods exposed.

An anchor plate was placed over the protruding ends of the Stressrods and another Howlett grip nut attached. A hydraulic jack was secured to the end of the rod and tension applied. The jacks stretched the steel rods inside the tubing and the nut was tightened. This, in effect, put a stress on the entire slope area, holding the loose dirt under compression and providing a firm foundation.

The grip nut is made from Bethlehem alloy steel bar stock. Sizes vary in diameter from 1¾ to 2¾ in.

Tallest post-tensioned lift-slab job goes up in San Francisco

A 13-story structure in San Francisco has risen to its full height in 44 days, the entire operation requiring a maximum crew of 10 men. An apartment house, 1800 Pacific Building, it is the tallest post-tensioned lift-slab construction so far attempted anywhere in the world.

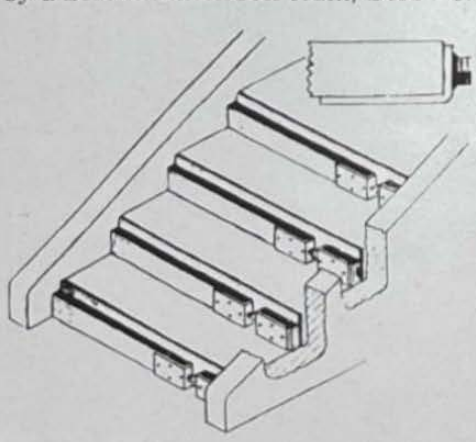
Vagtborg Lift-Slab Corp. began its part of the job March 23. By April 1 the second and third floors of the structure were permanently in place and the remaining 11 post-tensioned concrete slabs were stacked on top of the third floor instead of on the ground. The 20 steel columns supporting the slabs were then extended higher into the air in preparation for the second series of lifts. There were six series in all.

Largest ever lifted in an operation of this kind, each slab measures 160 x 81 ft., is 8 in. thick and weighs 600,000 lb. Lifted two at a time, they were raised 1/10 in. with each turn enveloping three 115-ft. slip form concrete towers already in place. This is the first use of slip form concrete towers and post-tensioned lift-slab construction in combination. Use of the towers eliminated all need for erection bracing of the structure which utilizes Calaveras cement throughout.

George P. Belcher is owner-contractor and August E. Waegemann is structural engineer for the project designed by the late H. C. Baumann.

New system for step forms developed in Northwest

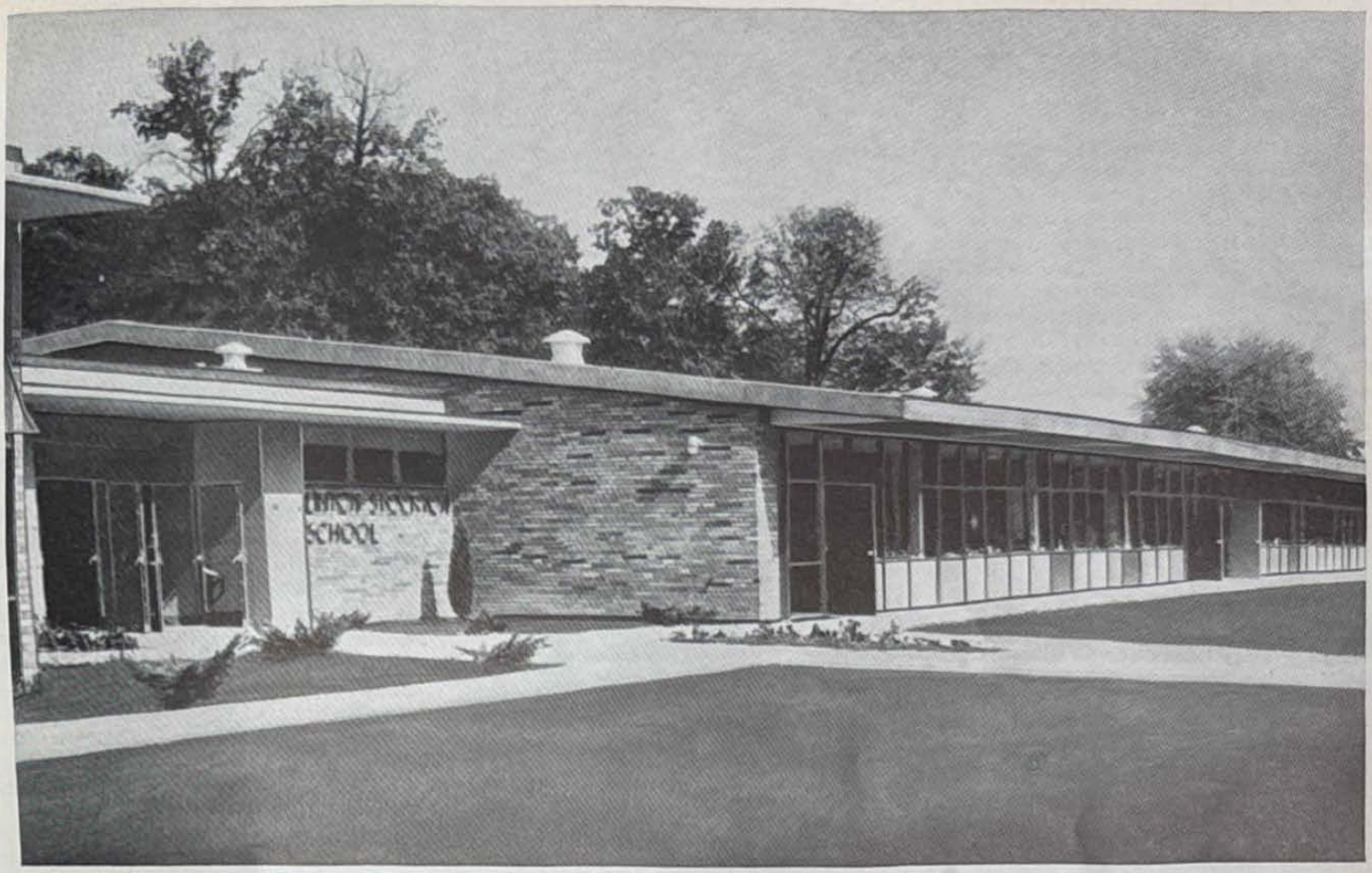
A new system for installing step forms in a stairwell or between concrete abutments has been developed by a Seattle father-son team, Soren C. and Clarence J. Jensen. Called the Fit-Quick system, the method involves the use of timber members that are expanded by means of ¾-in. stove bolts.



FORMS in place for stairwell with cutaway portion of concrete showing how Fit-Quick members are tightened into place to hold forms by means of friction.

The same idea is being tried for other phases of concrete work. As an example, a Fit-Quick member is adjusted under the waler for shoring a concrete decking. The lower half rests on top of a post and the waler rests on the top part which consists of a piece of angle iron. The bolt is then tightened to the precise point that gives the desired slab thickness.

The makers claim that forms for 10 steps can be installed, including cutting of the walers and riser board, in 2½ hours. Where a number of stairwells are the same width on any job the same wood forms can be used repeatedly with installation taking only a few minutes after the first stairwell has been placed.



Modern school uses precast concrete . . . reduces costs to less than $11.00 per square foot!



Precast concrete "bent" *being swung into place at new Linton-Stockton Elementary School. Designers: T. C. Darste and S. G. Pantazi, Indianapolis. Structural engineer: F. E. Burroughs, Indianapolis.*

How to get the best school at the lowest cost. This is a common problem in growing communities. The Linton-Stockton Elementary School in Linton, Indiana, solved it with precast concrete.

The school building has received wide acclaim in educational circles . . . and the cost was only $10.87 per square foot.

There are 36 classrooms in all, each averaging 1200 square feet in size. Total accommodations: 1200 pupils. Total cost for this 80,000 square foot school: $870,000.

Construction was relatively simple. The frame was formed by precast concrete members supporting precast roof slabs. All precasting was done at the site.

Careful planning, standardization of members and re-use of forms helped hold down costs and building time. Other advantages include low maintenance, long life, low annual cost and high fire safety.

If your community is considering a new school, it should definitely consider precast concrete. Free information will be sent on request.

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stair safety treads

For heavy traffic stairs in commercial, industrial and institutional buildings, Wooster is offering Super-Grit safety treads made of heavy duty aluminum with 3- to 16-in. deep penetration of diamond - hard abrasive minerals. Treads are built into the steps during construction with anchors or other type of specified fastener. Standard sizes are 8 and 6 in. Narrower widths are available for stairs subject to lighter traffic.—Wooster Products, Inc. **(Item No. 1)**

joist hanger

Simpson has added the F-24 joist hanger for 2x4 finished lumber to a line that now extends from this model up to units for 6x16s. Manufactured of 18-gage heavy galvanized steel and work-hardened under 120,000 lb. of pressure, the joist hanger has high vertical and torsional load-bearing capacities and has been approved by the International Conference of Building Officials.—Simpson Co. **(Item No. 2)**

school communication system

Private telephone communication and general announcements through classroom wall speakers are handled in an all-purpose communication system developed especially for schools. Practi-Call is incorporated as part of the clock and program system, utilizes the bell control board and is operated by the office secretary. Since wiring is in the same conduit as the clock and program system, installation savings are substantial.—Standard Electric Time Co. **(Item No. 3)**

patterned acoustical tile

For ceilings of lobbies, reception rooms and other interiors where a decorative effect is desirable, Armstrong is offering wood fiber acoustical ceiling tiles featuring patterns in soft translucent colors. Called Centennial Cushiontone, in observance of the company's 100th anniversary, the series includes three abstract patterns, two in a floral design and one resembling falling leaves. Noise quieting efficiency is the same as the regular Cushiontone line. — Armstrong Cork Co. **(Item No. 4)**



drywall assembly

A versatile drywall assembly permits horizontal and vertical wallboard application and erection of double layers where increased strength, greater fire resistance and sound transmission loss are desired. Called the USG metal stud partition system, it consists of a lightweight channel stud set in steel runner tracks at floor and ceiling and faced each side with Sheetrock gypsum wallboard. When erected with 3⅝-in. metal studs and single layer ⅝-in. wallboard the non-load-bearing partition weighs about 6.5 lb. per square foot. One of its main features is a specially made drywall screw for attaching the wallboard to the metal studs. It is power driven to a preset depth to provide a slight depression below the plane of the wallboard. Screw will not pop, eliminating the change of loose boards. The system is one of four introduced recently by the company for commercial and industrial construction—United States Gypsum Co. **(Item No. 5)**



stonelike texture brick

To provide the architect and build with greater versatility in brick construction, Gladding, McBean has introduced a facebrick with stonelike texture. The brick is made by processing a regular facebrick through machine which creates the texture stone on its face. Stoneface is available in standard unit sizes and in the colors offered in the company regular line.—Gladding, McBean Co. **(Item No.**

self-locking window

The 1960 line of R.O.W. wood casement windows features a self-locking device incorporated in a single-operation control that regulates all window action. The control was developed to eliminate damage to windows that occur when the absent-minded homeowner attempts to open the window without freeing the standard separate manual lock. Other changes include a switch from metal to vinyl weatherstripping and from extension type hinge to concealed hinge operating on tandem nylon rollers. Windows are removable for cleaning. Units are available in 10 different sizes.—R.O.W. Sales Co. **(Item No.**

colorful cork

Cork floors or walls in color are possible with a line of 16 pastel and deep shades offered both in rolls and tile in a number of widths and thicknesses. Cork does not need to be repainted as the colors are an integral part of the burlap backed, plastic, vinyl coated material. Product can be applied to all surfaces without special preparation using standard adhesives. It covers masonry and sheetrock joints without plastering and can be worked around corners. Manufacturer says Color-Cork is easy to clean with soap and water, will not support combustion or show punctures. The wide range of tasteful colors, designed by Eleanor Pepper of the Pratt Institute, offers many design possibilities both with single colors or by mixing and matching them. — Gotham Materials, Inc. **(Item No. 8)**

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powder actuated hand tools

Gregory Industries, makers of Nelson stud welding equipment, have entered the powder actuated tool and fastening business with two models of stud drivers for anchoring wood or metal to concrete or steel and the formation of a special division to handle the line. Model 660 uses ¼-in. drivestuds, .25 caliber powder charge and automatically ejects spent cartridge cases. Model 600 uses interchangeable 14- and ⅜-in. barrels, with .22 or .25 caliber powder charges and has a removable breech plug. Alloy steel drivestuds range from 1 to 6 in. and may be threaded or headed. Eye pins for concrete are available.—Nelson Stud Driver Division, Gregory Industries, Inc. **(Item No. 9)**

packaged kitchens

To meet builders' needs for economical, easy-to-install package kitchen units, Youngstown is offering a cabinet line designed larger than the regular units, with more open undercounter area for plumbing access and delivered at the jobsite with handles, drawer fronts, etc., already installed. Available in five different sizes, including sink and storage units, the Uni-Pak cabinets can be used in any combination with each other and with other Youngstown cabinets to fit L- or U-shaped, corridor or straight wall kitchens.—Youngstown Kitchens Division, American Radiator & Standard Sanitary Corp. **(Item No. 10)**

curved wall surfaces

Unusual decorative effects can be achieved with a snap-on paneling treatment developed by Formica which results in floor-to-ceiling rows of vertical curves. To install, thin vertical strips of laminated plastic on ¼-in. corestock are secured 14 in. apart. Balance of the wall is erected by buckling 17-in. wide sheets of unsupported plastic into the spaces between the anchoring strips. Process eliminates subwall construction and a full veneering operation. Impact resistance of snapped-on panels is relatively high.—Formica Corp.

(Item No. 11)

metal acoustical ceiling

Easy access to above-ceiling areas and flexibility are the prime features of a metal acoustical ceiling offered by a Seattle firm. With 1½-in. furring channels installed on 4-ft. centers, the Accesso channels are clipped in place on 2-ft. centers and the 12x24-in. metal pan units hung from the channel to conceal all suspension members. Incombustible absorbent pads of various types may be laid within the pan units for absorption at any given frequency. Simple push-up and lift-out removal procedure prevents torn or bent pans and provides a low cost flexibility for movement of partitions or lighting fixtures. Any type standard acoustical tile may be used on the Accesso suspension members if desired. — Accesso Ceiling Products, Inc. **(Item No. 12)**



washable wall covering

Wall fabrics, such as grass cloth and slubbed linen, are protected against fading, dirt and other injury by an invisible layer of washable Krene vinly film in the Royaltex line of decorative materials. Patterns range from loosely woven jute fibers and imported lines to designs utilizing butterflies, leaves and sea heather against simple textured backgrounds. Royaltex is backed by a layer of aluminum foil which serves as a moisture barrier and has a layer of paper bonded to the under surface for application by conventional paper hanging techniques. Designs are similar to a companion rigid laminate line called Panlam. Vinyl film for both is a product of Union Carbide Plastics Co.—Polyplastex United Inc.

(Item No. 13)



labor-saving sandwich walls

Subdivision housing construction should benefit most from a sandwich wall construction technique providing structure, exterior surface, insulation and interior finish in one step. The walls are constructed around cores of foamed-in-place urethane plastic, a material frequently used in missile and space applications because of its insulative properties, light weight and structural strength. The urethane is foamed between an exterior skin of aluminum or steel and an interior wall surface of hardwood veneer to form a prefabricated wall panel with window and door openings. No other internal bracing is necessary. Fasteners are not required to hold the outer and inner wall skins together as the foam bonds to the walls with an airtight and watertight seal.—American Latex Products Corp. **(Item No. 14)**

enamel coated aluminum

For residential, farm and light mercantile structures, Alcoa is marketing enamel coated aluminum building panels in seven color shades. Colorib panels have trapezoidal corrugations and diamond embossed finish and are available in standard 8-, 10- and 12-ft. lengths.—Aluminum Company of America. **(Item No. 15)**

partition remote control

An electronic push button control switch provides remote control operation of the Haws electric-hydraulic folding partitions, enabling the operator to move ahead of the partition and maintain complete visibility on both sides. With the switch, which is contained in a pocket size case weighing 7 oz., the operator can spot such obstacles as chairs, tumbling mats, etc., and remove them from the path of the partition. Switch is powered by transitors.—Robert Haws Co.

(Item No. 16)

deep corrugated siding

For industrial buildings, warehouses and other structures in areas where there are atmospheric corrosion problems, Armco has developed a roofing and siding material of deep corrugated stainless steel. Manufacturer reports that the deep corrugated provides more than twice the strength for the same gage or weight of material, making it possible to achieve substantial costs savings by reducing the gage that would ordinarily be necessary or widening the distance between purlins. Material has a 2⅔-in. pitch and ⅞-in. depth.—Armco Steel Corp.

(Item No. 17)

Safety Breaker: gives complete specifications and data on units in line for home installations; 44 pp.; with companion 16-page brochure showing location flexibility and other features; Cutler-Hammer Inc., 315 N. 12th St., Milwaukee 1, Wis.

Aluminum Sliding Glass Doors (AIA 16-E): catalogs line of doors and window wall system; 12 pp.—Ador Corp., 2345 W. Commonwealth, Fullerton, Calif.

Non-Slip Flooring: describes Alundum aggregate and Norton non-slip abrasives for use in terrazzo and concrete floors, ramps and stairs; 8 pp.—Norton Co., Worchester 6, Mass.

Engineered Lighting and Control Equipment: covers specialized units for stage lighting, lobbies, hospitals and other institutional use with circuiting, photometric and specification data; 44 pp.—Hub Electric Co., 2255 W. Grand Ave., Chicago 12, Ill.

Water Repellent Masonry Fill Insulation (AIA 37-C-2): outlines features and applications for brick cavity and concrete block walls in two publications; 4 pp. each.—Zonolite Co., 135 S. LaSalle St., Chicago 3, Ill.

Convector Radiators for Steam and Hot Water (AIA 30-C-4): catalogs line with dimensional data and capacity charts, including 13 new models; 32 pp.—Young Radiator Co., Racine, Wis.

How To Lay Out a Parking Lot (AIA 38-M, 14-A-3): offers suggested layouts with emphasis on self-service parking; 40 pp.—Western Industries, 2742 W. 36th Place, Chicago 32, Ill.

Aluminum Foil Building Insulation (AIA 37-C-3): outlines technical data on reflective insulation and provides standard specifications; 28 pp.—Reflectal Corp., 200 S. Michigan Ave., Chicago 4, Ill.

RLM Standard Specifications for Industrial Lighting Equipment: includes three new specifications and upward revisions for several others in 1960 edition; 52 pp.—RLM Standards Institute, Inc., 326 Madison St., Chicago 6, Ill.

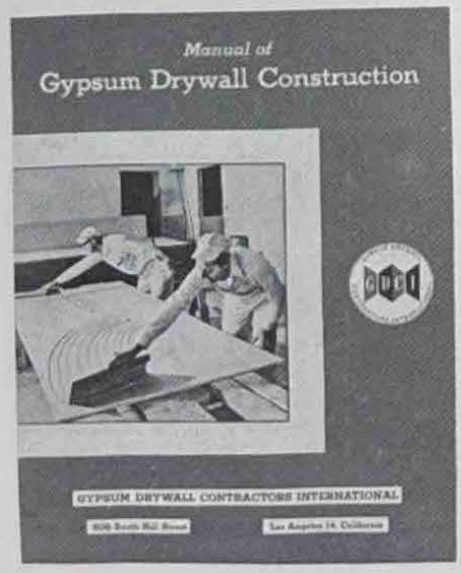
Porcelain Enamel on Steel for Exterior Use (AIA 15-M-I): gives tentative standard plus supplementary information on gloss, color, packaging and shipping, etc.; 4 pp.—Porcelain Enamel Institute, 1145 19th St., N.W., Washington 6, D. C.

Panel-Board Partition System (AIA 35-H-6): describes new partition incorporating a single modular framing system to which plywood, hardwood or wallboard panels are attached by means of batten strips that snap into grooves in the studs; 16 pp.—Penn Metal Co., Inc., 40 Central St., Boston 9, Mass.

Spang Underfloor Duct: provides dimensioned detail drawings of standard and double-capacity systems and installation suggestions; 36 pp.—The National Supply Co., 2 Gateway Center, Pittsburgh 22, Pa.

pa&b pick of the month

"Manual of Gypsum Drywall Construction" is exactly what it says it is—a comprehensive outline of recommendations and specifications for drywall installation. Manual is the product of two years of preparation and editing by Gypsum Drywall Contractors International. The time was obviously well spent. Sections deal with lumber and framing, nails, application of wallboard, selection of joint system products, joint and nail head treatment, decoration of gypsum wallboard, electric radiant heating with two-ply gypsum wallboard, design data such as fire-resistance ratings and sound-transmission loss ratings and ASA specifications.—Gypsum Drywall Contractors International, 608 S. Hill St., Los Angeles 14, Calif.



Mineral Wool Insulation: descr performance standards based on stalled resistance in line with "all-weather comfort standard" ad ed by NMWA; 8 pp.—National Min Wool Association, Rockefeller Cen 1270 Sixth Ave., New York 20, N

Dylite Panels (AIA 19-K): descr modular sandwich panel with in core of expandable polystyrene w 16 study houses in varying styles a aptable to this type of construct 33 pp.—Koppers Co., Inc., Dylite P Plant, Plastics Division, Box 57, Ha per Station, Detroit 13, Mich.

Air Diffusion Equipment (AIA 30-J provides complete application a specification data on line of registe grills, dampers, etc.; 58 pp.—Wate loo Register Co., Inc., Box 72, Wate loo, Iowa.

Roof Sheathing of ⅜-in. Plywo describes series of loading tests ⅜-in. PlyScord with face grain para lel with framing; prepared by No R. Adams; 22 pp.—Douglas Fir Pl wood Association, Tacoma 2, Wa

Ceramic Veneer Grills: illustrates designs in drawings and photograp of installations in churches, publ buildings and residences; 8 pp.—Fe eral Seaboard Terra Cotta Corp., E. 40th St., New York 16, N. Y.

Porcelain Panels (AIA 15-M-1). ca logs 1960 line with detail drawi and distributor list; 12 pp.—David Enamel Products, Inc., 1104 E. Kib St., Lima, Ohio.

Buyer's Guide of Redwood Produ lists mills producing standard or sp cial CRA-trademarked redwood; pp.—California Redwood Associati 576 Sacramento St., San Francisco Calif.

Heating and Air Conditioning: gi brief rundown and basic ratings boilers, fans, blowers, air handl units and related products; 24 pp American-Standard Industrial D sion, Detroit 32, Mich.

New Light on Learning: illustra creative use of glass in schools; 4 —American-Saint Gobain Corp., Madison Ave., New York 22, N. Y

AITC Standards (AIA 19-B): prese standards for deflection of sa beams, 3 pp.; and heavy timber c struction definition, 2 pp.—Ameri Institute of Timber Construction, 1 K St. N.W., Washington 6, D. C.

Promotion of separate contracts lambasted by AGC

Reemphasizing its support of the single contract system as "necessary and beneficial to the public and the industry," the AGC last month accused promoters of separate contracts of using "misleading and sometimes mistaken information."

President John A. Volpe, directing his fire at a brochure published by the National Association of Plumbing Contractors which claims that separate contracts save owners money, said the advantages of the single contract system include centralized responsibility, lowest cost, completion on schedule and protection of the owner against loss from suits and claims.

He said the leadership of the NAPC "has consistently rejected cooperation with other industry organizations" and, instead, is unilaterally promoting separate contracts to the detriment of the entire construction industry.

The AGC also issued a point-by-point rebuttal of the claims made in the brochure. Volpe issued this statement:

"The single contract system of construction, the major force for cohesion and strength in America's huge and diversified construction industry, has recently come under attack from an industry group.

"With the publication of a brochure entitled 'Economy and Efficiency with Separate Mechanical Contracts,' the NAPC has, in effect, by taking action that tends to weaken the public image of construction as unified industry, aligned itself with the enemies of contract construction.

"This brochure is grossly misleading, inaccurate and overdrawn and presents a totally distorted picture of conditions within the construction industry.

"The AGC, which since its founding more than 40 years ago has advocated the use of the single contract system as being in the best interests of the public, has refuted the charges and claims made in the NAPC brochure.

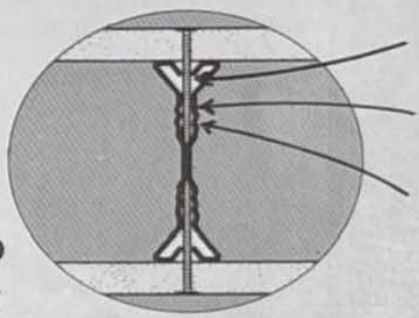
"The public knows from experience that the advantages to owners of awarding one general contract for construction to an experienced and competent general contractor include centralized responsibility; lowest cost; completion on schedule; exercise of creative management; assurance of quality according to plans and specifications; coordination of all construction operations for maximum efficiency; establishment of a uniform labor policy; correlation of safety measures; and protection of the owner against loss from suits and claims.

"It is unfortunate that such an attack on the single contract system should be made at this time and by a construction industry group. Because of intensifying efforts of industrial unions to encroach on traditional contract construction markets, it is more necessary than ever before that the construction industry be united.

"The NAPC, unlike the major groups representing mechanical specialty contractors, has chosen to remain outside the Council of Mechanical Specialty Contracting Industries. The AGC maintains a joint cooperative committee with the CMSCI and through it the industry seeks positive solutions to problems arising from general contractor-subcontractor relations.

"The work of this joint committee has been outstanding. Recently, it developed a procedure for the receipt

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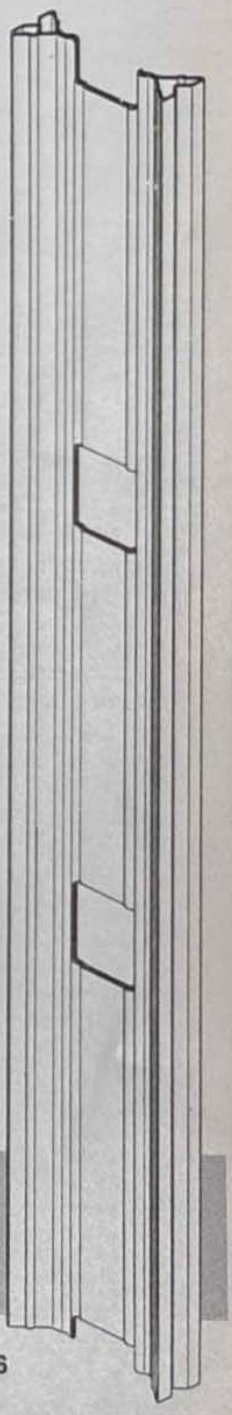
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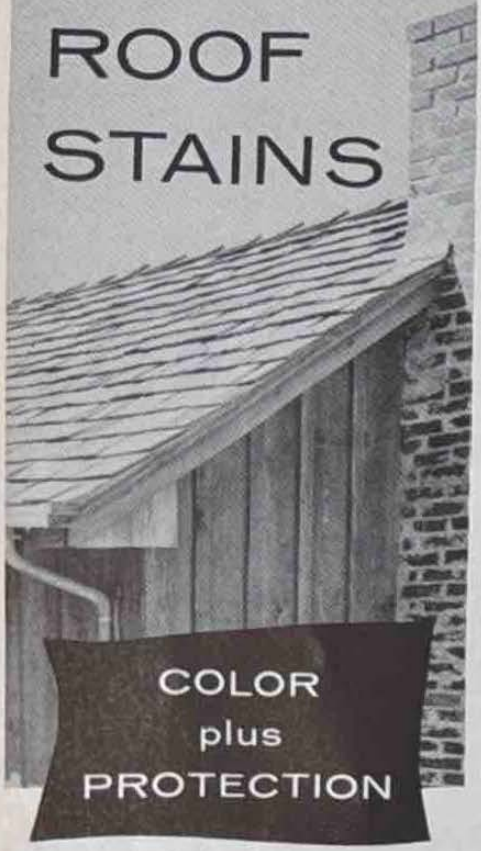
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and handling of subbids which it recommended to its parent organizations. The National Electrical Contractors Association has already approved the procedure. The Mechanical Contractors Association and the Sheet Metal and Air Conditioning Contractors National Association are expected to approve it at their conventions this month.

"The AGC at its recent convention recommended that its 127 autonomous chapters use the procedure in those areas where cooperation is available to make it effective and contingent on support of the single contract system by the local participating subcontractors.

"The NAPC rejected the subbid handling procedure, once again taking a position opposed by other contractors' associations who see the procedure as a step toward solving an old problem.

"The leadership of this segment of the mechanical specialty trades has consistently rejected cooperation with other industry organizations. Not once has it been willing to sit down with other construction industry associations and attempt to work out mutually acceptable solutions to industry problems. Instead, it has chosen to unilaterally promote the separate contract system.

"The AGC deplores the fact that this organization is willing to fly in the face of the rest of the construction industry and that it seeks to promote separate mechanical contracts through the use of misleading and sometimes mistaken information.

"The AGC continues to support and promote the single contract system, and it will continue to work for that intra-industry unity under the single contract system banner which alone is capable of creating a stronger, more cohesive industry that can better and more efficiently satisfy the construction needs of the nation."

Among the statements made in the brochure was that "the architect and engineer have fewer job headaches" under the separate contract system, to which the AGC replied:

> The experience of architects and engineers has been to the contrary—that with separate contracts they are called upon to perform a much greater amount of work and they expect to be paid for it.
>
> The AIA in its Standard Form of Agreement Between Architect and Owner (Document No. B-121), states:
>
> "The basic rate (for the architect's fee) applies to work let under a single contract. For any portions of the project let under separate contracts, on account of extra service thereby required, the rate shall be 4% greater and if substantially all the project is so let the higher rate shall apply to the entire project . . ."
>
> Nevertheless, for architects who think they might like to work as coordinator on a separate contract job, the AIA a special warning. The 1958 edition the "Handbook of Architectural Pr tice," prepared and published by AIA, states:
>
> "Under the separate contract syste the number and complexity of the arc tect's duties are such that a word warning is necessary to architects w think that they may like to work und that system. Any architect who is capable administrator and has his offi well organized for such work may a tempt it. It should be pointed out th his ability to screen out the unwort among separate contractors is no bet than among general contractors an since there are many more separate co tractors, the difficulty is multiplie many times.
>
> "Nor should the architect imagin that the additional percentage will b a source of large profit. He will fin that expense will be greatly increase and that his own burdens and respons bilities will be much greater than h might suppose. When liquidated dam ages for exceeding time limits are pro vided, the assessment may become diffi cult when there are a number of separ ate contracts.
>
> "Finally, if the separate contract sys tem is badly administered it will result in confusion, delay, annoyance, disap pointment to the owner and loss . . .

Construction industry unites to sell contract method

Construction by the contract metho is one great common product th both management and labor in t construction industry have to se according to William P. Scott J president of the Mechanical Contra tors Association of America.

Addressing the annual AGC co vention in San Francisco (see PA& for April '60), the Oakland contract contrasted the contract method "do-it-yourself" construction, "inclu ing that performed by big industri plants with their inexperienced pr duction workers."

Scott praised general contracto and mechanical specialty contra tors for their cooperative efforts promote the contract method and eliminate "unfair trade practic which plagued the industry."

"The objective of promoting th contract method has brought us to gether in the Construction Indust Joint Conference to discuss and de velop effective ways of selling ou services," he said. "Through adverti ing methods we have already achie ed gratifying results for your mem bers and ours."

The National Joint Cooperati Committee of the AGC and th Council of Mechanical Specialty Co tracting Industries, formed in 195 he continued, has resulted in th adoption of a recommended code fo ethical conduct for the entire con struction industry; a guide and chec list for subcontracts to remove som of the friction points in prime sub contractor relations; and a recon

mended procedure for receiving and handling subbids for the building construction industry.

Scott said that from a analysis of the jobs performed by his firm, it was concluded that "it was of greatest importance to our company's success to be under the direct control of a reliable general contractor, who would coordinate not only our work but that of the other subs and, what is more important, finish the job on time."

Bid depository center opened in San Diego

A bid deposit and distribution center serving the construction industry in San Diego County, Calif., has been established by the Construction Subcontractors Association of San Diego. Offices of the organization are at 3907 El Cajon Blvd. where the Allied Trust Fund Administration Service will act as bid custodian.

The Bid Depository of San Diego County may be used by any awarding authority without charge, but once the depository has been appointed for a specific job, the contract must go to the low acceptable bidder. Categories of work covered include electrical, plastering, plumbing, painting, roofing and work of other subcontractors and suppliers.

Operations are financed by a percentage levy from the low bidder. President and head of the new organization's board of governors is E. H. Larson. He explains that in other parts of the nation where similar bid depositions have been established, the result has been "lower construction costs, improved quality and better protection for owners, architects and builders."

Cement finishers' strike settled in Washington

A month-long strike of cement finishers in western Washington was settled in April when Mountain Pacific and Seattle chapters of the AGC signed a three-year agreement with Local 528. The package consisted of a 25-cent raise for the first year, 18 cents for the second and 17 cents for the third.

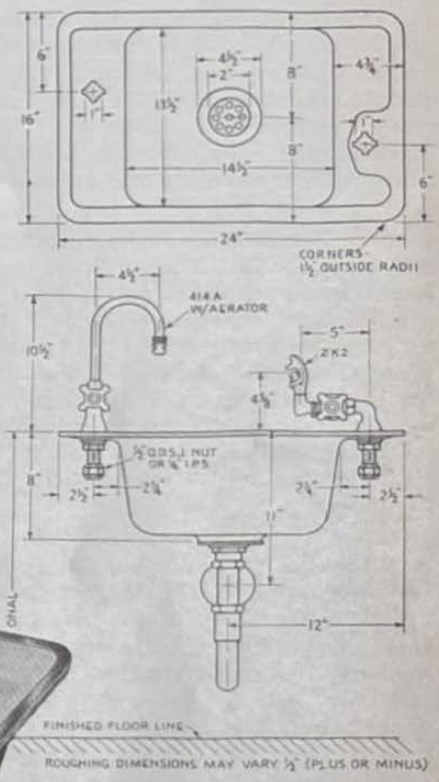
The union had demanded a 30-cent increase this year and 30 cents next year and certain fringe benefits which the contractors considered featherbedding. Among these were demands for double time during lunch hour if a cement mason worked just one minute past 12 o'clock and wage differentials for working off the ground, grinding and working in colored concrete. The union abandoned all these demands in accepting the wage increase and the AGC chapters agreed to drop their $596,000 suit against the union, at least so far as monetary damages are concerned.

BRIEFS

● **Colorado Springs Division, Associated Building Contractors of Colorado,** has elected Fred I. Fletemeyer of B. H. Baker, Inc., as president, succeeding Donald B. Downey who will serve as a member of the executive committee. Completing the slate are Cliff Lyon, vice president; Bruce Hughes, secretary; and Herman Walsky, treasurer.

● **Howard S. Wright Construction Co.,** Seattle, has elected Harlan S. Bixby as vice president in charge of engineering. Project engineer on the Norton Building, the Olympic Hotel addition and the Crown Zellerbach paper mill in Antioch, Calif., he will supervise all estimating and engineering activities for the firm.

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• **Evans Products Co.** has established a $1,500 graduate fellowship grant and a $750 undergraduate scholarship in forestry at Oregon State College, Corvallis. The awards, which become effective with the fall term this year, will be given annually for an initial period of five years.

• **Fibreboard Paper Products Corp.** has appointed Harry W. Hargrave as Rocky Mountain district sales manager for the gypsum division. He previously held the same post for the Intermountain office. A. P. Alesandri has been appointed as merchandising manager of roofing, gypsum and industrial insulations in the San Francisco headquarters office and John R. Hume has been named to a similar post for floor covering and paint.

• **The Mosaic Tile Co.** has promoted Arthur J. McNeil, Pacific Coast territorial manager since 1956, to vice president in charge of sales at the company's headquarters in Zanesville, Ohio; and James A. Falconer has been named president and general manager of two California subsidiary factories: Jordan Tile Manufacturing Co., Corona, and General Tile Co., El Segundo.

• **Ador Corp.**, Fullerton, Calif., has appointed Robert C. Baggott as national sales manager. He previously was vice president of marketing for Baskon Corp., Los Angeles.

• **Aluminum Company of America** has transferred William H. Derry from the Jackson, Mich., office to the Seattle district sales office where he will serve as assistant manager.

• **Hawaiian Cement Corp.**, Honolulu, has appointed Nathaniel R. Potter Jr. as sales manager. He previously was with Grace Bros., Ltd., contractors.

• **Kaiser Aluminum & Chemical Sales, Inc.**, has licensed King Anodizing, Burbank, Calif., and Fentron Industries, Inc., Seattle, to use its Kalcolor anodizing process for architectural aluminum.

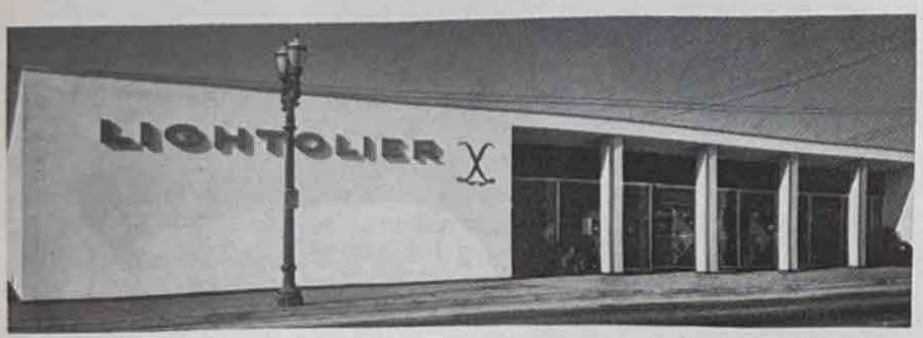
• **Pittsburgh Plate Glass Co.** has appointed Donald J. Hess to the newly created post of manager of industrial relations, Pacific Coast operations. He has been with the firm since 1946.

• **Chem Seal Corporation of America** has appointed Modern Materials, Inc., Los Angeles, as distributor for the deck coating materials line in Los Angeles and Orange counties. L. M. Scofield Co., Los Angeles, has been appointed distributor of the floor and wall coatings, sealants ond other products in the industrial line in San Bernardino, Riverside and Orange counties.

• **The General Tire & Rubber Co.** has appointed Berkheimer's Manufacturing Co. as distributor of the building materials division Bolta lines of vinyl wall and floor materials in Washington.

• **Victor Industries of California,** Chico, producer of church and school furniture, has purchased D.N.D. Enterprises, wood products manufacturer.

• **Progress Manufacturing Co.** has named Irving Beber western divisional operational manager. He has been associated with Marvin Electric Manufacturing Co., a subsidiary, the past six years. Progress also has opened warehouse operations in Honolulu.



WESTERN HEADQUARTERS AND SHOWROOM

for Lightolier, Inc., in Los Angeles is divided into four areas displaying contemporary and traditional lighting, architectural division's line for commercial and public structures and garden lighting set among plantings and alongside small pool. Costing $500,000, building was designed by Carl Petrilli with Neil Oppenheim as associate architect and interior designer.

• **A. M. Byers Co.** reports that Alb D. Sheere, Pacific Coast division ma ager, has retired after more than years service with the compa Sheere had headed the Pacific Co office since 1950. He is succeeded W. E. Weber, field service enginee the division the past five years.

• **Haws-Kramer Flush Valves** moved its office and factory ope tions from San Francisco to the Ha Drinking Faucet Co. home plant Berkeley.

• **Hillman Manufacturing Co.** installed aluminum extrusion equi ment at the Los Angeles plant of Acorn Aluminum Division and is n producing components for build furniture, electronic and other ind tries.

• **Formica Corp.** has promoted Rob H. Cottle from assistant to distri manager at Los Angeles, succeedi Glenn H. Taylor who has retired aft 26 years with the company.

• **Koppers Co., Inc.**, has begun pr duction of noncombustible lumb and plywood at its Everett, Was plant where wood is pressure treat in huge cylinders with chemicals d veloped by the firm.

• **Airtemp Division of Chrysler Co** has named two new distributors: A Conditioning, Inc., Salt Lake Ci and Refrigerative Supply, Inc., Por land.

• **Worley & Co.**, a division of Ele Products Co. manufacturing met lockers, has moved from Pico Rive to a new plant in Whittier, Calif.

• **U.S. Stramit Corp.** plans to co struct a manufacturing plant in Wal Walla, Wash., for the production insulating board from wheat straw a process developed in Sweden.

• **The Dow Chemical Co.** has com pleted a new plant for productio of polyethylene film in Fresno, Cali Manufacturing formerly handled b a subsidiary in Los Angeles has bee transferred to the Fresno plant whic will serve the entire West.

ASSOCIATIONS

• **Woodwork Institute of Californ** has elected Elmer Vivian, head General Veneer Manufacturing Co Los Angeles, as 1960 president. Othe new officers are Owen Miton, Moun tain View, first vice president; Re

Taylor, Los Angeles, second vice president; and Lester Sterett, Fresno, treasurer. More than 450 members attended the group's annual convention in Los Angeles this spring.

• **Vermiculite Institute** elected C. H. Wendel of Los Angeles and L. K. Irvine of Salt Lake City to the board of directors at its recent annual meeting in Chandler, Ariz. L. G. McDiarmaid, of Vancouver, B.C., was elected president.

• **Western Red Cedar Lumber Association** has appointed Robert V. Denby to the newly created post of public relations manager, with headquarters in Seattle. He formerly was with Hixon & Jorgensen, Inc., serving as associate producer and writer of "Success Story," a live, weekly television series produced in the Pacific Northwest.

COMMENT and OPINION

"A dream home with all of the ultra-modern conveniences and none of the traditional beauty and grace would be an electronic nightmare. We know how to build more practical homes than we do, but no one would care to live in them. Women want labor-saving devices, but they won't sacrifice traditional beauty to get them."—William M. Stuart, president of Martin-Senour Co. in an address before the Rocky Mountain Council of the Painting and Decorating Contractors of America at Denver.

"Color, properly understood and used, can be an important selling aid, but it can also create problems if improperly used. Color must be considered not only for its immediate effect but for its acceptability over long periods of time."—LeRoy Klein, vice president of Caloric Appliance Corp., in a series of talks before the Honolulu Chapter of Producers' Council, Inc., Home Builders Association of Hawaii and Honolulu Gas Co.

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Portland: Win Romtvedt Holmes, 507 McKay Bldg., CApitol 3-1229.

Salt Lake City: Peggy Hansen, 3790 Lois Lane, CRestwood 7-4606.

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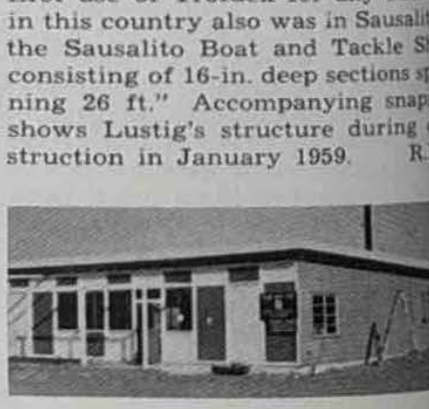
It is always a delight to come up an architect-designed structure, th type of which is generally not ass ciated with such professional service And the joy is even greater when th project turns out to be well abo average designwise. To illustrat what we mean, next month we'll le off with a pumping plant built for municipal utility district in Califo nia.

When an architect is commissioned to plan a house for an avid collecto the end result is somewhat disastro more likely than not. Either th former gets carried away in a sear for an appropriate background fo the collection or the latter gets carri away in the decorating process. Her again we've hit upon another note worthy exception to the rule and we'll show it in July. The architect has designed a suitable structure t house and exhibit a collection o Northwest Indian art for clients wh have contributed to its success.

More and more we are finding our desk flooded with useful bits of in formation about product development and application which do not lend themselves to methods articles an consequently get lost in the shuffle They may refer to a new idea, an im portant test result, a prediction, a trend. In any event, we'll gather th more significant pieces into a yet un named department, beginning wit the next issue.

the firstest fi

In the "Methods and Materials" se tion of PA&B for April, we refer to a factory and showcase in Sau lito, Calif., designed by Marquis Stoller, as the first industrial use Trofdek in the U.S. To which arc tect Robert L. Lustig of Berkeley plies: "As a matter of interest, first use of Trofdek for any build in this country also was in Sausali the Sausalito Boat and Tackle Sh consisting of 16-in. deep sections sp ning 26 ft." Accompanying snap shows Lustig's structure during c struction in January 1959. R.



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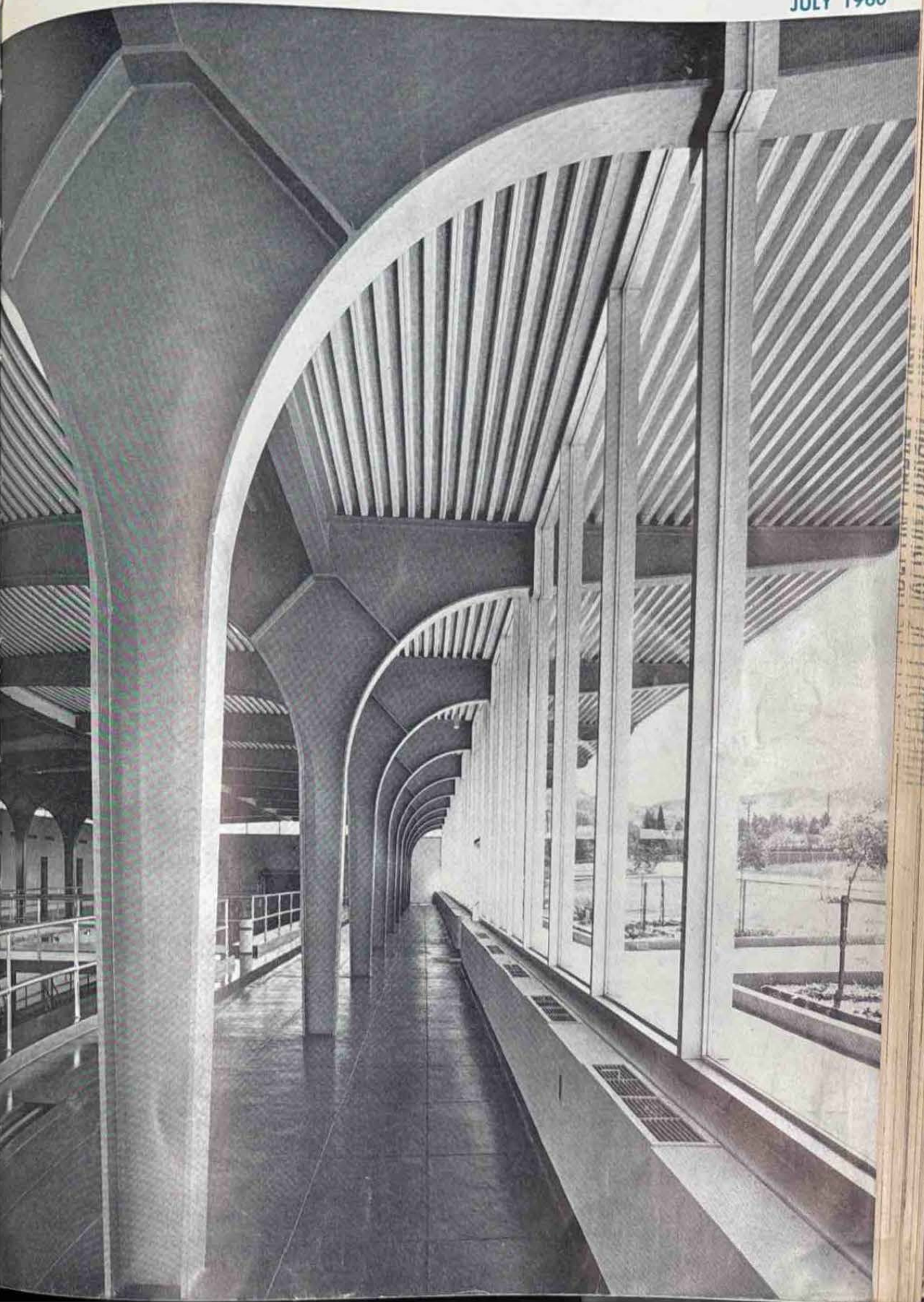
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National Bank of Detroit
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California makes big dent in May total

Building permit volume for the 13 western states in May totals $332,637,610, a drop of $37.6 million from the same period in 1959. While a number of states showed good gains for the month, a decrease of $45.7 million in California made a big dent in the overall total. States recording increases for May compared to last year are Alaska, up $5.7 million; Oregon, $5.4 million; Montana, $1.5 million; Wyoming, $1.1 million; New Mexico, $837,000; and Hawaii, $737,000. In addition to California, states reporting decreases are Colorado, down $2.3 million; Arizona, $2 million; Washington, $1.4 million; Utah, $869,000; Idaho, $597,000; and Nevada, $22,000.

15 leading agencies

Among the 15 leading agencies for May, nine are in California, two each in Washington and Arizona and one each in Oregon and Hawaii.

	May 1960	May 1959
1. Los Angeles	$40,076,138	$71,083,701
2. Los Angeles County	20,284,044	26,731,850
3. San Diego	12,447,356	19,648,240
4. Honolulu	13,118,832	11,545,325
5. San Jose	11,919,831	13,471,853
6. Orange County	10,850,732	8,838,439
7. San Diego County	9,666,800	12,784,800
8. Portland	9,491,385	4,334,705
9. Seattle	9,277,612	8,866,569
10. King County, Wash.	9,017,648	12,899,400
11. San Francisco	8,959,443	6,815,141
12. Maricopa County	8,450,324	10,962,768
13. Phoenix	8,229,051	7,713,007
14. Long Beach	8,051,915	6,244,975
15. Sacramento County	7,986,482	13,204,725

On the brighter side, May building starts picked up $14.8 million in volume over the preceding month. This is an areawide increase spread over 11 states and ranging from $200,000 in Wyoming to $6.1 million in Alaska and $6.2 million in Washington. Only Nevada and Hawaii totals are below April.

Five-month total is $1.5 billion

The five-month total stands at a healthy $1,512,397,554, but not good enough to top the $1,580,818,682 for the first five months of 1959. On a statewide basis seven states are running ahead of last year: Hawaii by $30 million; Alaska, $6.9 million; Nevada, $5.6 million; Oregon, $2.8 million; Wyoming, $2.5 million; Montana, $1 million; and Arizona, $650,000. State five-month totals behind last year are California, down $63.7 million; Washington, $27.2 million; Colorado, $15.4 million; New Mexico, $6.2 million; Utah, $3.1 million; and Idaho, $2.6 million.

Analysis of selected areas—May

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$15,847,552	$2,388,693	*$1,159,710
Orange County	9,587,372	694,361	260,399
Sacramento County	5,174,708	1,200,503	1,421,187
Las Vegas	980,438	628,935	
Denver	2,964,200	1,519,085	59,065
Portland	4,847,400	471,275	380,000
Seattle	2,635,138	5,224,802	1,272,000
Honolulu	7,958,480	2,204,692	2,486,276

*Does not include $1,247,079 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for May, 1960

CALIFORNIA	May 1960	May 1959
Alameda County	$ 2,341,950	$ 1,834,750
Anaheim	6,083,918	5,534,666
Bakersfield	897,172	912,645
Burbank	738,029	1,092,535
Contra Costa County	4,133,282	5,470,473
Fresno	1,630,670	2,629,524
Fullerton	2,025,470	1,307,568
Glendale	1,121,141	2,378,716
Inglewood	1,363,712	882,865
Long Beach	8,051,915	6,244,975
Los Angeles	40,076,138	71,083,701
Los Angeles County	20,284,044	26,731,850
Oakland	4,456,272	4,615,572
Ontario	1,045,976	606,035
Orange County	10,850,732	8,838,439
Palo Alto	2,370,711	2,922,046
Pasadena	1,661,776	2,196,643
Pomona	851,263	2,224,181
Richmond	938,950	1,393,352
Riverside	1,130,720	1,967,110
Sacramento	6,079,798	5,005,816
Sacramento County	7,986,482	13,204,725
San Bernardino	1,837,745	1,424,861
San Bernardino County	5,210,584	
San Diego	12,447,356	19,648,240
San Diego County	9,666,800	12,784,800
San Francisco	8,959,443	6,815,141
San Jose	11,919,831	13,471,853
San Mateo	1,020,642	1,119,067
San Mateo County	4,575,767	2,203,207
Santa Ana	6,299,420	3,391,442
Santa Monica	906,025	2,862,921
Stockton	983,414	771,425
Sunnyvale	592,796	2,677,997
Torrance	3,017,869	3,264,600
West Covina	990,800	735,495
TOTAL	$194,548,613	$240,249,236

OREGON	May 1960	May 1959
Albany	$ 213,340	$ 250,870
Astoria	229,990	40,457
Baker	43,832	118,550
Bend	190,289	156,250
Coos Bay	94,724	88,500
Corvallis	211,565	376,150
Eugene	2,133,235	595,565
Grants Pass	289,500	39,150
Gresham	94,250	105,000
Hillsboro	172,800	231,612
Klamath Falls	237,190	405,684
LaGrande	53,153	92,351
Lane County	1,311,014	1,109,155
Medford	389,778	559,675
Multnomah County	2,166,409	3,769,670
North Bend	83,741	75,698
Oregon City	367,125	71,503
Portland	9,491,385	4,324,705
Roseburg	387,580	82,313
Salem	443,507	678,185
Springfield	101,831	105,652
The Dalles	139,803	97,000
TOTAL	$ 18,836,041	$ 13,373,695

WASHINGTON	May 1960	May 1959
Aberdeen	$ 95,632	$ 104,344
Anacortes	48,944	45,155
Auburn	789,800	453,800
Bellingham	405,427	317,776
Bremerton	98,590	123,930
Centralia	139,059	206,865
Chehalis	20,895	119,800
Ellensburg	78,344	81,500
Ephrata	8,542	16,710
Everett	740,940	448,548
Kelso	24,514	8,800
Kennewick	261,270	100,850
King County	9,017,648	12,899,400
Kirkland	68,315	39,900
Longview	525,743	754,049
Moses Lake	58,385	91,599
Olympia	208,552	246,150
Pasco	77,015	256,955
Pierce County	2,025,062	2,887,842
Port Angeles	10,995	94,621
Puyallup	169,150	159,540
Seattle	9,277,612	8,866,569
Spokane	4,834,506	1,811,928
Spokane County	3,097,767	2,721,479
Tacoma	1,290,712	2,180,487
Vancouver	810,055	609,379
Walla Walla	327,293	364,811
Wenatchee	251,591	138,540
Yakima	562,714	575,544
TOTAL	$ 35,325,072	$ 36,726,871

ALASKA	May 1960	May 1959
Anchorage	$ 6,587,084	$ 998,157
Fairbanks		
Juneau	15,500	95,470
Ketchikan	941,449	29,500
TOTAL	$ 7,954,433	$ 2,251,097

IDAHO	May 1960	May 1959
Boise	$ 384,885	$ 475,961
Caldwell	23,020	204,025
Coeur d'Alene	105,721	33,760
Idaho Falls	276,203	1,559,137
Jerome	82,500	23,950
Lewiston	102,137	94,785
Nampa	139,852	193,735
Payette	39,300	70,325
Pocatello	1,032,205	331,765
Sandpoint	122,900	75,700
St. Maries	359,850	23,000
Twin Falls	117,350	266,550
TOTAL	$ 2,785,923	$ 3,383,793

MONTANA	May 1960	May 1959
Billings	$ 847,800	$ 755,200
Bozeman	413,550	125,440
Butte	87,900	50,121
Glasgow	30,300	192,000
Glendive	67,200	68,900
Great Falls	2,188,817	903,018
Helena	261,900	769,300
Kalispell	87,950	31,200
Lewistown	50,250	75,474
Livingston	12,800	27,900
Miles City	740,995	247,755
Missoula	248,244	221,100
TOTAL	$ 5,037,706	$ 3,467,408

WYOMING	May 1960	May 1959
Casper	$ 1,283,760	$ 749,820
Cheyenne	1,141,937	574,010
Sheridan	170,844	161,405
TOTAL	$ 2,596,561	$ 1,485,235

COLORADO	May 1960	May 1959
Aurora	$ 842,512	$ 969,894
Boulder	1,295,389	695,486
Denver	6,499,015	9,926,160
Englewood	775,325	964,131
Fort Collins	950,645	647,604
Grand Junction	109,695	159,657
Greeley	953,732	1,082,655
Pueblo	887,940	352,470
Trinidad	30,720	18,245
TOTAL	$ 12,445,173	$ 14,816,302

UTAH	May 1960	May 1959
Logan	$ 251,300	$ 543,300
Murray	307,935	574,850
Ogden	1,019,430	1,556,304
Provo	582,500	1,073,950
Salt Lake City	2,645,692	1,927,322
TOTAL	$ 4,806,857	$ 5,676,526

NEVADA	May 1960	May 1959
Elko	$ 112,778	$ 10,544
Las Vegas	1,609,373	3,306,700
Reno	3,017,312	1,414,760
Sparks	63,238	93,546
TOTAL	$ 4,802,701	$ 4,825,550

ARIZONA	May 1960	May 1959
Douglas	$ 206,088	$ 63,461
Flagstaff	228,519	203,075
Glendale	95,575	68,074
Maricopa County	8,450,324	10,962,768
Mesa	1,333,588	968,328
Phoenix	8,229,051	7,713,007
Tucson	3,034,336	3,997,463
Yuma	354,320	39,830
TOTAL	$ 21,931,801	$ 24,016,006

NEW MEXICO	May 1960	May 1959
Albuquerque	4,296,355	4,961,248
Carlsbad	201,700	168,665
Clovis	255,556	502,053
Gallup	516,164	355,856
Hobbs	1,072,409	326,430
Las Cruces	400,000	547,000
Roswell	885,075	
Santa Fe	298,860	227,462
TOTAL	$ 7,926,119	$ 7,088,714

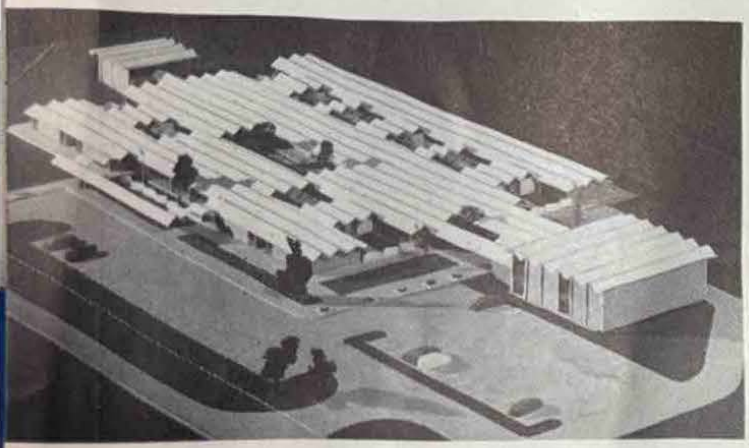
HAWAII	May 1960	May 1959
Hawaii County	$ 277,506	$ 1,151,437
Honolulu (city-county)	13,118,832	11,545,325
Maui County	244,272	206,149
TOTAL	$ 13,640,610	$ 12,902,911
GRAND TOTAL	$332,637,610	$370,263,344

PROJECT PREVIEW



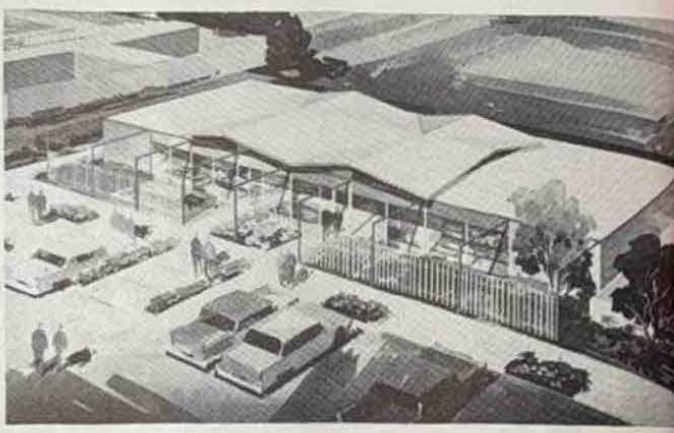
15-STORY OFFICE BUILDING

to be developed by Wilshire-Mattei Corp. in Los Angeles will mark notable departure from customary Wilshire Boulevard look. Exterior wall surfacing of lightweight precast concrete panels has been designed especially for $7 million structure by Swiss architect Gerard Kupfer. To be known as Wilshire-La Jolla Building, it will include 200,000 sq. ft. of office space, bank on first floor and luxury terrace restaurant on second. Five-level substreet parking area will accommodate 400 cars. Architects-engineers: Steven M. Heller and Rochlin & Baran & Associates.



COVINGTON ELEMENTARY SCHOOL

to be built in Kent, Wash., is planned with clusters of four classrooms around core activity room and toilet facilities, with access by covered walkways. Clusters are grouped around series of eight interior courts and installation of landscaping is included in $553,600 contract. Roof panels of stressed skin plywood panels form series of small gables which permit elimination of all beams and girders. Architects: Waldron & Dietz; landscape architects: Eckbo, Dean & Williams.

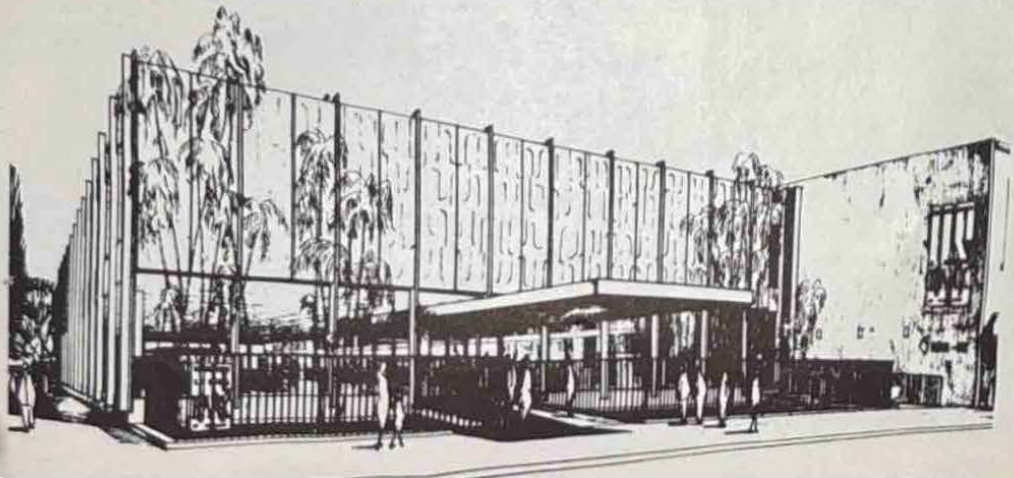


WEST HOLLYWOOD PARK LIBRARY

being built for Los Angeles County will incorporate ornamental garden screens, terrace reading rooms and folded plate roof. Costing $125,000 and comprising 5,067 sq. ft., building will have uninterrupted side walls and facade end sections of salmon colored, rug-faced brick. Centered double walkway through garden and screen arrangement will connect library entrances with large parking area. Structure is first of community's three-phase building program. Architect: Edward H. Fickett.

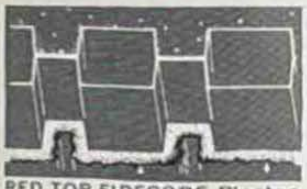
BANK BUILDING

now under construction in downtown Eugene for United States National Bank of Portland will be highlighted by precast concrete sculptural panels, work of designer James Bartell. Two-story concrete structure with full basement will cost $368,000. Architects: Wilmsen & Endicott; landscape architect: William Teufel.

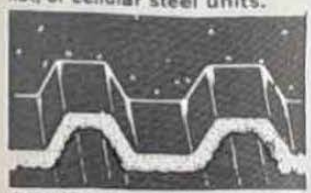


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DEMOLITION—and construction not far behind.

Century 21 Exposition gets off ground in Seattle

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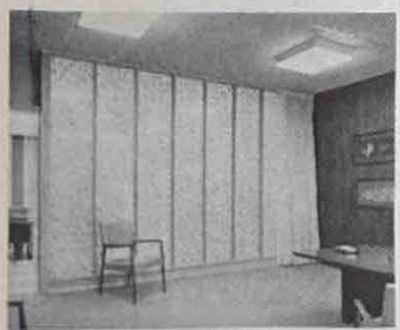
HEADQUARTERS OF CENTURY 21 STAFF

An existing two-story insurance building remodeled by Tucker & Shields houses the general offices of Century 21 Corp. on the western extremity of the exposition grounds. Exterior simply got a new coat of paint—blue, the show's official color. Interior has been tastefully dressed up on a low budget.

Art Hupy photos



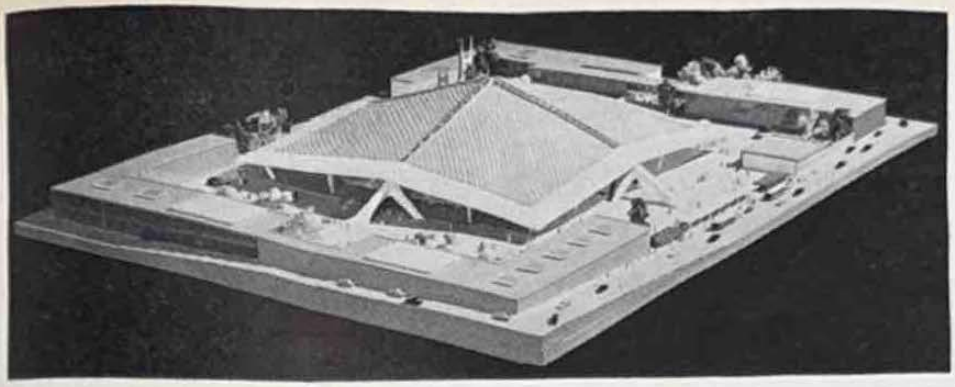
CONFERENCE ROOM has end walls of cork, fourth of walnut—all with shelf brackets for display purposes. Architects collaborated with Irene McGowan on lighting fixtures.



HONEYCOMB PLASTIC SCREEN executed in three shades of blue serves as divider between general and private offices.

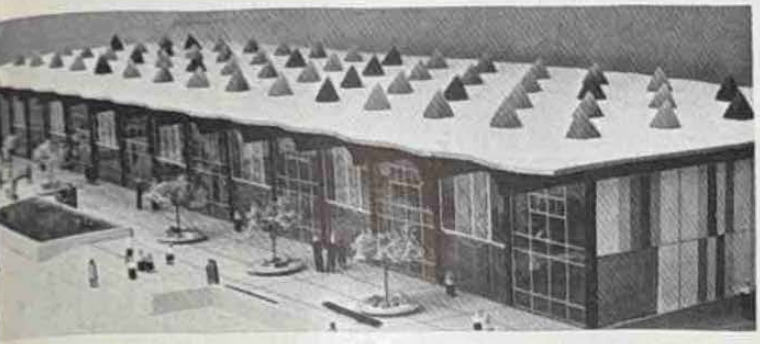


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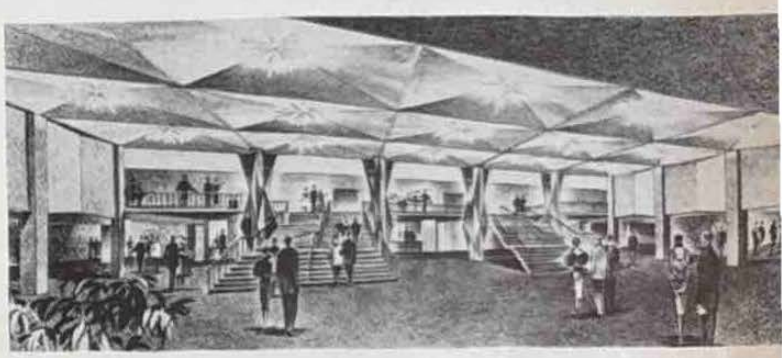




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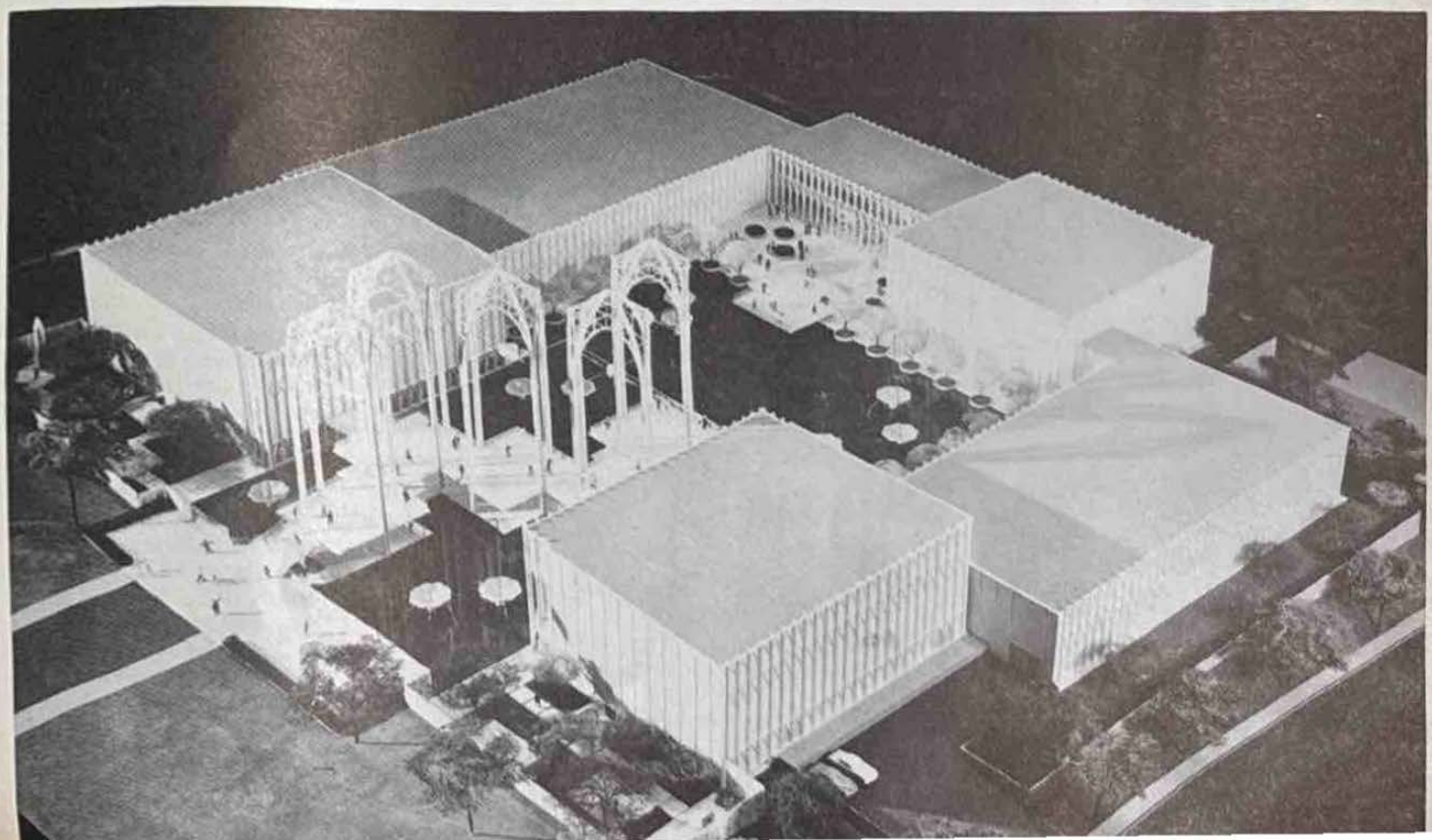


WORLD OF COMMERCE AND INDUSTRY'S first unit will be highlighted by rows of illuminated pyramids atop building. This segment involves 20,000 sq. ft. of covered space—70 ft. deep, 277 ft. long and 24 ft. high—estimated to cost $175,000. Architect: Robert P. Price.



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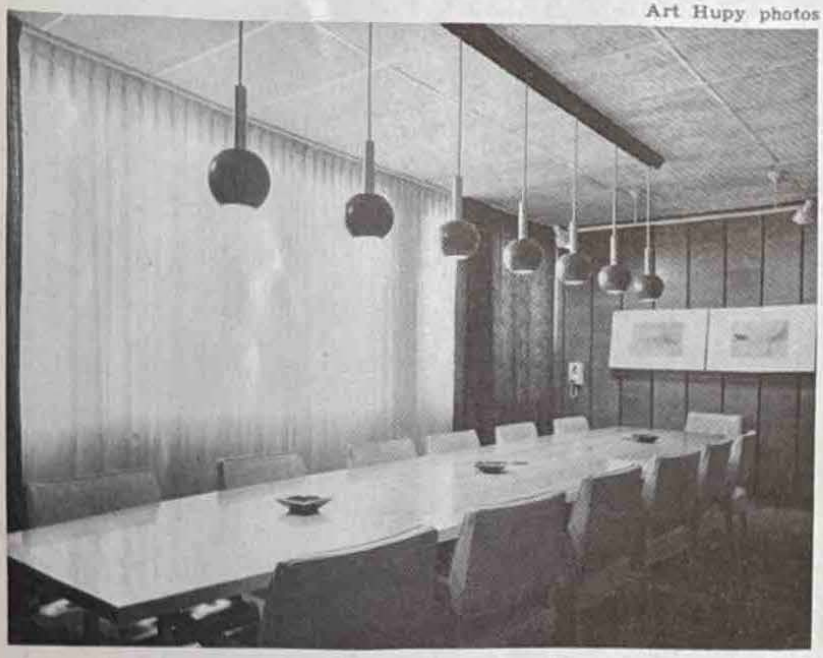
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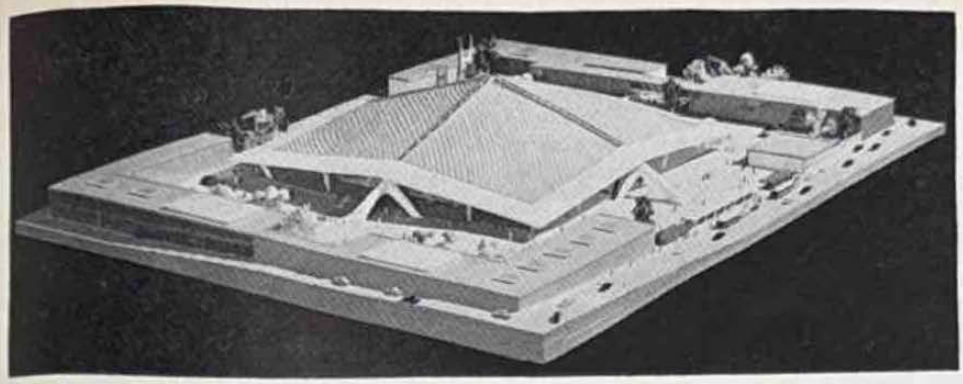
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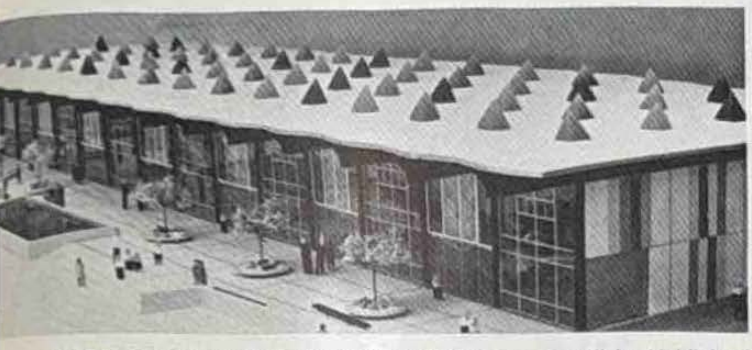


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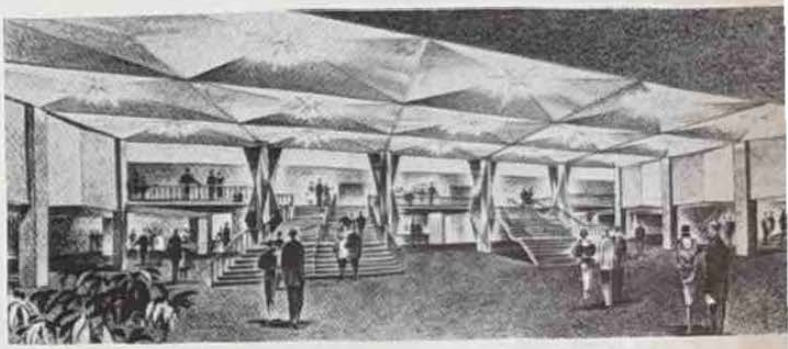




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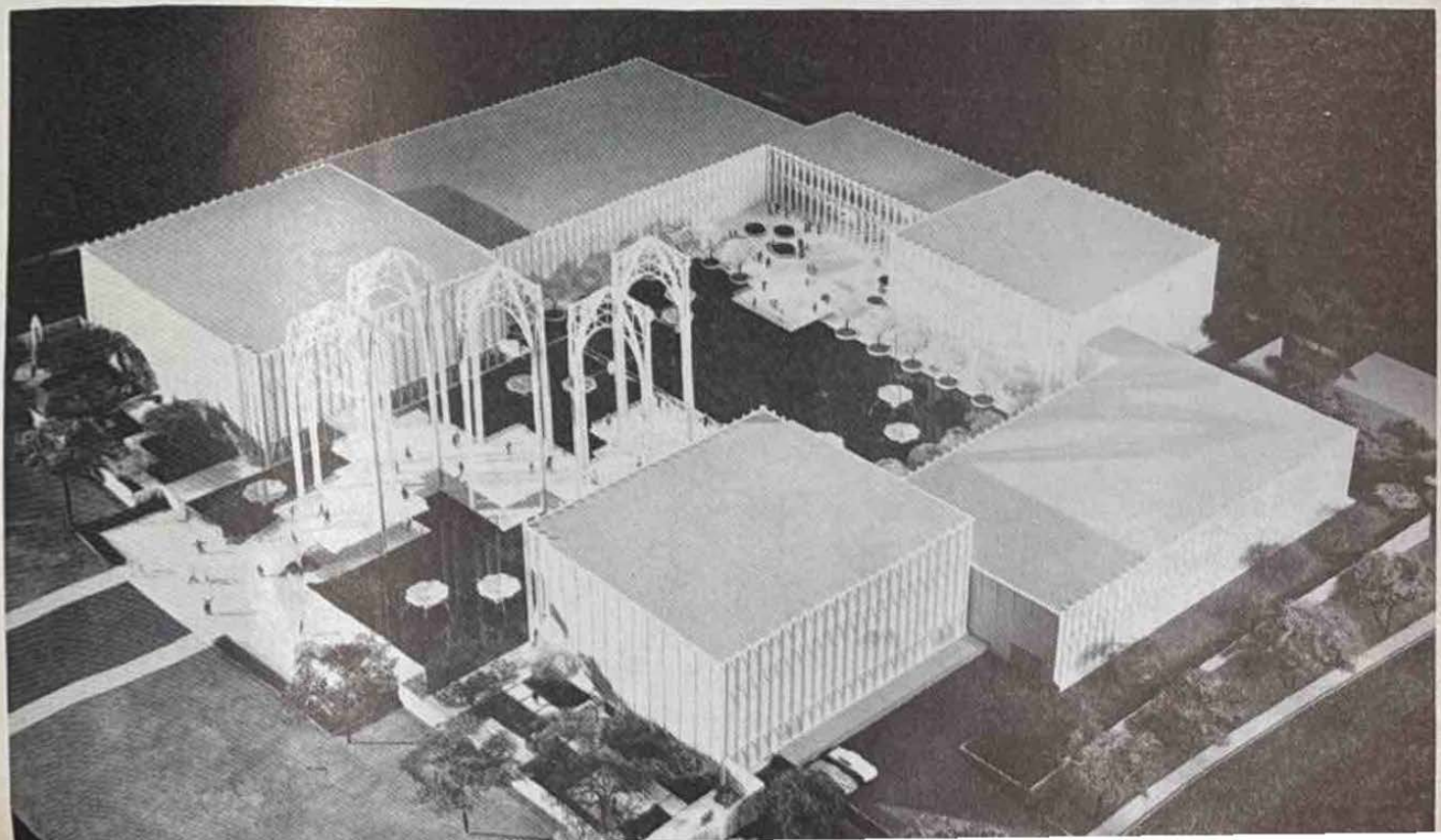


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ACTION sessions stress need for coordinated planning of urban transportation

Keynoter for ACTION's meeting in San Francisco June 6 fulfilled his function by hitting the theme politicians, engineers, architects and city planners who attended seem to have uppermost in their minds: that coordinated planning of all facets of urban life is needed if the problems of today and tomorrow are to be solved. And this planning must be undertaken quickly; there has been perhaps already too much discussion and not enough action.

Robert B. Bradford, California director of public works, speaking on "Urban Transportation," put it this way: "We face two basic problems. First, we must run fast enough to keep abreast of present demands for traffic facilities; and second, we must have an adequate concept and plan of urban areas of the future."

Bradford said highway engineers were far out in front, because of circumstances, of other specialists in the first category.

"Under the second category, no single specialist can be out in front. All of them must pool their knowledge and ability. The highway engineer, the city planner, the transit specialists must team up so that we can arrive, on purpose, at our goal of an efficient and livable urban community. I doubt very much if we should ever arrive there by accident."

Bradford advocated the establishment of some governmental level which can oversee the complete urban planning that is needed. He added that "piecemeal planning and patchwork government are not adequate for the great metropolitan problems ahead."

The keynote speaker emphasized there is too much of the familiar attitude toward planning and transportation systems which says, in effect: "We are in favor of a coordinated, areawide attack on this problem, but leave our agency out."

Are highways happy ways?

The remainder of the morning session dealt in specifics on the overall topic for the ACTION meeting, "Efficient Urban Transportation in the American City."

J. P. Sinclair, assistant highway engineer, District IV, California, said he and other highway engineers "are in complete agreement that highways cannot satisfy the entire need for movement of people and goods, particularly in the peak hours when large groups of people are commuting to and from work. The highway system is but one important segment of the overall transportation picture."

Sinclair described in some detail the work that has already been done in developing California's freeways, noting among other things the state's master plan and the study of needs of cities. He then said that "the average American places great importance on the factor of mobility."

Freeway route criteria

In rural areas, Sinclair pointed out, the placement of roads and freeways is not terribly important. But in urban areas, freeway location is complicated by man-made controls and city planning commissions. He added that while it is felt by some that freeway locations have not always reflected proper consideration for city planning, sometimes highway planning must precede city planning.

Sinclair explained the three criteria which the division of highways uses in establishing freeway routes. These are: the route must be located so as to provide adequate traffic service; it should be located so as to cause a minimum of disruption to existing and planned improvements; the cost of the facility must be such as to be economically sound.

In conclusion, Sinclair stated the location of freeways is done through cooperation, when possible, with the division of highways and local government.

Rapid transit vs. auto

Adrian J. Falk, president of the San Francisco Bay Area Rapid Transit District, defined in his speech on "Rapid Transit for the Bay Area" the relationship between rapid transit and the automobile. He said rapid transit must be designed primarily to accommodate the "great mass of commuters whose twice-a-day trips create the most critical congestion. With rapid transit providing accommodations for the peak travel hours, it is then possible to design freeways and parking facilities to accommodate those who must drive because they use their cars in their work."

Falk later compared rapid transit with freeways, noting the many lanes of traffic that would be required to handle the same number of persons traveling in autos or buses who are expected to ride rapid transit, described some of the plans developed for San Francisco's Bay area and then closed with an appeal for new ideas on financing rapid transit.

"If you can contribute even one new idea in this area of financing, you will have made a lasting contribution toward the solution of the nation's congestion problem," he added.

To complete the general rundown of transportation conditions in the Bay area, John E. Sullivan, chairman of the Parking Authority for San Francisco, said the 11-year-old body has met with more than "modest success" in its attempt to solve the city's parking problems.

He noted the authority has provided 100% more off-street parking during that period while the demand has risen just 60%, that they strive to turn over garages and lots to private enterprise when practical and that they have already established in courts the right of such an authority to construct and maintain such facilities when necessary.

Time for coordinated authority

The ACTION sessions continued through the noon hour with a luncheon program presided over by Edgar Kaiser, president of Kaiser Industries Corp. and one of the leading figures in the attempted establishment of a Bay Area Authority which has as its purpose the coordination and planning of transportation of all forms for the entire area.

In his introductory remarks, Kaiser said we need a sense of urgency in trying to solve the problems of today and tomorrow.

"I am convinced," he stated, "that the four million people of the Bay area do want coordinated transportation systems and that they are not suspicious of each other. But a few persons strategically placed in local governments have been opposing the Bay Area Authority idea which is intended to provide coordination. These persons seem not to be capable of seeing beyond the boundaries of their own little areas," he declared.

San Francisco Mayor George Christopher called for action in solving the problems facing cities today. He noted that the Bay area has already lost a bridge or two because the studies and discussions had continued so long construction costs had risen to the point where it was impractical to build the bridges. He warned that the same thing can be true of rapid transit for any city. While planning and some discussion is absolutely necessary, he again stated that it can be carried too far.

Main speaker at the luncheon, U. S. Sen. Alan Bible of Nevada, pointed out that complete and efficient planning for transportation to serve metropolitan areas is very important,

but then cautioned these areas against striving for something too ideal. He quoted as a good example of what can be done the case of Philadelphia where the city was able to utilize existing rights-of-way and rail lines for rapid transit system that, while not ideal, proved economically sound and therefore operational.

During the afternoon sessions discussions turned toward a little more personalized approach with authorities, representing every form of transportation, serving as a panel of experts. These experts first gave short talks about their own types of transportation and how they could serve cities and then answered questions from the floor. And through it all prevailed the one theme of the need for complete and coordinated planning plus the need for quick action.

The panelists: Roy W. Johnson, chairman of the board, ACTION, presiding; George Anderson, executive vice president, American Transit Association; Robert A. Bailey, chief engineer, Lockheed Aircraft Corp.; Oscar L. Dunn, general manager, motor and generator division, General Electric Co.; Patrick Healy Jr., executive director, American Municipal Association; Robert B. Mitchell, city planning department, University of Pennsylvania; Walter W. Patchel, vice president, Pennsylvania Railroad Co.; Thomas R. Reid, director of the office of civic affairs, Ford Motor Co.

Also on the panel were special consultants Martin Meyerson, director of the Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, and Frederick Gutheim, president of the Washington Center for Metropolitan Studies.

Housing starts may gain in second half of '60

A prediction that housing starts would pick up during the last six months of 1960 was made by U. S. Housing Administrator Norman P. Mason in a recent speech before the National Lumber Manufacturers Association in San Francisco.

Mason believes that in the last six months of 1960 America will produce more housing units than it did in the same six months of 1959 and will spend more dollars.

However, he pointed out that buyers this year are more selective. "Builders are going to have to study their markets closely and they will have to merchandise what they build."

"Manufacturers of lumber are going to find shifts in their markets," he added. "You will see some new trends. You will need to do something about this if you are to hold your present volume." Mason particularly referred to the increase in construction of multiunit rental housing as compared to single family residences since the former type of construction usually uses less lumber.

Commenting on the change in the money market, Mason said there has been a definite thaw in the home mortgage market. Lenders are returning to the market and net savings inflow at savings and loan associations is up.

"As money becomes more and more available, the prospects of the building industry will brighten progressively," Mason said. "It will mean better markets for you, but you won't get the most out of them unless you work at it."

During the conference the National Wood Promotion Commission endorsed a stepped-up promotion program costing $2 million. The program would include national advertising, merchandising and technical promotion. It must be approved by the 16 regional associations comprising NLMA.

Corydon Wagner Sr. of Tacoma, a former NLMA president will head the committee on lumber standards.



San Diego AIA gives three top awards for design

In citing both completed and design stage projects, 12 in all plus four special mentions, the jury for the 1960 Honor Awards program of the San Diego Chapter, AIA, suggested that "perhaps more attention could be given to your year-round mild climate which would enable you to adopt a more open kind of planning.

"Many of the submissions were fresh in approach and final solution," the report of the five-man jury continued. "Some were sterile and others were static, but almost all were at least the beginning of a good thing, hopefully seeking the perfection we all desire but seldom attain."

Awards of Excellence went to three buildings. (Photos will be shown in PA&B next month.) Only completed projects were eligible for this distinction and for the Award of Honor. The jurors, who reviewed 94 entries, consisted of three architects—chairman Joseph Esherick of San Francisco, Robert Alexander of Los Angeles and Paul Hayden Kirk of Seattle—and two laymen—Donald Hord of San Diego, sculptor who received the AIA Gold Medal in 1954, and William G. Quinn of Laguna, Southern California editor of Pacific Architect & Builder. The winners:

Awards of Excellence: Martin L. Gleich Residence — Henry Hester, architect; Martin L. Gleich, contractor; Homer Delawie Residence—Homer Delawie, architect; Design Center, interiors; Bach Construction Co., contractor; Western Lumber Co. Office Building—Johnson & Anderson, architect; C. A. Larsen Construction Co., contractor.

Award of Honor: Harold G. Sadler Residence—Harold G. Sadler, architect.

Awards of Merit: Apartment House (completed) for Col. Irving Salomon —Henry Hester, architect; Mabie & Mintz, contractors; Carlton Hills Lutheran Church (under construction)—Robert E. Des Lauriers, architect; Richard Bradshaw, structural engineer; K & N Construction Co., contractor; Fire Station for the City of San Diego, Tucker, Sadler & Bennett, architects; Dr. Robert J. Orr Residence, Deems-Martin Associates, architects; Robert N. Carter, landscape architect; K & N Structural Concrete Co., Contractor; General Hospital for San Diego County—Paderewski, Mitchell & Dean and Wulff & Fifield, architects; E. L. Freeland, structural engineer; El Cortez Convention Facility—Deems-Martin Associates.

Special Award: to two City of San Diego projects; Regional Center Study—Frank L. Hope & Associates, architects; Children's Zoo—Ruocco & Delawie, architects; Jeffrey Lindsay, geodesic dome design and construction; Callahan Bros., contractors.

Historical Mention: Cabrillo Bridge and Hotel del Coronado.

School building clinic set

"Architecture and the Newer Education Media" will be the theme of a a school building clinic co-sponsored by Washington State University and the Washington State Board of Education at Pullman July 18-19.

Conference will be highlighted by architect John Lyon Reid of San Francisco; Dr. Amo DeBernardis, assistant superintendent of Portland; and Dr. James J. McPherson, past president of the National Audio-Visual Association.

Gallion resigns deanship at Southern California

Arthur B. Gallion has resigned as dean of the University of Southern California's School of Architecture, effective July 1, to join Bartholomew & Associates, city planners-engineers in Honolulu. No successor had been named at press time.



GALLION

Becoming dean in 1945, Gallion had maintained a private practice in the Oakland-Berkeley area from 1936-38 and then held posts as regional project planner for the U.S. Housing Authority in San Francisco and director for development for the Federal Public Housing Authority in California, Arizona, Nevada and Hawaii.

He was elected to fellowship in the AIA in 1958.

T-SQUARE TALK

new offices, partnerships

R. Eugene Frazier, formerly associated with several architectural firms, has opened his own office at 1405 Littleton Blvd., Denver.

H. Scott Parsons, formerly specifications writer for Edward L. Varney, Phoenix architect, has opened his own office at 221 E. Camelback Road where he will continue in the same line of work.

Bill Akerman has opened an office for the preparation of specifications for architects at 12741 Hatteras St., North Hollywood, Calif. Akerman was formerly associated in this capacity with the offices of Charles Luckman Associates, Mayer & Kenner and Victor Gruen & Associates.

A new architectural firm, Merrill, Roehrig, Onodera & Kinder, Inc., has been organized in Honolulu, with offices in the Damon Building. Principals are William D. Merrill and Kenneth W. Roehrig of Merrill, Simms & Roehrig and Kenji Onodera and Wesley C. Kinder. The four partners have been in close association for many years, beginning in the mid-30s when Merrill, Roehrig & Onodera were associated with the late C. W. Dickey, whose office was the predecessor of Merrill, Simms & Roehrig. Kinder has been with the latter firm for 10 years.

T. J. Moore, Charles S. Sink and Arthur H. Bush, Denver architects, have formed a new firm known as Moore, Sink & Bush, occupying a two-story building at 393 Corona St.

James F. Bell, a Washington State University graduate, and Donald A. Greve, a University of Washington graduate, have formed an architectural partnership to be known as Bell & Greve, with offices at 1734 Market St., Seattle.

firm changes

Ernest M. Hicks, architect, has closed his personal office and also the Hicks & James branch office in Coeur D'Alene, Idaho, and has joined the parent firm, James & Hicks, in the Old National Bank Building, Spokane.

The San Francisco architectural firm of Aleck L. Wilson is now known as Aleck L. Wilson & Associates, with offices at 256 Sutter St.

Esley D. Harden has been named an associate and added to the firm name of Eugene architect Percy D. Bentley.

new addresses

James P. LaBarber, architect, to 504 Rosenberg Bldg., 306 Mendocino Ave., Santa Rosa, Calif.

Max P. Williams & Robert B. Martin, architects, to 1801 N.E. Couch St., Portland.

Warren Gilbert & Associates, architects, to 1515 on the Alameda, San Jose, Calif.

Chin & Hensolt, consulting engineers, to 121 Second St., San Francisco.

Thomas F. FitzGerald, structural engineer, to 25 California St., San Francisco.

Carl Jamison, consulting engineer, to 1761 Monument Blvd., Concord, Calif.

honors

Southwest Oregon Chapter, AIA, at its annual Craftsmanship Awards dinner June 10 honored three Eugene-Springfield area men: Earl Done, metalsmith; Hugh E. Hughes, mason; and Lloyd W. Strand, painter. In addition, an honorary award was given to Lloyd Hill, Eugene building inspector. Main speaker was Robert E. Koehler, editor of Pacific Architect & Builder, whose talk was entitled "The Architect Image: What Does the Contractor See?" Paul Edlund was the awards chairman.

For the third time in its 66-year history, the Washington State Chapter, AIA, has recognized a layman's significant contribution to the profession by awarding a life membership as honorary associate. Milton W. Bean, editor of the Daily Journal of Commerce, was cited at the June meeting for the sensitive perception with which "for the past 45 years he has reported and editorialized on the architectural developments of our city." In bestowing the associateship, President Lawrence Waldron said Bean's writings "have increased public understanding of the architects and constitute a significant contribution to the advancement of the profession in this community."



BEAN

deaths

Ellsworth Storey, 80, Seattle architect who retired in 1952, died May 28 in Ithaca, N.Y., where he was residing. Born in Chicago, he was graduated from the University of Illinois in 1903 and came to the Northwest that same year to establish his practice. The Washington State Chapter, AIA, last December presented him with a special award for his design of the low-rental cottages in the Mount Baker area (described in PA&B for June '60). However, the architect himself favored such more serious works as the old Unitarian Chapel, the chapel and rectory at the Church of the Epiphany and the fraternity house of Sigma Nu.

Albert C. Martin Sr., 80, Los Angeles architect-engineer who founded his own firm in 1907, died April 9. Long active in affairs of the Southern California Chapter, AIA, he was cited by the Chamber of Commerce as its "Man of Achievement" for 1959, an honor given to only two other architects.

elections, appointments

Wyoming Chapter, AIA, at its annual meeting in Saratoga picked this slate: Frederic H. Porter Jr., Cheyenne, president; Harold Engstrom, Caspter, vice president; and Robert Postin, Cheyenne, secretary-treasurer.

Las Vegas Chapter, AIA, has named Jack Knighton, president; Harry Hayden Whiteley, vice president; and James Brooks McDaniel, secretary-treasurer.

Washington State Chapter, AIA, has elected these officers: John M. Morse, Seattle, president; Frederick M. Mann Jr., Seattle, first vice president; Donn Rothe, Yakima; second vice president; Gayne L. Jones, Seattle, secretary; and Gene Martenson, Kirkland, treasurer.

Fred M. Guirey, architect, has been elected president of the Phoenix Musical Association board.

retirements

Following an association that goes back to 1912, Eyler Brown, associate professor of architecture at the University of Oregon, retired at the end of June. He received his bachelor's degree on the Eugene campus in 1916 and later his master's at MIT. Brown served in numerous civic capacities, including the Springfield City Planning Commission. He spent a year in Belgium on a Commission for Relief in Belgium Education Foundation Fellowship.

F. Marion Stokes, who began his architectural practice in Portland in 1919 and had been in the Hughes Building since the early 1940s, retired in June. He was associated with Fred S. Allyn from 1943 until the latter's retirement last year. Stokes' practice included a high proportion of public school work. One of his best-known projects is the Oregon State Fairgrounds horse racing grandstands where steel columns were spaced 50 ft. apart to provide maximum view of the races.

ARCHITECTS DIRECTORY

A limited number of copies of the first edition of the American Architects Directory, edited by George Simpson Koyl and published in 1956, are now available at the special price of $12.50 per copy. This is the only biographical work on the profression. To order copies, write Dean Koyl at 4400 Spruce St., Philadelphia 4, Pa.



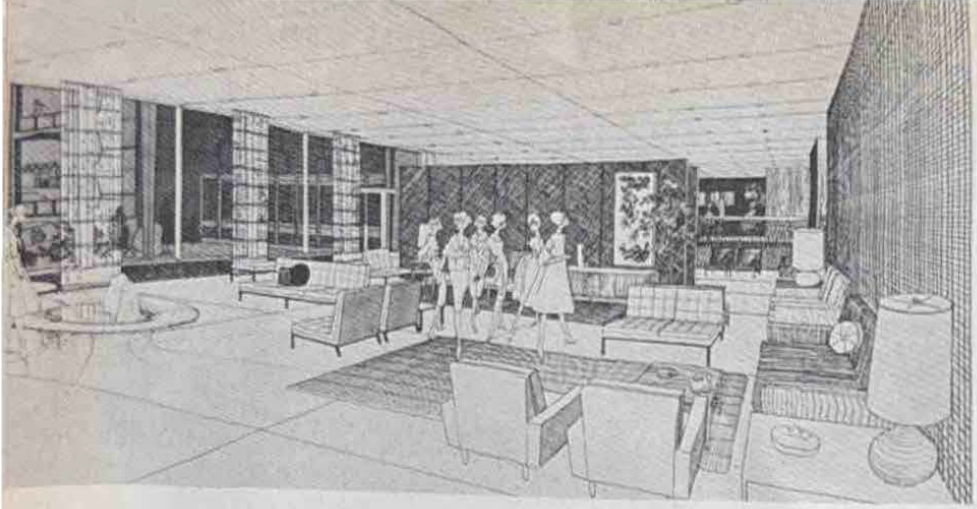
IN HONOLULU

Harry C. Weller of Pullman, Wash., Northwest regional director, AIA, is greeted by Frank S. Haines, president of Hawaii chapter, as former pays annual visit to Hawaiian members and discusses plans for district's conference to be held here in October 1961.

campus notes

While participating in the University of Oregon's "Summer Academy of Contemporary Arts" in Eugene July 5-15, Bruce Goff of Tulsa will conduct a design refresher course in the School of Architecture and Allied Arts. The two-week program will include study and solution of a design problem in the mornings and attendance at the afternoon lectures in the Summer Academy. It will be open to practicing architects as well as students.

Arizona State University has graduated its first architectural student, Frank M. Henry of Phoenix. With his graduation, the School of Architecture on the Tempe campus becomes eligible to apply for accreditation, formal steps toward which are scheduled for next fall.



COMMONS BUILDING provides dining and kitchen facilities, student lounge, main desk and adult resident's quarters.

Hexagonal window treatment suggests beehive of activity at residence halls

Newest housing project for Washington State University in Pullman will consist of two seven-story dormitory buildings accommodating 614 women and flanking a central facility of one story and basement. Architects Walker, McGough & Trogdon make these comments about the unusual window treatment of the complex, to be known as Streit-Perham Halls:

"From our earliest design considerations we were particularly concerned with the student's need for personal identification, especially when she is probably away from her family for the first time. This problem became more critical when the large seven-story scheme proved advantageous and was ultimately selected. In an effort to express individuality, separate windows were developed in a system of cast-in grids which repeat the many interior study room living units. The grids also are construction and control joints.

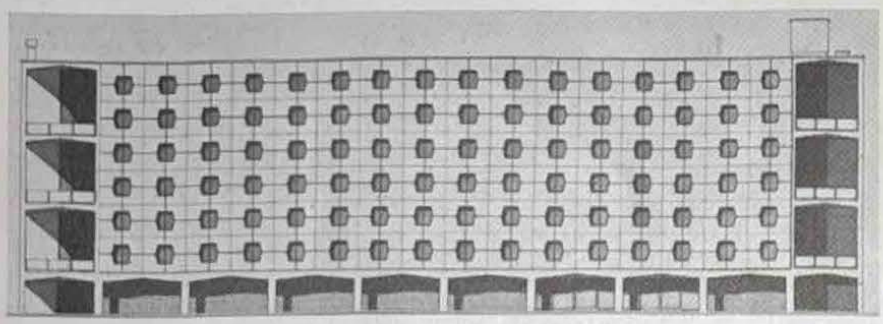
"The hexagonal windows again express the 'unit' as associated with the beehive and establishes a rhythm which was repeated throughout the structures."

Hilly nature of the campus suggested keeping the entrances as low as possible to eliminate unnecessary stair travel. Site services dictated the minimum elevations of the buildings, whose exterior concrete will have a skin coat of integrally pigmented stucco.

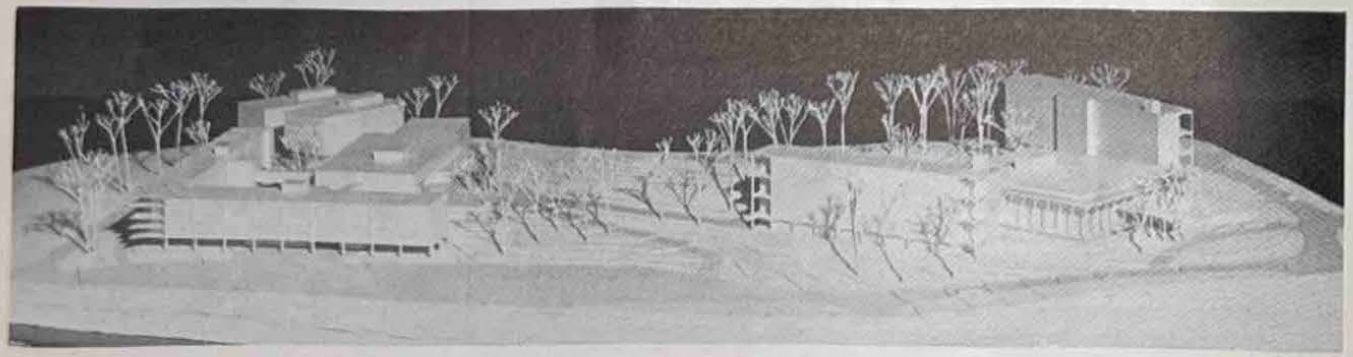
Both dormitory units will devote their first floor to a recreation room, workroom, ski storage, laundry and related facilities. Each group of 150 students will have a small lounge on the third and sixth floors. Elevator service will be limited to the top three floors.

Room plans call for built-in natural finish birch wardrobes, drawer units, desks and book shelves, with plastic faced tackboards on walls above and behind the beds, which will double as daytime seating units. Dormitories will contain 58,000 sq. ft. each and the commons building, 15,000 sq. ft., for a total cost of $2,764,000 (excluding furnishings, fees and state sales tax).

Johnson - Busboom-Rauh are the general contractors on the project; Lyerla & Peden, structural engineers; Lyle Marque & Associates, mechanical engineers; and Joseph M. Doyle & Associates, electrical engineers.



SOUTH ELEVATION reveals system of cast-in-grids. Model below indicates relationship of latest three-unit complex (taller because of site limitations) at right to existing housing at left.



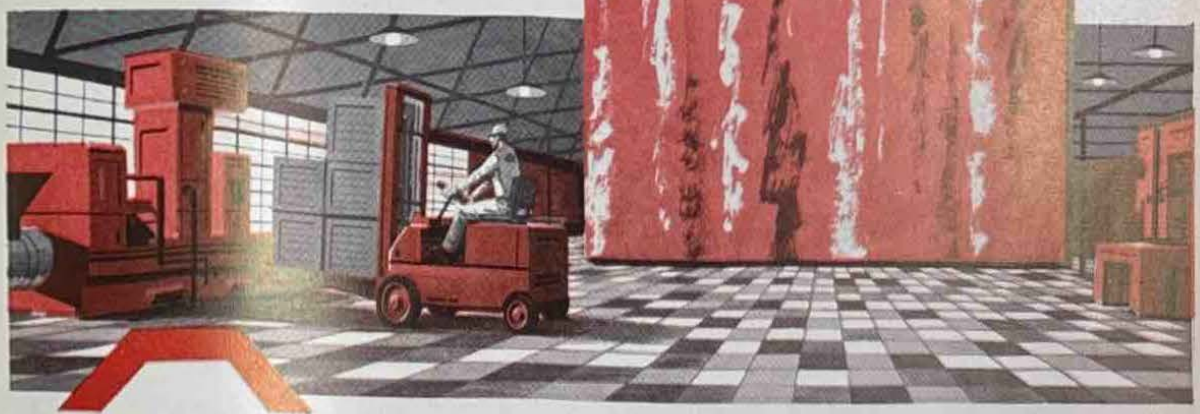
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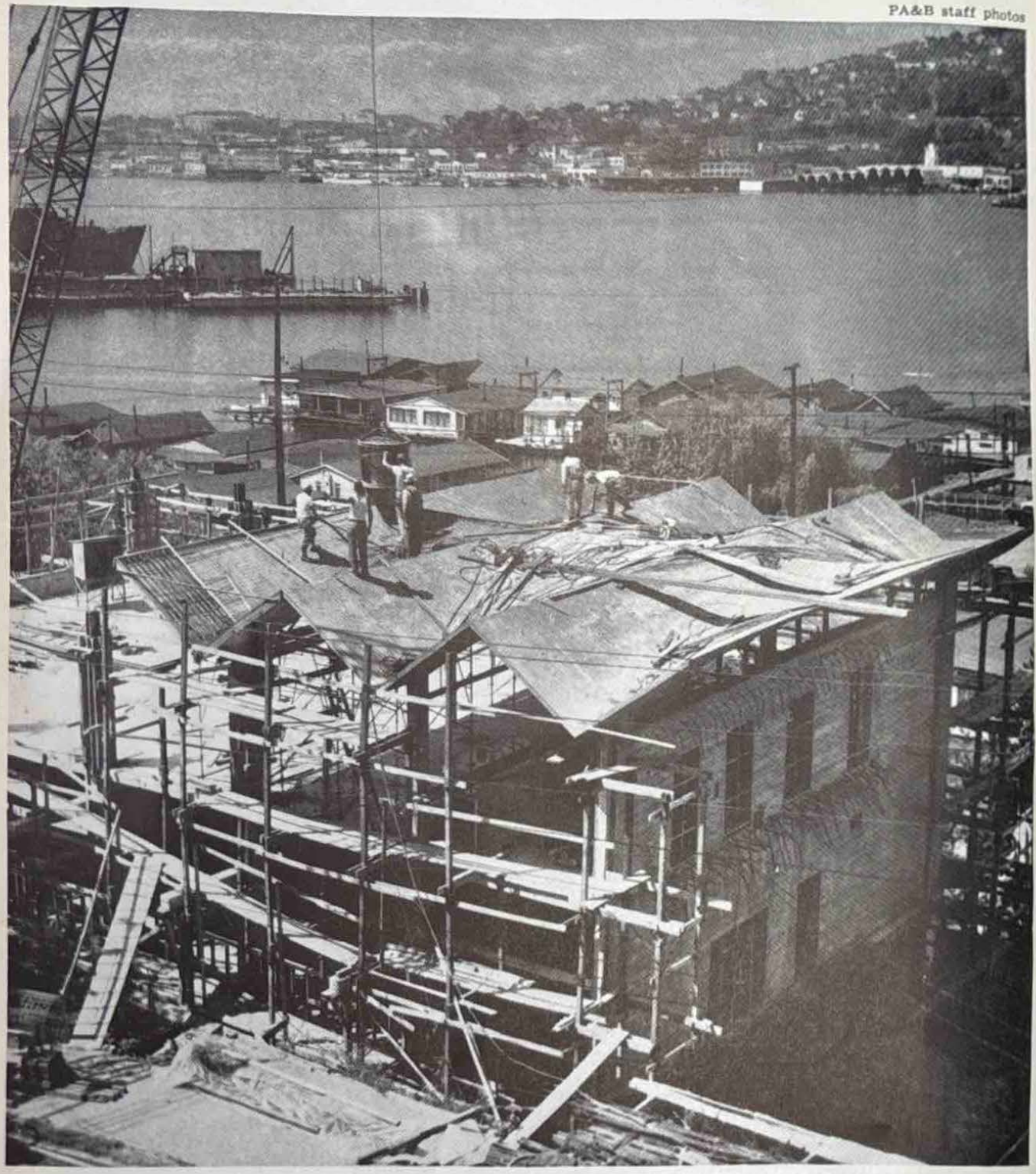
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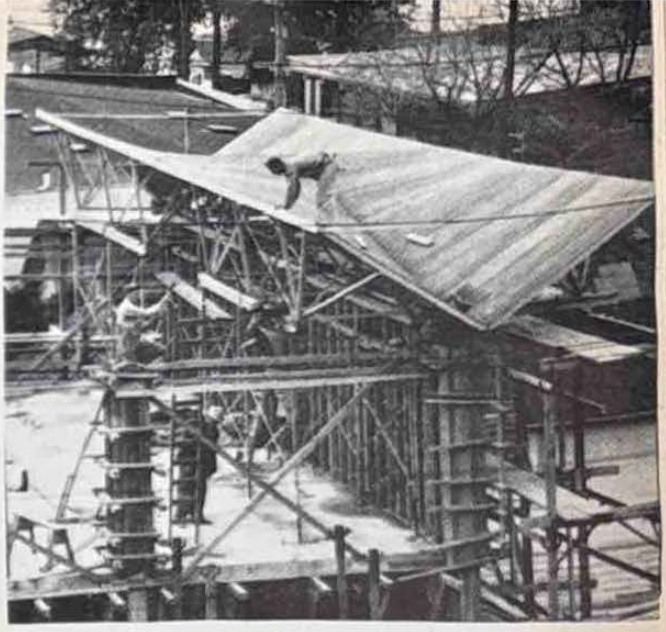
No 3: PA&B progress report

PA&B staff photos



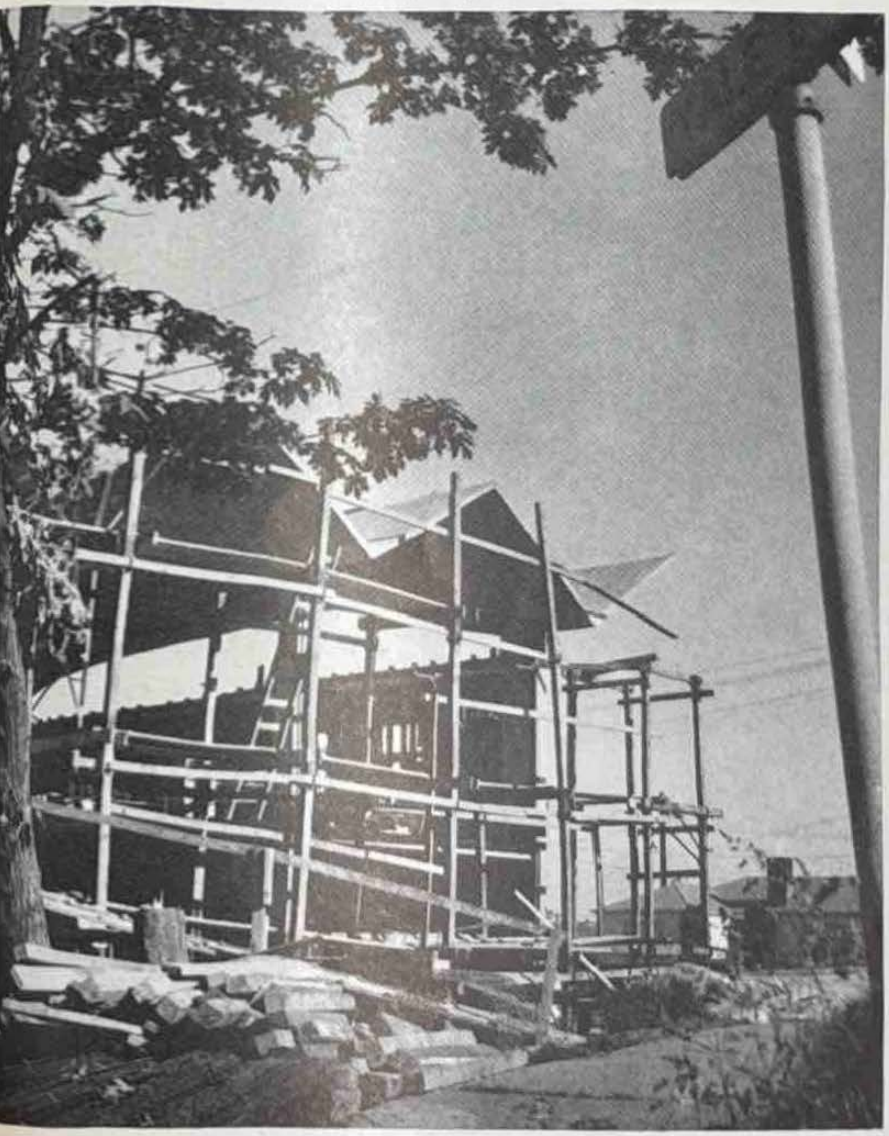
POURING OF THIRD ROOF SHELL is in progress, with four to go, each 2½ in. thick. Reinforcing steel is stubbed out of end wall at right for flat roofed service wing connection. Site overlooks Lake Union.





RIDGE LINE across center of each shell is straight line at same height as shell's upper edge. Warping of surface (hyperbolic paraboloid) up to this straight line is best shown above. Underside of cross ridge is evident upon close scrutiny of photo at left.

PERIMETER OF MAPLES AND MADRONAS girdle southern third of structure, giving sense of intimacy with natural growth unusual for urban lot.



With the pouring of the 2½-in. thin shell roof, the headquarters building for Pacific Architect & Builder and its publisher is structurally nearing completion on a site overlooking Lake Union near downtown Seattle. Architect A. O. Bumgardner's design called for seven thin shells to allow clear spans of 45x83 ft. on both the printing and publishing levels and to emphasize the roof, since the major approach to the building is from an arterial above the property.

Because of limitations of the lot and its steep terrain, Riley Pleas, Inc., general contractor, elected to use a four-part movable form developed by Proctor Products for pouring in place. The 4-in. slump concrete is placed by truck crane with a 1-yd. bucket and a 110-ft. boom and jib. Concrete mix is 6.5-sack High Early cement, ⅜-in. maximum aggregate, and includes ½-lb. Pozzolith per sack of cement.

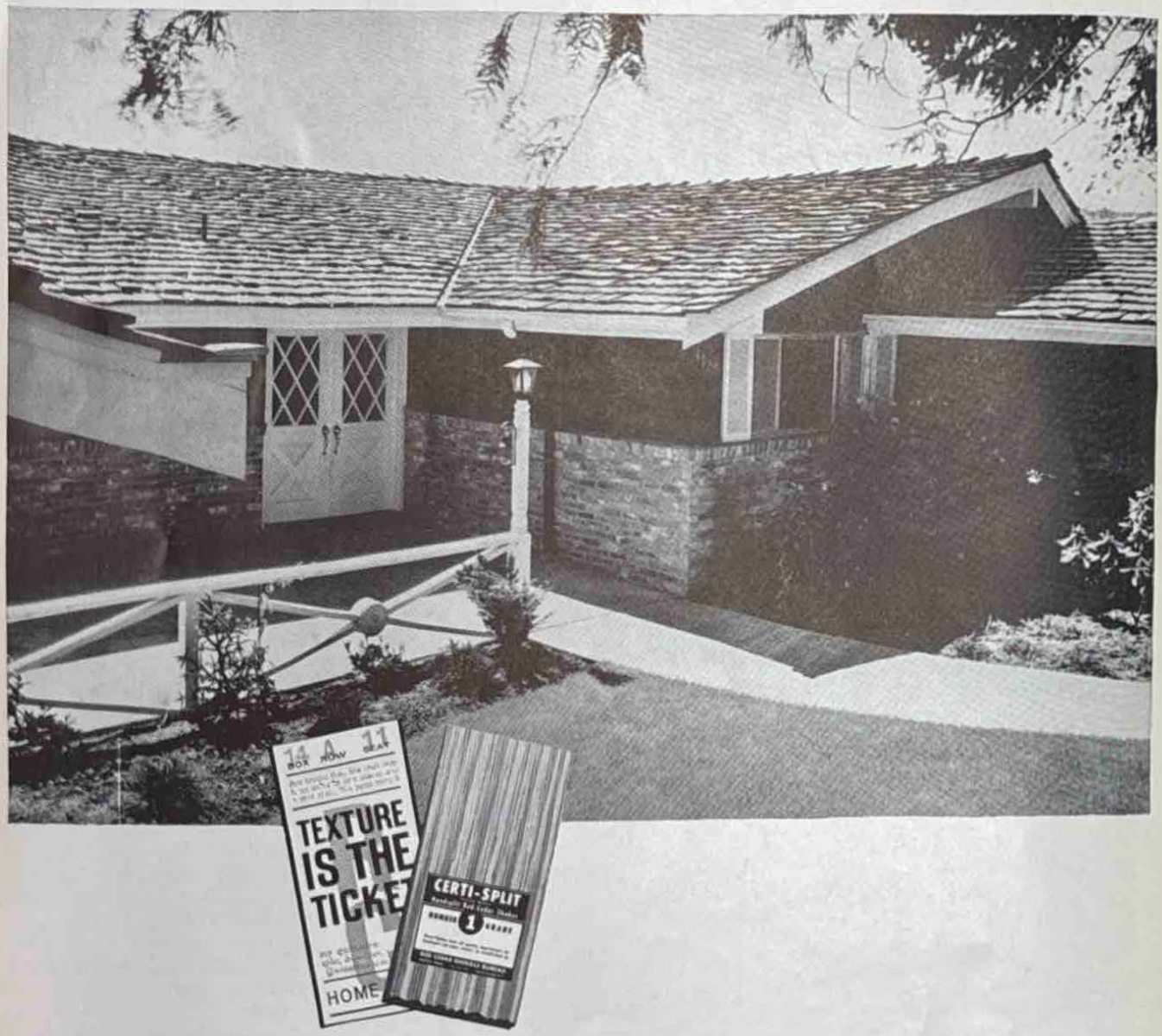
Continuous vibrating has produced a good finish and compression tests have shown strengths in excess of 4,000 psi. in four days (design requirement: 3,750 psi. in seven days). Thus the contractor has been able to move forms in as little as three days after a pour, scheduling pours for every seven days—1½ to move, 1½ to place steel and 1 to pour.

Structural engineers are Worthington, Skilling, Helle & Jackson, Jack Christiansen, associate.

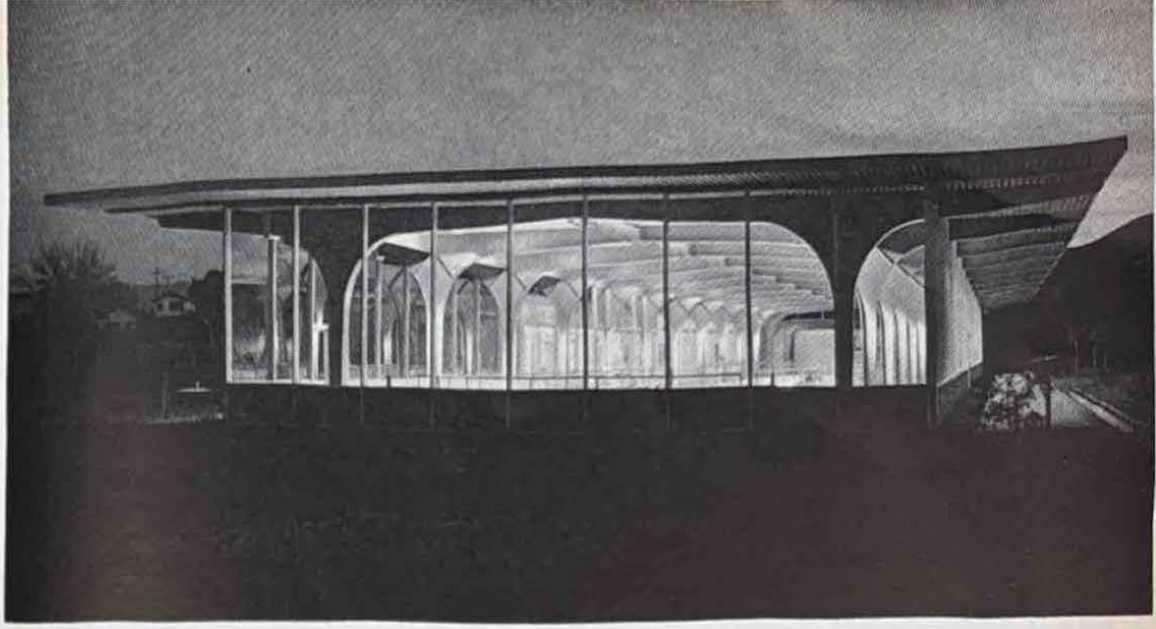
Pacific Printing Co., a subsidiary of the publishing firm, will begin moving presses on a staggered schedule into the lower floor (parking is underneath) about August 15. General completion of the building is set for mid-September.

HANDSPLIT CEDAR SETS THE STAGE

The stage is set for a sale. For this is the All-American House. Warm and friendly . . . natural through and through . . . it looks like home. Prominent in the design is an extra-heavy roof of genuine handsplit cedar shakes. Like most quality materials, handsplit shakes appeal to both kinds of buyers—those who demand the tasteful appearance of a natural material and those who measure a value by the years of service it provides. On both counts, a roof of handsplit shakes is unexcelled. Perhaps that's the reason this long-lived, beautifully-textured material is in such demand.



RED CEDAR SHINGLE BUREAU
5510 White Building, Seattle 1, Washington
550 Burrard Street, Vancouver 1, B. C.



Simple shelter defined by its structure

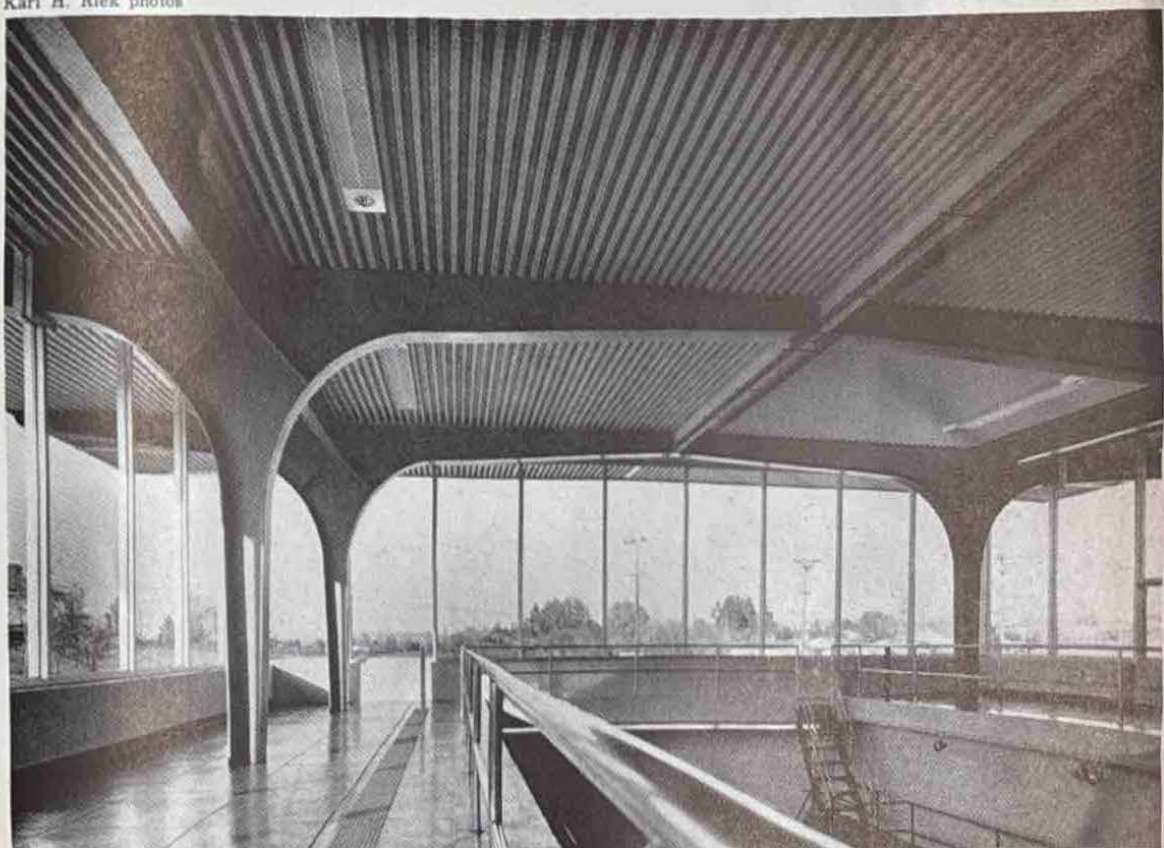
East Bay Municipal Utility District
Pumping Plant
Walnut Creek, California

•

WARNECKE & WARNECKE, Architects

ELMER J. FREETHY, General Contractor

Karl H. Riek photos



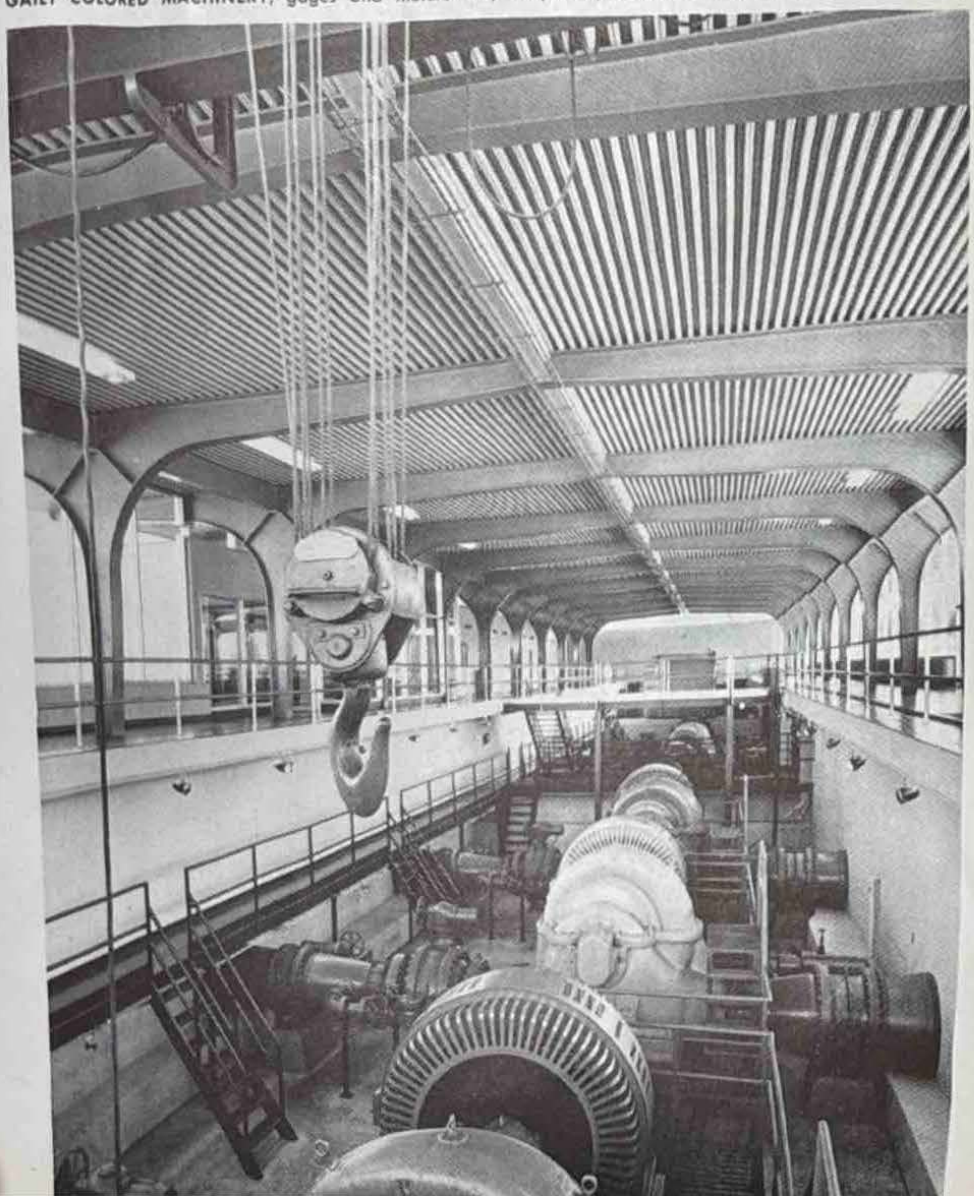
WALNUT CREEK PUMPING PLANT

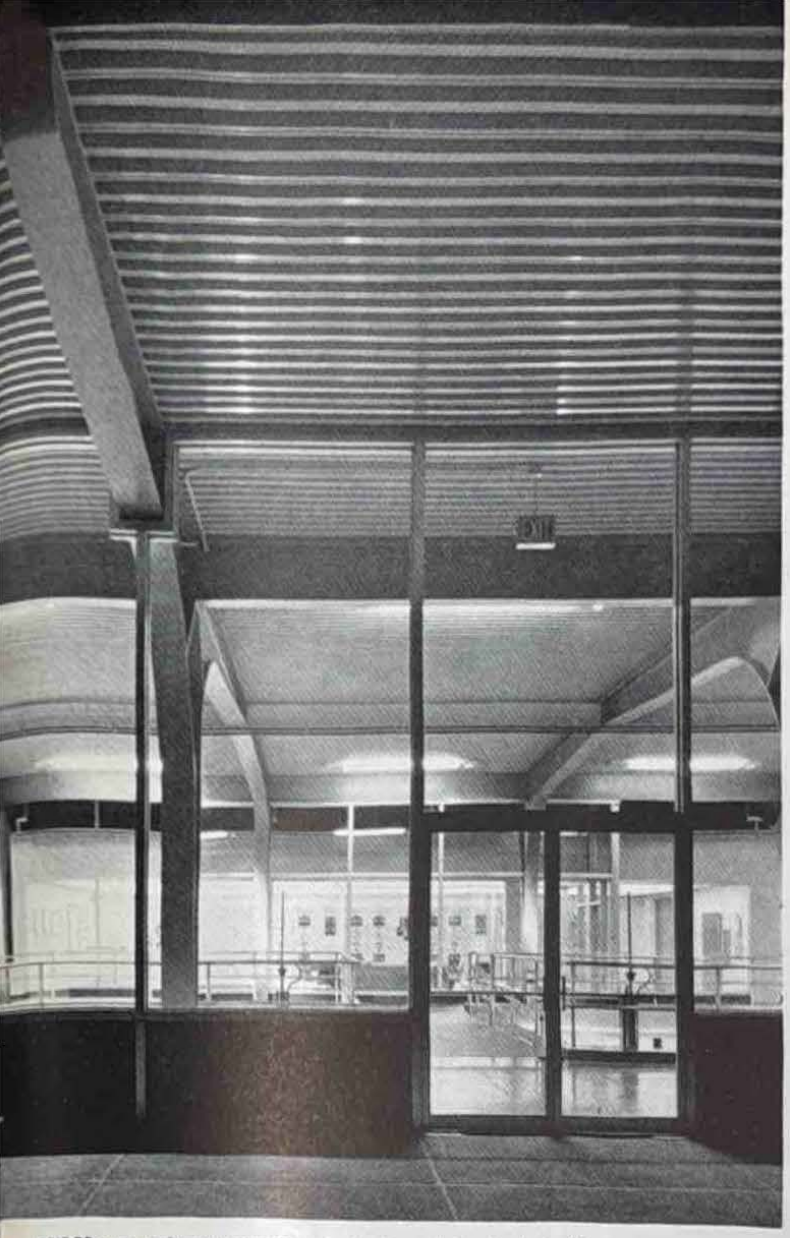
THE CLIENT required a well-designed structure, clean and precise in detail, since the building is located in an area that will become increasingly residential. At the same time, it is the owner's policy that its operations be kept open to the public for inspection; thus a plant was desired that would favorably and visually demonstrate the public service rendered by the East Bay Municipal Utility District whose structural, mechanical, electrical and civil sections did the engineering on this project.

Building has only one story above ground. Pumps and equipment are located in an open pit. Noise is partially muffled between the concrete walls of the depressed area and partially by the acoustical treatment of the ceiling. A special crane, supported on a bent that travels on tracks along the equipment pit, is entirely independent of the structure. This, in turn, freed the upper portion from vibration and movement so that it was possible to enclose the building in glass from base spandrel to ceiling.

Spare framework of graceful steel bents and its transparent enclosure, recessed under the wide overhang, provide a functional shelter with an unobstructed view of its interior. At night the shady space of the day is transformed into a brightly lit enclosure, clearly defined by its structure.

GAILY COLORED MACHINERY, gages and meters may be publicly viewed from galleries and control room.





BRIDGE over equipment area connects viewing galleries, leads to office.

OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete; frame: exposed structural steel; special formed steel bents; roof: metal decking—H. H. Robertson Co.; floors: concrete slab.

Exterior Finish: aluminum curtain wall with ceramic tile panels; fixed plate glass.

Roof Surfacing: built-up with gravel topping.

Doors: exterior: aluminum frame with plate glass; interior: hollow metal.

Insulation: rigid on roof; fiberglas in depressed equipment area—Owens-Corning Fiberglas Corp.

Interior Finish: painted, perforated cement-asbestos panels—(Transite) Johns-Manville Corp.; plaster; exposed concrete.

Ceilings: exposed steel decking; acoustical tile in toilets—Celotex Corp.; suspended luminous in office and control room—Sunbeam Lighting Corp.

Lighting Fixtures: swivel type, louvered bottom spotlights in equipment area—Sunbeam Lighting Corp.

Heating: forced air system.

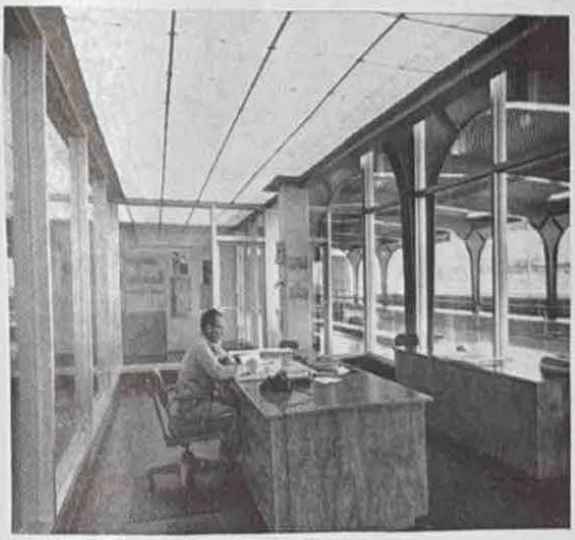
Plumbing: white porcelain fixtures—American-Standard.

Total Area: 24,151 sq. ft.

Total Cost: $1,108,504 (including equipment).

Date of Completion: March 1959.

OFFICE allows observation of control room behind, entrance in front.



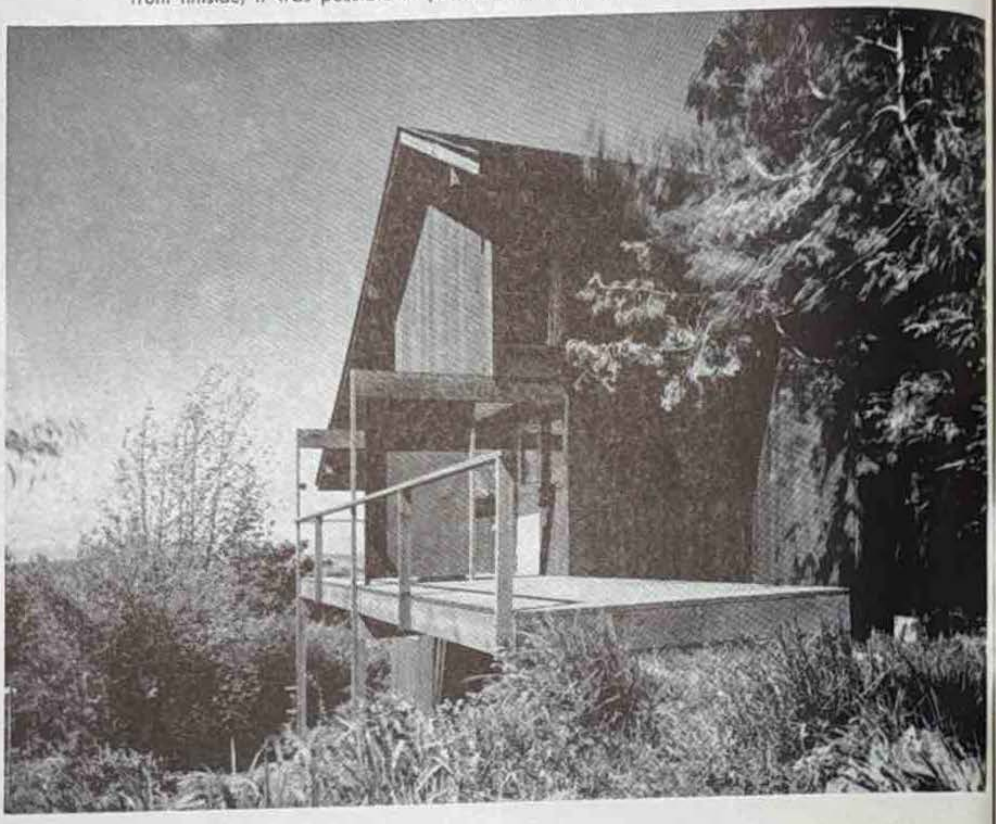


William Holm Residence
Richmond Beach, Washington

GENE ZEMA
Architect

RAYMOND CONSTRUCTION CO.
Contractor

STEEP WOODED SITE commands view of Puget Sound and Olympic Mountains. By carving shelf from hillside, it was possible to preserve virtually all trees on high side.





INTEREST in Northwest Coast Indian lore and a desire for space to display a collection of artifacts dictated the design of this house, perched on a wooded hillside just outside Seattle. The lodge type character provides an appropriate setting for the collection and the ceiling-high totem pole carved by the owner, an art teacher.

This is a busy couple (she is a YWCA instructor). They show presentations of authentic Indian dances in costume, serve as camp counselors in the summer and are interested in wood carving, weaving, photography and painting. It was necessary, therefore, to provide both ample storage space for all these activities, plus access by auto for loading and unloading.

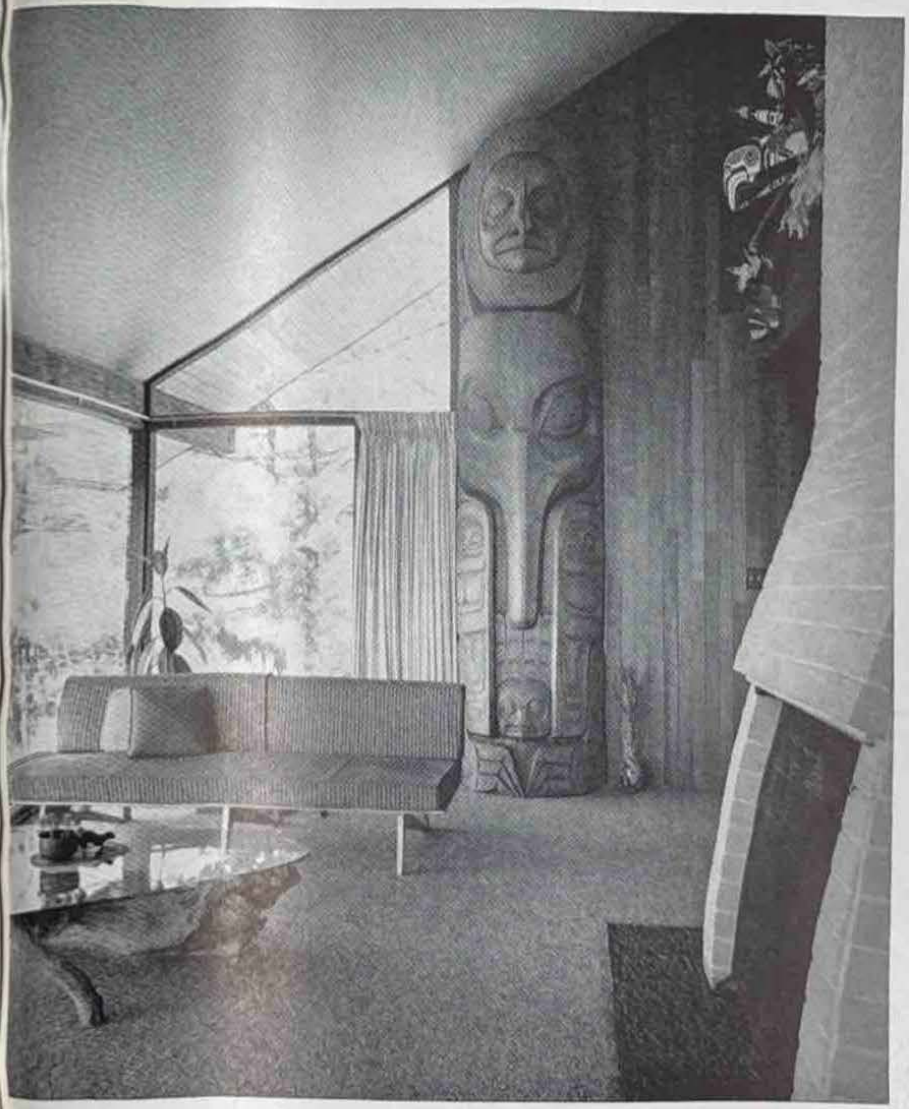
The house is three stories. Main-floor ceiling follows the steep shingled roof slope and is partly open to bedrooms above, located under the peak. Base level has space for a furnace, utilities and future third bedroom. All floors are connected by an open stairwell. The clients, willing to do part of the work if feasible, executed the entry pebble floor, millwork and painting, keeping the construction cost to $14,900.



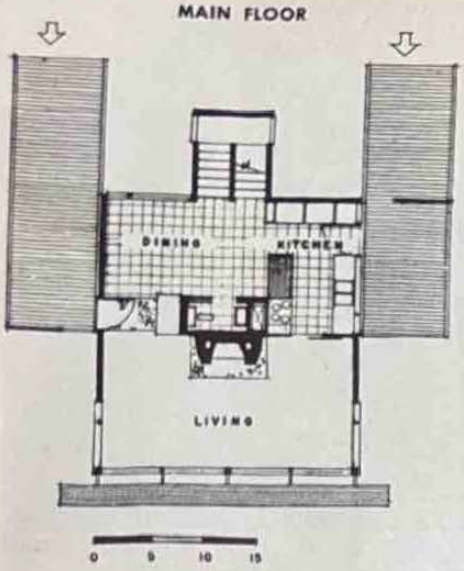
Art Hupy photos

Contemporary lodge houses old Indian art

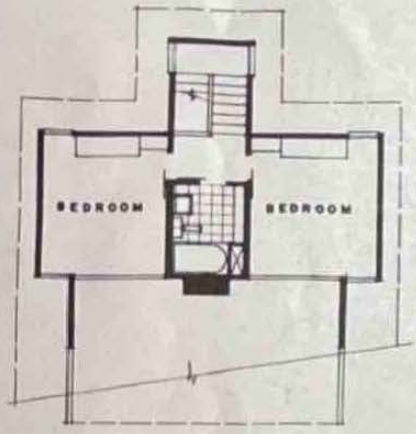
GIANT CEDAR TOTEM POLE, detail of which is shown above, is work of owner.



MAIN FLOOR



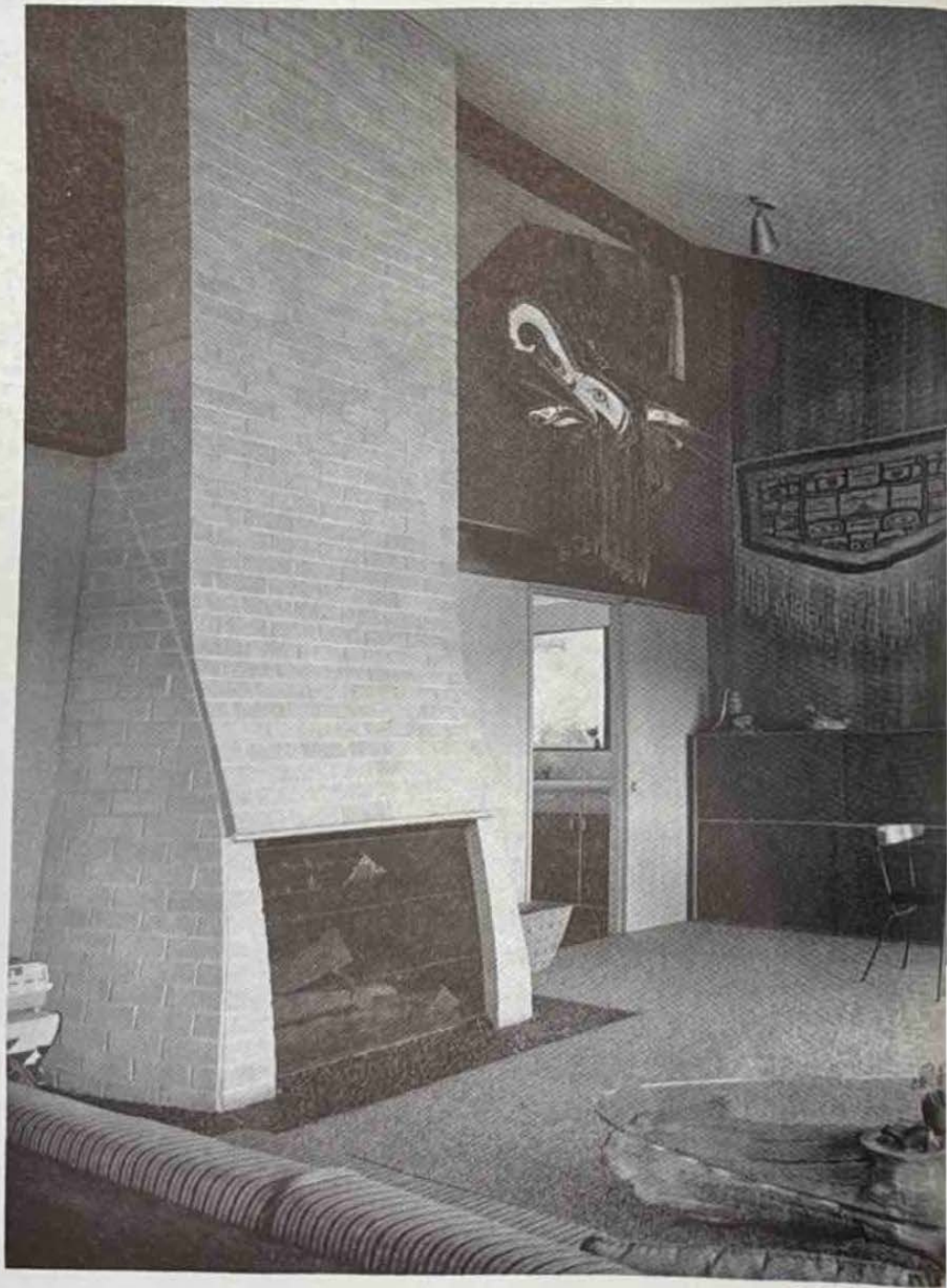
SECOND FLOOR



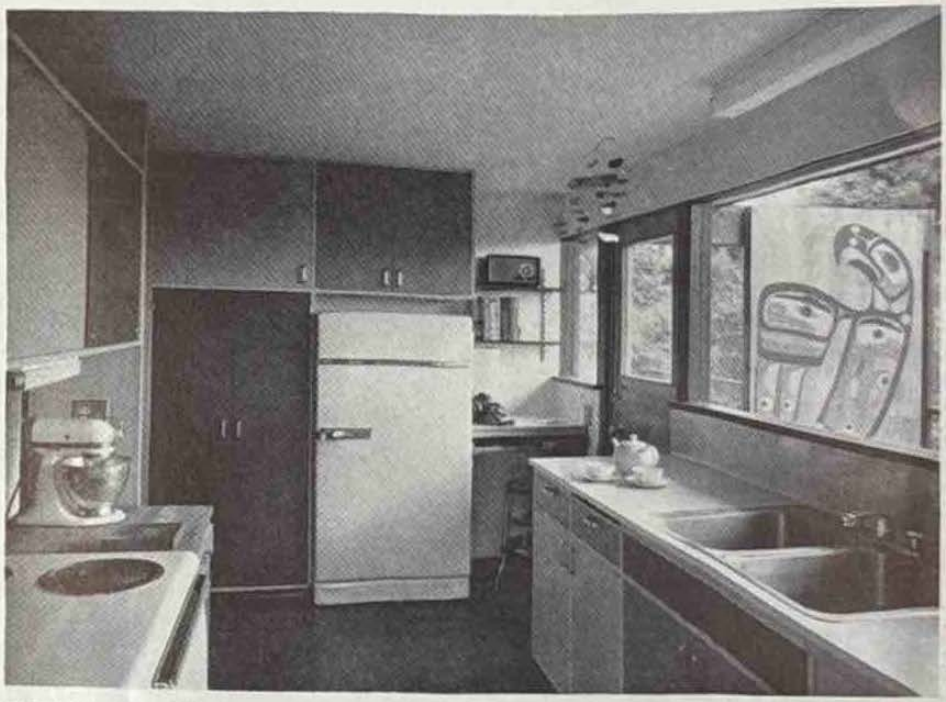
BASEMENT



LIVING ROOM indicates how architect met prime requirement: space to display owner's collection of Indian artifacts. Fireplace design also reflects Indian theme.







OLD INDIAN MASKS hang from upper floor's partial partition. Kitchen looks out on one of carved and painted murals on cedar plywood which serve as space dividers for two large decks.

OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: post and beam; roof: cedar shingle.

Exterior Finish: stained 1x4 cedar siding, flush jointed, rough side out.

Windows: operating aluminum—Tecler Aluminum Corp.

Doors: exterior: painted fir slab; interior: stained fir slab; ¾-in. redwood panels.

Floor Surfacing: vinyl cork—Dodge Cork Co.

Insulation: 2-in. fiberglass batts—Sealtight Corp.

Interior Finish: plasterboard; 1x4 cedar siding, V-jointed, smooth side out.

Ceilings: plasterboard.

Lighting Fixtures: flush mounted and spotlights—Prescolite Manufacturing Corp.

Heating: oil fired forced air—General Electric Co.

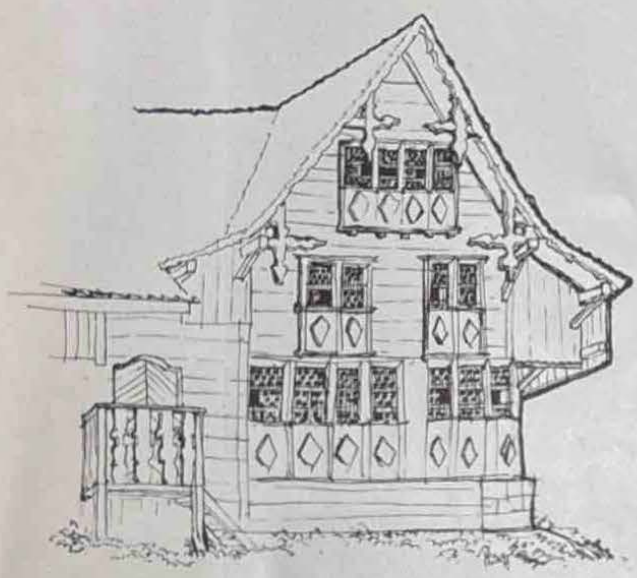
Plumbing Fixtures: Crane Co.

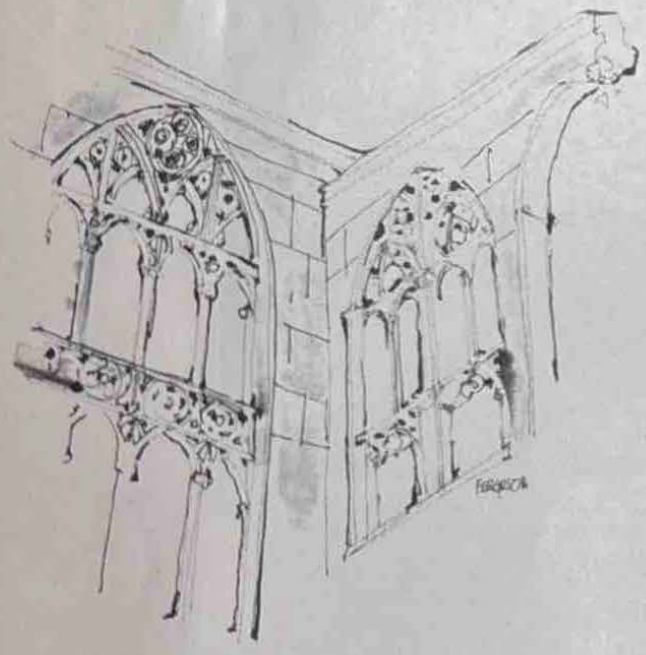
Total Area: 1,953 sq. ft.

Total Cost: $14,900 (excluding millwork, painting, entry floor and hearth executed by clients).

Date of Completion: September 1956.

Regionalism





Sketches by Frank Ferguson and Lloyd Platt

THE LAYMAN has a tendency to needle the contemporary architect with questions such as "Why does a 12-story bank in Chicago have to look like a one-story pharmaceutical laboratory in St. Louis?" or "Why can't we build modern buildings in Santa Fe with fake fronts of pseudo-adobe and make our city prettier?" The architect, with a ready answer, replies to the first question, "Technology demands this," and then replies to the second, "Technology denies this." Once again the issue of architectural character or regionalism is denied a hearing.

Regionalism, architecturally speaking, is not a style or an element of a style which is now out of vogue but is rather the quality of individuality or uniqueness imparted to buildings due to the influence of the peculiar natural or man-made properties of the environment for which they were designed. Pueblos in the American Southwest and igloos in the Arctic are the classic, if not extreme, examples of regionalism; while the Cape Cod of New England and wrought iron porches of New Orleans are more rational examples. Regionalism is seen as a feature of architecture only when building forms are influenced by environment as well as materials and technology.

In previous decades the traveled American would have had little difficulty in recalling an area of the country by conjuring up an image of its unique architectural expression. This is not so today, for the major distinction between cities lies in the size and quantity of structures and in the natural landscape in which these buildings exist.

It is not difficult to discern the cause for this lack of regional character in American building. Communication and technology are responsible, with communication being the prompter. The first great wave of illogical buildings in our country was the obvious outgrowth of the mass consumption of both popular and architectural magazines. The popular magazines, with women's magazines in particular, revolutionized the modern woman's concept of the kitchen; and in the same breath expounded the parvenu glories of the "Early American," "Georgian," "Plantation" or "Mission" styles. In this manner, pressure was exerted on architects and builders for reproductive design rather than creative design.

But the architectural journals, trade magazines and craftsmen's journals were similarly responsible in that they enlightened the drab architects and builders with scale drawings which "told them how to do it." At the same time, this allowed many architects to find a comfortable niche in the newly created market. To produce these buildings, a demand was created by the magazines and a supply was provided by the architects and builders,

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This article, written by an assistant professor of architecture at the University of Utah, is reprinted from the December-January 1959-60 issue of Architecture Utah, publication of the Utah Chapter, AIA.

nd technology

by DONALD J. BERGSMA

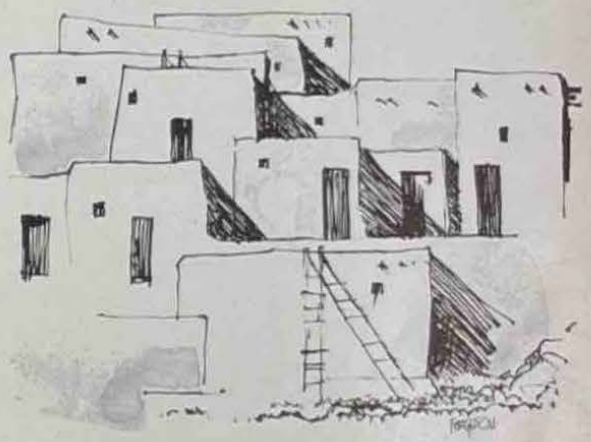
and "architecture" was lost in the shuffle. Designs, materials, mechanisms and devices appeared which allowed any type of building to be constructed anywhere and caused the resultant conglomeration of styles throughout America in the 20s and 30s.

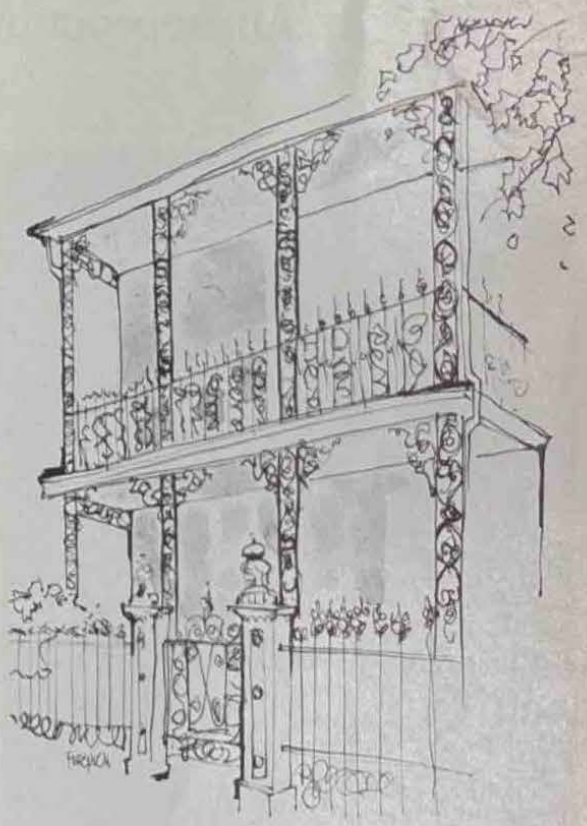
Today even the most complex mechanical and structural problems which confronted the architects of the past have been eclipsed through technology. We are able to design structures almost without limitations. Any material, or its second-rate and barely adequate copy, is readily available. Mechanical devices are becoming so commonplace that architects find difficulty in storing the literature or for that matter even reading it. We are told that we can produce any environment we desire notwithstanding the locale. The sky is the limit through technology.

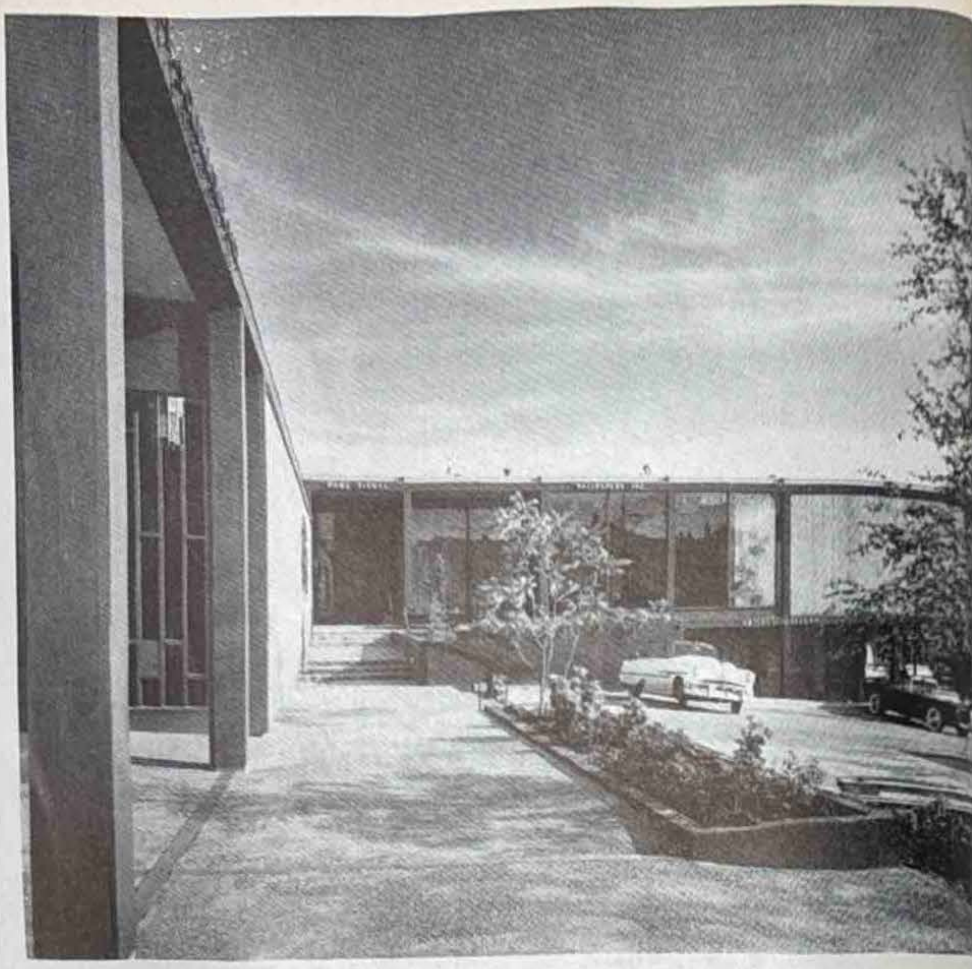
But what effect has this freedom had upon our architecture? More important, what effect has this freedom had upon our total environment in which architecture plays so important a role? This advanced state of technology has caused an even greater neglect of the once powerful feature of local character. Architects use this technology as a prerogative to design a school, warehouse, bank, residence or church in a similar idiom in dissimilar localities without adequate consideration of the natural or man-made visual and physical environment. We are left with Gothic forms of reinforced concrete placed indiscriminately in Detroit and Sacramento, Saracenic screens of cast stone in Seattle or Miami, or steel frames and glass panels in New York and Tucson, while barren plains, wooded meadows, rugged mountains or busy streets appear to bear no influence on our architecture. We should not wonder when the layman asks us the above questions if architects with all means available fail to recognize those qualities which can give character to a building in its unique setting.

If then, our architecture is literally without limitations, perhaps we should now investigate the potential of greater integration of buildings with the environment. A visual analysis of the character of the surroundings often brings to light many features which can be recalled in a new form. The recall of these features need not control or stifle the design but could have an influence on the form, structure or materials and in this manner provide a sense of visual harmony so lacking in our buildings today.

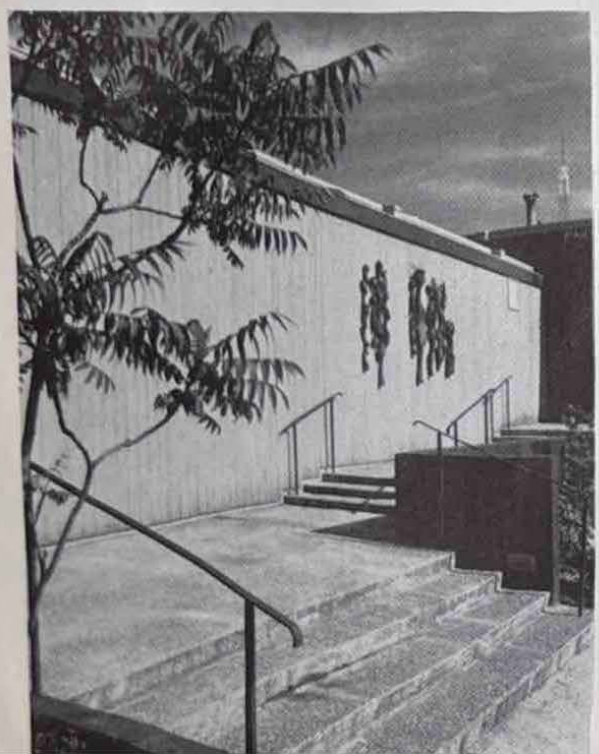
If the architecture of our decades solves the technical problems but continues to neglect the dynamic influence a particular environment can have on a design, can architects truly claim that they have fulfilled their task? We are too often prone to cast stones at the work of our professional predecessors who produced the eclectic forms of the 20s without realizing that with our potential we may well be producing an equally erroneous architecture. The pot can ill afford to call the kettle black.







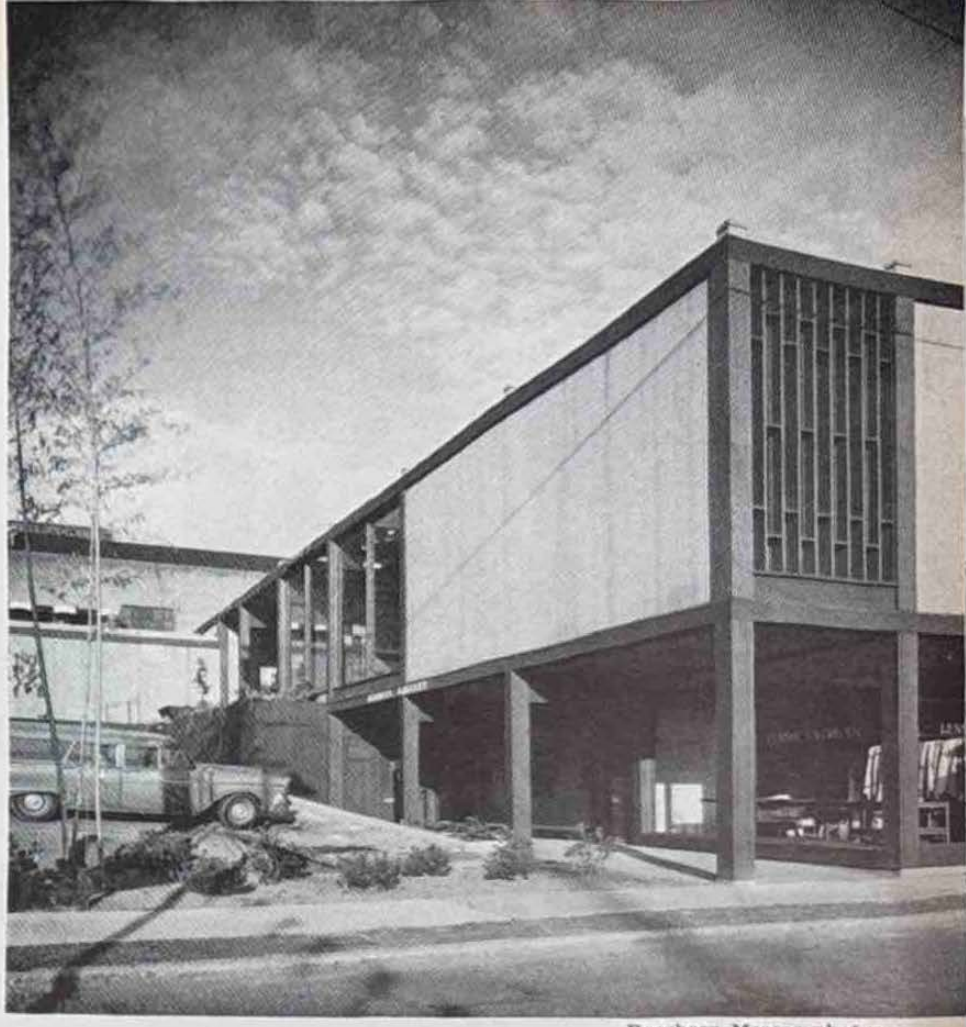
An appropriate shell for showroom tenants



IN PLANNING a fitting structure for the display of draperies, fabrics, wallpaper, etc., by four individual operators, the architects devised a simple L-shaped building with a landscaped parking plaza encompassed by the two wings. Both units—one is two-story due to the typography—are planned to accommodate an additional floor, now under serious consideration.

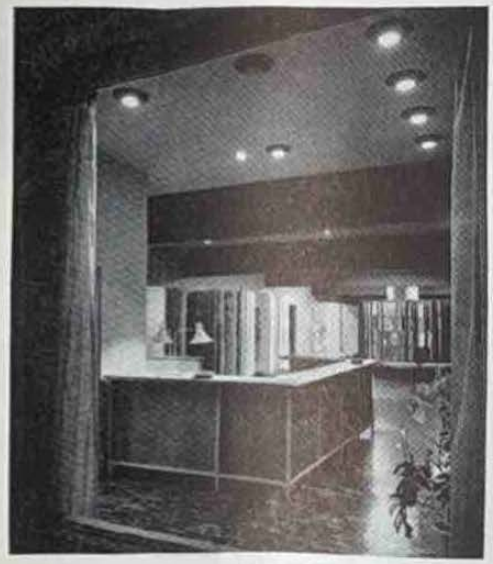
Lighter-than-natural stained cedar siding is used for the exterior wall treatment, accented by dark stained beams set in wood-encased steel columns and alternated with large display windows. Inside, the plasterboard walls in most cases are covered with grass cloth, burlap or foil paper at the tenants' discretion. Ceilings consist of exposed glued laminated beams and painted plasterboard. Floor surfacing is either vinyl asbestos tile or carpeting. Because of the nature of merchandise on display, the interiors are constantly changing.

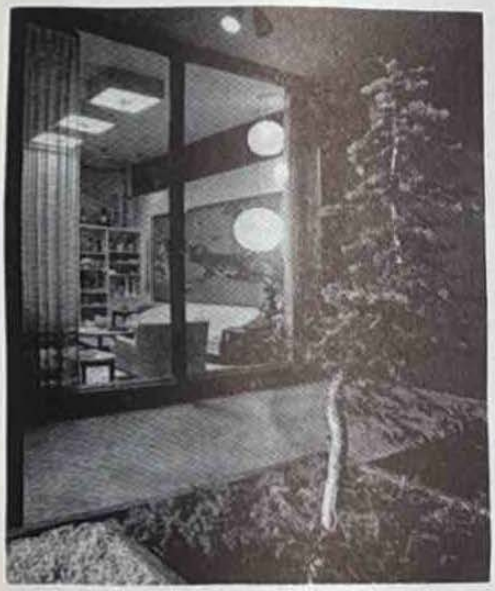
PEBBLE SURFACED CONCRETE with wood dividers is used on entrance walk. Sculpture is work of Harold Balazs.



Dearborn-Massar photos

DECORATIVE LIGHTING is by Irene McGowan.



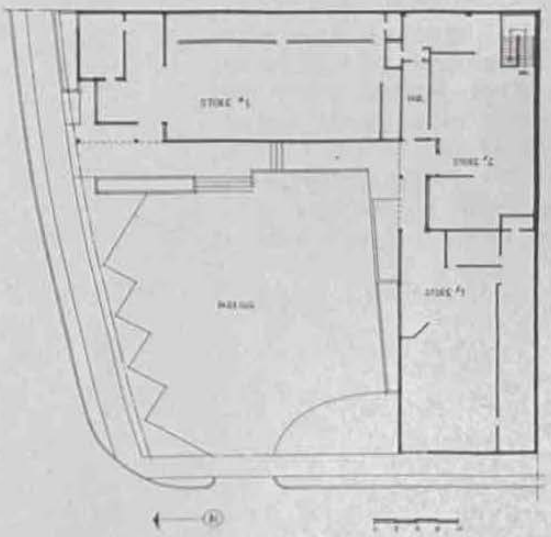


Paul Siegel Decorative Center
Seattle, Washington

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TERRY & MOORE
Architects

PUGET CONSTRUCTION CO., INC.
General Contractor



FIRST FLOOR

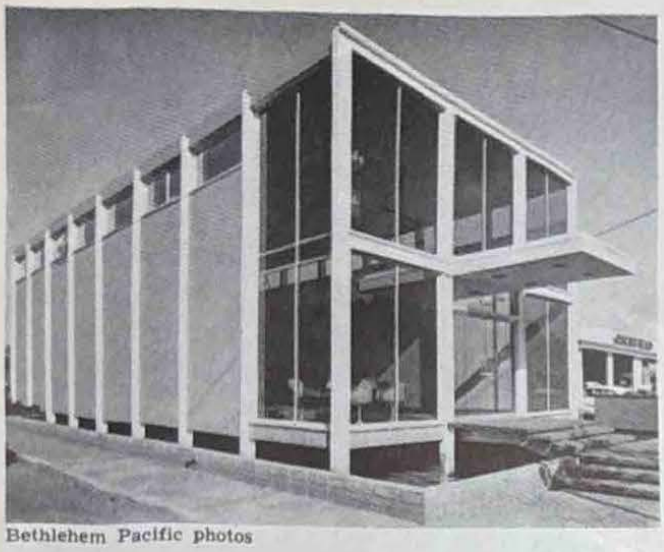
Two steel frame

Kramer Associates
Mill Valley, California

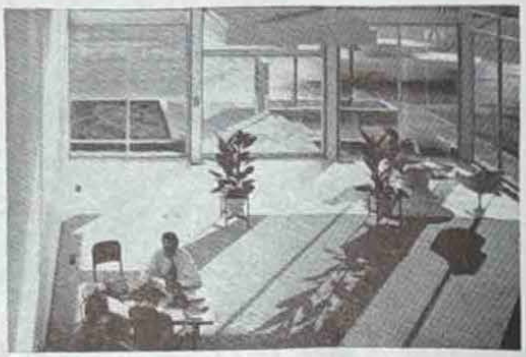
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MICHAEL WORNUM
Architect

A. A. HEMMERLING
General Contractor



Bethlehem Pacific photos

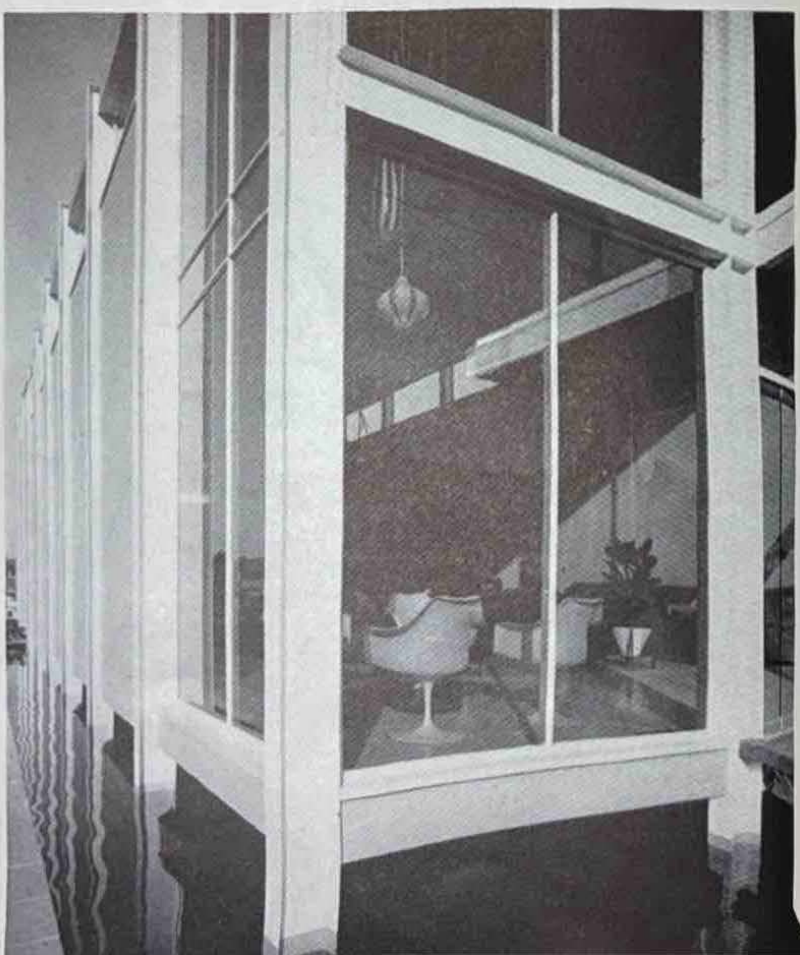


DOUBLE-CANTILEVER CANOPY over front entrance is 26 ft. wide and framed with 10-in. channels.

UTILIZING a moat frame, the architect has created the effect of a floating structure to differentiate the realtors' offices from adjacent buildings. Vertical strikes of white steel, extensive use of glass and thin line of the roof give the illusion of height although the building is only one story.

Structure overhangs the water on three sides. Pool accents a feeling of lightness achieved by the wide expanse of glass and the clerestory windows that extend all the way around. Red has been used as an accent color in furniture and equipment to offset the gray curtain wall and white frame.

Building is designed on an 8 ft., 8-in. module. Exposed steel columns are set on concrete footings at the bottom of the 15-in. deep moat. In effect, there are two foundations: the column footings and a lighter one for the floor joists. Steps leading up to the front entrance are reinforced concrete slabs cantilevered over two 10-in. channels that form a bridge across the moat. Structural engineer was John E. Brown.



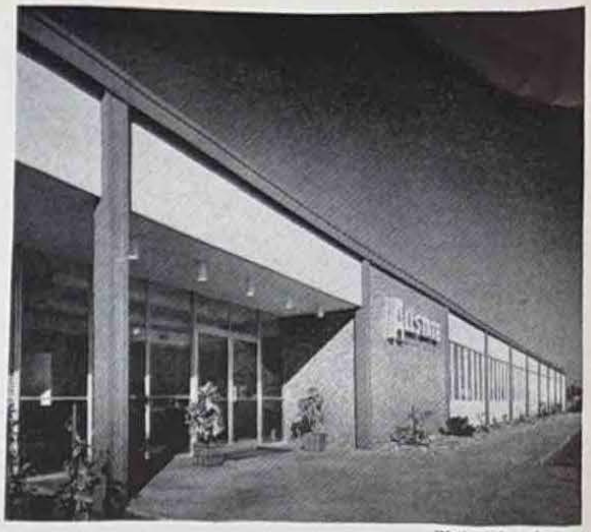
office buildings

Allstate Insurance Co.
Sacramento, California

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DREYFUSS & BLACKFORD
Architects

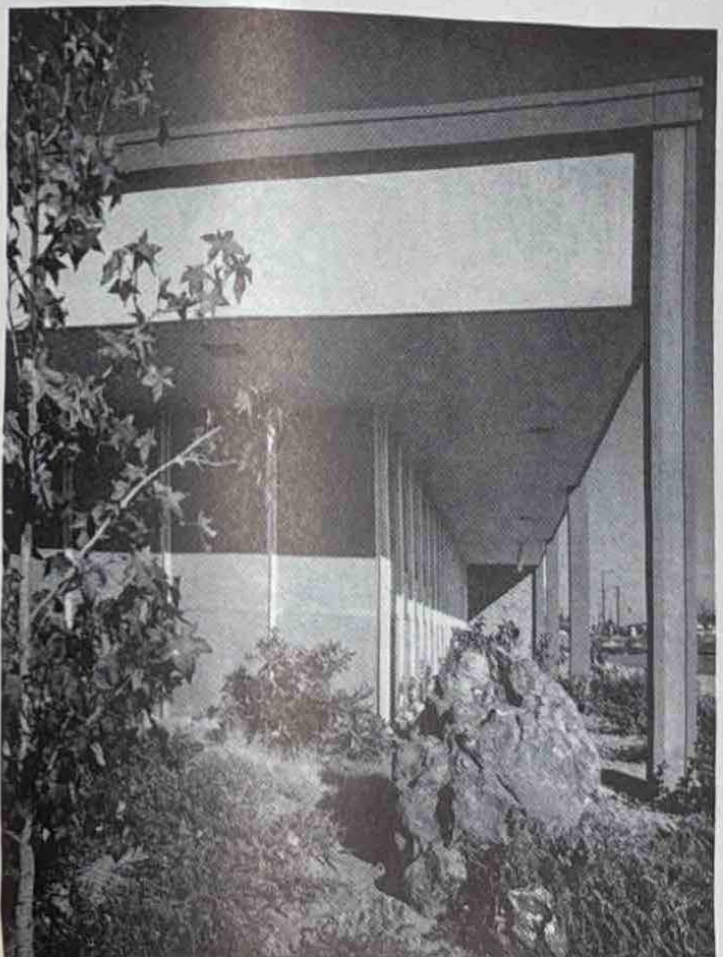
CONTINENTAL CONSTRUCTION CO.
General Contractor



Phil Fein photos



STEEL FRAME of charcoal gray and concrete panels of gray-biege are set off by turquoise porcelain panels. Ceramic tile in brown tones at entrance serves as backdrop for architect-designed sign, to be used by client on other projects.



REQUIREMENTS for this building to be leased to the present tenant for a period of five years called for 30,000 sq. ft., provision for 50% expansion and a critical construction time limit. The architects, therefore, were limited to use of materials easily available.

Despite these limitations, the owner-contractor was interested in developing a building that would do the community proud from a design point of view.

Structure consists of a steel frame with wood roof and suspended ceiling. Exterior walls are tilt-up concrete panels with aluminum windows and aluminum window wall in the entrance area. A patio opens off the cafeteria for outdoor eating for employees. Parking was provided for approximately 200 cars.

Time limit allowed only 4½ months from completion of preliminary plans to occupancy of the building. Actually, completion occurred 15 days in advance of the schedule.

Site is northeast of Sacramento near the central business area of a rapidly growing suburban district, a 3½-acre plot with an 800-ft. frontage on a principal avenue.



Beatrice M. Howell

Diamond Head Apartments
Honolulu, Hawaii

VLADIMIR OSSIPOFF
Architect

PARK & YEE
Structural Engineers

HAWAIIAN DREDGING & CONSTRUCTION CO.
General Contractor

Trade winds and privacy are given their due

FREE-STANDING DESIGN—120-deg. angled wings—of this 14-story cooperative apartment house takes advantage of the trade winds, Hawaii's most important cooler, and affords a privacy to its residents somewhat unique on Waikiki's waterfront. The three-pointed starlike plan also provides a maximum view of the sea and the mountains from the rear.

Building is the nation's first high-rise structure utilizing prestressed concrete. Raised basement and first floor are devoted to parking, giving the project a floating effect.

Another noteworthy feature is that each apartment is customized at the owner's request, including the color scheme. The precast concrete beams and furred ceilings give a flexibility in arranging bathroom and kitchen fixtures and act as a soundproofing agent.

R. Wenkam



Beatrice M. Howell



WHITE CONCRETE STRUCTURE is enlivened by green and white striped awnings.

Phil Fein photos



A bakery to fit the machines

RAINBO BREAD CO. BAKERY, DENVER: Form and shape were dictated quite simply by the need to enclose an automated baking system in a manner that would most readily adapt itself to the functions of the machinery. A concrete shell was used because it provided clean, unbroken surfaces that could be easily cleaned and maintained. Architect's solution to these two problems resulted in a Merit Award from the Western Mountain District, AIA.

Building is an 81x35-ft. clear span concrete and steel structure. Elimination of girders and cross bars provides ceilings and walls that are completely smooth. All of these areas are air conditioned and air washed. Monorail systems for some of the production installations and all electrical and mechanical installations are suspended from the roof, making it possible to maintain a high standard of sanitation at a low cost. Because of the large, open areas, the entire bakery is swept and scrubbed every day with power equipment requiring a minimum of personnel. *Architect:* T. J. Moore; *general contractors:* Brown-Schrepferman & Co.



A store to fit the neighborhood

SAFEWAY MARINA STORE, SAN FRANCISCO: Here is a case where the residents of the neighborhood influenced the design. Site is not far from expensive residences near the Golden Gate Bridge and the homeowners were vocally opposed to the store, to the point of engaging in a 13-month zoning battle. The architects were asked to plan a store attractive enough to ameliorate the bad feelings engendered by the zoning fight.

The architects already had revamped Safeway's prototype store, making it cleaner and lower by lowering the side walls 4 ft. and taking out the bowstringing for the laminated wood trusses. To enhance the front of the Marina installation, they set porcelain enamel fins vertically in the broad glass front. The fins also serve to mute the flow of late afternoon sun into the store.

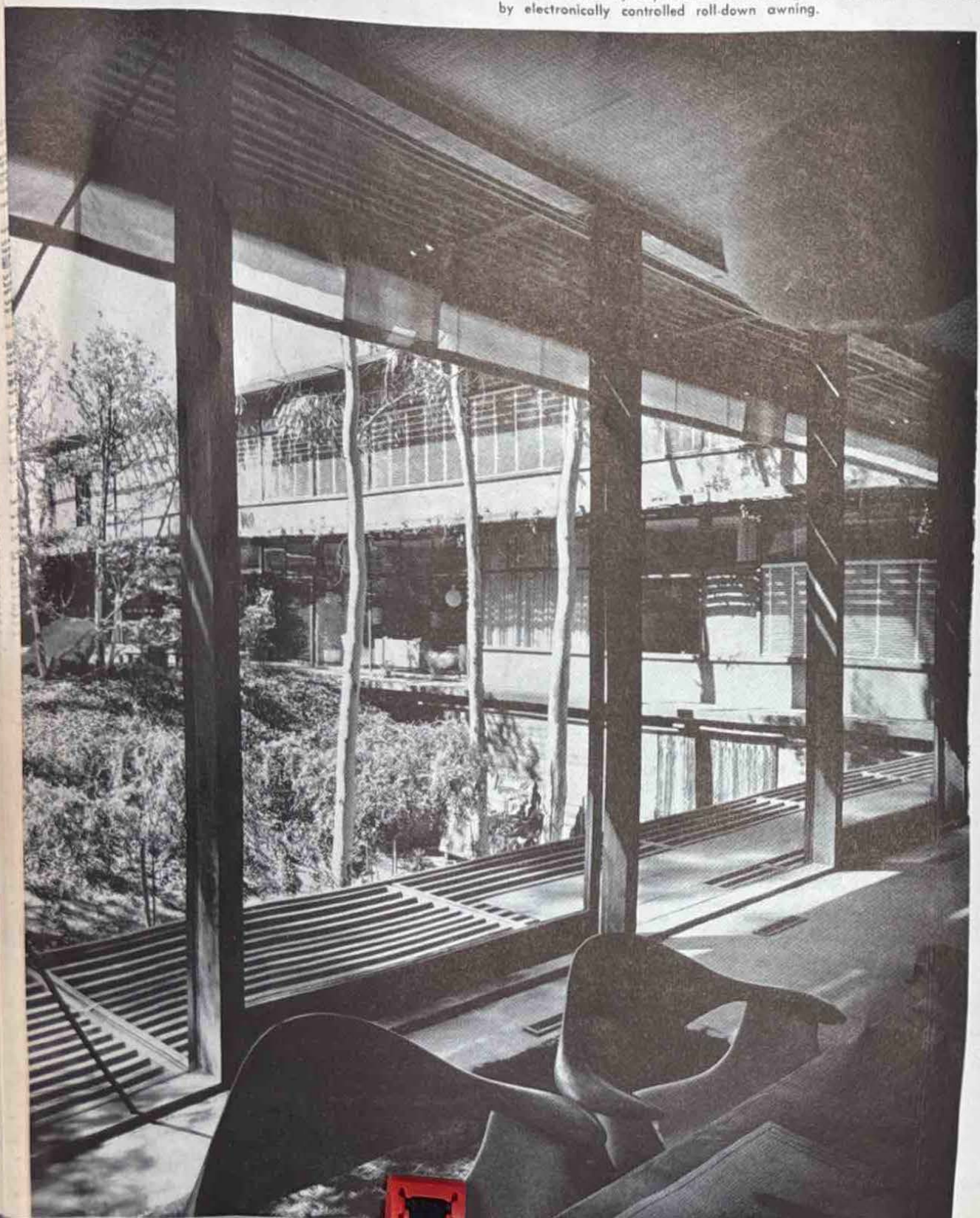
Cost was about $10 a sq. ft., actually no more than most of the company's other northern California outlets. Evidently the residents have accepted Safeway's offer of friendship via a well-designed structure: business has been 20% more than expected. *Architects:* Wurster, Bernardi & Emmons; *general contractors:* McDonald, Young & Nelson.

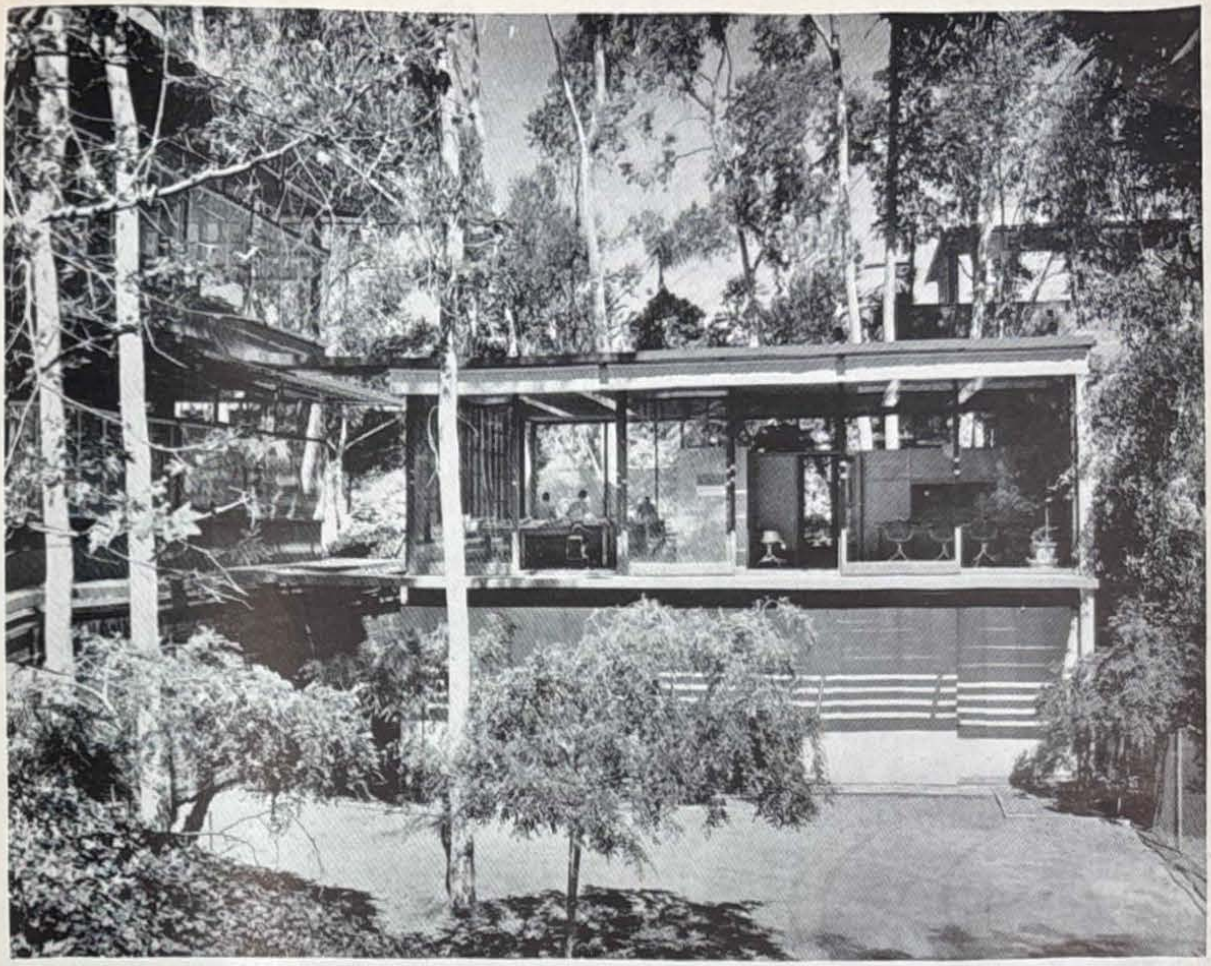


Where architects hang their hats

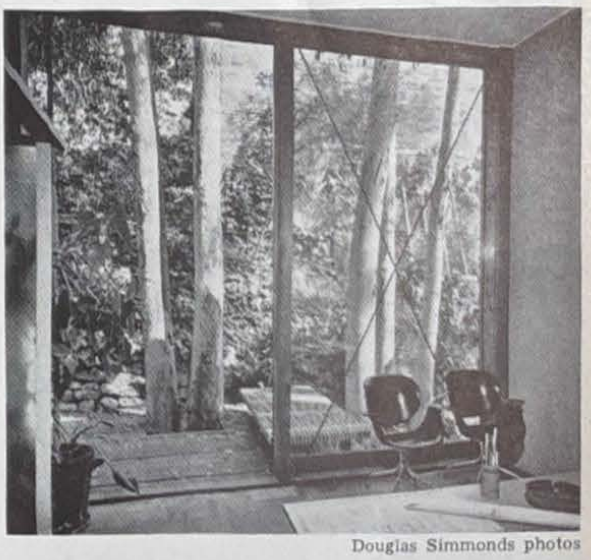
RUOCCO & DELAWIE
San Diego, California

ARCHITECTURAL OFFICES are part of Design Center Building, planned, built and owned by Lloyd Ruocco. Sun and light on south are modulated by electronically controlled roll-down awning.





DRAFTING ROOM is at left, Ruocco's office at right. Below Homer Delawie's adjoins small rear garden.



Douglas Simmonds photos

DEVELOPED on the premise that one tree is worth a thousand times its weight in architecture, these offices in reality constitute a 35x42-ft. empty box with a spacious garden view (100x200 ft.) on the south and a compact garden approach (15x100 ft.) on the north. Structure, according to the architects, demonstrates five basic design concepts: absolute simplicity; fully flexible room planning; incorporation of the most humane values of the climate—garden views, sunlight and natural ventilation; openness of plan to suggest physical and psychological freedom; and a true art feeling which is possible only without ostentation.

Offices owe their fortuitous location to the fact that they rest on a warehouse which is used by Design Center Interiors, an establishment which occupies most of the lower floor of the building on the west. Wimmer & Yamada, landscape architects, and the California State Board of Equalization are the other tenants.

Structure and doors are of natural Douglas fir, with a dull red exterior trim on both wood and metal. Drafting room wall on the west is an off-blue plastic; the 11-ft. high ceiling, white striated acoustical tile; floor and exterior walkway to the south, natural color masonite hardboard in 4x12-ft. sheets. Casework, of Douglas fir with white stain, is 7 ft. high and can be relocated easily as the future demands. Present layout calls for an optimum of from six to eight draftsmen.



In Oakland: 115 tons of structural steel

Thin, curving steel beams form the dome framework of the Greek Orthodox Church of the Assumption in Oakland, making the marriage of a centuries-old traditional architectural form with modern construction techniques. Reid, Rockwell, Banwell & Tarics, architects-engineers, designed a circular church to provide the greatest possible seating capacity in the available floor space and to achieve optimum conditions in the seating arrangement for viewing and hearing the speaker. Framing system turned out to be very economical for this type of structure, comments Alexander Tarics, the firm's structural engineer.

The dome is composed of 36 arched wide flange sections, bent to a 74-ft. radius at Bethlehem Steel Co.'s San Francisco shipyard. All structural steel for the church and adjacent classroom building was fabricated and erected by Bethlehem. Ribs were fabricated in two sections and welded together at the site. All other connections were made with high strength bolts.

An 8-ft. square falsework tower supporting a compression ring was set in the center of the building and ribs were erected in opposing pairs to keep the load balanced. All steel was erected with a 20-ton truck crane.

Ribs spaced at 10-deg. intervals are anchored at the top of the concrete perimeter wall to chord sections made of smaller wide flange sections split along the web to form a tee. These chord sections are welded end to end, forming a solid ring with a 122-ft. diameter. The entire frame is braced with 1¾- and 1½-in. diameter diagonal rods.

Four arched dormers are located at equal intervals around the dome. They will contain colored glass windows, shaded with a ceramic screen and are framed with wide flange sections bent 180 deg. in a 15-ft. radius.

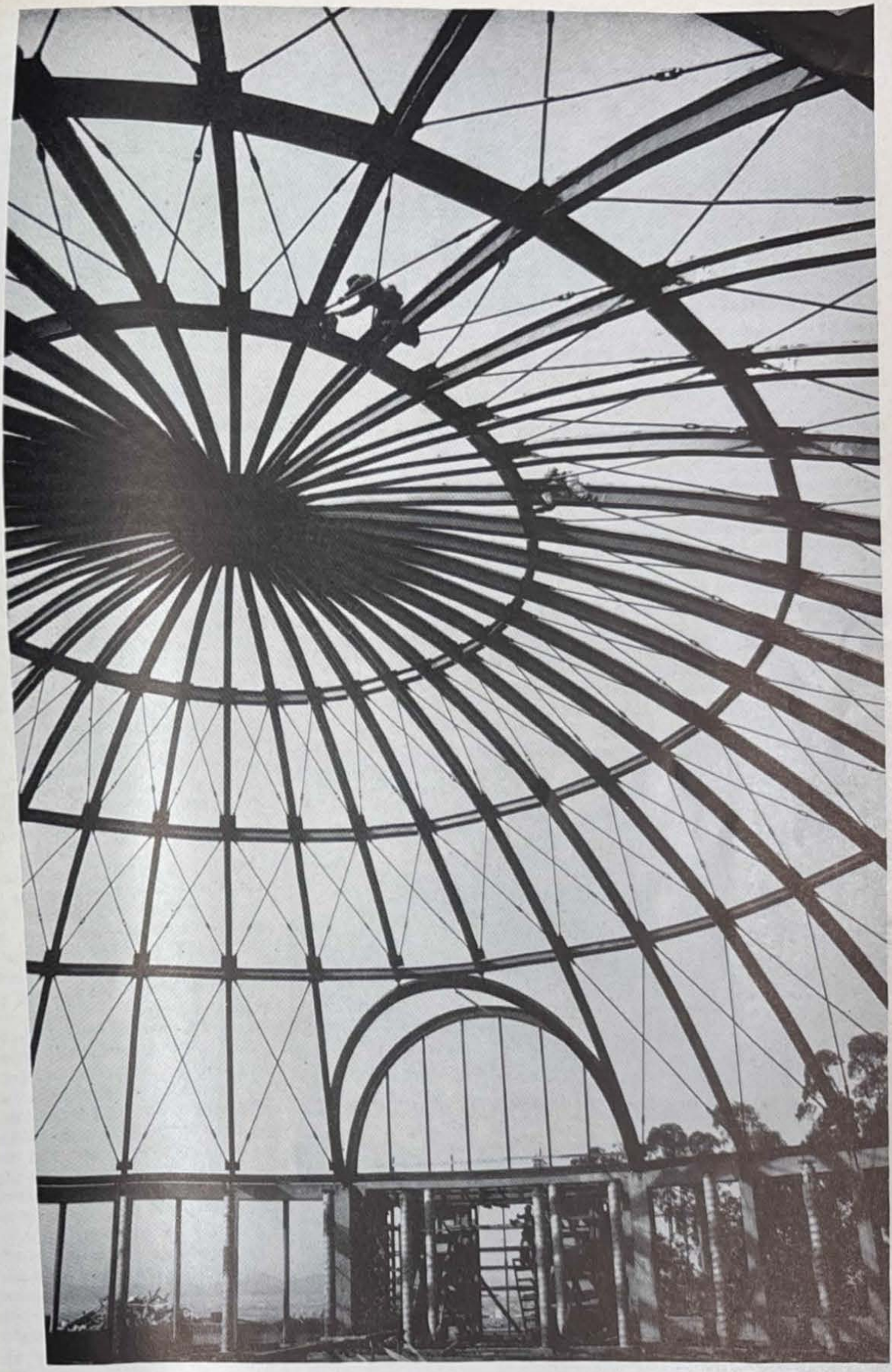
Three wide flange sections — much heavier than the others — support a choir loft above the main entrance. These beams are topped with 4½-in. steel decking forming the loft floor.

Opposite the choir loft is an apse screen consisting of an elliptical section, having the same curvature as the roof and framed with 11 curved wide flange sections standing on end. The screen forms a background and acoustical reflector for the services.

Church is located in the curve of a winding street overlooking the city. The outside will be covered with copper sheeting, the inside with gold anodized aluminum perforated for acoustical treatment. Structure will be acoustically engineered to eliminate problems inherent in the dome shape. General contractor is Williams & Burrows, Inc.

CIRCULAR DOME is accentuated by its location in curve of winding street which overlooks Oakland. Completion date is set for this coming September.





TWELVE-INCH WIDE FLANGE BEAMS intersect with compression ring covered with 8-ft. diameter steel, ¾-in. thick. Church, which will seat 1,000, and classroom building contain 115 tons of structural steel.



COLUMNS go up fast with minimum of trouble. Two carpenters seen above set and stripped average of seven units every eight-hour shift.



PREFABS produce attractive, curved high ramp walls, shown here just after stripping minus blemish. Hardware tie ends are broken off.

Jet age concreting reduces costs on Salt Lake City terminal project

Several interesting design and construction methods are being utilized in erecting the $4 million Salt Lake City Airport Terminal Building.

The new development, which will replace a long-obsolete administration building, consists of a main terminal building with control tower, north and south ramp buildings, north and south passenger concourses and a utilities building. Architects-engineers Ashton, Evans & Brazier designed a modular reinforced concrete system from the bottom of basement level to the top of the first floor. From here the building is a combination of prefabricated facing, glass and steel columns to the top of the control tower.

Passengers will be pleased to know that materials in the front columns facing the parking ramps are being acoustically treated so that they can enjoy watching the planes through a large, glassed-in area without the ear-splitting noise from screaming jet engines. To hold down the sound the structural steel vertical columns are surrounded by special perforated metal tubes filled with Styrofoam which absorbs most of the noise.

Contractor Christensen Bros. employed plywood forms with steel edges and corners and steel backing to speed the concreting work and cut costs. The Symons Steel-Ply forms were used to advantage on the 12-in. thick reinforced concrete basement walls, which were fairly well cut up with electrical installations, and on square passenger concourse columns. These were completed at the rate of seven a day by two men working together.

When electricians forgot to install outlet boxes on several occasions, they were able to remove one panel from the middle of an entire 14-ft. high section, install the box and button the thing back up in a matter of minutes. The forms were even used on pile cap foundations.

One of the hardest forming jobs was a double-flared, curving wall of variable height lying directly in front of the administration building. It was formed by constructing its foundation, outlining the curve and then stacking the forms on steps which had been poured in the foundation. By using channel type filler strips between the panels, front and back, the curve was formed and poured mortar tight.

Concrete work moved just as efficiently. Ideal sacked cement was used. On some of the footing and basement wall construction, the concrete was dumped direct from truck mixers; in other portions of the building it was handled by a 1-yd. transfer bucket and a truck crane. A synthetic membrane produced by Techkote Co. was employed in curing the concrete.



MAIN STRUCTURE and related facilities rest on foundation of driven Raymond Step Taper piles.



NEW FACILITY is expected to be serving Salt Lake City before end of year.

CURTAIN WALL sales potential of $125 million in the 13 western states in 1965 was forecast by D. B. McFarland, president of Pacific Curtainwall, Inc., at a meeting of company representatives. But, he said, "to realize this potential, the curtain wall industry must make a concerted effort to adapt itself to the requirements of architects." The $125 million estimate includes only the prefabricated metal-frame type and does not include other types of nonbearing walls. It was based on a survey predicting $65 billion in national building volume in 1965, one-third of which would be in the western region.

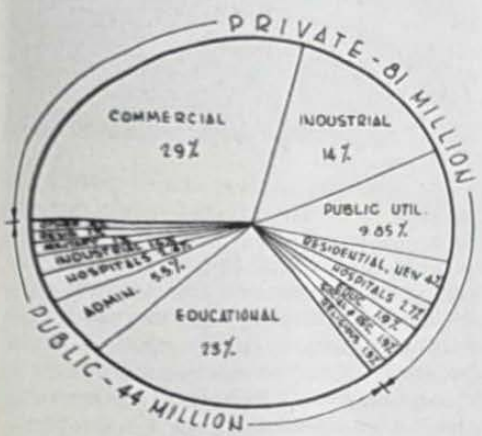


CHART breaks down by specific type of construction percentage that each will account for of predicted $125 million in potential curtain wall sales.

—pa&b memo—

WESTERN HEMLOCK bark can be used as a partial replacement for expensive resorcinol to produce cold-setting adhesives at a relatively low cost, Dr. F. W. Herrick, a scientist from Rayonier's Olympic research division, recently told the Forest Products Research Society. Dr. Herrick reported that adhesives containing 30 to 60% of silvichemical HT-120, a highly reactive polyphenolic intermediate chemically extracted from the bark, gave excellent bonding quality in Douglas fir laminates prepared under room temperature setting conditions. He reported that the new adhesives were developed to meet pot-life and long open assembly requirements of the softwood laminating industry. HT-120 is now available in limited quantities for laboratory or pilot plant testing.

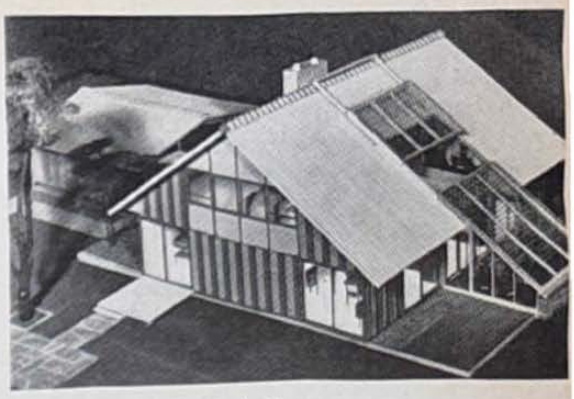
—pa&b memo—

ALUMINUM HOMES—5,000 three- and four-bedroom models priced to sell between $14,400 and $16,500—will highlight a $120 million building program planned for two California cities, Newark and San Leandro. They will combine the features of the Reynolds Metals Co. House of Ease, the Owens-Corning Fiberglas Comfort Conditioned Home and the all-electric Medallion Homes. In addition, the Bevilacqua project will include 1,300 multiresidence units and two commercial shipping centers for the two locations.

Features drawn from the three models will be aluminum siding, roofing shingles, windows and sliding doors, rain-carrying equipment, flashing and about 15 other aluminum items; Fiberglas insulation in ceiling and side walls; and all-electric Hotpoint kitchen and electric baseboard heating.

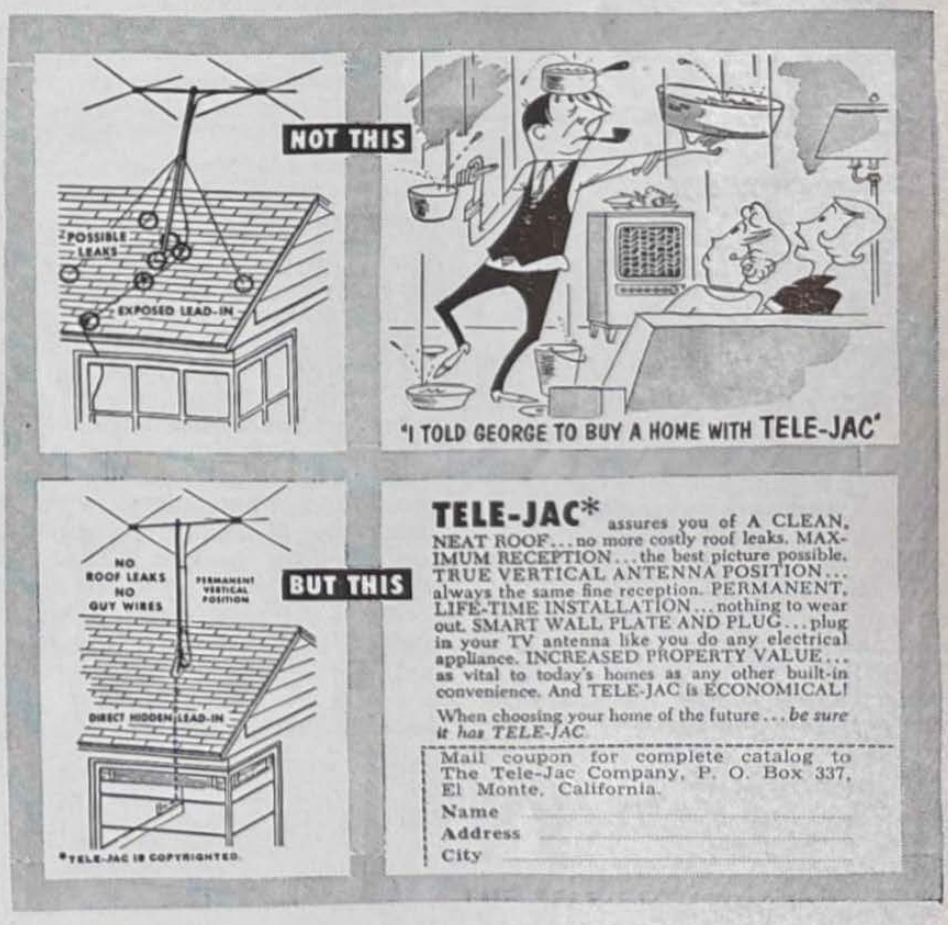
—pa&b memo—

PORCELAIN ENAMEL panels, up to now primarily a building product for commercial and institutional structures, will take a step into the home field this summer when the Ferro Research House is erected in Cleveland. The house, being built by Ferro Corp., will have Fenestra porcelain enameled steel wall panels throughout and is planned as a demonstration of speedy construction with prefinished and prefabricated elements to show flexibility of design with these materials and their maintenance-free qualities.



MODEL of Ferro Research House.

Curtain wall will be of insulated sandwich design, enameled inside and out with interchangeable panels that can be replaced to suit the color whims of the owner. Interior partitions will be similar and treated to nullify sound transmission. Ceilings will be steel panels porcelain enameled on the exposed face, perforated and backed up by a sound absorbing glass fiber pad. Windows are an integral part of the exterior panels. Exterior doors will have porcelain enamel finish while interior doors will be vinyl coated.



colored stainless steel

Allegheny Ludlum Steel has developed a simple, economical method of producing stainless steel in colors and is now marketing the product in shades of brown and black. Other colors are being field tested. The method, developed in cooperation with the Kelsey-Hayes Co. which produces the coating material, involves the application of a chromate-base coating similar to that used on the inner lining of metal containers. It is then cured at 350-deg. temperature. The company says this process achieves good uniformity of color, good surface adherence and abrasion resistance.—Allegheny Ludlum Steel Corp.

(Item No. 1)

electroluminescence light

For nurseries, bathrooms, hallways and like applications, Sylvania is marketing a light utilizing electroluminescence, the direct conversion of electrical energy into light. Called the Panelescent night light, it provides a soft, green light source which illuminates a small area without creating distracting light at a distance. Panelescent plugs into a standard 120-volt outlet, burns for a year on less than three cents worth of electricity and has a life expectancy of almost five years of continuous burning. It consists of a thin ceramic plate coated with electroluminescent phosphors and protected by a rigid vinyl sheeting.—Sylvania Lighting Products.

(Item No. 2)

steel swimming pool

A swimming pool specifically designed to be put in by the builder's crew and equipment has been developed by



a California firm. Called Coraloc, the pool utilizes a ribbed steel sidewall that combines vertical strength and horizontal flexibility to withstand the stresses of freezing and thawing; reinforcing steel and concrete at the bottom; and concrete at the top. Sidewalls are finished with a waterproof surfacing in color. When installed during house construction cost is reportedly under $2,000.—Coraloc Industries, Inc. (Item No. 3)

suspended ceilings

A low cost expanded plastic tile designed for use in suspended grid type ceilings is now being marketed nationally following successful applications in several major remodeling projects in the east. Cost of installation is further reduced due to the material's light weight which makes it possible to employ lighter than usual steel grids. Product is white, in a striated pattern and is supplied in modules of 1 in. thick for standard 2x2 and 2x4 grids. It can be cut to accommodate vents and irregular shapes.—General Foam Plastics Corp. (Item No. 4)

electronic teaching package

Schools wishing to inaugurate the tape teaching method for foreign languages, speech correction, shorthand and other courses can now obtain a package laboratory that will teach up to nine different lessons and from six



to 54 students at the same time. The Webster Teaching Laboratory consists of a monitor panel, power panel, program panel, tape recorders, microphones and headsets. It allows three different methods, student selection of the program, instructor selection or the student may "teach himself." Components are designed for installation in standard student booths. The same system can be used for paging or music distribution.—Webster Electric Co. (Item No. 5)

high capacity shoring

To speed erection, stripping and forming time, Tubular Structures is offering a shoring engineered to carry a load of 20,000 lb. per panel. Hi-Load handles like others in the Waco line, using 4-ft. wide panels, adjustable staffs, shore heads and cross braces. Panels come in heights from 3 to 6 ft.—Tubular Structures Corp. of America. (Item No. 6)

decorative plastic panel

A low cost, fiberglass reinforced plastic panel specifically designed for decorative interior applications has been added to the Filon line. The material features a random pattern of multicolored leaves, butterflies and gold flecks against a frost background. It is recommended for room dividers, shoji screens, etc. Panel is 48x144 in. —Filon Plastics Corp. (Item No. 7)

electrical conduit

Harvey has entered the electrical rigid conduit field with a line of conduit, elbows and couplings in standard trade sizes up to 6 in. made of an aluminum alloy developed especially to meet the electrical contractor's specifications. To make wire pulling easier, all internal surfaces are treated and coated. An electrical thread lubricant, also developed by the company, is applied at the factory to the threads on both ends of all lengths and elbows.—Harvey Aluminum.

(Item No. 8)

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plastic covered paneling

Prefinished plywood paneling protected from grubby fingerprints, crayon and scuffs by a vinyl plastic film is being marketed by Simpson under the trade name Lifeclad. Paneling, with matching flush doors, will be offered in five grained finishes and three natural woods with a laminate of either grained or clear film, all factory finished. They can be washed with detergent or soap. — Simpson Logging Co. **(Item No. 9)**

patterned aluminum

For room dividers, solar shades, ceiling panels, display backgrounds and other similar uses, Alcoa has developed a three-dimensional aluminum sheet in four patterns and 11 finishes. Product is called 3-D Sheet and is available in a single standard alloy, size and temper through Pacific Metal Co.—Aluminum Company of America. **(Item No. 10)**

patch acoustical treatment

Sometimes the acoustical treatment in a classroom is so thorough the children in the back of the class can't hear the teacher. To solve this type of acoustical problem, Pittsburgh Corning has come up with a system called Geocoustic, based on the principle of distributed or patch absorption and utilizing individual units of cellular glass material. Developed during 10 years of research, the material has high sound absorption qualities making it possible in some cases to use a relatively small number of patches. Because of its rigidity and dimensional stability, small holes of precise dimensions can be made to predetermined depths. This, in turn, permits the production of units that can be precisely tuned to specific frequencies. At present the company is marketing the product in 13½-in. square, 2½-in. thick units weighing 2 lb. each. Nearly 2,400 holes 1/16 in. in diameter are pressed into both the front and back surfaces and the unit is mounted on four square pads so that it sits out ½ in. from the wall or ceiling, creating the effect of a resonant chamber. —Pittsburgh Corning Corp. **(Item No. 11)**



roof insulation

Gold-N-Kote, a prime surfaced roof insulation holds bitumen absorption down to a minimum, saving in both material and labor. Absorption is said to be only 15 lb. per 100 sq. ft. Product is now available either plain or impregnated in thicknesses from ½ to 3 in.—The Flintkote Co. **(Item No. 12)**

fold-away tables

For school cafeterias and other installations where it is desirable to move the tables out of the way, Smith System is offering a line of tables that fold up into wall pockets. The 24 models and sizes range from a 10-ft. table that stores in a cabinet 5 ft. high to the 7-ft. high pocket holding two 14-ft. tables. Tables and benches are of high pressure plastics. Uniframe construction distributes strains over the entire frame for extra strength. Distributorship is being planned throughout the West.—Tubular Products Division, Smith System Manufacturing Co. **(Item No. 13)**

flexible asbestos-cement

An asbestos-cement structural sheet that will conform to irregular surfaces for a wide variety of uses and effects has been introduced by Keasbey & Mattison. Kamwall can be bent into a circle as small as 18 in. in diameter, can be nailed or stapled within ¼-in. of an edge and can be cut with a handsaw. Predrilling is unnecessary. —Keasbey & Mattison Co. **(Item No. 14)**

insulated steel panels

For steel structures requiring insulation, Truscon has announced a sidewall panel designed for assembly in the field with a layer of insulating material, such as fiberglass. Insulation goes between two sheets of Truscon 24-in Ferrobord or galvanized ribbed siding. Panels are furnished in widths of 2 ft. and up to 40 ft. in length, providing savings in erection time. Interlocking side joints blend with the panel's fluted design.—Truscon Division, Republic Steel Corp. **(Item No. 15)**



custom designed screens

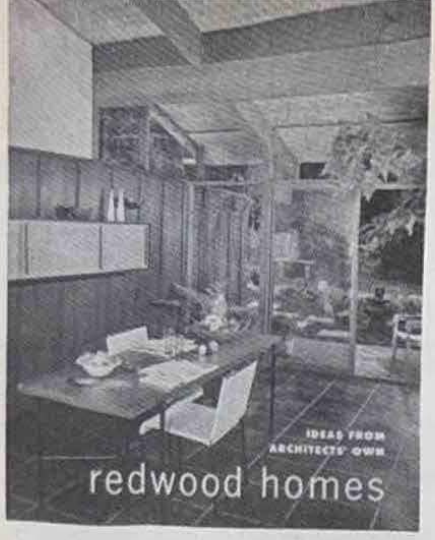
A technique for producing low cost, custom designed architectural screens utilizing an aluminum alloy called Tenzaloy has been tried out in the Middle West to good effect. Screen panels were foundry cast in small sections, coated with baked-on steel epoxy resin base paint and then assembled into larger sections. They were erected on the front of a church building with stand-off mounting brackets bolted to the building wall. —American Smelting and Refining Co. **(Item No. 16)**

aluminum canopies

Extruded aluminum solar canopies designed for cantilever installation projecting as much as 5 ft. from the building are being offered by Brisk. The canopies, developed to reduce transmission of heat through windows and thus air conditioning requirements, are available in several fascia designs and are of 12-gage aluminum. —Brisk Waterproofing Co. **(Item No. 17)**

high powered trowel

To keep slabs from getting away on hot, dry days, Master Vibrator is producing a 36-in. trowel packing a 5-hp. Briggs & Stratton engine that turns the blades from 45 to 110 rpm. Using the lightweight 5-Horse at 45 rpm. the contractor can float a wet slab sooner without worrying about digging in or stalling. Engine can be revved up to finish a big slab at high speed. If supplementary weights or sandbags are needed, the machine still has enough power to pull up soup on a dry slab. The 5-Horse has four blades, weighs 120 lb. and has a stationary guard ring overlapping the blades to ease work close up to walls and around pipes and columns.—Master Vibrator Co. **(Item No. 18)**



pa&b pick of the month

"Ideas from Architects' Own Redwood Homes" is a 16-page booklet, handsomely illustrated in color, showing the individuality of expression achieved by a number of different designers. While many different areas of the U.S. are represented, a goodly number are California projects and indicate a strong emphasis on natural redwood finishes. — California Redwood Association, 576 Sacramento St., San Francisco 11, Calif.



pa&b pick of the month

Room settings that show how lighting can be used as a design element are featured in "Inspiration Lighting," a 66-page catalog (AIA 31-F-2) of the Moe residential line. Interspersed among the standard catalog pages are ideas, both in text and full-color pictures, for dramatizing architectural details and furniture arrangements in every room in the house. The line itself, ranging from traditional to ultramodern, is tastefully presented on uncluttered pages.—Moe Light Division, Thomas Industries, 207 E. Broadway, Louisville, Ky.

Vermiculite Fire-Resistance Ratings (AIA 21-C-1): summarizes data for 59 official fire ratings for vermiculite plaster, concrete, acoustical plastic and type MK direct-to-steel fireproofing; 15 pp.—Vermiculite Institute, 208 S. LaSalle St., Chicago 4, Ill.

Hot Water for Industrial Plants: consolidates material on complete line with sizing charts and specs; 100 pp.—Permaglas Division, A. O. Smith Corp., Kankakee, Ill.

Efflorescence and Chalking on Painted Masonry Surfaces: discusses problems and solutions as presented to the convention of Federation of Paint and Varnish Production Clubs by Gerould Allyn; 48 pp.—Resinous Products Division, Rohm & Haas Co., Washington Square, Philadelphia 5, Pa.

Warehoused Architectural Aluminum (AIA 15-J): covers structural shapes, extruded tubing, handrails, window sills, etc., plus data on alloys of plain, embossed and colored sheet; 24 pp.—Reynolds Metals Co., Richmond 18, Va.

Built-in Stereo (AIA 31-I-51): illustrates system that combines built-in stereo AM-FM radio-music with intercom for homes; 8 pp.—NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

Studless Metal Lath and Plaster (AIA 20-B-1): revises 1956 publication for 2-in. solid partitions; 4 pp. — Metal Lath Manufacturers Association, Engineers Bldg., Cleveland 14, Ohio.

This Is Cemesto: depicts varied installations of multipurpose structural panels for insulated curtain walls; 8 pp.—The Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill.

Drywall Construction (AIA 23-L): describes and illustrates four Hummer systems for drywall applications with blueprint details and step-by-step procedure; 4 to 6 pp. each.—Bestwall Gypsum Co., 120 E. Lancaster Ave., Ardmore, Pa.

Mixing Valves: catalogs line of Swiss-produced thermostatically controlled water mixers; 8 pp.—Simix Co., Inc., 101 Park Ave., New York 17, N. Y.

Roofing Guide: describes and illustrates 14 common roof problems and recommends repairs and maintenance to overcome each, including flashing damage, alligatored, blistered, torn and open seams; 16 pp.—The Monroe Co., Inc., 10703 Quebec Ave., Cleveland 6, Ohio.

Wood and Aluminum Window (AIA 16-L): describes Wood-A-Lume window which has aluminum exterior permanently bonded to wooden interior surface, with installation details; 12 pp.—Building Products Division, Jervis Corp., Grandville, Mich.

Plastics for Lighting: catalogs complete line with photometric data charts and other design data in durable binder; K-S-H Plastics, Inc., High Ridge, Mo.

Bonding Charts: shows at a glance proper types of adhesives for various applications involving ceramic tile work and insulation projects; two charts.—Miracle Adhesives Corp., 250 Pettit Ave., Bellmore, N. Y.

Housepower Use-Planner: lists 146 electrical appliances with typical wattage and use-rating to aid in planning outlets; 6 pp.—The Wiremold Co., Hartford 10, Conn.

Sheet-Board (AIA 19-D-3): describes properties of this panelized sheathing grade lumber with specification guide; 6 pp.—Western Pine Association, 510 Yeon Bldg., Portland 4, Ore.

Luxtrol Light Controls (AIA 31-F-25): illustrates application of adjustable light controls in homes and commercial buildings; 24 pp.—The Superior Electric Co., Bristol, Conn.

Waljohn Waterstop (AIA 7-C and 4-E-11): briefly describes this extruded polyvinyl chloride waterstop with test data; 4 pp.—Waljohn Waterstop, Inc., 437 88th St., Brooklyn 9, N. Y.

Lidseen Chicago Bender: describes tool and outlines method for bending conduit or pipe; 6 pp. — Lidseen of North Carolina, Inc., 1082 First St., Hayesville, N. C.

Manual of Paper Food Service: is primarily for restaurant or institution managers, but offers information to aid in planning or designing kitchen and services areas; 60 pp.—Paper Cup and Container Institute, Inc., 250 Park Ave., New York 17, N. Y.

Precast Concrete Frame School (AIA 4-K) is well-illustrated project report on an Ohio high school, an all-concrete structure; 6 pp.—The Flexicore Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio.

Flex-Tee (AIA 4-K): describes and gives technical details of this prestressed, single stem roof deck cast either at yard or jobsite; 8 pp.—Flexforms, Inc., 1445 W. Quincy, Englewood, Colo.

Seamless Terne for Roofing (AIA 12-A-31): gives complete specifications for standard methods of application, outlines properties and pictures several installations; 4 pp.—Lead Industries Association, 292 Madison Ave., New York 17, N. Y.

Kalwall Panels: describes translucent and opaque panels and unit wall with detail drawings and photographs of installations; 8 pp.—Kalwall Corp., 43 Union St., Manchester, N. H.

Vidio-Master Projection Screens: catalogs line and gives selection information for industry, schools and other institutional uses; 36 pp.—Audio-Visual Department, Da-Lite Screen Co., Inc., Warsaw, Ind.

Dow Latex 560 for Portland Cement Compositions: describes advantages of this additive with test results and suggested placement techniques; 40 pp.—The Dow Chemical Co., Midland, Mich.

Cam-Lock Forming System: presents products developed for this newly patented concrete forming system and shows step-by-step application; 8 pp.—Gates & Sons, Inc., 80 S. Galapago, Denver 23, Colo.

Lupton Windows: catalogs complete line with specifications, detail drawings and table of sizes; 35 pp.—Michael Flynn Manufacturing Co., 700 E. Godfrey Ave., Philadelphia 24, Pa.

Insulating Board and Acoustical Products (AIA 37-B): briefly describes complete line with application data and tables of sound absorption coefficients; 24 pp.—Simpson Logging Co., 1033 White Bldg., Seattle, Wash.

Mortise Locks and Latches: gives complete data on four series, including a new knob made from Delrin, a material by DuPont; 32 pp.—Sargent & Co., New Haven 9, Conn.

Preservative Treatment of Millwork (AIA 19-A-3): evaluates softwoods for natural decay resistance and discusses preservative treatments; 8 pp.—Architectural Woodwork Institute, 332 S. Michigan Ave., Chicago 4, Ill.

Teco Timber Connectors: gives specifications and details on connectors, framing devices and installation tools with tables of recommended working loads; 8 pp.—Timber Engineering Co., 1319 18th St. N.W., Washington 6, D. C.

Electric Heat: provides estimated costs for electric heat in major market areas based on average temperature, with installation instructions; 14 pp.—Sun-Tron, 7435 W. Wilson Ave., Chicago 31, Ill.

Swimming Pool Equipment (AIA 35-F-2): covers all types of equipment, including diving stands, ladders, pumps, etc.; 36 pp.—Paragon Swimming Pool Co., Inc., 12 Paulding St., Pleasantville, N. Y.

Masonite Construction Manual (AIA 19-D-2, 23-L): outlines interior and exterior uses with detailed drawings; 28 pp.—Masonite Corp., 111 W. Washington St., Chicago 2, Ill.

FOUR DISTINCTIVE HAWS FOUNTAINS
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"The Series 60"...refreshing new styling with the durable beauty of gleaming vitreous china, permanently in good taste. All are wall-hung models, based on the same appealing design. Choose the model that best fits your plans...or choose several to complement each other in varied locations. Sanitation? Only HAWS has the exclusive M fountain head...raised, shielded, anti-squirt angle stream. Automatic flow control, too. Get detailed specs from HAWS. Write today.



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Scandinavian crane makes U.S. debut in California

A California contracting firm, North State Builders, Ltd., is the first in the U.S. to employ the Linden Climbing-Crane which raises itself from floor to floor while work is in progress.

Ray Jacobsen, who heads the Melo Park company, says this about the Scandinavian crane: "Because it stays on top of the job, no matter how high up the building goes, and is operated by one man from the working deck where he can see everything, we were able to forget about the problems of street accesses and unnecessary ramps and runways. It poured concrete and hoisted other materials, landing them quickly, exactly where needed. We saved $1,300 a month with our first Linden model."

The one man who remote-controls the work of the crane with a 3½-lb. electronic panel can slew, hoist and luff at the same time. He is free to move to any part of the job and to assist with loading and unloading.

The effective action radius varies from 66 to 100 ft., depending on which of the four Linden models is being used, due to the 360-deg. swing of the particular jib. The hoist line can reach the ground at any point, allowing transit-mix trucks, for example, to pull off the road at the most convenient place.

The tower protrudes far enough above the elevator or stair shaft in which it climbs to provide clearance for the construction of two floors. When these two floors are completed, the crane climbs up by its own hoisting winch to work on the next two floors. When the building is completed, the crane comes down quickly and easily as no part weighs more than one ton.

Among the crane's other features: motor brake lifter and speed guard, limit switch for highest load position, overload protection, outer and inner position for trolley carriage. It can be operated on rails and in a fixed position and erection can be accomplished using its own power equipment.

Manufactured by F. B. Kroll of Copenhagen, the crane is recommended for all types of industrial, apartment and office buildings, bridges, viaducts, etc. It has been employed successfully with slipforming of elevator shafts, without scaffolding. The U.S. distributor, B. M. Heede, Inc., of San Francisco and New York, offers four models at what it refers to "as about half the cost of comparable capacity cranes."



CRANE, shown at work on Palo Alto project, actually climbs up by its own bootstraps.

BRIEFS

• **Tacoma Chapter, AGC,** has a new secretary-manager, Gerald C. Campbell, who succeeds Robert F. Shapley. A graduate of the College (now University) of Puget Sound, Campbell had been associated with Crown Zellerbach Corp. in San Francisco for four years in its public relations and sales division. Shapely has taken a position with United Pacific Insurance Co. in Tacoma.

• **Paul Nels Carlson,** Seattle building contractor, received one of three Alumni Awards of Merit presented last month by Bethany College in Lindsborg, Kan. He was cited for contributions in the sciences and a continued interest in Bethany. A 1906 graduate, he later earned a degree in civil engineering at the University of Illinois.

• **Donald T. Groom,** 57, long active in home building and land development in East Bay cities, died May 24 in Oakland.

NLRB DECISONS AFFECTING THE CONSTRUCTION INDUSTRY

Union agrees to stop secondary boycott

The NLRB entered a consent order in a dispute between the Idaho Falls Building & Construction Trades Council and New Construction Corp.

The union group agreed to cease forcing the contractor to recognize or bargain with it as collective bargaining representative of the contractor's employees until the council has been certified by the NLRB as the representative of such employees.

The unions also agreed to stop putting pressure on a number of subcontractors to force them to cease doing business with New Construction Corp. and to stop forcing the contractor to cease doing business with Scott Bair or any other subcontractor whose employees are not members of the council.

Journeyman carpenters given back wages

Another consent decree was approved in settling a dispute between Johnson Construction Co. of Glendive, Mont., and Local No. 2425 of the Carpenters Union. The dispute centered about two carpenters, Bjarne Aas and Jack Younker, whom the contractor had reclassified and given a reduction in pay.

Under the consent settlement, the contractor agreed to restore the two ment to the classification of journeyman carpenter and to pay each of them $50 in settlement for the loss of pay suffered while they were reduced from journeyman.

The contractor also agreed to bargain with the union in the future with respect to rates of pay, wages, hours of employment and other conditions of employment.

Idaho supplier must bargain with union

A Twin Falls, Idaho firm, Sumner Sand & Gravel Co., has been found guilty of refusing to bargain with Teamster and Operating Engineer locals and has been ordered to do so by the NLRB.

On June 5, 1959, the NLRB had certified the Teamsters Union as the collective bargaining represenative for the firm's truck drivers, shop mechanics and helpers, and on May 28, 1959, had certified the Operating Engineers as the bargaining agent for the firm's crusher operators, shovel, dragline and tractor operators, oilers, mechanics and welders.

The company had refused to bargain on the grounds that it was not engaged in commerce as defined by the National Labor Relations Act and because it claimed the certification of the unions as bargaining agents

was improper. It also complained that certain ballots in the employees election had been counted improperly.

The entire case hinged on the validity of the order certifying these two unions as bargaining agents for the firm's employees, since the Sumner Sand & Gravel Co. did not deny that it had refused to bargain with the unions.

The trial examiner found that the consent election agreements executed by the unions and the company were final and binding and there was no evidence to support the company's contention that the regional NLRB director had acted in an arbitrary or capricious manner.

He ordered the sand and gravel company upon request, to bargain collectively with the two unions and if an understanding is reached, to embody such understanding in a signed agreement.

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The firm's full-time field survey personnel consisted of three persons. In May 1959, two of these employees, Madison E. Carrithers and Albert E. Hartley Jr., joined the engineers' union and on May 30 the business agent of Local No. 189, Ronald Labe, went to the engineering firm's office and attempted to bargain for the men. After Rogers had examined the two men's union membership cards, he remarked: "This will cost them their jobs."

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The NLRB ruled that Local No. 189 was the exclusive bargaining representative for the two men and that by failing and refusing to bargain with the union, the engineering firm was engaging in unfair labor practices.

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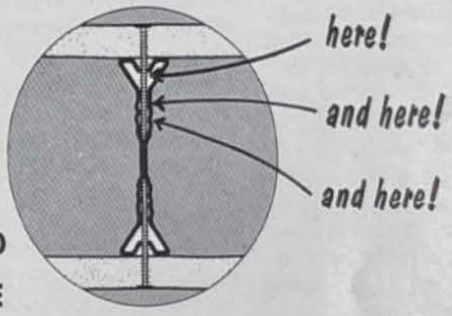
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DRYCO

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(non-bearing)

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Secure steel fastening ... no welding

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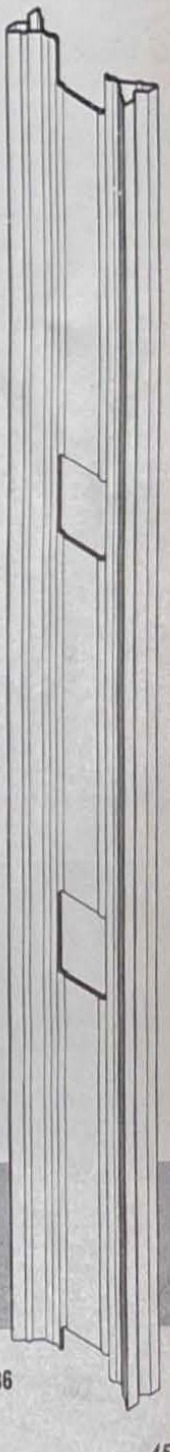
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WESTERN STATES A-E-C CATALOG FILE

DRYCO, INC.

NAILABLE SYSTEMS dryco

manufactured by Atlas Steel Stud Co., Inc.

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Scandinavian crane makes U.S. debut in California

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Ray Jacobsen, who heads the Melo Park company, says this about the Scandinavian crane: "Because it stays on top of the job, no matter how high up the building goes, and is operated by one man from the working deck where he can see everything, we were able to forget about the problems of street accesses and unnecessary ramps and runways. It poured concrete and hoisted other materials, landing them quickly, exactly where needed. We saved $1,300 a month with our first Linden model."

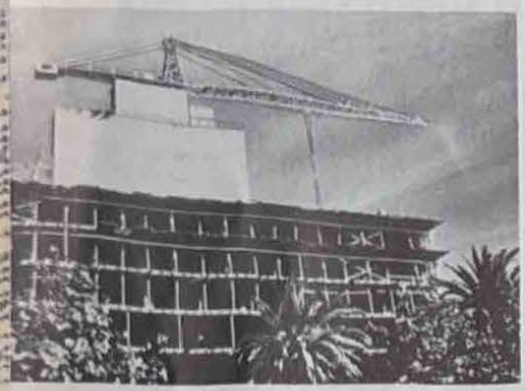
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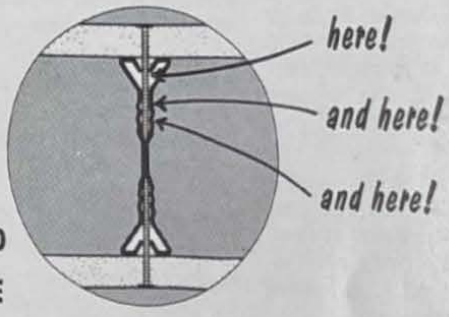
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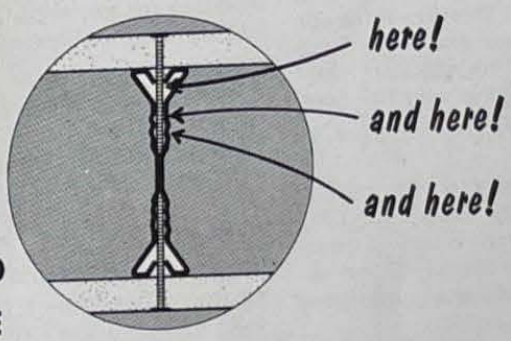
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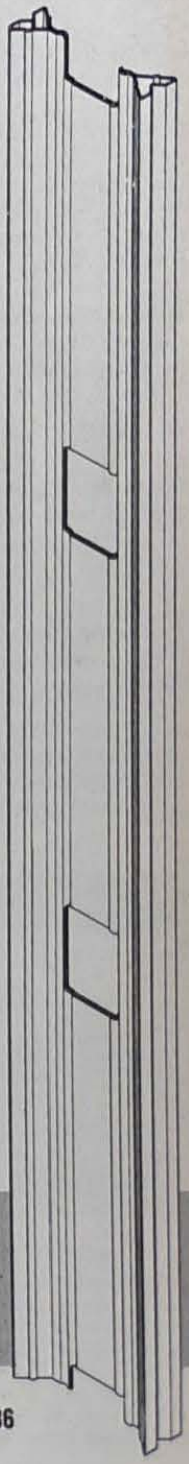
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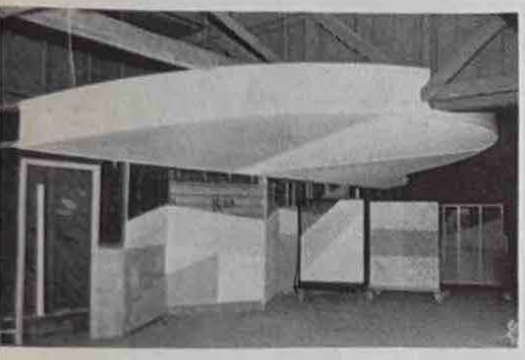
• **Pomona Tile Manufacturing Co.** has moved its Bay area operations to a new branch showroom and warehouse in Candlestick Industrial Park. Howard DeWeese is San Francisco division manager.

• **National Gypsum Co.** has opened a western region sales office in Los Angeles under the management of C. (Gus) Gustavus, formerly southwestern division manager in Dallas. The western region will include California, Washington, Oregon, Idaho, Nevada, Arizona, New Mexico and parts of Texas. In Denver, Fitzhugh W. Moore has been promoted from assistant manager to manager, succeeding Clyde A. Cook who has been named Kansas City manager.

• **Gladding, McBean & Co.** reports plans to acquire the Utah Fire Clay Co. of Salt Lake City. Board of directors of both firms already have approved the plan which is now being submitted to shareholders.

• **Pacific Curtainwall, Inc.,** has moved to new, expanded quarters at 600 W. 15th St., Long Beach, Calif.

• **Weyerhaeuser Co.** has named several panel products distributors for its Silvatek Division. They are Pacific Flooring Supply Co., Palo Alto and Sacramento; Sierra Skyline, Inc., Oakland; and The Harris Co., Olympia, Wash.



ARCHITECTURAL SEMINAR

held in Seattle recently featured this free form canopy constructed of suspended channel iron grillage, run-in-place plaster moldings and three types of acoustical plaster. Sponsored by Northwest Plaster Bureau, four-hour program had two divisions: construction largely erected and finished and portable exhibits—all without brand name identification.

• **Michael Flynn Manufacturing Co.** has appointed Selcal Western Corp. of Berkeley as sales representative for Lupton aluminum extrusions in northern California.

• **Rex-Spanall, Inc.** has purchased Spanall of the Pacific, Inc., western and Alaskan marketing firm for Spanall horizontal shoring. Rex-Spanall, which is a subsidiary of Chain Belt Co., has appointed Burke Concrete Accessories, Inc., to serve as Pacific Coast distributor.

• **Kennatrack Corp.** has appointed Stanley L. Crawford as sales representative for northern California. He will work out of Saratoga.

• **General Electric Co.** has named Diamond W. Supply Co. as wholesale distributor in the Los Angeles area for Textolite.

• **Peterson Window Corp.** has appointed John W. Akins Jr. as western representative for its line of aluminum windows, doors and curtain wall units. He will headquarter in Phoenix.

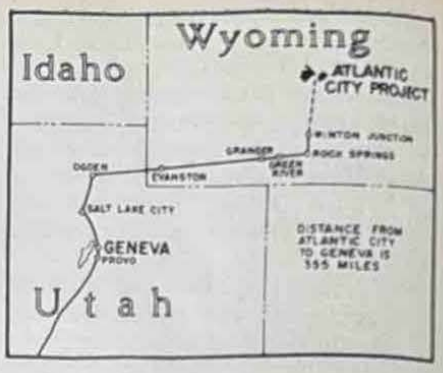
• **The Republic Supply Company of California,** Los Angeles, has appointed H. J. Bedell as manager of a new specialty metals division.

• **Felker Manufacturing Co.,** Torrance, Calif., has been purchased by Bay State Abrasive Products Co. of Massachusetts and will be operated as a wholly owned subsidiary.

• **Day-Brite Lighting, Inc.,** which operates a plant in Santa Clara, Calif., plans to merge with another St. Louis firm, Emerson Electric Manufacturing Co. Day-Brite would become a subsidiary of Emerson.

• **The General Tire & Rubber Co.** has appointed Flanagan Supply Co. of Phoenix as distributor of the building materials division's Bolta-Floor vinyl floor covering line.

• **Aberdeen Plywood & Veneers, Inc.,** Aberdeen, Wash., has purchased the Harbor Plywood Corp. and will operate it as a division.



• **Columbia-Geneva Steel Division,** United States Steel Corp., has started construction of an iron ore mining and beneficiation facility some 26 miles south of Lander, Wyo. After completion late in 1962, the ore mining, concentrating and pelletizing operations will supply pelletized iron ore to the company's plant near Provo, Utah. Known as the Atlantic City Project, the operation in the rugged Wind River Mountains will be the highest, large-scale open pit iron mine in the U. S.

• **Fibreboard Paper Products Corp.** has appointed two district sales managers for its roofing division: G. D. Page (Intermountain) with headquarters at Salt Lake City and Robert J. Drew (southern) at South Gate, Calif.

• **O'Keefe & Merritt** has named S. E. Morton as district manager in Utah, Montana, southern Idaho, eastern Nevada and western Wyoming.

• **Kasparians** has appointed Executive Office Interiors of San Francisco and Castle/West of Denver to act as wholesale representatives and show rooms for the firm's line of residential and office furniture.

• **Kaiser Steel Corp.** has opened a sales office in Salt Lake City and transferred David B. Brunson from the home office in Oakland to serve as sales representative in the new office. Territory will include all of Utah and southern Idaho.

• **Tempera Corp.** has appointed Guy E. Hawhee as Washington distributor for its water temperature control. Hawhee, a retired U. S. Army colonel with the Corps of Enigneers, will maintain offices in Tacoma under the name, Washington Tempera Valve Co.

• **Aluminum Company of America** has transferred Scott E. Gibb from Portland to Seattle where he will serve as sales promotion manager, succeeding Jack D. Stratton Jr. who

is being shifted to the Philadelphia office. Succeeding Gibb as Portland branch administrative manager is Joseph H. White Jr., formerly in the Seattle office.

• **Safway Steel Products, Inc.,** has named James C. Jay to serve as president of Safway Pacific, a new division of the firm organized to operate the recently acquired Beatty Scaffold. Jay will continue to serve as executive vice president and member of the board of directors of the parent company.

ASSOCIATIONS

• **Western Pine Association** has named Frank Scalero as trade promotion field representative with the Inland Empire-Intermountain region as his territory. For the past three years he was on the staff of Spokane architect Henry J. Swoboda and he will continue to make his home in that city.

• **Acoustical Materials Association** has named three West Coast men to its board of directors: W. J. Marshall of Kaiser Gypsum Co., Inc., Oakland, S. M. Lewis of the Pioneer Division, Flintkote Co., Los Angeles, and D. K. Meissner of Simpson Logging Co., Shelton, Wash. Marshall also will serve as chairman of the liaison committee with the Insulation Board Institute.

• **American Institute of Timber Construction** has reelected Ward Mayer as president. He is chairman of the board for Timber Structures, Inc., Portland. Others who will continue in their previous positions include Val Gardner, sales manager for Rosboro Lumber Co., Springfield, Ore., treasurer; John E. Attwell, vice president and general manager of Attwell, Inc., Everett, Wash., director; L. A. Jacobson, president of Associated Wood Products, Inc., Berkeley, Calif., director; and Frank J. Hanrahan, executive vice president and secretary. Paul T. W. Strub, vice president of Fluor Products Co., Santa Rosa, Calif.; and William B. Lindberg, president of Woodlam, Inc., Tacoma, were elected to the board of directors.

• **Portland Cement Association** has named Jack Y. Barnes, who has been district engineer in Montana since 1952, to a similar post in Colorado and Wyoming, working out of Denver. He has been succeeded by Norman D. Baumgart, with offices in Helena.



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6609A

Critique: Will Seattle be proud of its proposed city hall?

The Argus, "The Northwest's independent journal of news, comment and opinion," devoted front page space in one of its recent weekly editions to a criticism of Seattle's proposed city hall by architect Victor Steinbrueck (see "Not Specified").

It is said that architecture is a reflection of its times. In the hopes that our posterity may think more highly of us, an architectural criticism of the newly proposed city hall (and garage) is offered for those who care.

Perhaps as it stands, the design is actually a reflection of our city government. However, there are many who feel that a city hall should represent the pinnacle of a city's culture and be the finest possible architecture. Most Seattle architects are among these.

When a building as important as a city hall is to be built, the best talent available should be prevailed upon to do the architecture. In this case, the architects were selected as a result of a misdirected call for bids for a "package" offer including design, construction and financing. This would have circumvented the usual complications and intricacies of obtaining public approval.

The present design, produced in Texas, is little changed from that considered most likely in the earlier call for "bids."

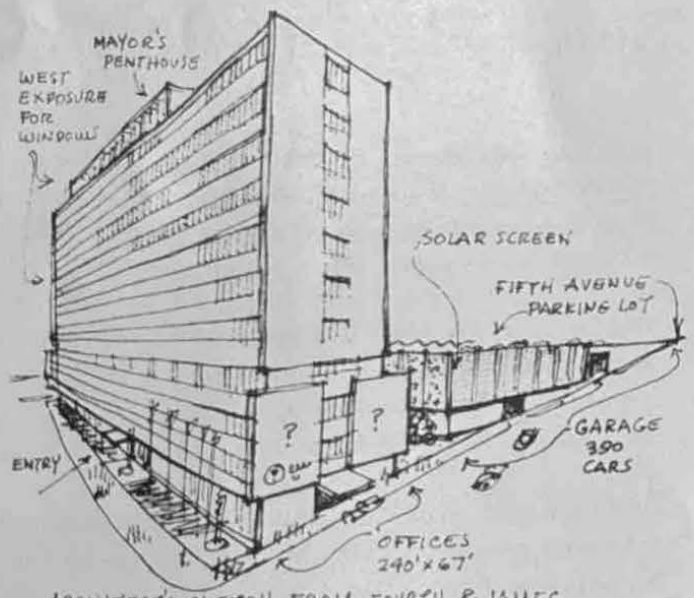
A proper architectural competition would have allowed much more talent to have participated and resulted in the best possible building. The means of selecting the architect would also have been a source of civic pride. Apparently, the original design package is again offered so it will be unwrapped a little in the hope of favorably influencing the final result.

It is comforting to know that major works of art will be commissioned and that the Art Commission will be consulted in this regard. Decisions regarding the architectural plans are held to be the function of the City Council alone. An evaluation such as would take place in a competent architect's office at this preliminary stage, therefore, seems in the public interest.

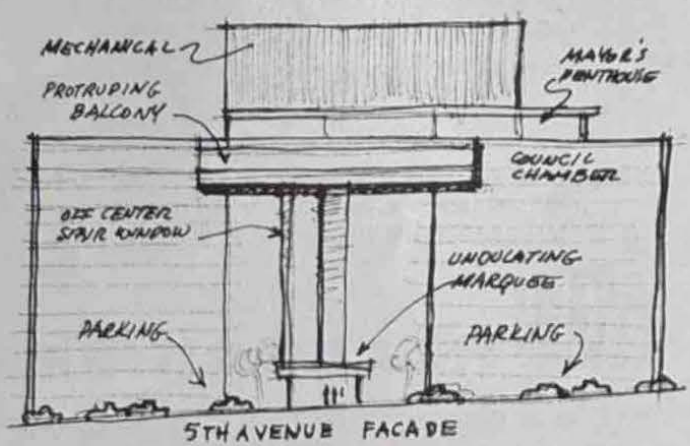
The first impression of the only sketch which has been shown is one of a somewhat complicated but quite ordinary combination of buildings. There is little to distinguish it from any other office building of 10 years ago. However, it is felt that the quality of design does not come up to the sheer elegance and luxurious off-street space of the new Norton Building, the dignity and quality of the new Washington Building, the direct honesty and simple proportions of the new Logan Building, nor the good massing and directness of the new City Light Building. If this is true, can it then be "a most attractive building of which the city can be proud?" Does anyone believe that it equals the quality of any of our recent buildings?

In locating the main office block, there appears to be a gross mistake in not providing an open public space at Fourth Avenue in relation to the Memorial Plaza of the Public Safety Building across the street. Instead, a separate open space results on Fifth Avenue. Developing a spatial continuity with the existing plaza might have been further related to placing the narrow office block running east and west to avoid the glare of early morning and afternoon sunlight. Windows thus exposed to the good north light and easily controlled south sunlight would improve the office functioning. Could this be a solution based on Texas climate?

Further study of the rest of the building and of the plans indicate the view published is the best one. The Fifth Avenue approach may be disturbing because of rather elementary architectural flaws. In the first place, one approaches through a parking lot under an undulating canopy, more than 100 ft. long, under which one cannot look up to see the building. Perhaps that is not too bad though because the building appears to develop a real awkwardness in its upper regions. Its absolutely symmetrical form is topped by a very obviously unsymmetrical 12th floor mayor's penthouse and even more disproportionate and heavy mechanical penthouse above that. This appears as "an out of drawing" error



ARCHITECT'S SKETCH FROM FOURTH & JAMES



5TH AVENUE FACADE

in the Fourth and James perspective, but it really is true.

A few minor flaws which will surely be corrected are a strange protruding balcony and councilman's "catwalk" at the 11th floor council chambers. The monotonous equality of proportion of the horizontal terra cotta spandrels and the windows will undoubtedly be more carefully considered as the design is improved.

On the James and Cherry Street facades, there is an unsolved problem of the garage feathering out to nothing at the Fifth Avenue street level and appearing downhill as a "solar screen" (?). One wonders about screening cars from the sun and not people. Good design demands a harmony between two elements of a building such as the office and garage units. Here an attempt at independence is experienced. Perhaps this is a reflection of work done in Texas and in Seattle.

Many architects have questioned the peculiar projecting square panels at the north and south ends of the second and third floors. There is no apparent reason for their existence since all floors seem to be similar. The horizontal overhang of the second floor along Fourth Avenue becomes awkward as the height diminishes to the higher sidewalk at Cherry Street.

The interiors are not yet fully developed so an observation regarding an obvious difficulty should be welcomed. The elevator lobbies are only approximately 9 ft. wide with opposing banks of two elevators each. (Most bedrooms are wider than 9 ft. On which side will the next elevator arrive?) Toilet facilities seem adequate.

Architecturally it is questionable whether this is really a first-rate building, especially considering what it ought to be. All of the problems of the building—the lack of spatial relation to the Memorial Plaza, the orientation of the offices, the unimaginative exterior appearance, the disparate forms, the unsolved relations between the garage and the city hall and the awkward grade relations on James and Cherry Streets—indicate that a great deal more talent should be exercised before this building becomes a reality. Possibly our councilmen have recognized their responsibility for the architectural plans and have so directed the architects?

So far, the proposed new city hall does not fulfill the consummate demands of fine architecture, the most difficult of all of the arts. Does Seattle deserve a better building for its city government?

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"Reed College is an institution that has traditionally stood for an enlightened and truly contemporary approach to education and human relations," write the architects who designed the new four-dormitory complex on the Portland campus. "Freedom of thought and expression are encouraged. In this type of atmosphere a true examination of various facets of undergraduate life, the students' desires and wants and a fresh approach to the problem of housing was possible." How that approach was developed into an award-winning solution will be described in our August issue. Other design features will cover a small steel and glass house set in the foothills of Utah's Mount Olympus and a large nursery and garden supply firm in California. And as for methods articles, one will examine the techniques in building a bank on a floating foundation.

mumford: seattle style

In bringing our "Points of View" department back to life this month, we reprint the criticism which architect Victor Steinbrueck leveled at Seattle's proposed city hall. That such a criticism should be published at all is significant enough in itself, although followers of the Argus probably were not too surprised, for the Seattle weekly journal speaks out in a fearless voice about a variety of political, economic and cultural matters. Steinbrueck and the Argus have been making an important contribution toward the layman's better understanding of architecture through a series of drawings and commentary entitled "Seattle Vignette," examples of which PA&B will run later this year. The author's name may ring a bell with many readers since he wrote the article on the Storey Cottages which we carried in June.

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it's an ill wind

When we presented a pictorial report on San Francisco's Candlestick Park in our June issue, we promised to discuss informally how architect John S. Bolles attempted to deal with that wind which has blown up such a storm of controversy in the Bay region. Here's how Ward Lindbeck, our Northern California editor and Giant baseball fan, sizes up the situation:

"Baseball parks must be oriented as close to north-south as possible since teams play afternoon games and if parks were in any other direction, either the defensive or offensive players would have the sun directly in their eyes during late innings. Therefore, Candlestick Park is oriented close to north-south, with center field bearing 23 deg. northeast of home plate. The variation from true north-south resulted because the wind problem was recognized.

"Economics prevented a wind baffle from presently being constructed farther out into left field from which come the prevailing northwest winds. But the architect has planned—and hopes that someday the plans will materialize—for additional stands and the enclosing of the bleachers out on the left field side. If that ever happens, the park will then accommodate about 90,000 (42,000 now) and the wind baffles will continue part way around left field.

"Many wind studies had been conducted before any design proposals got underway and the problem was acknowledged but nearly impossible to overcome. In addition, the structure itself has changed wind patterns somewhat.

"Now for the effect of the wind. The patrons certainly don't like it and the newspapers find the park and its wind fertile ground on light newsdays. But the Giants don't seem to mind. Actually the existing situation would seem to suit the style of other ball clubs more than the long-ball-hitting Giants, but this has not been borne out by the record. (They have won a great majority of their home games.) It is still true that no one has hit a home run during a day game over the left field fence and this is attributed to the heavy wind blowing in from that direction. During night games, when the wind is either less severe or is more variable in direction, home runs have been hit over that fence.

"And so if no U-2 has been shot down on a particular day, you can bet someone will be taking shots at the park. One which has become popular lately is that the mass of concrete is too severe in appearance and its critics advocate bright paint. I think it's a pretty, graceful structure and bright paint would be similar to smearing lipstick on Whistler's Mother because you don't like the mood she creates."

no grass on main street

Somehow New Yorker George Nelson, known to westerners through a number of personal appearances on the coast and through his furniture designs, always is a little more provocative than the next fellow. And he did not let his listeners down on NBC Radio's "Image America" series last month when he suggested that if a complete stranger were to come to one of our cities—"someone who had never seen anything like it before—his reaction would probably be that it was produced by barbarians." He added that the stranger would wonder why potatoes ride in trucks in the sunlight while people must ride around in holes in the ground. Other comments:

"A real community has young people, old people, childless people and even dead people. There isn't any room in 'Young Suburbia' for a cemetery.

"Tracts are an unattractive and inefficient way to use available land. Unfortunately, the possession of a one-family detached house is one of the great American dreams—even if it is a 2-ft. house on 3 ft. of land. But I think in spite of this we are eventually going to have to build towers that can house a large number of families. These towers will not take up much land and they can be surrounded by parks and gardens that will be for the use of all the families."

R.E.K.

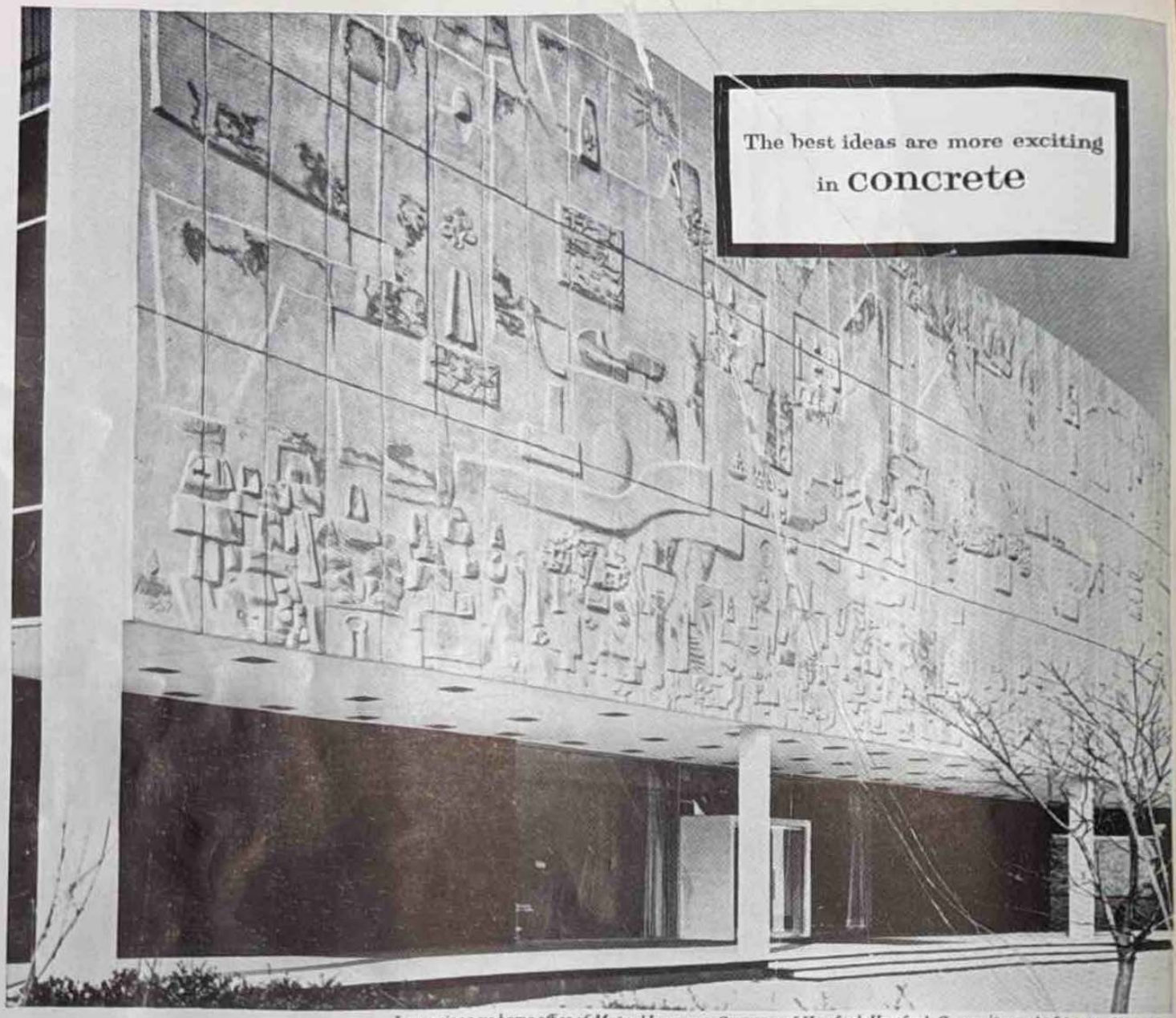
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AUGUST 1960





Impressive new home office of Mutual Insurance Company of Hartford, Hartford, Connecticut. Architects: Sherwood, Mills & Smith, Stamford, Connecticut. Structural Engineers: Werner-Jensen and Korst, Stamford, Connecticut.

Precast concrete and sand molds make "sculptured walls" come easy!

To achieve the striking design effect pictured here, the architects chose precast concrete. With it they turned the fronting wall of the building into an heroic bas-relief.

Famed sculptor Costantino Nivola "carved" the designs in damp sand. Cast directly from these sand molds in 132 panels, the concrete captured all the detail and rich texture of the original sculpture. Color variations on buff-toned background increase the feeling of depth.

This is just one example of how today's architects are using concrete to create outstanding decorative effects in buildings of every purpose, every size and type.

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COVER: Fountain by George Tsutakawa, Seattle Public Library (p. 14)—Bindon & Wright, Architects; Decker, Christenson & Kitchin, Associated Architects; Art Hupy photo.

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First six months show $55 million drop

Dollar volume of building permits for the first half of 1960 in the 13 western states totals $1,876,515,245, a loss of $55 million from the same period last year. Although there have been three good months this year, February, March and June, gains in those periods just couldn't offset the big drops in January, April and May. On a state basis, the picture is evenly divided between gains and losses. State showing the greatest increase for the January through June period is Hawaii, up $32.4 million compared to the first six months of 1959. Other states recording increases are Arizona, up $10.6 million; Nevada, $9.1 million; Alaska, $8.7 million; Oregon, $6.1 million; Wyoming, $2.6 million; and Montana, $1.5 million. Largest decrease is in California, down $68.5 million for the period. Other states recording decreases are Washington, down $30.8 million; Colorado, $15.5 million; New Mexico, $6.4 million; Idaho, $3.2 million; and Utah, $1.8 million.

Top 15 agencies

Among the top 15 agencies for the six months, nine are in California, two each in Washington and Arizona and one each in Colorado and Hawaii.

	Jan.-June 1960	Jan.-June 1959
1. Los Angeles	$327,096,114	$333,043,925
2. Los Angeles County	141,146,249	128,345,452
3. Honolulu	93,603,313	62,537,751
4. San Diego	66,459,138	100,564,179
5. San Francisco	64,437,246	53,709,567
6. San Diego County	57,661,100	73,097,700
7. Sacramento County	56,227,831	68,828,467
8. King County, Wash.	52,687,938	64,700,600
9. Phoenix	52,520,103	40,112,282
10. San Jose	51,952,264	69,171,544
11. Seattle	45,760,900	64,800,493
12. Maricopa County	35,686,807	40,943,855
13. Long Beach	35,535,820	32,647,080
14. Denver	35,494,135	50,965,478
15. Orange County	33,790,566	38,090,670

June total up

For the month of June key agencies in the 13 states report a total of $356,030,452, an increase of $4.1 million over June 1959. Eight states record increases, led by Arizona, up $10 million. Others, with amount of increase, are Nevada, $3.5 million; Oregon, $3.2 million; Hawaii, $2.1 million; Alaska, $1.7 million; Utah, $1.3 million; Montana, $483,000; and Wyoming, $148,000. States recording decreases for the June period are California, down $13.9 million; Washington, $3.7 million; Idaho, $548,000; New Mexico, $177,000; and Colorado, $83,000. Top five agencies for June are Los Angeles, $73,132,565; Los Angeles County $30,724,971; Honolulu, $18,964,653; Phoenix, $11,083,783; and Maricopa County, $10,703,721.

Analysis of typical areas—June

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$22,176,913	$5,760,379	*$1,767,750
Orange County	3,984,920	554,866	
Sacramento County	6,758,920	908,919	1,464,099
Las Vegas	2,928,354	594,850	2,201,800
Denver	2,657,985	2,409,210	97,000
Portland			
Seattle	2,044,894	4,231,943	3,013,983
King County	6,415,799	1,587,240	185,760
Honolulu	6,067,125	4,109,292	8,447,601

*Does not include $1,871,592 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for June

CALIFORNIA	June 1960	June 1959
Alameda County	$ 2,275,750	$ 1,369,225
Anaheim	2,787,558	4,410,517
Bakersfield	1,610,016	1,642,735
Burbank	648,065	829,298
Contra Costa County	3,877,251	4,673,309
Fresno	3,490,257	1,108,471
Fullerton	1,340,540	3,104,911
Glendale	3,259,067	2,121,141
Inglewood	1,628,992	714,000
Long Beach	5,178,720	8,229,460
Los Angeles	73,132,565	54,791,353
Los Angeles County	30,724,971	21,880,782
Oakland	4,248,837	4,464,647
Ontario	407,953	268,247
Orange County	4,708,140	4,603,836
Palo Alto	1,599,327	841,031
Pasadena	1,105,715	1,950,884
Pomona	1,111,073	861,342
Richmond	946,544	1,754,721
Riverside	2,887,921	2,674,694
Sacramento	2,520,227	4,525,786
San Bernardino	1,613,200	1,665,190
San Bernardino County	4,563,129	6,008,104
San Diego	7,914,482	22,033,577
San Diego County	7,289,300	12,533,500
San Francisco	5,502,919	10,165,143
San Jose	7,352,465	13,808,539
San Mateo	1,537,299	1,453,350
San Mateo County	4,225,061	2,281,669
Santa Ana	2,377,861	4,102,484
Santa Monica	1,701,245	1,022,428
Stockton	2,321,783	1,507,920
Sunnyvale	2,490,955	3,528,746
Torrance	1,753,535	4,199,800
West Covina	730,245	474,065
TOTAL	$210,473,220	$224,453,366

OREGON	June 1960	June 1959
Albany	$ 260,330	$ 215,783
Astoria	47,371	58,412
Baker	70,657	83,000
Bend	99,995	108,500
Coos Bay	55,740	94,655
Corvallis	2,802,144	2,589,625
Eugene	2,717,070	1,013,139
Grants Pass	137,550	109,850
Gresham	205,025	64,600
Hillsboro	112,010	142,000
Klamath Falls	156,130	138,715
LaGrande	90,301	153,863
Lane County	2,905,483	1,433,361
Medford	278,220	1,038,070
Multnomah County	2,374,401	2,921,342
North Bend	78,408	211,448
Oregon City	11,398	136,920
Portland	5,468,880	4,506,735
Roseburg	376,879	243,012
Salem	430,173	462,920
Springfield	432,667	98,793
The Dalles	148,535	162,829
TOTAL	$ 19,259,367	$ 15,987,572

WASHINGTON	June 1960	June 1959
Aberdeen	$ 75,449	$ 230,694
Anacortes	51,298	76,878
Auburn	105,800	422,300
Bellingham	381,170	562,313
Bremerton	206,245	265,295
Centralia	41,228	188,812
Chehalis	57,565	70,148
Ellensburg	36,593	126,628
Ephrata	18,300	166,890
Everett	416,986	207,472
Kelso	84,202	79,600
Kennewick	148,205	260,930
King County	8,317,308	10,559,600
Kirkland	36,150	69,195
Longview	356,976	304,264
Moses Lake	78,286	106,206
Olympia	174,311	371,995
Pasco	446,310	125,687
Pierce County	2,053,395	2,658,863
Port Angeles	85,300	68,750
Puyallup	53,100	180,147
Seattle	9,474,107	11,831,832
Spokane	2,707,728	1,401,154
Spokane County	3,186,003	1,559,529
Tacoma	1,507,355	2,156,127
Vancouver	662,367	574,758
Walla Walla	595,485	248,860
Wenatchee	96,937	418,175
Yakima	320,725	257,211
TOTAL	$ 31,775,084	$ 35,550,313

ALASKA	June 1960	June 1959
Anchorage	$ 3,217,161	$ 1,391,423
Fairbanks	528,860	490,967
Juneau	22,900	126,900
Ketchikan	34,875	7,975
TOTAL	$ 3,803,796	$ 2,017,265

IDAHO	June 1960	June 1959
Boise	$ 453,285	$ 1,135,927
Caldwell	248,625	238,120
Coeur d'Alene	53,350	49,800
Idaho Falls	515,691	828,669
Jerome	57,400	10,945
Lewiston	307,815	184,633
Nampa	148,295	122,665
Payette	14,500	28,500
Pocatello	244,961	142,557
Sandpoint	140,800	78,400
St. Maries	8,500	10,000
Twin Falls	190,930	102,495
TOTAL	$ 2,384,152	$ 2,932,711

MONTANA	June 1960	June 1959
Billings	$ 2,716,000	$ 1,494,800
Bozeman	12,000	128,050
Butte	17,000	279,524
Glasgow	2,900	289,000
Glendive	18,785	76,950
Great Falls	1,425,803	974,567
Helena	198,387	350,036
Kalispell	45,150	230,750
Lewistown	42,000	12,000
Livingston	25,350	49,700
Miles City	59,917	76,635
Missoula	174,074	285,267
TOTAL	$ 4,737,366	$ 4,254,279

WYOMING	June 1960	June 1959
Casper	$ 441,095	$ 704,710
Cheyenne	1,338,268	860,055
Sheridan	65,380	131,223
TOTAL	$ 1,844,743	$ 1,695,988

COLORADO	June 1960	June 1959
Aurora	$ 963,666	$ 1,245,042
Boulder	1,092,455	902,946
Denver	7,514,340	7,019,530
Englewood	438,905	403,739
Fort Collins	601,600	960,105
Grand Junction	138,397	99,748
Greeley	493,670	415,241
Pueblo	630,522	884,496
Trinidad	21,967	48,140
TOTAL	$ 11,895,522	$ 11,978,987

UTAH	June 1960	June 1959
Logan	$ 1,462,500	$ 406,416
Murray	233,400	365,575
Ogden	1,622,196	1,593,200
Provo	706,000	679,650
Salt Lake City	1,615,579	1,264,594
TOTAL	$ 5,639,675	$ 4,309,435

NEVADA	June 1960	June 1959
Elko	$ 53,140	$ 41,800
Las Vegas	5,837,768	1,593,424
Reno	1,235,070	2,221,071
Sparks	341,528	72,536
TOTAL	$ 7,467,506	$ 3,928,831

ARIZONA	June 1960	June 1959
Douglas	$ 58,860	$ 168,548
Flagstaff	220,844	462,293
Glendale	34,289	43,150
Maricopa County	10,703,721	3,241,664
Mesa	1,180,061	2,662,950
Phoenix	11,083,783	6,284,000
Tucson	4,400,468	4,878,430
Yuma	236,925	173,600
TOTAL	$ 27,918,951	$ 17,914,635

NEW MEXICO	June 1960	June 1959
Albuquerque	$ 3,908,826	$ 5,618,661
Carlsbad	217,625	281,316
Clovis	384,465	470,240
Gallup	202,974	138,607
Hobbs	336,550	289,890
Las Cruces	400,000	397,000
Roswell	1,715,109	624,622
Santa Fe	1,060,481	583,021
TOTAL	$ 8,226,030	$ 8,403,357

HAWAII	June 1960	June 1959
Hawaii County	$ 571,770	$ 336,649
Honolulu (city-county)	18,964,653	17,899,594
Maui County	1,068,617	257,137
TOTAL	$ 20,605,040	$ 18,493,380
GRAND TOTAL	$356,030,452	$351,898,500

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Building Permit Totals for 155 Western Agencies for January-June, 1960

CALIFORNIA	Jan.-June 1960	Jan.-June 1959
Alameda County	$ 9,569,425	$ 8,596,560
Anaheim	21,113,766	24,717,581
Bakersfield	8,746,608	7,041,140
Burbank	5,067,057	5,834,880
Contra Costa County	21,174,771	21,947,613
Fresno	16,522,544	10,744,715
Fullerton	9,802,422	11,555,772
Glendale	9,629,820	13,360,286
Inglewood	6,624,022	6,672,145
Long Beach	35,535,820	32,647,080
Los Angeles	327,096,114	333,043,925
Los Angeles County	141,146,249	128,345,452
Oakland	23,099,614	27,434,216
Ontario	4,824,019	2,522,809
Orange County	33,790,566	38,090,670
Palo Alto	11,718,398	7,969,552
Pasadena	8,884,326	12,095,780
Pomona	7,772,014	7,600,964
Richmond	4,852,839	6,968,122
Riverside	10,517,860	13,046,363
Sacramento	22,784,785	23,982,955
Sacramento County	56,227,831	68,828,467
San Bernardino	8,290,801	10,442,155
San Bernardino County	28,137,961	34,072,591
San Diego	66,459,138	100,564,179
San Diego County	57,661,100	73,097,760
San Francisco	64,437,246	53,709,567
San Jose	51,952,264	69,171,544
San Mateo	9,300,729	6,073,987
San Mateo County	13,649,262	10,273,622
Santa Ana	21,817,424	14,824,952
Santa Monica	10,734,855	11,570,136
Stockton	8,109,914	8,029,908
Sunnyvale	12,580,629	17,550,655
Torrance	20,038,722	14,960,453
West Covina	5,067,791	5,928,004
TOTAL	$1,174,738,706	$1,243,326,500

OREGON	Jan.-June 1960	Jan.-June 1959
Albany	$ 1,064,431	$ 1,340,199
Astoria	337,911	203,477
Baker	581,422	1,071,970
Bend	767,924	669,335
Coos Bay	836,912	776,252
Corvallis	4,573,141	4,369,890
Eugene	9,635,790	3,977,276
Grants Pass	933,475	753,800
Gresham	377,875	362,540
Hillsboro	1,322,655	919,244
Klamath Falls	1,026,283	1,024,127
LaGrande	298,220	383,336
Lane County	8,829,239	6,169,118
Medford	2,309,782	3,498,909
Multnomah County	14,330,893	17,626,269
North Bend	530,636	1,534,919
Oregon City	583,456	472,709
Portland	32,312,195	30,339,880
Roseburg	1,532,811	744,758
Salem	2,765,206	2,750,212
Springfield	970,496	610,929
The Dalles	482,346	630,629
TOTAL	$ 86,403,099	$ 80,219,778

WASHINGTON	Jan.-June 1960	Jan.-June 1959
Aberdeen	$ 930,701	$ 675,439
Anacortes	530,308	512,548
Auburn	1,743,497	1,796,960
Bellingham	3,019,902	2,244,468
Bremerton	1,150,395	1,811,575
Centralia	321,411	1,027,878
Chehalis	176,636	421,528
Ellensburg	405,374	362,410
Ephrata	879,859	251,387
Everett	2,981,160	1,923,276
Kelso	242,991	348,400
Kennewick	1,326,545	784,105
King County	52,687,938	64,700,600
Kirkland	443,265	540,545
Longview	1,654,815	2,630,120
Moses Lake	295,976	911,166
Olympia	1,555,860	1,372,796
Pasco	961,678	1,294,005
Pierce County	13,136,293	12,731,096
Port Angeles	623,110	313,991
Puyallup	542,262	814,587
Seattle	45,760,900	64,800,493
Spokane	12,791,147	15,381,931
Spokane County	10,791,440	10,663,461
Tacoma	11,343,789	10,327,591
Vancouver	3,882,762	4,423,468
Walla Walla	3,677,535	1,423,870
Wenatchee	1,125,414	1,143,831
Yakima	2,147,084	2,383,719
TOTAL	$ 177,130,047	$ 208,017,244

ALASKA	Jan.-June 1960	Jan.-June 1959
Anchorage	$ 11,751,623	$ 3,185,131
Fairbanks	1,178,610	1,705,145
Juneau	96,150	294,515
Ketchikan	1,039,774	135,350
TOTAL	$ 14,066,157	$ 5,320,141

IDAHO	Jan.-June 1960	Jan.-June 1959
Boise	$ 2,916,021	$ 3,707,897
Caldwell	826,675	872,820
Coeur d'Alene	467,754	641,600
Idaho Falls	2,550,149	5,161,088
Jerome	276,300	123,730
Lewiston	1,191,268	1,158,945
Nampa	808,523	1,162,620
Payette	267,000	286,320
Pocatello	2,228,690	1,739,472
Sandpoint	415,850	427,376
St. Maries	433,750	86,300
Twin Falls	854,230	1,073,045
TOTAL	$ 13,236,210	$ 16,441,213

MONTANA	Jan.-June 1960	Jan.-June 1959
Billings	$ 6,522,500	$ 3,710,698
Bozeman	771,791	997,490
Butte	158,300	440,680
Glasgow	213,600	606,002
Glendive	222,124	248,250
Great Falls	5,733,782	4,965,354
Helena	1,222,316	2,122,597
Kalispell	393,810	344,700
Lewistown	152,550	208,274
Livingston	112,750	356,632
Miles City	997,659	602,050
Missoula	912,342	1,229,242
TOTAL	$ 17,413,524	$ 15,831,969

WYOMING	Jan.-June 1960	Jan.-June 1959
Casper	$ 4,430,504	$ 5,496,472
Cheyenne	6,375,722	2,876,299
Sheridan	747,292	502,540
TOTAL	$ 11,553,518	$ 8,875,311

COLORADO	Jan.-June 1960	Jan.-June 1959
Aurora	$ 4,473,119	$ 5,682,340
Boulder	5,153,408	3,434,204
Denver	35,494,135	50,965,478
Englewood	2,183,110	2,967,534
Fort Collins	3,637,979	3,749,176
Grand Junction	846,586	3,236,377
Greeley	3,793,512	3,010,916
Pueblo	6,459,027	4,570,100
Trinidad	158,136	114,338
TOTAL	$ 62,199,003	$ 77,730,463

UTAH	Jan.-June 1960	Jan.-June 1959
Logan	$ 2,724,640	$ 2,212,156
Murray	2,193,682	2,397,560
Ogden	5,177,126	7,820,924
Provo	1,899,145	3,180,630
Salt Lake City	11,104,708	9,316,601
TOTAL	$ 23,099,301	$ 24,927,871

NEVADA	Jan.-June 1960	Jan.-June 1959
Elko	$ 405,503	$ 392,964
Las Vegas	21,226,317	14,753,946
Reno	11,445,328	8,845,414
Sparks	2,486,675	2,380,840
TOTAL	$ 35,563,823	$ 26,373,164

ARIZONA	Jan.-June 1960	Jan.-June 1959
Douglas	$ 567,612	$ 623,839
Flagstaff	1,060,117	1,594,388
Glendale	1,035,339	651,163
Maricopa County	35,686,807	40,943,855
Mesa	8,165,775	7,533,010
Phoenix	52,520,103	40,112,282
Tucson	20,178,893	17,200,765
Yuma	1,243,235	1,143,245
TOTAL	$ 120,457,881	$ 109,802,547

NEW MEXICO	Jan.-June 1960	Jan.-June 1959
Albuquerque	$ 23,048,871	$ 34,639,885
Carlsbad	1,342,168	1,003,737
Clovis	2,184,847	2,611,083
Gallup	1,230,741	1,301,962
Hobbs	2,227,773	1,789,440
Las Cruces	3,506,000	4,025,000
Roswell	5,126,558	624,622
Santa Fe	2,616,385	1,691,345
TOTAL	$ 41,283,343	$ 47,687,074

HAWAII	Jan.-June 1960	Jan.-June 1959
Hawaii County	$ 2,498,651	$ 3,024,759
Honolulu (city-county)	93,603,313	62,537,751
Maui County	3,268,669	1,393,878
TOTAL	$ 99,370,633	$ 66,956,388
GRAND TOTAL	$1,876,515,245	$1,931,509,663



Oregon's hills set scene for workshops in the arts

A summer-long symposium relating all the arts to the concept of environment is Richard I. Jeb Stewart's proposal for Horizon Northwest, his new institution near Salem, Ore. On an 800-acre campus, the designer projects a complex of facilities which will enable this proposal to expand without limit.

Stewart's first summer of operati is remarkably inclusive for a begi ning. Horizon Northwest is subtitl "The Arts and Architecture Wor shops." A faculty of 26 is engaged offer courses which vary from weekend to a month in length. Em phasis is on architecture, with sculp ture, painting, weaving, ceramics a metal work integrated as architectur enrichment.

The opening course on environme came in two sections on the weeken of July 8 and 15. Dr. Marion Ro professor of architecture at the Un versity of Oregon, and Lewis Crutche Portland architect, supplemented eac other with slide lectures which con sidered individual American building of the past and present and the se tings in which they now find them selves.

Crutcher demonstrated the princ ple of perceiving the aesthetic qual ties of various kinds of architectur space by taking his class of teen-age and adults on a "space walk" throug the campus. Groves, lanes, meadow hills, valleys, banks, fences and lake they learned, are prototypes of archi tectural concepts.

The opening week also saw Davi Hatch, formerly of Eugene and pres ently of Antioch College in Ohio, giv ing the basic design course, with Car Hall of Willamette University in structing in painting.

Horizon Northwest, while semina at present, is endowed with a ric variety of blessings. It would be diffi cult to say whether the superlativ campus itself or Stewart's ability t develop it with enlightened restrain comes first in importance. Second without doubt, is the dedicated coteri of pleasant and able individuals wh constitute the staff. Third is the im pact already made on the residents of Salem. On opening night, Salem's civic dignitaries came for dinner and stayed for Crutcher's presentation on the mediocre appearance of most American cities.

Thirty-year-old Stewart, trained at Cranbrook, Cornell and the Rhode Island School of Design, returned to Oregon late in 1958 after a 10-year absence. While still an architectural student, he designed a beach house in Rhode Island which is one of the featured tourist attractions of the area. Intended as a weekend house for a sociable couple, its pool with three pavilions embody the ultimate in sophisticated fun.

Stewart's work at Horizon North-

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west is totally different in character, combining an earthy rusticity with a sense of scale that makes for intimate or grand as needed. A guest cabin set in a grove beside a lake-bordered meadow, for instance, is as agreeable a shelter as a guest could hope for. Its interior, however, with a trim space divider to screen the door, a section of slender beams to contrast with the high rise of the roof and side walls of floor-to-ceiling glass, is untypical. So are the massive masonry fireplace of petrified wood, the shelves of books, the jug of teasels.

"Ivanhall," an enormous old barn, is metamorphosing into one of the most impressive buildings in the Northwest. It has completed class rooms, a partially completed student lounge, exhibition gallery and sculpture studios. The student lounge, taking shape on the lower level, is massively effective, exploiting the existing character of the beams and timbers of the original structure.

A crew of resident students works on the buildings after classes. A seemingly unlimited supply of weathered lumber, salvaged from demolished buildings of the once operating farm, is used as much for its aesthetic effect as for economy.

The completed dining room, formerly an apple drier, serves three meals a day. Minimum age for attendance: 14; for residence on campus: 19. For more details write Horizon Northwest, Route 1, Salem, Ore.

Elevated system proposed for Los Angeles transit

Consulting engineers for the Los Angeles Metropolitan Transit Authority have recommended installation of a rapid transit system utilizing lightweight cars electrically propelled on pneumatic rubber tires running for the most part on concrete track overhead structures. The report, presented to the authority late in June by Daniel, Mann, Johnson & Mendenhall, is now under study while public reaction and financing methods are explored.

Initial Metro system would total 74.9 miles consisting of four lines extending out from the Los Angeles central business district to Covina, Santa Monica, Long Beach and Reseda. It is estimated that 51 miles would be overhead, 21.6 at grade and 2.3 in tunnel. Stations along the Metro line would be coordinated with bus lines to serve as feeders and distributors. Major park and ride stations also are proposed. From the downtown station a secondary overhead distribution system is proposed utilizing small eight-passenger cars that would slow down at stations to pick up passengers on a semicontinuous basis.

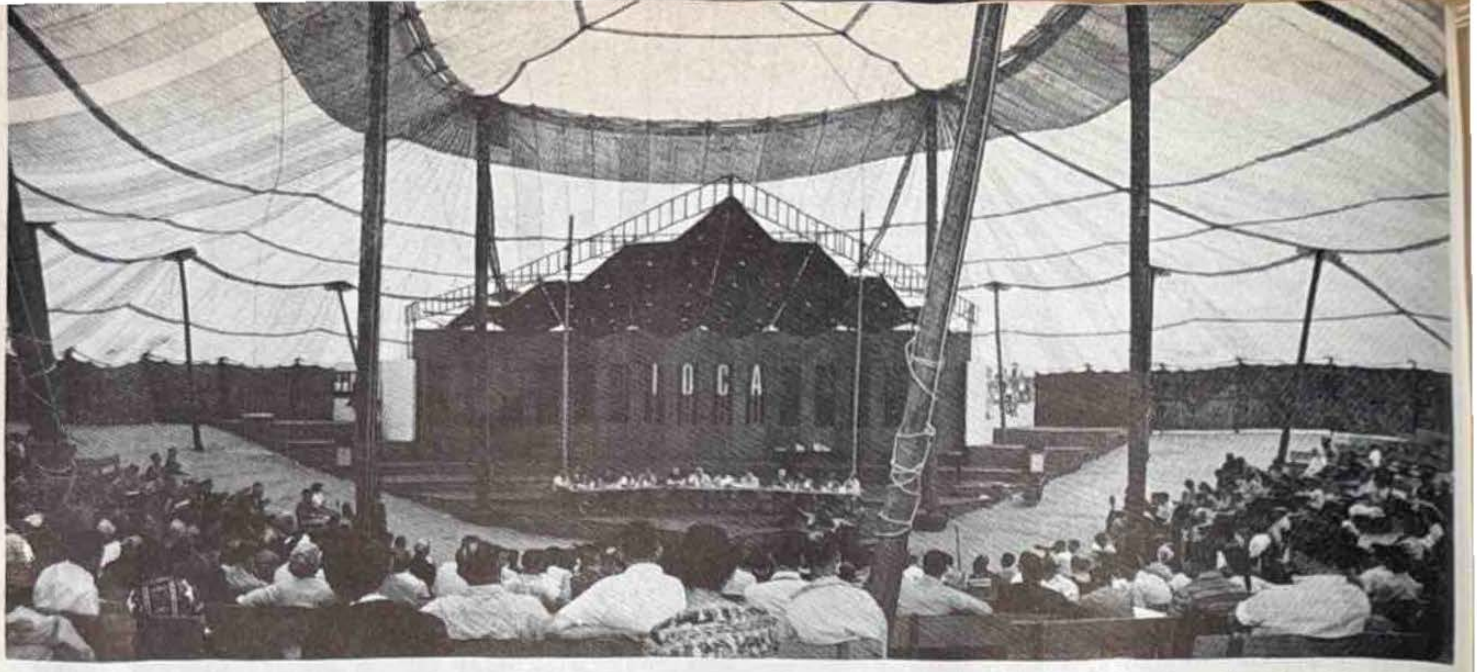
Where the Metro line operates above city streets, the engineers recommend that its track structure be supported by single concrete columns located in a narrow center median. Cars seating 54 passengers would run together in trains of two or six or more. A completely automatic control system would be used. Cars of this type can reach speeds as great as 80 mph. between stations which are planned to average one mile apart.

Cost is estimated at $529.7 million.

Home design clinic set for Stanford campus

Second annual West Coast Design Clinic scheduled for August 16-19 at Stanford University is expected to draw about 250 architects, land developers and contractors. Among the topics: design and its relationship to merchandising; fundamentals of design; critical analysis of builders' houses from a design standpoint; the effect of design on selling; and planning individual areas of the house. Co-sponsors: NAHB, Associated Home Builders of San Francisco and AIA.





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INFORMAL DISCUSSIONS supplement seminars.



DESIGNER Craig Ellwood of Los Angeles.



DIRECTOR Paul Reilly of Design Center.

Aspen's 10th International Design Conferenc

Twelve hand-picked stars from industry and design attracted 375 conferees to the 10th International Design Conference in Aspen, Colo. From June 19-25, architects, designers, management men and business psychologists from Europe and America explored possible relationships of "The Corporation and the Designer" in talk that was lively, interminable and inconclusive.

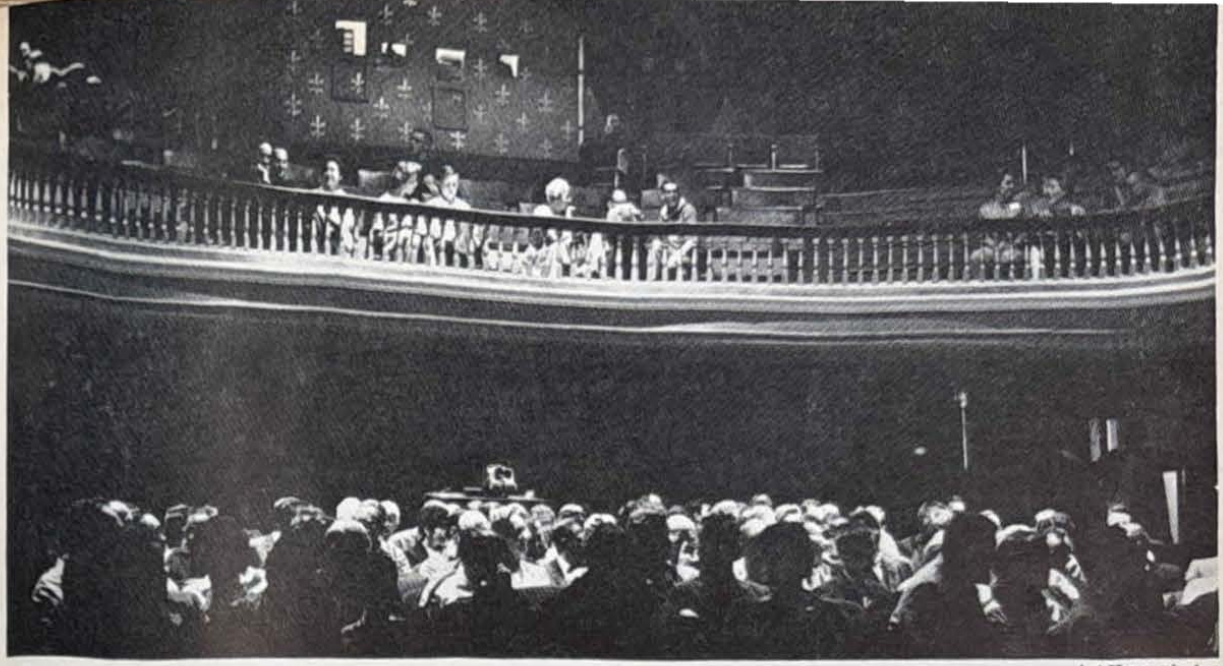
Designers, not unnaturally in the majority at such a conference, are aware of the magnificent role they could play in the 20th century, if only corporations would be enlightened enough to give them carte blanche. Managements, for their part, are increasingly aware of what designers could do for corporations, if only designers could be counted upon for brisk and effective solutions, delivered in a businesslike manner. An attempt to build a bridge between the taste-minded designer and the tally-minded management man lent some comedy and some asperity to the week's proceedings.

Panelists of the first cycle, concerned with "The Identity of Corporations," represented businesses of varying size. Dr. Traugott Malzan of Max Braun, an electronics firm in Frankfurt/Main, West Germany, and Leslie Julius of Hille Furniture Co. of London, represented comparatively small corporations in which the designer is an integral part of the production team. Joseph McGarry, vice president of the vast International Mineral and Chemical, described his chaperonage of the complete design program undertaken by IMC to celebrate its 50th anniversity. Spencer Stuart, business and design consultant, gave case histories in which corporation design programs were well or badly managed. This panel saw effective design programs as reflecting a spirit operating within a company.

The second cycle concerned itself with "The Identity of Design." It featured architect Eliot Noyes of New Canaan, Conn., and Craig Ellwood, with Swedish designer Olle Eksell and Alcoa's Blair Gettig as fellow panelists. This panel stated unanimously that the designer who is called in as consultant from outside an organization can operate more objectively than one regularly employed as corporation staff. Too close an association with intracorporation politics was agreed to be an inhibiting factor to achieving creative solutions. For this panel, an important part of the designer's function was to formulate and project the company spirit, to create its corporate identity, which for the first panel was the initiating source of any valid design program.

The third panel, concerned with "The Future of Design in a Technological Society," was inevitably the most idealistic and theoretical of the three. Whereas the first two cycles and their attendant seminars had dealt largely in specific cases, the third cycle dealt with possibilities. Vernon Welsh, recently of General Dynamics, emphasized the limitless opportunities opening up to designers. The tremendous instruments being manufactured today carry in their wake hundreds of opportunities for design innovators. He encouraged designers to be bold, imaginative, studious, self-educated—and to work a 16-hour day in a six-day week.

Paul Reilly, chairman of the British



OPERA HOUSE of mid-Victorian vintage where "message" films are shown.

Art Hupy photos

the corporation

subsidized body on the English scene. Created to combat the errors in taste which characterized British output immediately following World War II, the council operates the Design Center in London and publishes Design Magazine.

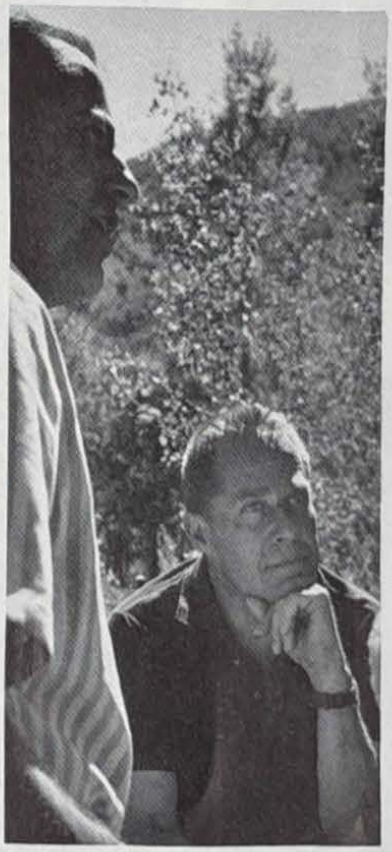
Manufacturers voluntarily submit items to the council's Board of Selection, whose members, chosen from among manufacturers and designers alike, are frequently rotated. Accepted items are placed on display in the Design Center. Those refused are given a critique which often results in their being redesigned for the better. Annual awards designate pieces of particular merit. The Design Center draws a large audience and its effect has been remarkable in improving the taste of the British consumer as well as of the British manufacturer.

Business psychologist Paul Fine of the Center of Research in Marketing deplored a present world of twisted myths in which men seek success from the wrong images and charged the world's artists with the task of rediscovering direction and perspective for a confused humanity.

C. Northcote Parkinson, who had delivered the opening address to the conference, was a member of the third cycle panel. In his keynote remarks, the historian and satirist had urged the designers to structure their training and methods of marketing their talents. (Wistful references to the AIA punctuated the conference, the inference invariably being that if the architects could order their chaos with businesslike training and marketing methods, the designers should be able to follow suit.) Dr. Parkinson's concluding remarks reiterated the plea. Enthusiastically stumping for an American body similar to the British Council of Industrial Design, he stated that it was clear to him that all of America's design problems would be solved if only it were to rejoin the British Commonwealth. Until that day, however, he urged that somebody redesign showers so that the proper water temperature could be mixed before one got in, light switches so that persons entering strange rooms in the dark would not turn on a variety of devices before finding the lights and car door handles so that one need not dislocate one's shoulder trying to discover whether the handle pulled up or down or across.

Program chairman George Culler of the San Francisco Museum of Art moderated the concluding session in which all 12 were given an oppor-

Continued on page 13





IN PENSIVE MOOD: architect Eliot Noyes . . . and other interested spectators.

San Diego jury selects three structures for top honors in AIA competition

Awards of Excellence in the 1960 Honor Awards program of the San Diego Chapter, AIA, went to the three buildings shown here: a lumber yard and two residences. (For a complete list of the winners, including one Award of Honor, six Awards of Merit, two Special Awards and two Historical Mentions, see PA&B for July '60.) Only completed projects were eligible for this distinction and for the Award of Honor.

Winners were honored at a banquet in Balboa Park's House of Hospitality June 17. C. J. Paderewski and Richard John Lareau served as co-chairmen of the awards committee.

In reviewing 94 entries, the five-man jury suggested to the architects that "perhaps more attention could be given to your year-round mild climate which would enable you to adopt a more open kind of planning." The jurors: architects Joseph Esherick (chairman) of San Francisco, Robert Alexander of Los Angeles, Paul Hayden Kirk of Seattle, Donald Hord, San Diego sculptor, and William G. Quinn, Southern California editor of Pacific Architect & Builder.



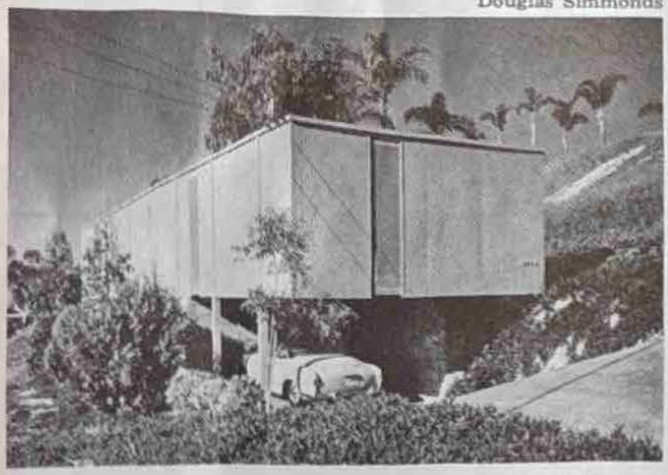
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JURORS Esherick, Quinn, Alexander, Hord, Kirk.

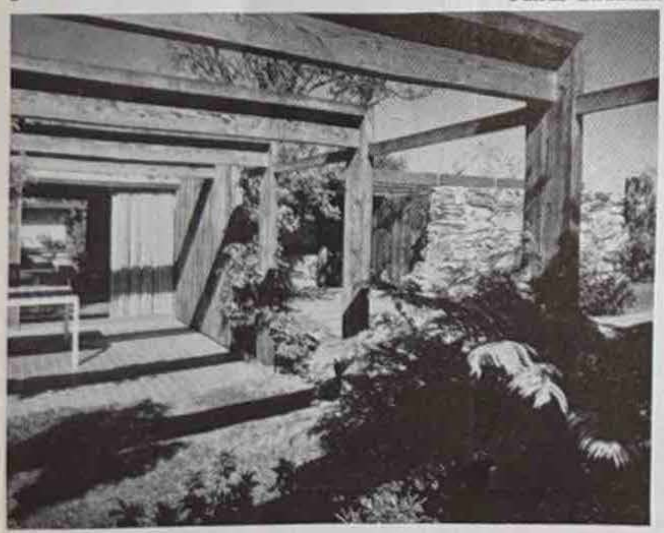
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Douglas Simmonds



3

Julius Shulman



Awards of Excellence

1. Western Lumber Co. Office Building: Johnson & Anderson, architects; C. A. Larsen Construction Co., contractor. "Excellent total development of the area, beautifully coordinated, and expression and capitalization of the very character of a lumber yard itself. Building handles sun screening and control of light well. Ideal landscape solution for an industrial building."

2. Homer Delawie Residence: Homer Delawie, architect; Design Center, interiors; Bach Construction Co., contractor. "A small lot has been used under limitations of a primitive zoning law in the best way possible. Environmental controls are exercised with imagination, proving that the architect can meet and overcome the challenge of a difficult site."

3. Martin L. Gleich Residence: Henry Hester, architect. Martin L. Gleich, contractor. "A complete environmental control within the site is an outstanding feature. The jury likes its informal organization and congratulates the clients for their receptiveness and awareness of good architecture and admires the beautiful integration of paintings and sculpture within the structure."

tunity for a final word. It became apparent that the representatives of management were fully as enthusiastic about the role of the corporation as they had been when they arrived at Aspen. They made no apology for the necessity of corporations to show a profit and even professed to find the pursuit of it exhilarating. They acknowledged their obligation to serve the public, but claimed that an efficiently managed corporation serves the public best.

Designers, however, seemed to have gained an insight into the variety of ways in which their services might be utilized in complex industrial systems. Corporations, they learned, have a liberal share of creatively oriented individuals, masquerading as presidents, vice presidents, production chiefs or even sales managers, and these persons, wherever found, are the designers greatest ally.

—Anne Todd

Burge named acting dean at Southern California

Henry Charles Burge has been named acting dean of the University of Southern California's School of Architecture. A graduate of USC and a member of the architectural faculty since 1945, he succeeds Dean Arthur B. Gallion who resigned July 1 to accept the position of director of planning for Harland Bartholomew & Associates, Honolulu city planners-engineers.



BURGE

Burge, who holds the rank of professor, also was appointed chairman of a faculty committee to assist in the selection of a new dean. Other committee members: Waldo A. Kirkpatrick, Emmet L. Wemple and Calvin L. Straub, all of the School of Architecture; Jules Heller, head of the fine arts department; Alfred C. Ingersoll, dean of the School of Engineering; and Arthur L. Grey, director of the city planning program.

The new acting dean received the Scarab Silver Medal last year from the USC chapter of the national honorary fraternity for his contributions to the advancement of architectural education. His firm, Burge & Roach of Montebello, has won several awards from the AIA and the NAHB for the design, planning and execution of neighborhood developments.

T-SQUARE TALK

new offices

Herbert E. Kaiser, Los Angeles architect, has established a new office at 2872 Rowena Ave.

Arthur W. Dekker, formerly associated with the Albuquerque firm of Brittelle & Ginner, has opened his own architectural office at 207 San Pedro N.E.

Dwight L. Busby, engineer, has opened an architectural and engineering office at 113 E. Camelback Road, Phoenix, under the firm name of Busby Associates. The latter includes Paul E. Crosier, architect, and Herbert W. Schneider. Busby, who was a member of Bricker & Busby, says his association with that firm will continue while various commissions he and Francis Bricker hold jointly are completed.

firm changes

The Honolulu firm of Rothwell & Lester, architects-engineers, has been succeeded by Rothwell, Lester & Phillips, Ltd. Officers of the new corporation are Guy N. Rothwell, president; Marcus C. Lester, vice president; and Elmer D. Phillips, secretary-treasurer.

new associates

The Portland architectural firm of Annand & Boone has given associate status to Douglas Drynan and Wayne Huffstutter, each with more than six years of service.

new addresses

Carlson, Eley & Grevstad, architects, to 1115 Eastlake Ave., Seattle.

Hobart D. Wagener, architect, to 900 28th St., Boulder, Colo.

Peter H. Hostmark & Associates, consulting engineers, to 533 12th Ave., Seattle.

Worthington, Skilling, Helle & Jackson, consulting engineers, to 1840 Washington Bldg., Seattle.

deaths

Harris C. Allen, 83, San Francisco architect who retired in 1952, died March 4. Best known perhaps for his contributions to architectural journalism, he served successively as publisher of the Pacific Coast Architect, California Arts and Architecture and the Bulletin of the State Association of Architects from 1919 through 1942. He headed the state association for two years.

elections, appointments

Newly formed Washington State Council of Architects has elected Lawrence G. Waldron, Seattle, chairman; Charles Pearson, Tacoma, vice chairman; and H. Brandt Gessel, Walla Walla, secretary-treasurer, representing the Washington State, Southwest Washington and Spokane chapters, respectively. The council, whose officers will be rotated yearly among the three chapters, will be divided into three subcommittees: state and national legislative, state administration and interchapter affairs.

Southwest Washington Chapter, AIA, has named these officers, all of Tacoma: John McGuire, president; Louis Pedersen, first vice president; Robert Jones, second vice president; G. Burleigh Krona, reelected secretary; and Arthur Forbes, treasurer.

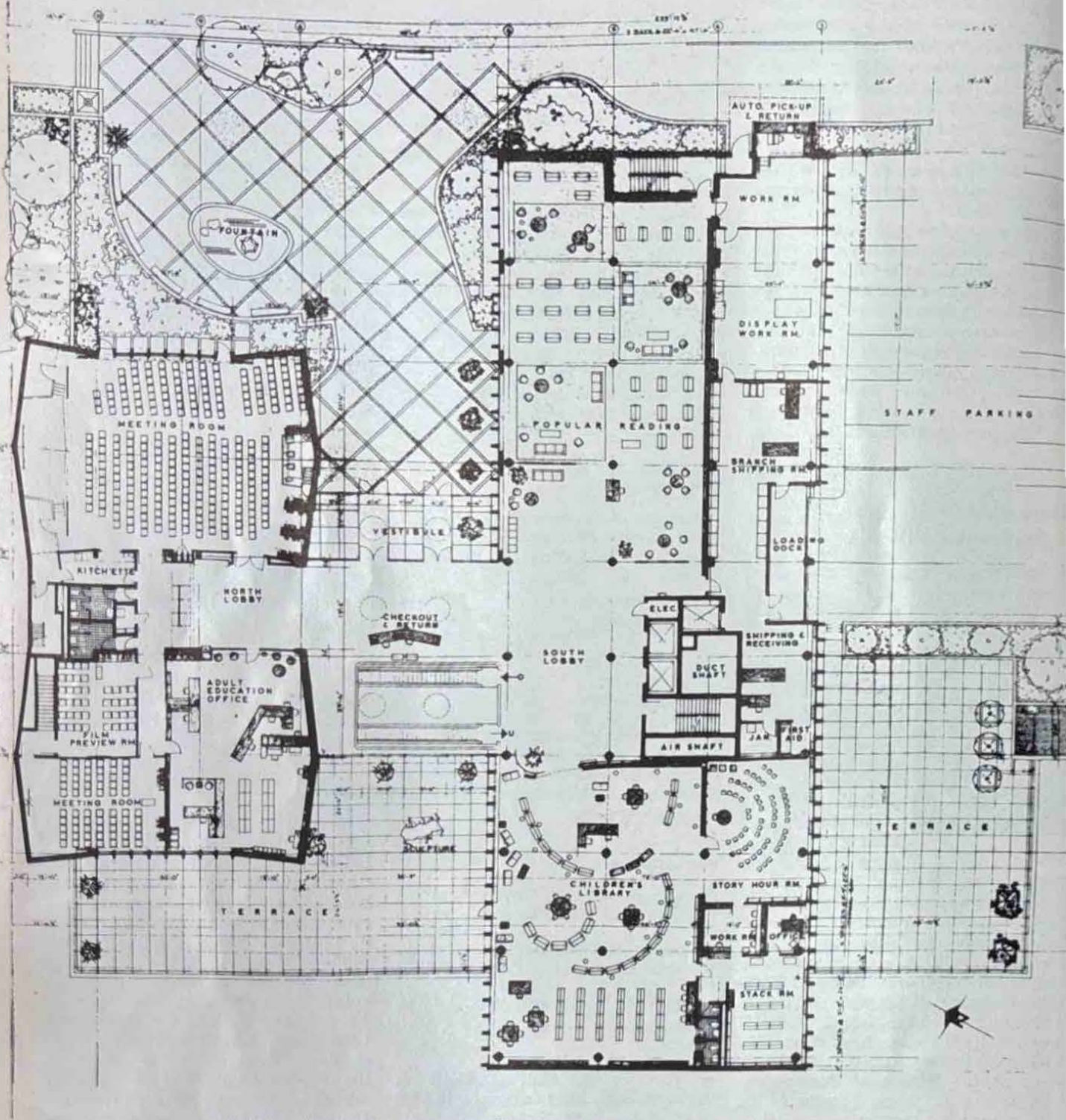
Victor Gruen, Los Angeles architect, has been elected a trustee of the Council for the Advancement of the Negro in Architecture.

Architect William J. Bain has been reappointed to Seattle's Housing Advisory Board.

honors

Southwest Washington Chapter, AIA, at its annual meeting in the Lakewood Terrace June 22 presented Craftsmanship Awards to George Roskos, Lakewood, for a sculptured basrelief over the main entrance to Trinity Lutheran Church, Parkland; Rudy Dehler, Tacoma, for masonry work in local commercial and residential buildings; Rueben Johnson, Tacoma, for electrical work in the Heartwood Elementary School; and Mrs. Jean C. Beall, Bellevue, for a mural in the General Administration Building, Olympia. Portland architect Lewis Crutcher as the main speaker gave an illustrated talk on the effect of neon signs and billboards on the landscape.

WANTED
ARCHITECT - DRAFTSMAN
Interesting openings for senior and junior architectural draftsmen in the office of Howard R. Perrin, Architect, 1415 Esplanade Ave., Klamath Falls, Ore.
Telephone: TUxedo 4-8497



THIRD FLOOR PLAN indicates integration of landscaped terraces on upper level, particularly at Fifth Avenue entrance (photos across page) where building undoubtedly is at its best architecturally. Bronze fountain by George Tsutakawa flows into pebble-studded pool. Patio has become favorite resting spot.





Art Hupy photos

Seattle Public Library
Seattle, Washington

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BINDON & WRIGHT
Architects

DECKER, CHRISTENSON & KITCHIN
Associated Architects

ANDERSEN-BJORNSTAD-KANE
Structural Engineers

JOHNSON-MORRISON-KNUDSEN CO., INC.
General Contractor

Human values to enrich the heart of the city



SEATTLE PUBLIC LIBRARY





FRONT ENTRANCE by night and day. Plantings and walkways give building breathing space in crowded downtown area.

THE MANY FACES a central library wears create problems enough for the designing architect. When Seattle voters authorized a $5 million bond issue to replace the massive, dark, cramped, downtown library, the architects were presented with an assortment of additional problems, among them a sloping site on a busy city street and book stacks built in 1950 that had to be incorporated into the new building.

The old Carnegie-endowed library was symbolic of its time when books were stacked on the shelves and the custodians sat back and waited for people to take advantage of this wondrous new thing — free public libraries. But times have changed. Like a department store, the library displays its wares, reaches out to the community to encourage the use of its materials. The most logical design solution from both a physical and visual standpoint to match this philosophy would be a circular floor plan with all public areas on the main floor. The sloping site and existing stacks made this impossible. The solution here is a core of public areas on the first three floors interconnected with escalators rising in an open well that provide both a vertical unity of space and the means of attracting "customers" to sections they might not otherwise visit.

Although the lower section is cut into the hillside, a feeling of airiness and spaciousness has been achieved by placing skylights over the open well of the escalators, bringing natural light into the center of the building and through large glass areas on the west. The building, the landscaping, the interior decoration, the artwork all form a bright, colorful, inviting whole that fairly lures the passerby to come in and browse, successfully tying together all these elements.

Undoubtedly one of the outstanding features of this building is the extensive use of commissioned artwork, a most encouraging feature in this day when public officials hestitate to spend funds for so-called frills. There are four major works: the patio fountain by George Tsutakawa; a metal screen at the entrance to the adult education department by Glen E. Alps; a metal and glass screen on the main floor partitioning off the Northwest room by James H. FitzGerald; and a statue on the Fourth Avenue terrace by Ray F. Jensen. All together $48,000 was authorized for these pieces and other art.

Landscaping also is extensive. Many of the old shrubs were saved and kept in Park Department nurseries. Others were carefully selected to give a good Northwest representation two years ahead of planting. Both processes not only saved money, but ensured that shrubs would be of good size on opening day. Perhaps typical of a librarian's thoroughness, and certainly a feature much appreciated by the public, are the markers placed by the plants to identify them.

Among the library staff's requests, two created special design problems. To serve the adult education department, a fast-growing section whose hours do not always coincide with other library facilities, an almost separate wing was provided with its own utility controls. These facilities include a multiuse room that can seat 300, with projection booth and folding doors for subdivision when needed. Since parking in the library area is extremely limited, a drive-in window is provided on the Fifth Avenue side. Persons can call ahead to ask for material, then drive in and pick it up or deposit books. To make full use of the space, the main telephone switchboard is located here.

Building is reinforced concrete, faced on the

outside with a cast stone veneer. Patios are surfaced with a terrazzo material which almost exactly matches the veneer. Interior finish is plaster. Concrete columns are painted brown. Acoustical material consists of mineral tile in general public areas, perforated tile in service areas and some acoustical plaster finish. Lighting is mainly 4x4 fluorescent fixtures; flooring, homogenous vinyl buff with inserts of bronze color for accent. Vertical fabric blinds are used for sun control. All glazing is gray, heat-absorbing glass.

Main section of the building is five floors. It has been designed so that three floors can be added. Fourth and fifth floors are laid out, with lighting in, for conversion to public areas when needed.

Total cost was about $4,100,000. Even with all other costs, such as rental of another building while construction was underway, there was still $600,000 left over from the bond issue for branch libraries

Interiors were done by Arthur Morgan Designers, Inc.; landscape architects, Beardsley & Brauner; mechanical engineers, May & Triol; electrical engineers, B. A. Travis & Associates.

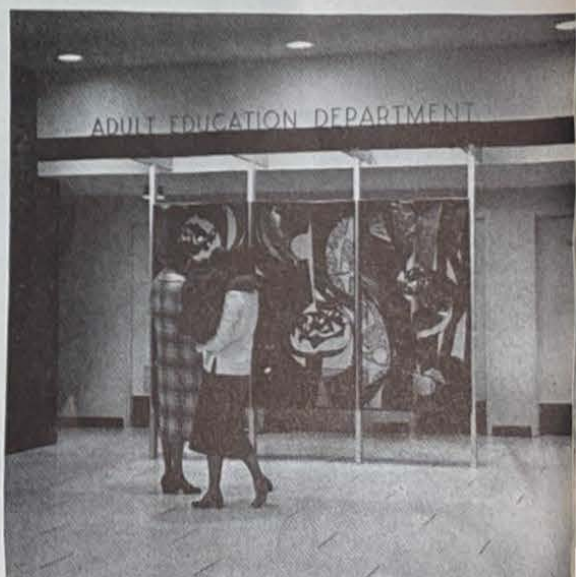


CAST BRONZE SCULPTURE called "Pursuit of Knowledge" by Ray F. Jensen perches on terrace between children's section and adult education wing, an almost separate entity.



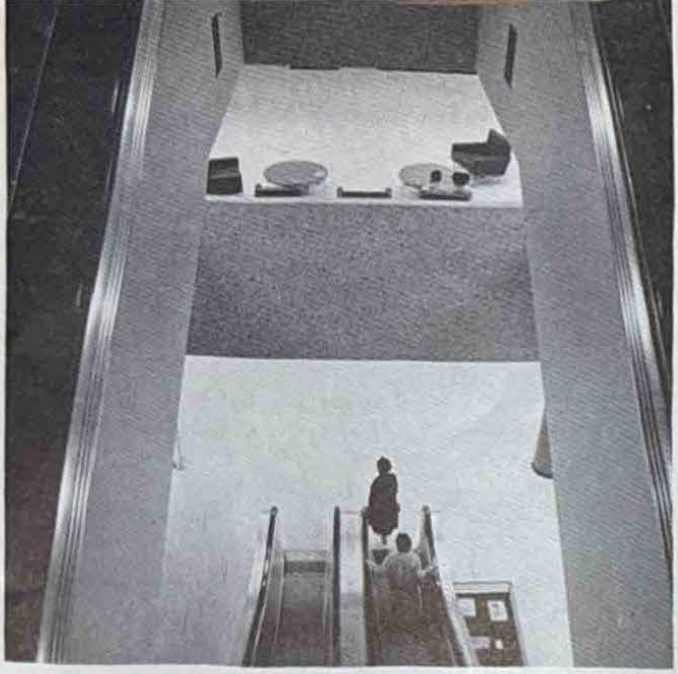
VISITORS AND LIBRARIANS alike say they see something different every time they look at James H. FitzGerald's metal and glass screen. View below is from main entrance, looking toward Northwest room.



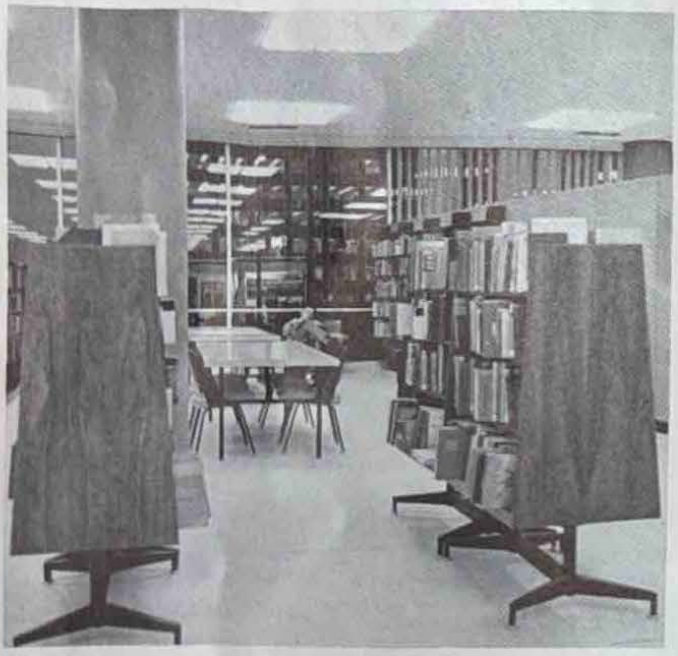


SPECIAL PROCESS for acid etching of steel developed by Glen E. Alps has been used in this screen. It looks like copper.

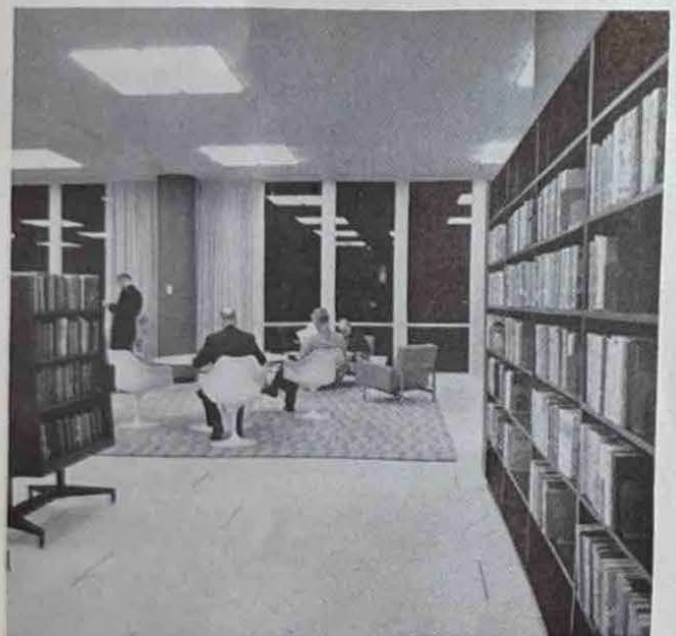
SEATTLE PUBLIC LIBRARY



ESCALATORS in center of building provide panoramic view, tie together public areas. Decorative touch is Venetian glass tile mosaic, repeated on columns at main entrance.



MASSIVE OAK TABLES AND CHAIRS are gone, replaced by bright, plastic topped tables and cushioned seats in orange. Bookshelves in contrasting walnut have gone modern too.



POPULAR READING ROOM on third floor is something like branch library with specially purchased collection of books, carpeted areas, casual seating and smoking allowed. This totally new department has proven so popular that shelves constantly have great gaps in them.

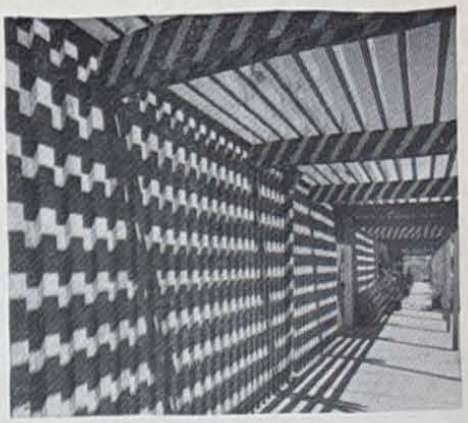
Egger Nursery and Garden Center
Mill Valley, California

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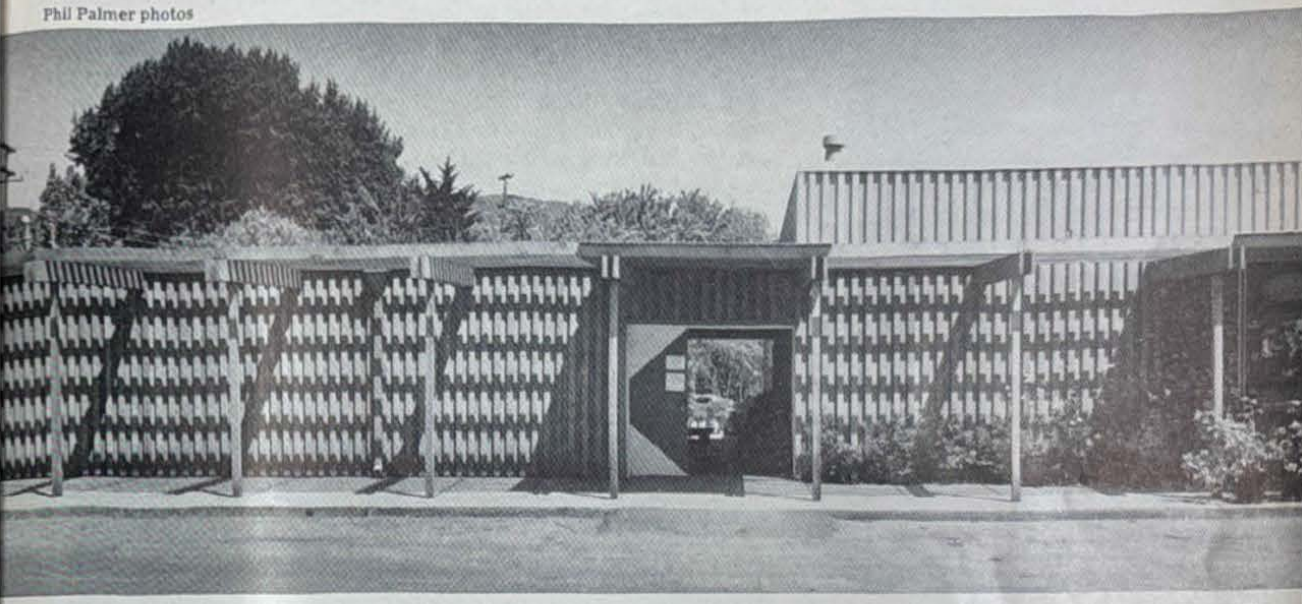
MICHAEL WORNUM
Architect

JOHN E. BROWN
Structural Engineer

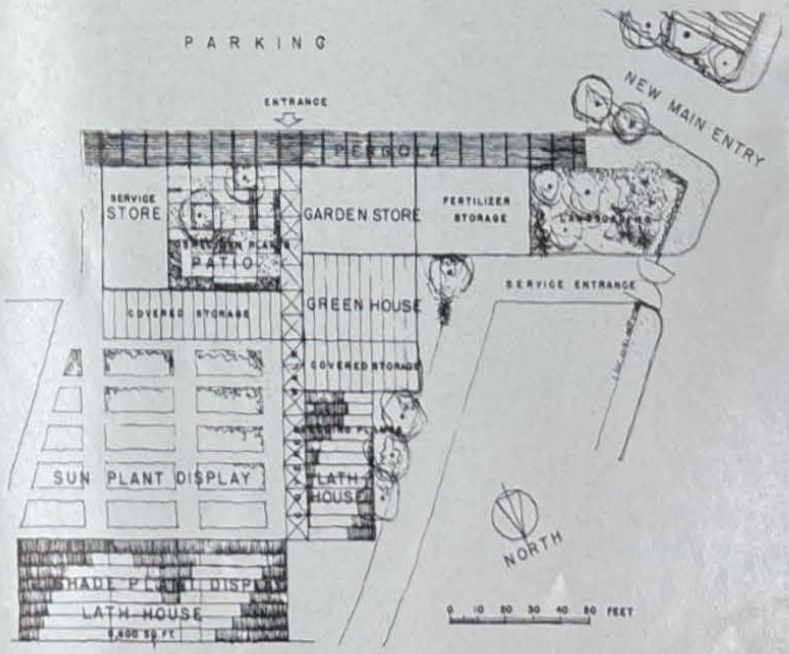
EDWARD W. BURGAR, INC.
General Contractor



Phil Palmer photos



A delicate interplay of texture and foliage



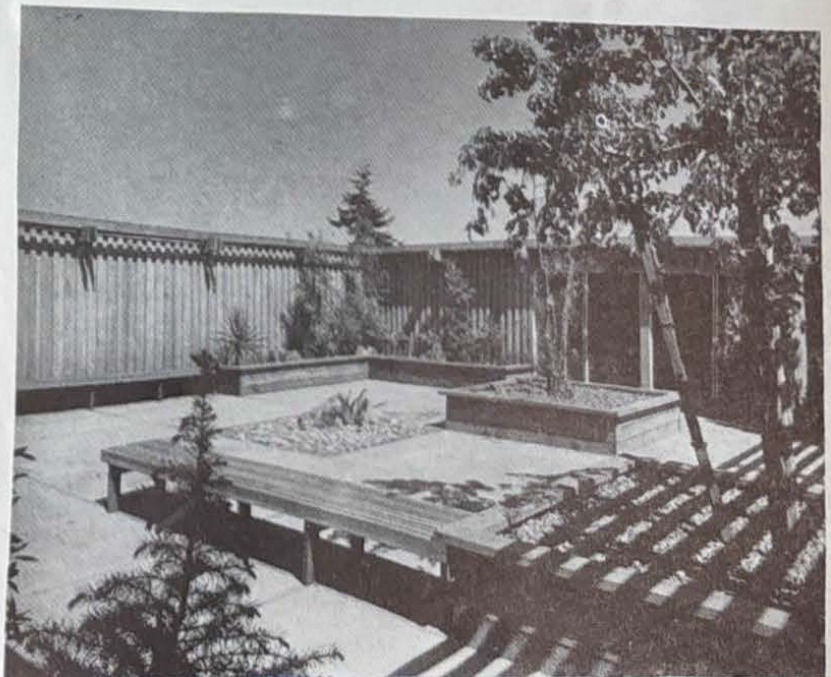
NURSERY AND GARDEN CENTER



RIM NEW PROJECT replaces collection of iscellaneous structures and lean-tos of long-tablished nursery forced to expand to keep ce with growing community.



s designed to emphasize value of and provide place to relax and area laying specimen plants. Redwood d batten siding is resawn with 2x4 8-in. centers, creating visual interest.



of 16,875 sq. ft. is divided as g space, 4,400; open selling offices, 300; lath house, 9,775.

IN REBUILDING this long-established nursery, the basic requ
ment was for a maximum of covered and open space and a l
house at the minimum cost per square foot. At the same time
client desired an attractive, unobtrusive structure that would
the main focus on the plantings themselves.

To provide this space and a feeling of design cohesiveness
strict module of 8 ft. in both directions was chosen, with the m
store having a double span of 28 ft. and the lath house hav
posts every 16 ft. in both directions. Softening this geometry
an 8-ft. wide pergola extending along the total front of the bui
ing for 168 ft. Off this is a patio for displaying specimen plan

Siding is designed to give a heavy texture for strong visu
interest. Color scheme is primarily in the natural materia
Trim, doors and beams are light yellow and grey-blue, compa
ible with, but not duplicating, the many greens in the foliage
the plants. Display fixtures are finished in identical colors
blend in as part of the building.

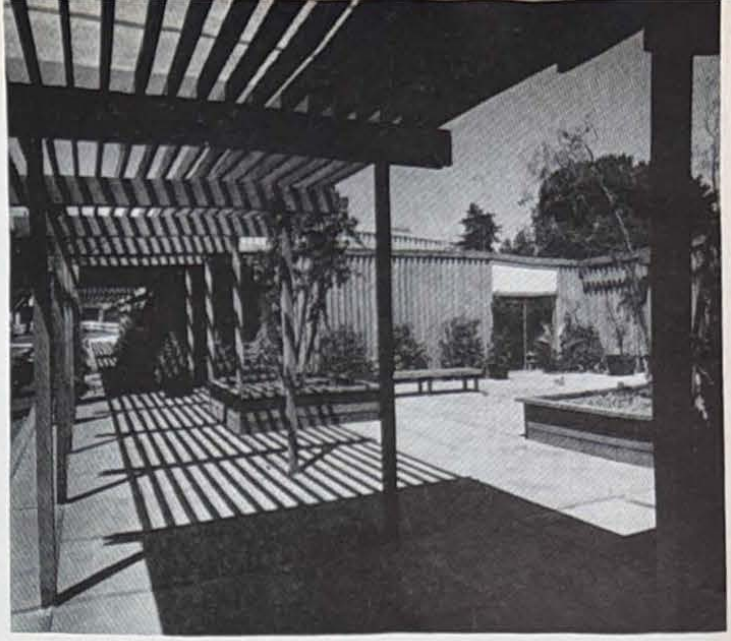
Plan was worked out carefully with the client to give a log
cal arrangement and circulation to the various functions of ga
den supplies, tools, indoor plants, outdoor varieties, plantin
boxes, tubs, containers and fertilizers. Checkout stand is locat
at the last stop where all purchases can be paid for and the
wheeled out to the parking lot in front. Location of the buildin
on the lot was determined by the fact that it eventually will
part of a larger shopping center.



COVERED STORAGE AREA, as well as greenhouse, is roofed with opaque white fiberglass.



NURSERY AND GARDEN CENTER



TRIM NEW PROJECT replaces collection of miscellaneous structures and lean-tos of long-established nursery forced to expand to keep pace with growing community.



PATIO is designed to emphasize value of plantings and provide place to relax and area for displaying specimen plants. Redwood board and batten siding is resawn with 2x4 batts at 8-in. centers, creating visual interest.



TOTAL AREA of 16,875 sq. ft. is divided as follows: selling space, 4,400; open selling space, 2,400; offices, 300; lath house, 9,775.



Douglas Simmonds ph

Sympathy of site and structure

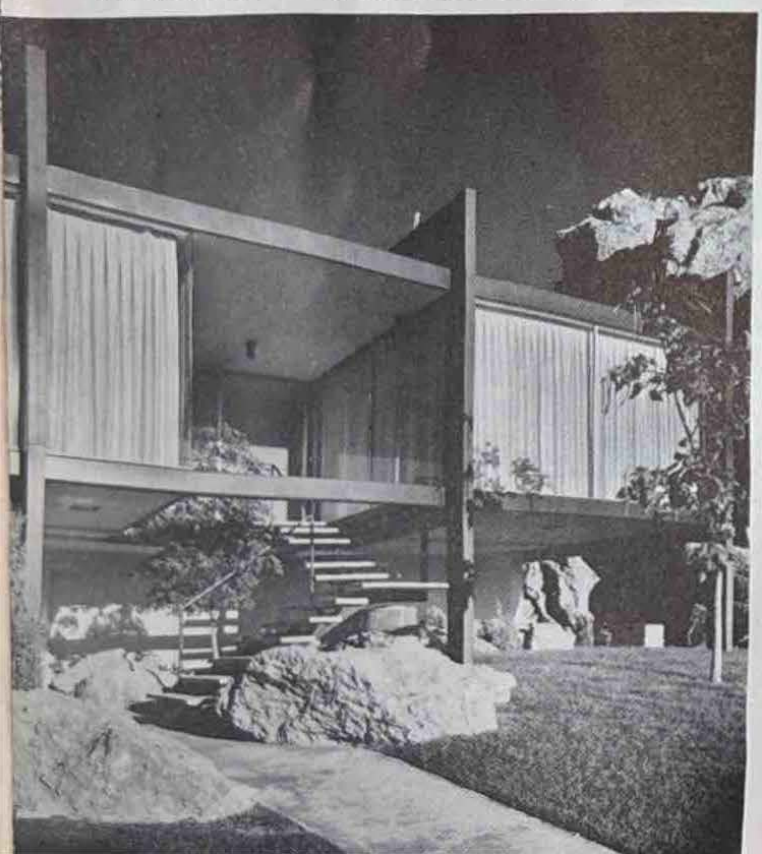
Donald Webber Residence
Salt Lake City, Utah

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EDUARD DREIER
Designer

EARL PACE
Contractor

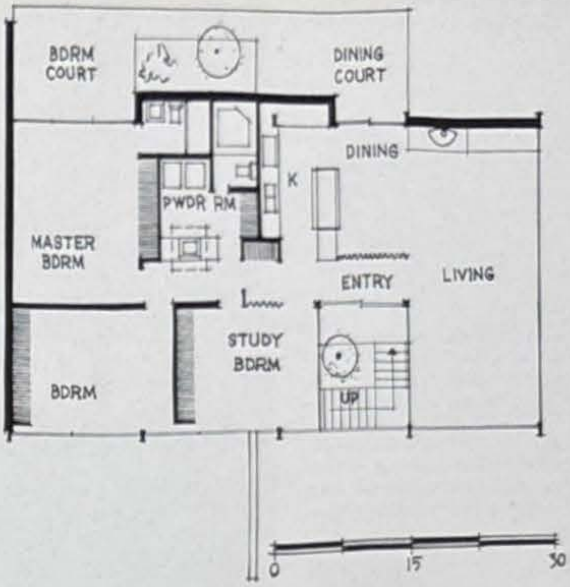
STEEL FRAME is charcoal gray, split block is light gray.



IN THE FOOTHILLS of Mount Olympus, this sma house of steel and glass has been tied snugly to gigantic rock formation. Because the hillsid lot had a steep incline from front to rear, th designer set the house close to the road an raised the floor plane 10 ft. above street level fo privacy. The space below is used for a carport general storage and housing for air condition- ing, heating and other utility equipment.

The plan makes maximum use of the limited space by grouping the three bedrooms, two bath- rooms and kitchen around a central utility core. The living-dining area and the master bedroom suite each opens onto separate patios on the shady side of the house.

Containing 1,450 sq. ft. of living area, the house is of post and beam construction using webbed steel exposed over the roof. Split block concrete masonry at the side elevation and en- try adds warmth and texture to the exterior. Maximum glass areas are employed on the street frontage which looks out on a fine city view.





INTERIOR COLORS are mostly white, relieved by storage wall in study of olive green, cerulean blue and gray; another in front bedroom of browns and warm tones; built-in kitchen appliances of turquoise. Interior decorator: Noel Betts.

OUTLINE SPECIFICATIONS

Foundation: concrete piers and footings; frame: five fabricated steel bents sheeted with 18-gage steel; roof: 1x6 pine diagonal sheathing over 2x8 Douglas fir; floors: ½-in. plywood over 1-in. t&g fir.

Exterior Finish: gray split block concrete masonry; ⅝-in. exterior plywood soffits.

Roof Surfacing: built-up, 20-year, five-ply.

Windows: fixed architectural sash; ¼-in. polished plate glass.

Doors: exterior: aluminum sliding glass—Lynart-Aluma Sliding Glass Door Co.; interior: slab masonite hollow core.

Floor Surfacing: vinyl tile in entry, kitchen, powder room—Kentile, Inc.

Insulation: 4-in. aluminum enclosed fiberglass batts in roof—Owens-Corning Fiberglas Corp.

Interior Finish: perfataped ½-in. gypsum wallboard — (Sheetrock) United States Gypsum Co.; Philippine mahagony veneer cabinets.

Ceilings: perfataped ½-in. gypsum wallboard—(Sheetrock) United States Gypsum Co.

Lighting Fixtures: surface mounted incandescent.

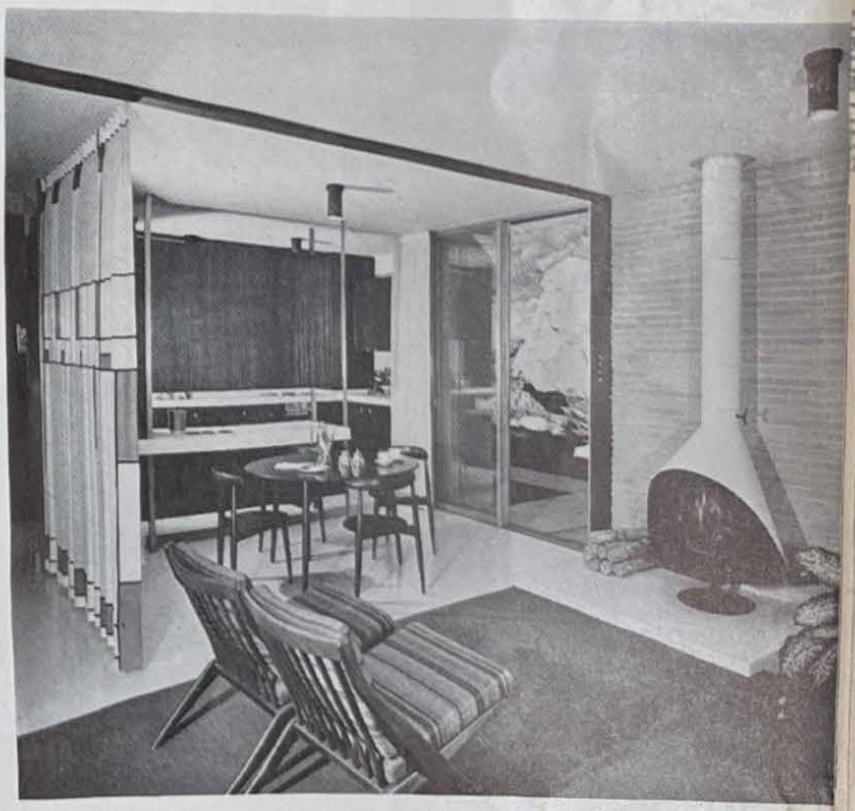
Heating: forced hot air system—(Janitrol) Midland-Ross Corp.

Plumbing and Sanitary: Crane Co.

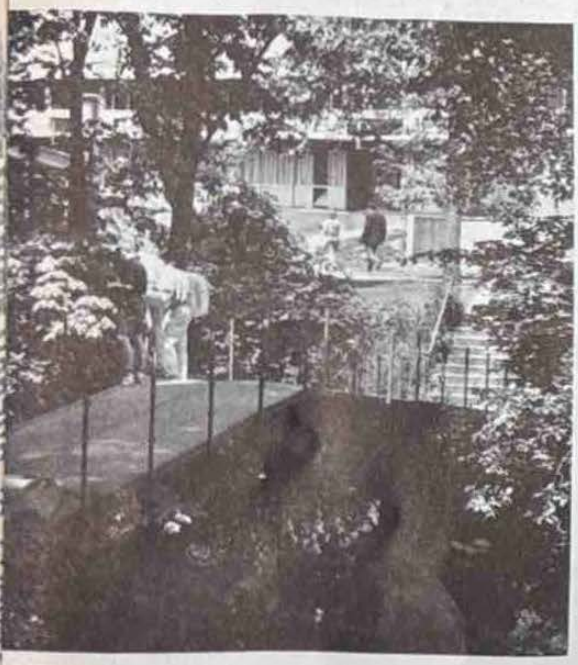
Total Area: 1,520 sq. ft. (excluding entrance court).

Total Cost: $28,000.

Date of Completion: 1957.



"**REED** has always boasted of working as an integrated educational community where faculty, students and administrators operated not as self-contained units but as contributors to a larger whole . . . The dormitory should be so placed as to seem an addition to the campus as a whole . . . For it is essential that students conceive of themselves as living in the midst of their college and not in a segregated housing development."





Art Hupy photos

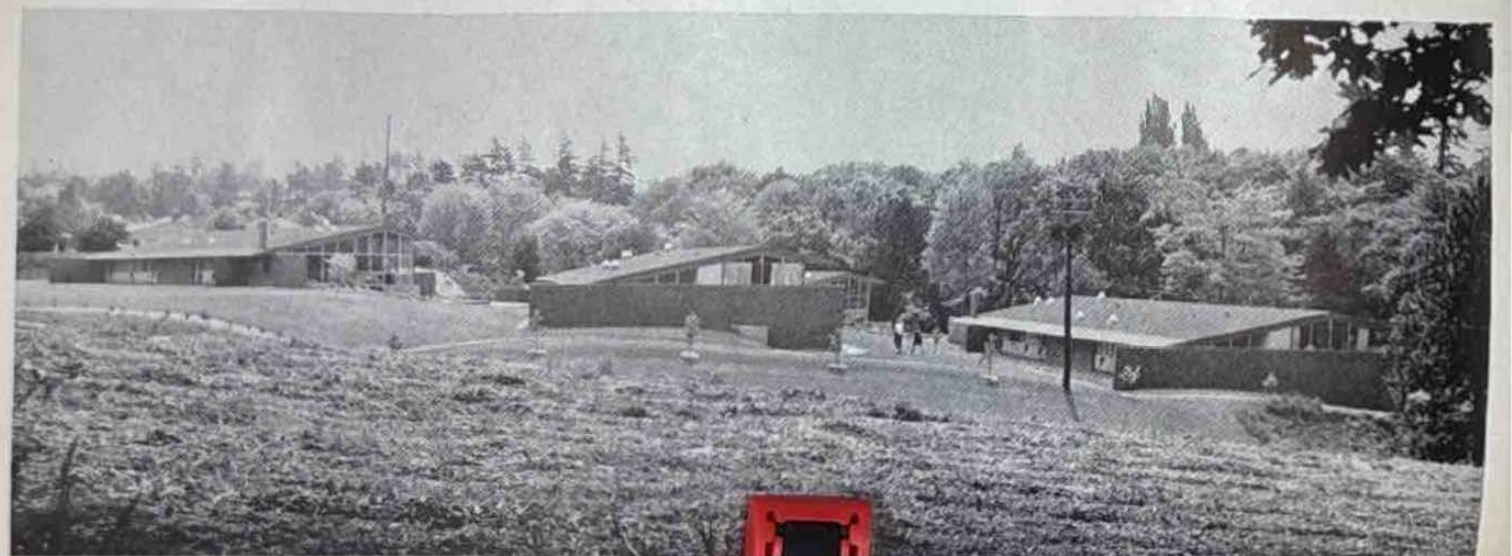
Reed College Men's Dormitory
Portland, Oregon

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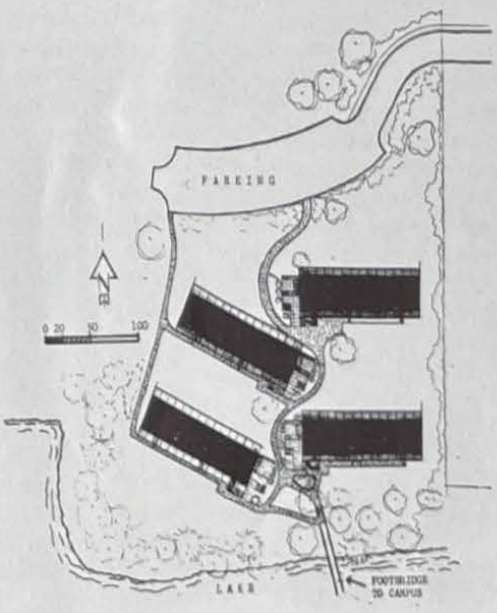
FARNHAM—SHELL & HOYT
Architects

JUHR & SONS
General Contractors

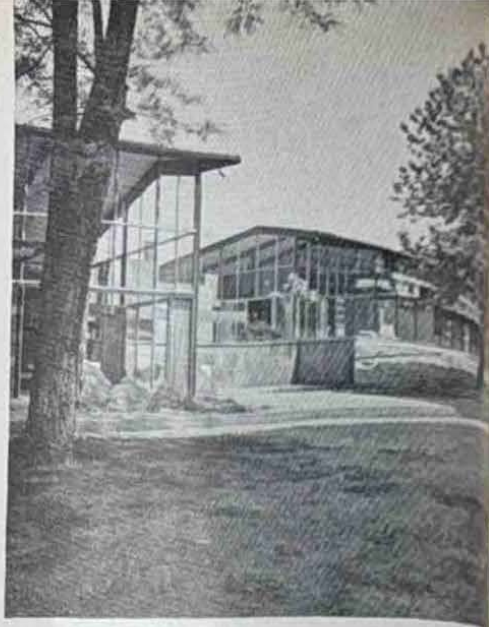
Design solution to match a great liberal tradition



THE CHALLENGE was to design a dormitory in keeping with long-standing traditions of the college and to do so by providing four buildings and extensive site development for the same cost as a compact, three-story unit. The solution was a split-level plan, using such materials as exposed steel frame, aluminum, glass and acoustical plank ceilings as design elements and whose very simplicity achieves the building committee's request for a "handsome, well-planned arrangement of







"THE SURROUNDINGS should be as well adapted as possible to the activities of the students in the dorm. For instance, a sizeable expanse of lawn or field relatively free from traffic for students to lounge, to study or to romp upon is certainly essential."

REED COLLEGE DORMITORY

buildings taking advantage of naturally attractive features of the campus."

Although two dormitories have been constructed on the campus since World War II, the architects were not saddled with any predecided set of conditions. Meetings were held with the building committee where the type of structure, desirable and undesirable features of existing buildings and possible sites were generally discussed. "This mature approach we found to be typically 'Reed,' an institution that has traditionally stood for an enlightened and truly contemporary approach to education and human relations," the architects comment.

"Site selection was the first decision to be made. Seven probable ones were studied in relation to the campus as a whole and four of these were chosen for more detailed study. For each of the sites the architects prepared a preliminary sketch and rough cost breakdown. After thorough investigation, the cross canyon site got the nod.

"The informal discussion periods with the school committee were expanded to include a most excellent survey made by student members of the building committee. (Quotations from that survey appear as photo captions on these pages.) The main factors that emerged from all our get-togethers seemed to be that all concerned desired a feeling of group unity. Fraternities and sororities are banned at Reed.

"Most successful living units had about 25 students. With 100 men as mandatory to receive Federal House and Home financing aid, we were on a four-group basis. The usual solution of a three-story walkup, while fitting cost requirements, just didn't divide into four groups readily and was unwieldy when it came to eliminating a hotel corridor feeling, noise interference between rooms, unflexibility of space and some variations in types and feeling of rooms — all items considered desirable.

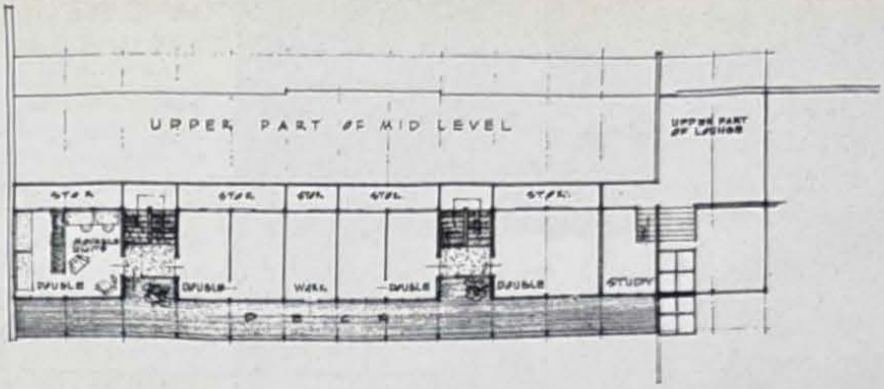
"The preliminary of a four-building complex, interrelated on the site but still separate units, allowed us to start development of a new site area and the split-level type of plan gave one corridor for three floors of units with the stairwells acting as visual breaks and sound traps between rooms."

A number of elements were used to eliminate long hotel type corridors; secondary entries, change in corridor ceilings height, opening doors into stairwells where possible and eliminating as much length as possible.

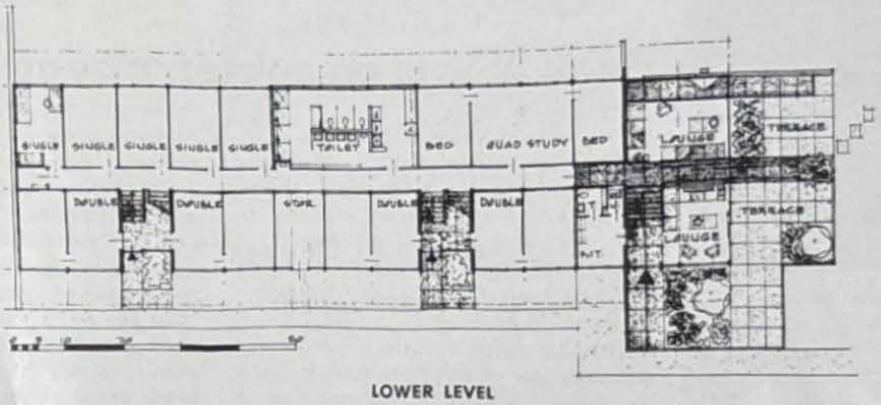
Storage areas and other room units were used as buffer zones and sound barriers between suites of rooms. Only rooms actually adjacent are the singles and those used for a single suite. Radiant heat eliminates sound transmission through ducts and helped free the building designwise.

Flexibility of room arrangement is provided in movable furniture units designed by the architects. Lounge area is on a three-level basis so that a group or one couple would not completely block its use.

Exposing the frame of steel and using brick masonry for a feeling of stability in a floating framework helped hold costs within the limited budget. Mechanical engineer was Thomas Taylor; electrical engineer, Grant R. Kelley.



MID LEVEL



LOWER LEVEL

OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: steel tubular columns—Van Huffel; wide flange steel beams 9 ft. o.c.—Columbia Wire & Iron Works; reinforcing steel—Soule Steel Co.; roof—2-in. decking over bulb tees on wide flange steel beams—Tectum Corp.

Exterior Finish: aluminum window wall—Fentron Industries, Inc.; panels—rigid sandwich type insulation board—(Cemesto) Celotex Corp.; brick—Sylvan Brick Co.; steel trim.

Roof Surfacing: built-up roof, gravel.

Doors: solid core flush birch, steel frame—McReuter & Sons.

Floor Surfacing: asphalt tile—Armstrong Cork Co.; exposed aggregate concrete at entries and stairways.

Partitions: 2-in. solid plaster; 4-in. solid brick exposed both sides.

Ceilings: insulating and acoustical plank—Tectum Corp.

Heating: radiant floor slab, vent fans on roof, steam line from central source.

Total Area: 24,048 sq. ft. (four-building complex).

Total Cost: $322,500.

Cost per Square Foot: $13.35.

Date of Completion: September 1958.

"WHERE POSSIBLE buildings should take advantage of naturally attractive features of the campus. They should be so placed as to seem, both to the student inside and to the observer outside, to absorb beauty of the surroundings."



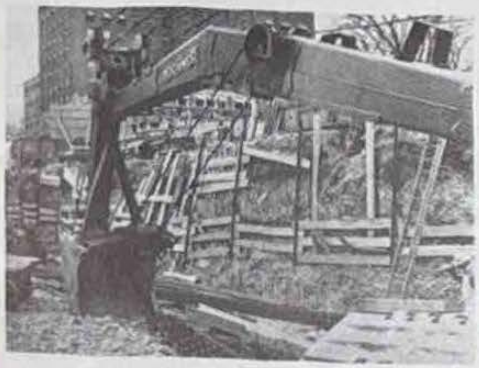




BROOM HOTEL as seen in copy of original photo. Stagecoach is at left.

METHODS and MATERIALS

Bank floats on subterranean water



EXCAVATION for hydro-seal is begun after footings have been poured.

To all outward appearances the Commercial Security Bank in downtown Ogden, Utah, is a standard three-story business structure. There is, however, one unusual difference. It floats on water that rises 2 ft. above the basement floor outside the outer walls.

This has been accomplished by the construction of a hydro-seal without the use of an expensive membrane or the constant pumping out of subterranean water, a new method in the area that has saved thousands of dollars in construction costs. The building, which has 45,000 sq. ft. of floor space, is of structural steel with reinforced concrete footings and walls designed for the maximum seismic load No. 9.

When the site was purchased, it bore a 77-year-old brick hotel called the Broom, in its heyday known as the most luxurious between Denver and San Francisco. Ranchers, farmers, tourists made it a point to stop there. Visiting celebrities were housed in its elegant suites behind the many bay windows. But as Ogden's population grew, more modern hotels and motels enticed the carriage trade. For many years the older folk remained loyal, but gradually the Broom deteriorated into a rooming house with down-and-outers living in the midst of the tarnished splendor.

When the Broom was built, brick construction did not require the excavation depths of today's steel and concrete structures. Its basement was comparatively shallow and there had been no subterranean water to cope with. However, Hodgson & Holbrook, architects for the new bank building, knew from experience the possibility of much underground water.

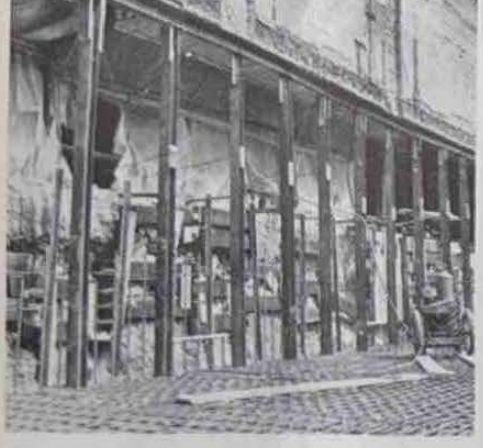
This problem had been met in other buildings by provision of constant pumping out of the water or with a hydro-seal employing use of an expensive membrane.

The architects decided that if conditions were right, a hydro-seal might be constructed without the use of the membrane. This would save from $10,000 to $15,000. If no provision were made to hold out the water and a pumping system installed as a continuous operation project, the operation costs would be much greater and still not entirely satisfactory because of possible failure of power or pumps.

Accordingly, before demolishing of the old building began, borings were made in the streets beside the structure to determine the water level, definite information on underground soil conditions and the exact thickness of the gravel strata which was found to be 7 to 12 ft. below footings. Thus the architects were able to design footings without pilings.

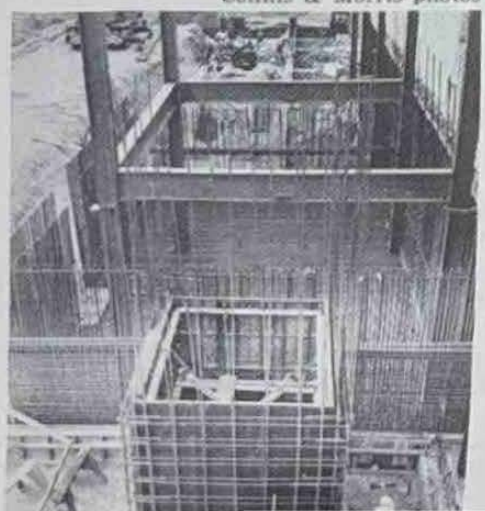
After the old building was torn down and before excavation for the new building was begun, more borings were made inside the area to verify previous findings. When excavation was completed, a drainage system and pump was installed to keep water down during construction of the hydro-seal.

Slabs of concrete with 2-ft. beams were connected to the footings by M. Morrin & Son, general contractors.



STEEL AND CONCRETE replace rock south basement wall and footings of building on northern boundary of excavation. This was essential before further work could be done.

Collins & Morris photos



VAULTS are constructed of concrete embedded with two layers of ¾-in. steel bars at 2½-in. centers, two ways.

Concrete with Anahydro and Pozzolith were poured in the floor slabs and walls. Connections with the walls were sealed with Anahydro grout. This sealed out the water and provided strength to allow it to rise to a height of 6 ft. outside the basement walls.

An underground drainage system and two pumps were installed for use in emergencies, such as earthquakes that might damage the hydro-seal.

An interesting feature of the construction was the necessity of changing basement wall and footings of the two-story Howell Building adjacent to the north boundary. Rock walls and footings had to be replaced with concrete in 6-ft. sections, with steel columns setting on subfootings placed in each section. Not more than one-third of the wall was taken out at one time. The complete south wall of the Howell Building was ultimately replaced.

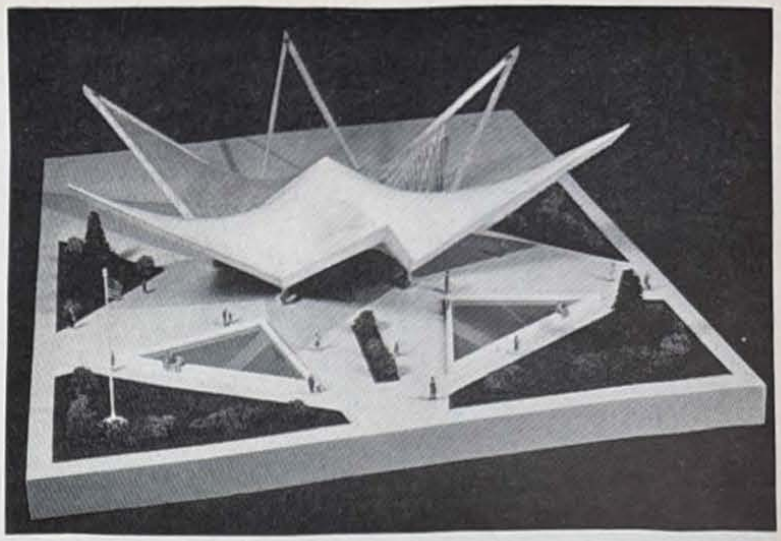
Two months were required to complete construction of the hydro-seal so that footings could be poured and normal construction carried forward. The cost of this type of hydro-seal was only $4,000 or $5,000 more than normal construction and much more economical than the use of a membrane.

Because of the footings situation, there not being a thick enough gravel strata without the use of piling, a slight change was made in the original plans for the bank's vaults. Five, one on top of another, had been desired. Only four could be installed. Three vaults of concrete embedded with two layers of ¾-in. steel bars at 2½-in. centers, two ways, were stacked at the west end of the building: one in the basement, one on the first floor and one on the second. The fourth vault is in the basement at the east end of building and is used for safety deposit boxes.

The building, which was completed in 15 months, will support two more floors should the banking operation require additional space in the future.



THREE-LEVEL STRUCTURE has 45,000 sq. ft.



HYPERBOLIC PARABOLOIDS with use of foamed plastic as permanent roof form are shown on one side of model, conventional forming techniques with many upright supports on other.

Foamed plastic serves as form for thin shell roofs

A new method of designing and building thin shell roofs utilizing plastic form boards of Styrofoam has been developed by The Dow Chemical Co. in cooperation with the School of Civil Engineering at Purdue University.

The foamed plastic planks serve in a triple capacity as a form for the permanent roof, as the thermal insulation and as a vapor barrier. They are bent to the desired roof contour, becoming an integral part of the roof structure and also providing a base for interior decoration. Much of the elaborate form work usually needed is eliminated, Dow says.

The technique is believed feasible for roofs of many sizes and shapes, from homes to large stadiums. It will be used in elliptically shaped elevated concourses at the new Trans-World Airlines Terminal at Idlewild International Airport, designed by Eero Saarinen. Plans are also underway to build a partially enclosed structure on the Purdue golf course, a 30x30-ft. hyperbolic paraboloid roof with a weatherproof concrete surface, and for a service station at Midland, Mich., which will have a multiple hyperbolic paraboloid roof. Dow is also working with a group of Texas home builders who will use the Styrofoam forms for thin shell roofs.

In a Purdue structural engineering laboratory, a 20x20-ft. hyperbolic paraboloid thin shell roof was constructed by use of lattices of wires over and under the Styrofoam which created the desired shape and caused the plastic to act as a shell membrane. This work was done under a Dow research grant.

The Purdue Research Foundation reported that results of all tests performed on the experimental model "indicate that this is a highly satisfactory, relatively simple and inexpensive technique for providing large unobstructed spaces under a graceful and attractive roof structure."

The Purdue group is now studying adaptations for other shaped structures, such as a spherical type shell composed of several truncated and skewed hyperbolic paraboloids and a barrel type shell. Dow engineers have constructed a test segment of a scalloped dome by arching boards of Styrofoam, placing them between steel angles, covering the foam with wire mesh and coating with concrete. Subsequent destruction testing established high load bearing ability, Dow reports.

Frederick J. McGarry, assistant professor of materials in the department of civil and sanitary engineering, MIT, makes this comment:

"The use of Styrofoam as a construction aid in the fabrication of thin shell concrete structures could well prove to be one of the most significant advances in building technology since the advent of curtain wall construction. The construction economies and architectural freedom which can be simultaneously achieved with this new technique will certainly expand use of these new buildings far beyond their present rather narrow limits. It represents one of the most intelligent and rational combinations of the dynamic field of plastics technology with that of civil engineering which has yet occurred.

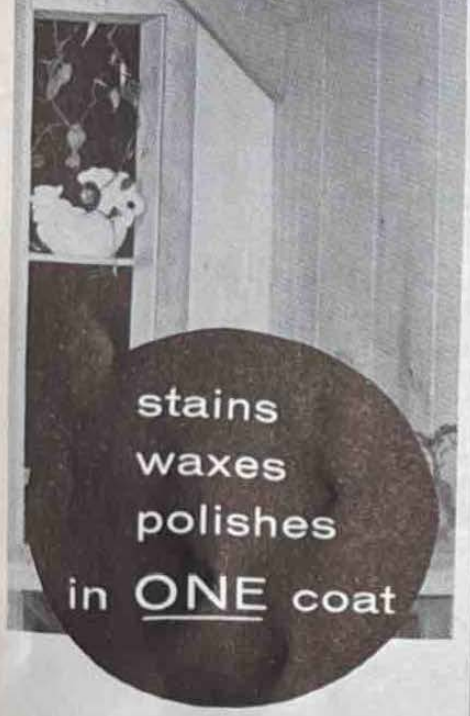
Ed. note: A technical bulletin "A Progressive Concept in Thin Shell Construction" is available by writing Dow at Midland, Mich.

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PA&B MEMO: *IDEAS / FORECASTS / TRENDS*

COLORED CONCRETE may soon become as common as brightly hued building panels. A California firm, Admixtures, Inc., has developed a method of adding uniform color to the concrete in the ready-mixed truck and, on the basis of 24 million sq. ft. placed in California, Arizona, Nevada and Hawaii, is preparing to move into the national market. The company says its process assures uniform coloring even when adjoining areas are placed at different times. The product already has found good acceptance for such uses as shopping centers (both buildings and sidewalks), patios, terraces and around swimming pools. Manufacturing licenses are now being negotiated.

—pa&b memo—

PLASTER CRACKS emanating from areas around metal door frames in hollow partitions may be eliminated in future buildings by using recently developed designs for metal door frame reinforcement. Research conducted by the Metal Lath Manufacturers Association working with representatives of the Steel Door Institute resulted in these recommendations: use control joints made with prefabricated expansion joints or casing beads above the door frame and in line with the jambs (these give attractive panel effects for more decorative interiors); fill interior portions of metal door frames with plaster: use a new type of slotted clip which acts as a jamb anchor when engaged with a prefabricated metal stud, thus preventing sideward movement of the door frame.

—pa&b memo—

ACOUSTICAL PROBLEM, the reverberation time in large halls used for music, may have been solved by a Massachusetts authority on the subject. According to Dr. Leo L. Beranek, president of Bolt, Beranek & Newman, Inc., the location and spacing of an audience, not just the number of people in a hall, is an important consideration in forecasting the correct reverberation time. In "The Journal of the Acoustical Society of America," Dr. Beranek reported on studies of over 50 world famous concert halls and opera houses in 15 nations. He discovered that basing forecasts of reverberation time on size of audience alone resulted in errors up to 44%. Dr. Beranek's study shows that an audience absorbs sound as though it were a thick carpet covering the floor. Its effect in lowering the reverberation time is in direct proportion to the area of the floor covered by the audience and not to the number of people in that area. Optimum reverberation time for concert halls should be from 1.8 to 2.1 seconds, in Dr. Beranek's opinion.

—pa&b memo—

EPOXY PROTECTANTS specially formulated for concrete and wood roofs will not only become increasingly important in the roofing business, but should provide for a sizable sales volume in the years ahead, predicted William C. Hodges, president of Hodges Chemicals Co., Mountain View, Calif., at a recent convention of the Roofing Contractors Association of California. He said the solventless epoxy systems will open up new market potentials for roofing contractors because the plastic materials can be applied easier and faster, will last longer and require less maintenance than conventional roofing products. Epoxies are still quite new to the roofing trade because special compounds were needed to meet the particular requirements of roof service. Such compounds are now being produced, Hodges explained, and are being introduced for use on roofs, balconies, decks and walkways.

—pa&b memo—

GLASS SIDEWALKS, occasionally used in small applications, are being tried out in a full-size test in front of Harold's Club in Reno. The 96-ft. span, 10 ft. wide and 2 in. thick, consists of 290 blocks, a third of which carry paintings depicting pioneer western scenes silk-screened on the underside of the top layer of glass. To provide for contraction and expansion, each block is cushioned in special bonding agents. A plastic, polyvinyl butyral commonly found in automobile safety glass, is laminated between the two sheets of glass. Top surface has been sand blasted to provide a nonslip surface. Underside is lighted. Alpine Glass Co. of Reno handled the installation.

—pa&b memo—

PLASTIC HOUSE built by Monsanto Chemical Co. at Disneyland three years ago has been undergoing periodic tests by structural engineers which indicate outstanding structural performance of the elements despite the six million visitors who have tramped through it. This is the report

of R. P. Whittier, project engineer for Monsanto's Home of the Future which was built with four 16x16-ft. reinforced plastic wings cantilevered from a central concrete core. Vertical deflection at outer ends of the wings has been at an average rate of .045 of an inch a year and the rate is slowing down, Whittier says. Polyester-fiberglass skins, epoxy-fiberglass supporting columns, polyurethane foam core, floating window wall and laminated wood beams all remain structurally sound. Periodic on-the-site tests of the structure have included measurements of vertical and horizontal movement, analyses of samples of the polyurethane foam core removed from the outer shell, examination for possible delamination of the interior shell and careful visual inspection for cracks.

—pa&b memo—

MODULAR STANDARDS for all major categories of building materials is the goal of an American Standards Association committee on the coordination of dimensions of building materials and equipment which met in Washington, D. C., late in July to initiate steps in that direction. Commenting on the need for reactivated standards work, Chairman C. E. Silling pointed out that since 1945 when the 4-in. module was adopted "the continued introduction of new modular products and the conversion of many traditional items to modular sizes has now made it imperative that all types of products be given the opportunity to benefit from more detailed dimensional standards. Jointing methods, assembly with other modular materials, tolerances and clearances are all considerations essential to achieving the full benefits of a dimensionally simplified construction industry."

—pa&b memo—

INSULATED CONCRETE BLOCKS have been recognized by the FHA in new standards accepting masonry walls without furring out when the wall will meet minimum heating loss and moisture penetration requirements. John Gold, president of Thermoflector, Inc., producer of a block with aluminum foil insulators, says the new regulation means that extra labor for furring, lathing and tacking up insulation and the most of these materials may be eliminated in cases where heat loss limitations can be met with this type of block. Exterior stucco or interior plaster can be applied directly to the block, made in all of the units available in the conventional type.



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insulated metal panel

A building panel originally designed to meet the needs of the armed forces in polar regions is now available in the civilian market for applications where moisture penetration is a special problem. Tests show frost will not form on the inside of the Arctic panel even when outdoor temperatures drop as low as 46 deg. below zero. It is designed for one-stop installation, requiring no extra materials and has no exposed fasteners on the exterior face.—The R. C. Mahon Co. **(Item No. 1)**

high strength bolts

A high strength bolt with increased across-flats dimensions results in greater bearing area. Installation costs are said to be lowered since it is possible to torque the bolts and nuts with the same wrench or socket and in many cases one washer is eliminated. Bolt ranges from ½ in. to 1½ in. in diameter and conforms to the latest A-325 specification of the ASTM.—Screw and Bolt Corporation of America. **(Item No. 2)**

vinyl coated steel

A line of vinyl protected, galvanized steel panels for industrial construction is being marketed by Granco Steel. Vin-Cor panels are produced in a wide variety of colors, patterns and gages in any length up to 12 ft. They are made from high strength, corrugated steel, protected on both sides by a galvanized coating and a three-coat, baked vinyl finish. — Granco Steel Products Co. **(Item No. 3)**

safety tilt windows

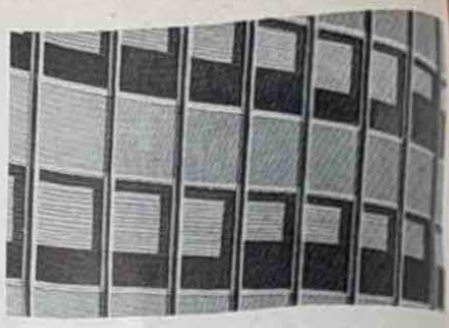
A window that can be tilted open for ventilation without danger of children falling out has been developed by adding special hardware to any conventional wooden double-hung type. Window also can be moved up and down and tilted to a horizontal position for cleaning or painting of both sides. Designed primarily for apartment houses, the window tilts into the room from the top of the sash by means of hinges on the bottom. It can be cleaned with screens in place.—Safety Window Hardware Corp. **(Item No. 4)**

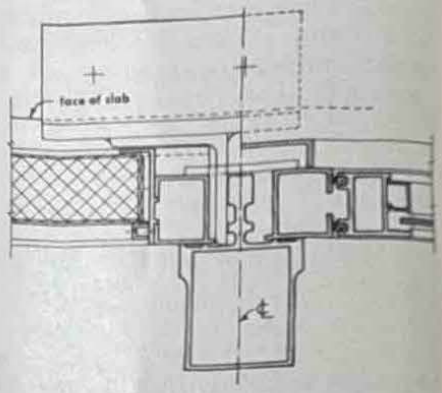
plastic building panel

Greater resistance to outdoor elements, color fading, chemicals, moisture and abrasion has been engineered into a translucent fiberglass and nylon reinforced plastic building panel being marketed under the trade name Filoplate. The acrylic-modified polyester resin coating is chemically bonded to the basic polyester core prior to the curing process. It becomes a part of the panel, creating a hard, tough, weather-resistant surface. Filoplate will be offered in 16 colors, flat and in configurations.—Filon Plastics Corp. **(Item No. 5)**

'sculptured' steel curtain wall

To dress up the exterior of warehouses or other steel buildings, Armco is offering a sculptured Steelox curtain wall panel to be used as the standard wall covering for big truss type and rigid frame buildings from 32 to 120 ft. wide. The company's new line also includes an industrial interior wall panel designed to the same 16-in. module as the exterior panels. Armco buildings are now available with clear span widths ranging from 5 ft. 4 in. up to 120 ft. and side walls up to 40 ft. A completely new series with a single slope roof has been added. — Armco Drainage & Metal Products, Inc. **(Item No. 6)**





curtain wall system

For high-rise structures, Albro is offering an aluminum curtain wall system erected in independent mullions and one-story units consisting of sash and panel frame. Flexibility of the system allows the architect a great deal of design latitude. All generally accepted spandrel panel materials can be combined with fixed or reversible windows. Series 400 can be erected largely from the inside, permitting all-weather installation and related advantages for constructing high-rise buildings. Size of the sections is relatively independent of the building height—Albro Metal Products Corp. **(Item No. 7)**

horizontal furnace

Iron Fireman's Custom Mark II oil fired furnace has been adapted for installation in horizontal form, making it possible to tuck it away into areas not usually used for furnaces. Suggested residential installations include beneath the floor in a no-basement house, hung from floor joists, suspended close to a ceiling in a basement or utility room, in an attached garage or in an attic. In commercial buildings, the furnace can be suspended from the ceiling in any convenient spot and operated with or without ducts. Volumetric combustion system of this model eliminates need for the usual chimney. Thus only a vent to handle exhaust is required where local building codes do not insist upon a special chimney. — Iron Fireman Manufacturing Co. **(Item No. 8)**

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fire-resistant tile

For stair wells, elevator shafts, fire walls and partitions, Natco has developed a tile to meet specifications for a single unit nominal 6-in. wall with two-hour fire-resistance rating. Called Fireproofer Tile, it will be available in the 6T series (5⅛ x 11¾-in. face size) with cored shells and three cells in wall thickness. A variety of ceramic glaze finishes are available on the select surface with smooth unselected, unglazed back. Backs with scored surfaces for plaster application will be available on special order. It also will be available in a buff, unglazed material.—Natco Corp.

(Item No. 9)

steel floor plates

For industrial and warehouse flooring that must take heavy abuse, Rockwell-Standard is marketing a modular steel floor plate with locking tabs that anchor it into the concrete base. Mod-U-Lok reportedly will not expand and contract causing warpage or buckling under the heaviest of traffic loads. Product comes in 1-ft. modular size. Concrete comes up through 33 small holes in each plate to provide safe footing. — Stamping Division, Rockwell-Standard Corp. (Item No. 10)

permanent storm sash

Storm sash and screens are integral parts of UALCO's series 60 horizontal sliding aluminum window, thus eliminating seasonal changes and storage. A new extrusion forms a double channeled third track on the deep stepped sill. Weatherstripped storm sash and the screen are housed in this channel. One storm panel slides behind the other for screened ventilation in the summer. — Southern Sash Sales & Supply Co., Inc. (Item No. 11)

masonry coating

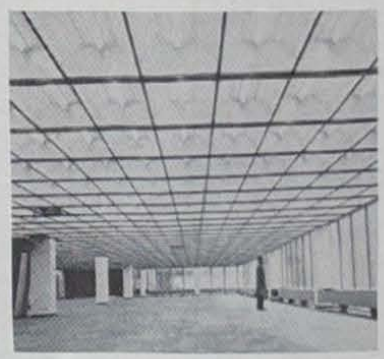
A fire-resistant coating for both interior and exterior finishes called Tonecrete is now available in a full range of colors and choice of fine or coarse texture, flat or semiluster finish. Since the product is over 90% inorganic, the cured film does not suffer from deteriorating effects of oxidation and weather exposure. Tonecrete is vapor permeable, eliminating film failures normally caused by concentrations of moisture and protecting against spalling. It can be applied over all types of masonry, bricks and blocks, stucco, plaster, cement plaster, unglazed tile and dry wall, asbestos composition boards, corkboard, paint primed wood and metals. Laboratory tests indicate it will not start to burn until subjected to approximately 1,600 deg.—Desco International Association.

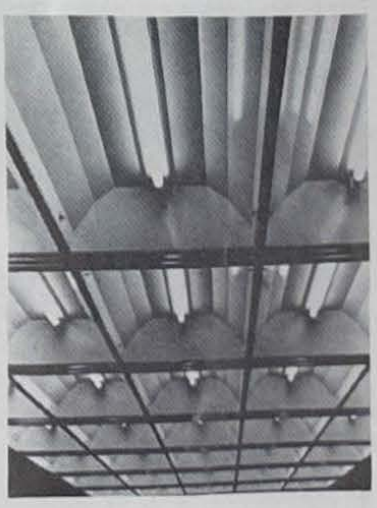
(Item No. 12)

all-purpose ceiling

A ceiling system incorporating the functions of lighting, air circulation, sound barrier and partition anchorage in one continuous plane of contiguous fixtures was developed for Union Carbide Corp.'s new office building in New York City. Elements of the system include translucent laminated plastic diffusers to transmit and diffuse the light; a grid of cold roll-formed stainless steel runners which serve as a framework for the lighting fixtures, as top anchors for the movable partition panels and as control nozzles for dispersion of conditioned air and intake for used air; individual reflectors which act as sound baffles and with contours which adjust the intensity of illumination evenly across the face of the diffuser; fluorescent lamps; special polyurethane gaskets for light and dust sealage and to cut down on reverberating sound. Ceiling was designed on a 2½-ft. wide by 5-ft. long module. Less than four watts per square foot produce a maintained illumination level of about 80 foot-candles.—Union Carbide Corp.

(Item No. 13)







corrosive waste drains

For piping of waste acids, alkalies or solvents, Dow has developed a non-corrosive drain line system using saran lined pipe and simplified fittings of ductile iron. Saran is resistant to practically all inorganic chemicals and to most organic solvents and compounds. Fittings are designed for ease of installation and service between normal wall partitions. Union type fittings are used with round connector nuts that can be tightened with a spanner wrench.—The Dow Chemical Co. (Item No. 14)

colored aluminum

Aluminum ribbed siding, V-beam roofing and siding and insulated panels in 20 factory-applied colors have been introduced by Reynolds. Called Colorweld, the line features finishes so durable they can withstand heavy embossing and stamping operations without damage, thus eliminating the need for special forming tools or spray painting of individual products after they are formed. Because standard tools and manufacturing methods can be used, the line is being offered at lower cost. Company also is offering a custom color service in a new line of Reynocolor commercial aluminum products which can be spray-enameled to meet any customer color specifications.—Reynolds Metals Co. (Item No. 15)

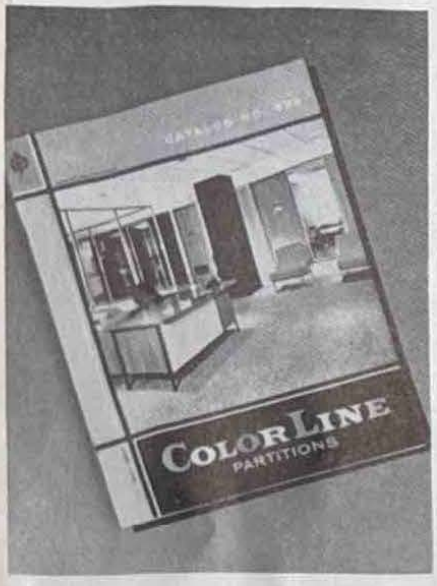
asbestos cement coating

An alkyd type coating reinforced with chlorinated rubber has been developed for asbestos cement and concrete products. Parifco has a strong resistance to many chemical conditions, including the alkali content of the asbestos sheets themselves. It keeps the alkalies in, as well as keeping them and other injurious elements out. Coating has good color tone and is easy to apply. One of the elements in Parifco is Parlon, a product of Hercules Powder Co. which collaborated in the material's development.—Industrial Finishes Co., Inc.

(Item No. 16)

pa&b pick of the month

Full-color photographs of installations do a good job of showing the possibilities of the ColorLine movable partitioning system in this 28-page catalog. Publication includes detail drawings of typical partition sections, framing and intersection details, plus other design and layout aids. A smaller companion brochure presents some additional ideas, all in full color.—Unistrut Products Co., 933 W. Washington Blvd., Chicago 7, Ill.



pa&b pick of the month

Examples of glued laminated timber construction in 18 churches appear in "Beauty for your Church" (AIA 9-B-3) and ably illustrate the 12-page brochure's title. Shown are applications for Tudor arches, Gothic arches, parabolic arches, rigid frames, decorative arches and tapered and straight beams. The churches range in size from small chapels to cathedral type buildings seating up to 1,200. Included are two California churches: Trinity Lutheran in Walnut Creek designed by Skidmore, Owings & Merrill and St. Paulus Evangelical Lutheran in Oakland by H. A. Schary; two in Washington: Bellevue Presbyterian in Bellevue by Mithun, Ridenour & Cochran and First Lutheran in Kennewick by Durham, Anderson & Freed; and two in Oregon: Central Presbyterian in Eugene by Freeman, Hayslip, Tuft & Hewlett and Community Presbyterian in Lake Grove by Edmundson & Kochendoerfer. Typical dimensional data and connection details are included in the brochure.—Timber Structures, Inc., Box 3782, Portland 8, Ore.

Facts and Data on Resilient Floors (AIA 23-G): is revised edition of publication outlining factors to consider in selecting type of flooring for various uses with installation data and illustrations of company line; 46 pp. —Congoleum-Nairn Inc., 195 Belgrove Drive, Kearny, N. J.

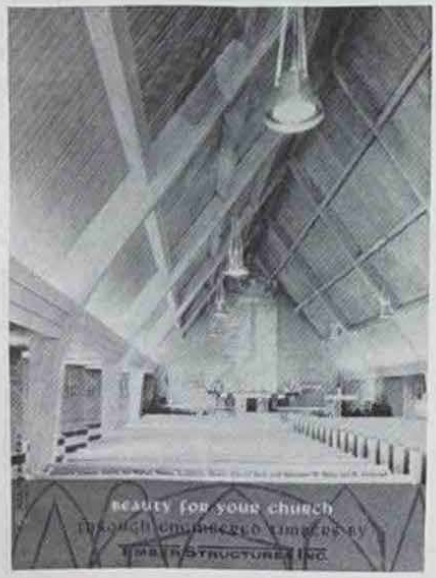
Fiberglass Drapery Fabrics: presents 128 fabric samples with information on weaves, fabrication and hardware. —Glass Fabrics Inc., Architectural Division, 620 N. Almont Drive, Los Angeles 46, Calif.

Electric Blast Coil Space Heaters (AIA 31-K-3): describes advantages and applications of custom designed units for duct installation that use no valuable floor or wall space; 32 pp.—Industrial Engineering & Equipment Co., 24 Hanley Industrial Court, St. Louis 17, Mo.

Ceramic Tile: catalogs line produced in California for distribution in the West, including the new 1-in. square Staccato accent tile and the Harmonitone coordinated palette; 28 pp.—The Mosaic Tile Co., 131 N. Robertson Blvd., Beverly Hills, Calif.

Dutch Doors: pictures interchangeable Dutch door tops and bottoms in Ponderosa pine that permit 16 different combinations; 4 pp.—Morgan Co., Oshkosh, Wis.

Industrial Hot Water Boilers: presents line of gas, oil or combination boilers from 126,000 to 5,000,000 btu. designed for institutional and commercial installations; 4 pp.—Sid E. Parker Boiler Manufacturing Co., 2061 E. 37th St., Los Angeles 58, Calif.



Modular Plastic Diffuser (AIA 30-J): introduces air diffuser sized to replace one or more standard tiles and offered in three types that can be combined to provide variety of air patterns and sizes, for any type of ceiling construction; 28 pp.—Carnes Corp., Verona, Wis.

Fiberglass Panels (AIA 26-A-9): shows variety of applications with installation details and specifications; 8 pp.—Alsynite Division, Reichhold Chemicals, Inc., 4654 De Soto St., San Diego 9, Calif.

Styltone Fissured Mineral Acoustical Tile: depicts several installations with brief data on product, along with sound absorption coefficients chart; 4 pp.—Acoustical Products Division, Baldwin-Ehret-Hill, Inc., 500 Breuing Ave., Trenton 2, N. J.

Garden Redwood Ideas: illustrates patio, garden and poolside areas designed by landscape architects; 16 pp. —California Redwood Association, 576 Sacramento St., San Francisco 11, Calif.

Kalcolor: covers architectural anodic finishes in 13 colors with description of the anodizing system and specifications; 16 pp.—Kaiser Aluminum & Chemical Sales, Inc., 300 Lakeside Drive, Oakland 12, Calif.

Swimming Pools (AIA 10-B): describes and pictures installations of glazed structural units for swimming pool room walls, shower rooms, etc.; 4 pp.—Kraftile Co., P. O. Box 2907, Fremont, Calif.

Hardboard Specifications: covers various types of hardboard and appropriate applications of each, gives information on standard panel sizes, tolerances and other criteria on mimeographed sheets; 7 pp.—Hardboard Association, 205 W. Wacker Drive, Chicago 6, Ill.

Electrical Signaling Equipment: describes air and electric signal systems, lists specifications for horns, bells, buzzers, chimes and sirens and charts selection of proper type for various background noise levels; 88 pp.—Sperti Faraday, Inc., Adrian, Mich.

Pomeroy completes new headquarters in San Francisco

J. H. Pomeroy & Co., international engineering and construction firm, has completed work on its new headquarters at 755 Sansome St. in one of San Francisco's most promising redevelopment areas.

"We believe our modernized building serves as an example for many business and commercial firms contemplating similar projects," says President Robert N. Pomeroy, "and we welcome all those interested to show them what can be accomplished under such a program."

Conversion of the former Tea Garden Building, which included offices, a warehouse, an ice plant and ice storage area, required little more than six months. Plans and specifications for the alterations were prepared by the Pomeroy engineering division. Comprising six stories and basement, the reinforced concrete structure was completely changed, inside and out, to provide approximately 80,000 sq. ft. of office area.

Pomeroy executive offices are located on the fourth floor, formerly part of a warehouse area. The third floor now houses estimating, purchasing and accounting departments. The company's engineering division, recently moved from Los Angeles, is located on the second floor.

The first floor is headquarters for Ben C. Gerwick, Inc., specialist in prestressed concrete construction, now part of the Pomeroy organization.



REMODELED STRUCTURE: Pomeroy's new home.



EXECUTIVE RECEPTION LOBBY on fourth floor.

BRIEFS

• **Portland Chapter, AGC, Building Division,** has moved to 0112 S. W. Pennoyer St.

• **Hawaii Chapter, AGC,** received its official charter during the organization's national convention in San Francisco. As local president, Frank N. Rothwell, who heads South Pacific Contracting Co., Ltd., accepted the charter on behalf of 23 member firms.



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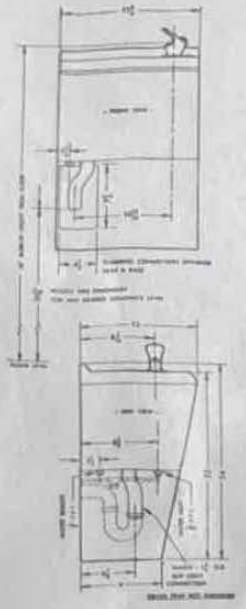
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• **The Flintkote Co.** has purchased Sealzit Co., Riverside, Calif., manufacturer of equipment for resin and plastic applications. James D. Moran, a Flintkote assistant vice president, has been elected vice president and general manager of the new subsidiary.

• **Calaveras Cement Co.** has transferred Charles Lindgren from Fresno, Calif., to Eugene, Ore., where he will serve as a sales representative. He is succeeded in Fresno by Craig A. Combs, formerly with Soule' Steel Co.

• **Forest Fiber Products Co.,** Forest Grove, Ore., has appointed George E. Wann as merchandising manager. Wann has been in the fields of advertising, sales promotion and public relations for the past 14 years in the Portland area.



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WRITE FOR DATA ON HAWS CAFETERIA AND RESTAURANT WATER COOLERS

• **Seattle Bronze Co., Inc.,** has been sold to Dale N. Fox and Robert J. Reynolds who plan to emphasize the aluminum storefront business, while continuing other custom architectural and metal contract work on order. Fox formerly was Seattle Bronze sales manager and Reynolds, architectural designer for the firm. Previous owners were Phillips Dickinson and Merrion R. Shapley.

• **The Republic Steel Supply Company of California** has appointed two sales managers for its new specialty metals division: Donald E. Becker in steel and Robert R. Johns in aluminum.

• **Permanente Cement Co.** has purchased a 1.3-acre waterfront site in Eureka, Calif., for installation of a bulk cement distribution plant with storage capacity of 3,000 barrels.

• **Hawaiian Cement Corp.,** Honolulu, has a new sales manager, Nathaniel Potter Jr.

• **U. S. Stramit Corp.,** which has been making building board from wheat straw since late 1957 at a pilot plant in Havre, Mont., is moving its factory to Big Pasco, Wash. The move involves about $250,000 worth of machinery and equipment weighing about 25 tons, reports Bernard P. (Barney) Haley, president and general manager.

• **Klemp Metal Gratings Corp.** has appointed Lloyd White as district engineer with offices in Albany, Calif.

• **Weyerhaeuser Co.** reports agreement has been reached under which the firm will purchase Roddis Plywood Corp., Wisconsin manufacturer of hardwood products. The company also has announced plans to move the general offices of the lumber and plywood marketing division from St. Paul to Tacoma in mid-August.

• **Building Specialties Co., Ltd,** Honolulu, has appointed Charles Eggleston, former manager of Hawaiian Water Transportation Co., as general manager.

• **General Controls Co.** has named William S. Orton as field representative for the air conditioning-refrigeration controls division. He will make his headquarters in the San Francisco branch office. Orton formerly was sales engineer for Fabricated Metals Co., San Leandro, Calif.

• **Vaughan Interior Walls, Inc.,** has established a northern California headquarters at 447 Canal St., South San Francisco, under the direction of Byron Johnson, vice president. Originator of the system of movable walls made of fireproof gypsum panels, Vaughan maintains its home offices in Los Angeles and has franchise representatives throughout the country.

• **Rilco Laminated Products** has named Guy H. West Jr. as manager of the plant now under construction at Cottage Grove, Ore. West formerly was with Weyerhaeuser Timber Co. in Longview, Wash.

• **Olin Mathieson Chemical Corp.** has appointed Charles D. Maclure as district sales manager for the Ramset fastening system. From headquarters in Denver, Maclure will direct sales activities in Colorado, Wyoming, New Mexico, Utah and southern Idaho. He formerly was head of Ramset sales for Landes, Zachary & Peterson Co. in Denver.

• **Bennett & Williams,** Portland, reports that Donald L. Bennett, president has resigned. Bennett has opened his own retail sales outlet for linoleum, tile and other home improvement products at 8950 S. E. McLoughlin Blvd. under the name Don Town, USA, referring to the building interior which is designed to simulate a city.

• **Beaver-Advance Corp.** has appointed Leo B. Manning as western district manager, succeeding R. Bruce Angell who is entering the construction equipment distribution field in Honolulu. Manning, who will maintain an office in San Carlos, Calif., formerly was general manager of the firm's West Coast subsidiary, Advance Scaffold, Inc.

• **United Pacific Aluminum Corp.** has taken an option on a site in Longview, Wash., for construction of a $10 million aluminum reduction plant.

• **A. M. Byers Co.** has appointed George B. Spears as a field service engineer for the Pacific Coast division.

• **Formica Corp.** has assigned Richard H. Baltimore to the sales staff in the Los Angeles office.

• **Clayburn-Harbison, Ltd.,** has named Builders Brick Co., Seattle, as distributor in Washington for refactory brick produced by the Vancouver, B. C., firm. Handling sales of the new line is Truxton King.

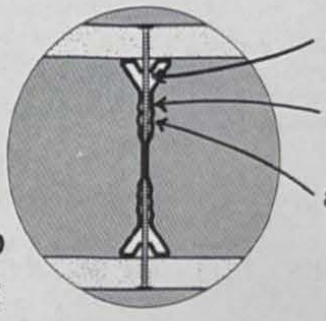
• **Kaiser Steel Corp.** has opened a sales office in Albuquerque to serve the New Mexico, West Texas and Texas Panhandle areas. Office will be headed by Keith W. Meserve who has been transferred from Denver.

• **Teleflex, Inc.,** has named two western representatives to handle the company's line of mechanical controls and linkages. They are R. J. deRecat & Co., San Francisco, whose territory will be California, Arizona, Colorado, Nevada, New Mexico and Utah, and Ron Marston Co., Seattle, which will cover Washington, Idaho and Oregon.

• **Timber Structures, Inc.,** Portland, reports that Harold K. Merrill, vice president and treasurer, has been elected a vice president of the Controllers Institute of America.

• **Master Builders Co.** has named Albert S. Quinn Jr. as sales repre-

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sentative in the Seattle branch office. For the past four years Quinn has been a sales engineer with Stebbins Engineering Corp., Seattle.

• **Linseed Oil Products Corp.**, Santa Ana, Calif., has changed its name to Behr-Process Co.

• **The Mosaic Tile Co.** has promoted James A. Falconer from vice president to president and general manager of its two California subsidiary factories, Jordan Tile Manufacturing Co., Corona, and General Tile Co., El Segundo. Arthur J. McNeil, who has been Pacific Coast territorial manager since 1956, has moved to Mosaic's headquarters in Zanesville, Ohio, as vice president in charge of sales.

• **General Electric Co.** has named Diamond W. Supply Co. of Los Angeles as wholesale distributor in that area for Textolite decorative laminated plastics.

• **Plywall Products Co., Inc.**, has named three California distributors for Poly-Clad Plywall paneling, G. H. Slack & Son, Inc., Bakersfield; Building Materials Distributors, Fresno and San Jose; and Petaluma Build Material, Santa Rosa.

• **United States Plywood Corp.** acquired Berkeley Plywood Co., I San Leandro and Los Angeles, a fi which specializes in the manufact and installation of panelized roof s tems and other plywood building co ponents. In January, U. S. Plywo purchased Panelbild Systems, Inc., Seattle and the Berkeley firm w play a key role in expansion of t component system in the San Fra cisco and Los Angeles areas, compa officials report. Management will co tinue under Warner Odenthal, Berk ley president.

• **Daryl Industries, Inc.**, has name Seaboard Corp., Long Beach, a southern California distributor.

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ASSOCIATIONS

• **Portland Cement Association** ha transferred Robert H. Lochow, Pacifi Northwest district engineer, to a sim ilar post in New Jersey. He will b succeeded in Seattle by Charles H Knight Jr. who has been serving a general field engineer and distric conservation engineer in the Los An geles area. Ernest H. Rogers ha joined the Seattle office as field engi neer for the Seattle, Tacoma and southwestern Washington area. He formerly was a sanitary engineer for the Seattle Water Department.

• **National Particle Board Associa tion** held its first semiannual meetin June 2 at the Brown Palace Hotel in Denver and met the newly appointed executive director, Robert E. Dough erty, who has established headquar ters in Washington, D.C.

• **Cement & Concrete Products In dustry of Hawaii** has been formed in Honolulu, with Ed Sheehan as execu tive secretary.

• **Douglas Fir Plywood Association** was represented among the honored guests in the person of its executive vice president, W. E. Difford, Tacoma, at the 50th anniversary of the Forest Products Laboratory at the University of Wisconsin in June. During the special ceremonies on the Madison campus, the laboratory received the U.S. Department of Agriculture's distinguished service award for "pioneering and maintaining visionary planning, sound execution of research and development of processes resulting in greatly expanded and more efficient use of forest products."

Schools and their programs need flexible design

J. Lloyd Trump, who directs the Commission on the Secondary School at the University of Illinois, addressed a conference on "New Schools for New Education" on the University of Michigan campus last winter. He suggested five areas, all affecting space requirements, in which educators and architects should seek greater flexibility.

1. Class size: Instead of organizing instruction in standard-size classes, we should vary the size of the class in accord with its purpose. As much as 40% of a student's school time should be spent working independently in libraries or other resource centers—not in a study hall policed by a teacher. It should also be possible for small groups of 12 or 13 students to meet with teachers.

2. Curriculum: The curriculum is now divided into neat units meeting five days a week. Content is selected to fit into these packages. It might be better to look at the curriculum and divide it into "basic education" for all students and "content in depth" for those with ability in a certain field.

Basic education should include the fine arts, social studies, mathematics and science. Students with ability could examine one or more of these areas in depth, going into libraries and resource places to work. School facilities should also be available to students evenings and Saturdays.

3. Scheduling: There is no need for standard periods. Large groups of students meet 20 to 40 minutes. Small groups could go for 20, 30 or 40 minutes. Students should be able to get into a laboratory and work for two hours. Now they just get going and the bell rings for the next class.

4. Staffing: We have recognized that there are individual differences among students, yet we have said that all teachers are alike. The student is now in "solitary confinement" with one teacher. Imaginative schools are now taking larger groups of students with three or four teachers and organizing a team approach.

5. Technological aids: So far recordings, films, radio and TV have only gotten into the school program as a little enrichment. Day-by-day teaching should include teaching machines—and this doesn't necessarily mean electronic gadgets. A book can be a teaching machine if it gives answers as well as questions so that, without wasting a teacher's time, the student can discover whether he was right or wrong, thus gaining immediate information on his progress.

The professional engineer: who and what he is?

In asking his colleagues this question, Seattleite S. Charles Dearstyne makes reference to legislation passed by Washington State last year which allows a corporation to practice engineering provided it employs one licensed engineer—a bill whose implications for the architectural profession are obvious. The article appeared in Puget Sound Engineering for April 1960.

Without a realistic evaluation of the services performed by engineers and an understanding of their value to and standing in the community, we cannot expect to obtain suitable legislation for the protection of the engi-

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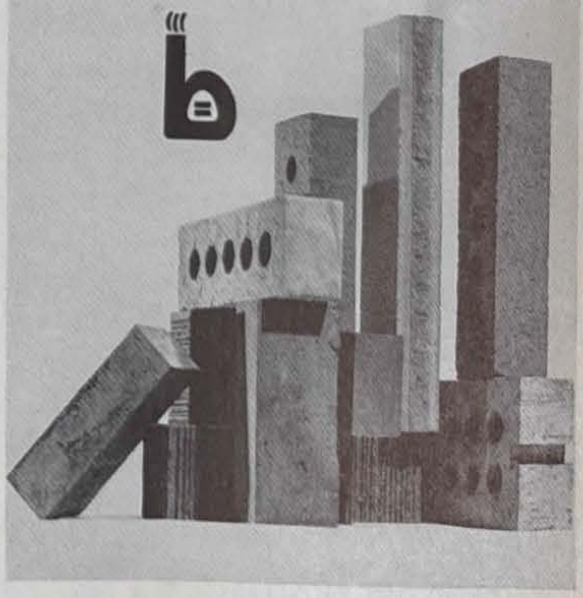
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neering profession or the protection of the public against improper engineering practice.

The confusion that attended the passage of SB-127 in the 1959 legislature, including the intense opposition of a certain group of engineers to this law, the apathy of the majority of the engineers as to what was happening and the widespread misunderstanding among engineers as to the implications—all of these indicate the necessity for a clearer understanding of what engineering as we practice it really is, the divisions within the profession and what the profession can, if it will, do about it.

At best, as it now operates, engineering is a conglomeration of many things. Forgetting the abuses and misuses of the term, it is composed of numerous branches and divisions, all of which appear to have different and varying standards and levels. There are no clean lines of grades and there are many overlappings.

At one extreme, we have highly capable and brilliant engineers with no state license, some doing subprofessional work. At the other extreme, we have improperly trained men with state licenses frequently directing engineering activities. In between is a plethora of incongruities.

It's no wonder the legislators, the public and the engineers themselves are confused! What can we do about it?

The way isn't easy and it is doubted if any one agency is big enough to do it alone. The technical societies could bring order out of confusion but they do not want to. They are basically technical rather than professional. Legislation is needed at the professional level and professional engineers are in the minority.

One may well ask: "What is a professional engineer?" Let us seek an answer to that question by initiating a line of thinking on the subject as a first step toward clarification of confusion by classification of engineers on a factual basis.

The state of Washington licenses many people to use the title "professional engineer" who, this article contends, are not truly professional engineers. The title was established by legislators with honest intent to differentiate between the man with technical background and the railroad engineer, the hoisting engineer and those of equivalent occupations.

In its better perspective, professional engineering should be the final of three categories as now practiced, consisting of:

The engineer: a man who has, through education or experience, gained adequate technical knowledge to qualify him to enter one of the several branches of what is recognized (or defined) as the field of professional engineering.

The technical engineer: an engineer who has developed sufficient skill in the use of technical knowledge to utilize and apply this knowledge for valuable purposes of design, construction, analysis or operation with limited supervision and who is so engaged.

The professional engineer: a technical engineer who has gained sufficient experience to enable him to supervise and direct major engineering works in their entirety and who is so engaged.

The above are not intended to be true definitions but indicators of classifications that presently exist and that should be recognized by the profession generally and by the state in the matter of licensing.

Following this thinking, the engineer may be one just out of college starting on a career. If he goes into other lines of work, he remains an engineer by his background. If he follows his studied profession, after working a period of time he becomes a technical engineer. As such he may be an employee of a manufacturing corporation, of a consultant or of a government agency. In time his un-

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derstanding increases, his vision broadens, opportunities open up and he thus becomes a professional engineer.

One may disagree with these titles or the limitation of these categories. However, it must be recognized that there are divisions and degrees and stata.

There are necessarily relatively few professional engineers. All engineers would like to be called "professional engineers," even those who have not yet developed sufficient ability to warrant use of the title. It gives importance and standing in the community.

There are also those who have attainments that qualify them as technical engineers who prefer to continue in that situation for the relative security it offers. These are usually men of character and ability and form the backbone of the profession.

But engineering cannot take its rightful place in society without the professional engineer, for in him is vested the vision, the dynamic ability, the ethical and moral forces that have so materially assisted in bringing about the tremendous advances in American technology.

It is this man, the professional engineer, for whom legislation is necessary, not only for his protection and, through him, the protection of the profession generally, but also for protection of the public against those who may seek to use his respected status as a medium for exploitation of the public.

Each of the above categories has a definite value to itself and to the community. Legislation for one category may not apply directly to the others, but certainly all divisions will have a participating interest.

Our legislators are generally sincere men. They are, however, mostly business men who have little understanding of or interest in professional problems, especially when the profession does not understand or recognize those problems itself. They have neither time nor inclination to head someone else's crusade.

It is hence urged that a movement be initiated by the engineering profession to:

- Clarify the respective stata of engineers by classification into categories, indicating the requirements for and limitations of each of these categories.
- Effect legislation recognizing and legalizing these categories.
- Effect legislation necessary for protection of the professional engineer and protection of the public by prevention of misuse of his position and function.

pacific architect & builder

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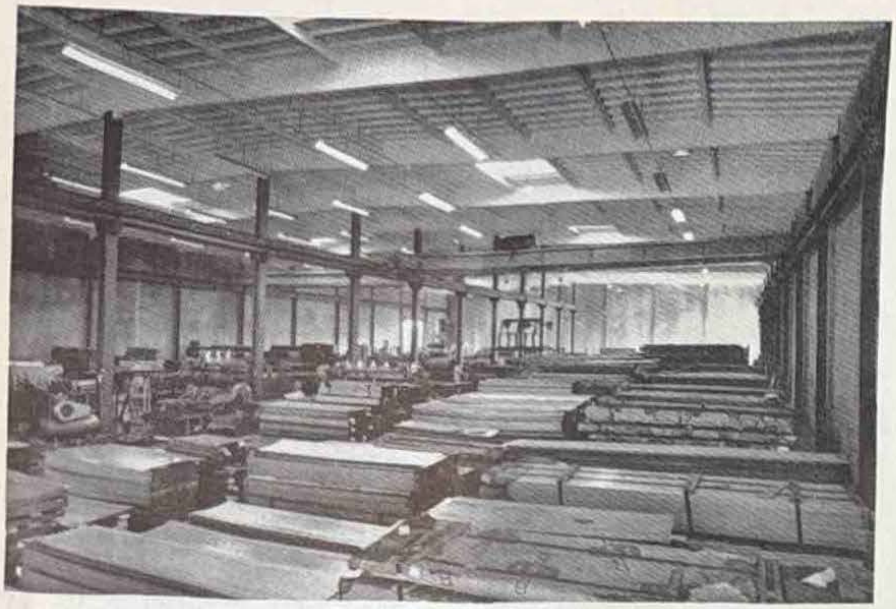
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Rich Steel Company Warehouse, Los Angeles, Calif., constructed with 24 Rilco glued laminated wood beams, 58' in length. Contractor: Ruane Corp., San Gabriel, Calif. Architect: Joseph L. Johnson, A.I.A., Los Angeles.



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Aspen, Colo., like the Internati Design Conference (see the news tion for a report on the 1960 sessio is unique. A thriving silver mi town in the 1890s, it has been resto to become a ski resort in the wi and a vacation and cultural cente the summer. Furthermore, it bo some interesting and refreshing ar tecture in a relatively small a We'll illustrate one example n month: an architect's own house which the marriage of the old a the new truly becomes a reality. Ot projects will include an office str ture in California, a provocative ch el in the Northwest and a priva club building in Hawaii. Our ma methods article will show an unusu German-made crane at work on first job in the West.

well-rounded (lady) enginee

When the Society of Women Eng neers held its national convention Seattle recently, we sent a femal member of the PA&B staff to find ou what the women were talking bou "Everything from missile nose con design to where they could buy th geometric toy sets (designed by Se attle architect Fred Bassetti) whic were used as table decorations for luncheon to the problems of educatin a well-rounded—mentally, that is— engineer or scientist," Anne Hecke reported back.

Prof. Lois Graham of the Illinois Institute of Technology mechanical engineering department commented that this technical age requires engineers with not only more specialized training but also with a good overa backround in order to communicat with and cooperate with their fellow project members. All this technological education doesn't leave time for the humanities, she sadly admitted. Other problems needed to be solved, touched briefly by Dr. Graham: Does our education system channel too much and destroy creativity? With college becoming more and more expensive, how are we going to make it possible for all those who should, to receive a higher education?

topographical error

We knew it was bound to happen sooner or later and sure enough, in describing the Paul Siegel Decorative Center last month, we had one wing of the Seattle project "two-story due to the typography." R.E.K.

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July drops $32 million behind last year

Dollar volume of building permits for July in the western states totals $287,512,743, a drop of $32 mill from the same period a year ago. There were, howe five states showing gains for the month. Hawaii leads list with a $4.4 million increase. Nevada is up $2.2 m lion; Arizona, $1.2 million; Wyoming, $809,000; and N Mexico, $580,000. States recording decreases are Calif nia, down $12.8 million; Washington, $11.1 million; O gon, $6.2 million; Utah, $4.4 million; Idaho, $2.4 milli Colorado, $2.1 million; Alaska, $1.3 million; and Monta $711,000.

Top 15 agencies

Among the top 15 agencies, 10 are in California, t in Arizona and one each in Washington, Colorado a Hawaii. They are:

		July 1960	July 19
1.	Los Angeles	$38,267,903	$48,725,25
2.	Los Angeles County	32,279,488	27,872,30
3.	Honolulu	12,884,920	8,867,37
4.	San Diego	10,348,069	15,673,82
5.	San Jose	9,640,415	9,455,32
6.	Maricopa County	8,992,515	3,807,85
7.	King County, Wash.	7,912,831	13,719,72
8.	Sacramento County	7,889,471	13,099,16
9.	San Diego County	7,713,400	8,627,10
10.	Phoenix	6,966,958	6,540,20
11.	Long Beach	6,945,105	4,524,27
12.	Denver	6,763,945	8,221,90
13.	Orange County	6,306,725	5,095,85
14.	San Francisco	5,018,587	6,741,72
15.	San Bernardino County	4,948,621	6,590,54

January-July figures down

The 13-state total for the first seven months of 1960 $2,164,027,988, a drop of $87 million from the same perio in 1959. Hawaii is the only area where building seems be booming. Dollar volume in the newest state is ru ning $36.8 million ahead of 1959. Others states movi ahead of last year are Arizona, up $11.8 million; Nevad $11.4 million; Alaska, $7.4 million; Wyoming, $3.4 millio and Montana, $870,000. Trailing 1959 for the first seve months are California, down $81.6 million; Washingto $42 million; Colorado, $17.6 million; Utah, $6.2 millio New Mexico, $5.8 million; and Oregon, a bare $26,000.

Nationwide figures tabulated for the first quarter 1960 indicate how the West is flexing its building muscle Of the top 10 permit-issuing agencies, five are in PA& territory: Los Angeles, second; San Francisco, fifth; Sa Diego, seventh; Phoenix, ninth; and San Jose, tenth.

Analysis of typical areas—July

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$14,811,500	$3,694,635	*$12,953,375
Orange County	5,550,062	505,146	
Sacramento County	6,250,129	1,081,859	373,472
Las Vegas	2,733,754	474,624	12,600
Denver	1,631,990	2,444,640	286,000
Portland			
Seattle	1,834,247	2,513,385	295,000
King County	5,435,025	2,172,060	231,500
Honolulu	8,758,688	1,888,902	2,153,632

*Does not include $670,592 for tax-supported school construction

Building Permit Totals for 155 Western Agencies for July

CALIFORNIA	July 1960	July 1959
Alameda County	$ 2,533,300	$ 1,264,725
Anaheim	3,639,725	2,859,627
Bakersfield	1,394,843	772,838
Burbank	718,036	1,354,160
Contra Costa County	3,572,043	3,874,956
Fresno	1,399,731	3,934,598
Fullerton	1,841,398	2,658,383
Glendale	1,212,156	1,990,675
Inglewood	2,961,945	903,357
Long Beach	6,945,105	4,524,275
Los Angeles	38,267,903	48,725,250
Los Angeles County	32,279,488	27,872,202
Oakland	3,667,736	4,473,584
Ontario	1,143,835	509,562
Orange County	6,306,725	5,055,855
Palo Alto	1,378,075	2,843,998
Pasadena	934,525	1,097,506
Pomona	1,139,933	1,059,452
Richmond	894,993	971,521
Riverside	1,371,402	2,171,341
Sacramento	4,596,105	4,637,716
Sacramento County	7,889,471	13,090,169
San Bernardino	2,216,131	1,404,243
San Bernardino County	4,948,621	6,590,547
San Diego	10,348,069	15,673,829
San Diego County	7,713,400	8,627,100
San Francisco	5,018,587	6,741,722
San Jose	9,640,415	9,455,328
San Mateo	1,426,183	1,670,836
San Mateo County	1,360,541	1,145,851
Santa Ana	3,866,655	4,048,203
Santa Monica	795,487	1,127,952
Stockton	1,182,651	852,527
Sunnyvale	1,777,938	1,963,838
Torrance	1,775,594	2,796,990
West Covina	622,974	2,245,861
TOTAL	$178,781,719	$191,854,722

OREGON	July 1960	July 1959
Albany	$ 144,777	$ 342,318
Astoria	29,252	43,105
Baker	78,698	374,200
Bend	162,380	83,918
Coos Bay	151,276	104,724
Corvallis	364,370	1,268,548
Eugene	683,415	648,515
Grants Pass	122,925	116,700
Gresham	54,800	136,700
Hillsboro	147,688	434,196
Klamath Falls	290,900	429,200
LaGrande	112,990	27,660
Lane County	1,091,172	1,214,565
Medford	465,434	5,277,557
Multnomah County	2,889,380	3,189,266
North Bend	152,860	98,669
Oregon City	25,870	81,950
Portland	4,711,610	4,707,510
Roseburg	64,087	102,660
Salem	1,063,127	453,569
Springfield	152,198	97,723
The Dalles	124,115	59,100
TOTAL	$ 13,083,324	$ 19,292,353

WASHINGTON	July 1960	July 1959
Aberdeen	$ 142,573	$ 92,250
Anacortes	43,395	52,830
Auburn	86,475	185,970
Bellingham	237,523	210,543
Bremerton	81,205	200,770
Centralia	97,483	47,584
Chehalis	243,023	289,401
Ellensburg	17,180	39,901
Ephrata	10,925	18,121
Everett	255,043	377,830
Kelso	150,747	160,200
Kennewick	120,950	191,725
King County	7,912,831	13,719,723
Kirkland	82,550	228,725
Longview	410,105	405,458
Moses Lake	30,250	73,286
Olympia	478,675	321,167
Pasco	101,550	315,220
Pierce County	2,097,285	2,385,685
Port Angeles	28,500	77,175
Puyallup	81,575	135,850
Seattle	4,777,329	8,986,852
Spokane	1,486,184	1,035,973
Spokane County	969,093	2,152,582
Tacoma	1,693,475	1,529,852
Vancouver	1,236,207	771,759
Walla Walla	236,973	124,315
Wenatchee	48,080	86,295
Yakima	132,210	270,040
TOTAL	$ 23,289,394	$ 34,487,082

ALASKA	July 1960	July 1959
Anchorage	$ 818,087	$ 2,023,584
Fairbanks	859,217	806,503
Juneau	500	202,250
Ketchikan	13,150	1,850
TOTAL	$ 1,690,954	$ 3,034,167

IDAHO	July 1960	July 1959
Boise	$ 484,182	$ 2,548,624
Caldwell	336,350	165,490
Coeur d'Alene	140,229	101,065
Idaho Falls	543,895	969,897
Jerome	8,100	43,050
Lewiston	416,715	113,500
Nampa	102,445	219,745
Payette	4,000	28,710
Pocatello	131,375	411,337
Sandpoint	17,500	52,600
St. Maries	1,000	7,500
Twin Falls	142,450	111,400
TOTAL	$ 2,328,241	$ 4,772,918

MONTANA	July 1960	July 1959
Billings	$ 275,600	$ 783,600
Bozeman	45,000	200,235
Butte	81,200	230,100
Glasgow	127,500	52,825
Glendive	70,400	60,200
Great Falls	3,478,939	3,258,007
Helena	487,563	575,290
Kalispell	377,100	62,350
Lewistown	40,240	144,755
Livingston	35,650	43,375
Miles City	69,092	103,660
Missoula	112,238	397,369
TOTAL	$ 5,200,522	$ 5,911,766

WYOMING	July 1960	July 1959
Casper	$ 599,196	$ 322,979
Cheyenne	1,167,309	669,747
Sheridan	92,706	27,427
TOTAL	$ 1,859,211	$ 1,050,153

COLORADO	July 1960	July 1959
Aurora	$ 983,310	$ 662,949
Boulder	895,790	893,610
Denver	6,763,945	8,221,005
Englewood	447,217	584,948
Fort Collins	416,735	536,851
Grand Junction	314,681	159,245
Greeley	852,646	775,319
Pueblo	720,757	1,641,116
Trinidad	13,350	54,780
TOTAL	$ 11,408,431	$ 13,529,823

UTAH	July 1960	July 1959
Logan	$ 566,800	$ 154,550
Murray	183,893	245,950
Ogden	1,238,950	749,900
Provo	331,000	178,100
Salt Lake City	2,188,107	7,630,502
TOTAL	$ 4,508,750	$ 8,959,002

NEVADA	July 1960	July 1959
Elko	$ 107,650	$ 105,440
Las Vegas	3,220,978	1,500,850
Reno	1,457,397	782,174
Sparks	531,594	635,444
TOTAL	$ 5,317,619	$ 3,023,908

ARIZONA	July 1960	July 1959
Douglas	$ 126,505	$ 50,776
Flagstaff	152,017	1,123,258
Glendale	61,855	265,150
Maricopa County	8,992,515	3,807,851
Mesa	919,274	745,908
Phoenix	6,966,958	6,540,209
Tucson	2,438,241	5,933,184
Yuma	151,500	176,319
TOTAL	$ 19,808,865	$ 18,642,655

NEW MEXICO	July 1960	July 1959
Albuquerque	$ 3,372,144	$ 3,461,574
Carlsbad	127,140	142,262
Clovis	192,930	263,159
Gallup	243,405	197,754
Hobbs	127,285	167,990
Las Cruces	285,000	620,000
Roswell	739,955	381,475
Santa Fe	957,980	231,117
TOTAL	$ 6,045,839	$ 5,465,331

HAWAII	July 1960	July 1959
Hawaii County	$ 847,897	$ 487,972
Honolulu (city-county)	12,884,920	8,867,376
Maui County	457,057	378,659
TOTAL	$ 14,189,874	$ 9,734,007
GRAND TOTAL	$287,512,743	$319,757,887



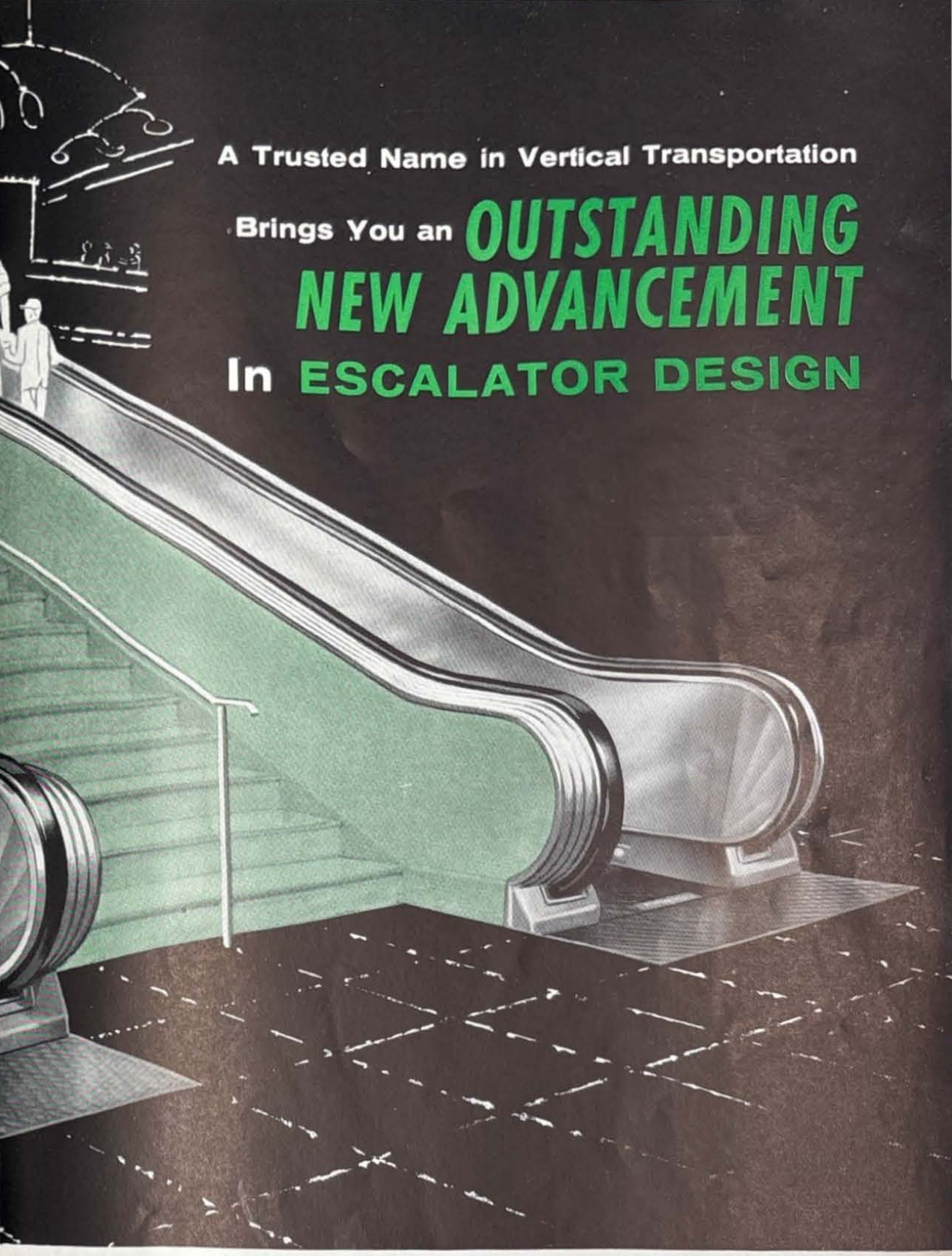
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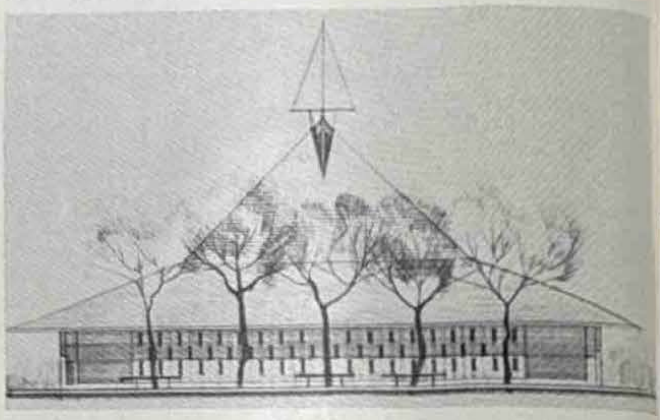


ADMINISTRATION BUILDING

for Alameda County in Oakland will be sited across street west of existing courthouse. It will be approached over landscaped plaza designed in grand scale and by second entrance from another street, one floor higher due to slope. Structural frame will be reinforced concrete expressed by exposed columns on north and south and cantilevered floor slab and girder system on east and west walls. Associated architects: Van Bourg-Nakamura and Ratcliff & Ratcliff; structural engineer: H. J. Brunnier.

NONDENOMINATIONAL CHAPEL

to be built at Colorado State Training School in Morrison will emphasize roof to tie in with pitch roofs of other buildings, all designed by same firm as part of campus-like concept. Square plan has been visualized as more appropriate than cathedral or some other type approach since chapel will serve all faiths. Number of building industry representatives, including architects, are donating their services because state budget does not provide funds for this kind of structure. Architects: W. C. Muchow Associates.



PROJECT PREVIEW



HEADQUARTERS BUILDING

for Buzza-Cardozo will put all operations of greeting card company under one roof in Anaheim, Calif. Tilt-up concrete cast in arcade-like facade will be used for exterior walls of $1,670,000 structure. Theme will be translated into main roof entrance and enhanced by precast concrete folded plates. Employees will enjoy such comforts as outdoor dining areas and swimming pool. Architects: Risley & Gould.



JUNIOR HIGH SCHOOL

to serve Mercer Island, Wash., will be concrete and masonry plant, highlighted by hyperbolic paraboloid roof system. Double cluster of classrooms, library and shops are at upper left. Large building will house multipurpose room and gymnasium, with common lobby between. Costing about $800,000, school will have 25 teaching stations in its first stage of construction. Architects: Bassetti & Morse.

LOS ANGELES MUSIC CENTER

is designed as pavilion in Civic Center, with fluted columns extending full height of five-level building and continuing around its periphery. Columns and roof overhang will be formed of precast white stone over steel and structure itself will be faced with dark granite and glass. It will be surrounded by outdoor promenade at first and second levels. Flexible seating—continental style without center aisles on orchestra floor—will accommodate from 2,700 to 3,100 persons. Architects-engineers: Welton Becket & Associates.



Three western projects cited for 'aesthetic use of steel'

A hotel in Colorado and a mountain cabin and a bank building in California are among 14 projects which have received the initial Architectural Awards of Excellence "for specific buildings that were built with steel or best illustrated the aesthetic use of steel." Sponsor of the national competition is the American Institute of Steel Construction which has cited bridges for their design qualities since 1928.

"For years we have worked closely with architects and have wanted to recognize their great aesthetic contributions to design innovation," comments M. G. Caskin, chairman of the AISC committee on awards. "As a first step, we asked representatives of our industry in all parts of the country to nominate outstanding buildings in their areas for our consideration.

"Seven of the 12 buildings chosen utilized structural steel—an indication that architects no longer see any need for hiding steel's strength and beauty under layers of unnecessary coverings."

Mounted on the top half of the 8x10-in. award panel is a photograph of the building protected by clear lucite. A sculptured metal plaque, designed with the T-square and triangle worked into a motif of structural shapes, is engraved with the names of the architects, the building and the year of the award. Plaques will be presented to the honored architects at local meetings during the fall.

The AISC plans to make this competition an annual event and announcement for nomination for 1961 awards will be made next spring.



HARVEST HOUSE HOTEL, Boulder, Colo.: Ralph D. Peterson & Associates, architects. Five-story structure is built on arc of circle. Use of steel is prolific in structural framework, joists in floors, studs for partitions, metal decks for exterior curtain wall and canopy where exposed structural steel forms framework.

Bethlehem Steel



BARTLETT MOUNTAIN CABIN, Huntington Lake, Calif.: B. David Tharne, architect. Observation deck, opening from glass walled living room, is cantilevered over bald point of rock. Foundation and framing system were designed to require minimum of earthwork. Six steel bents spaced on 12-ft. modules frame cabin which has 1,200 sq. ft. of living space. Exterior siding is cedar, interior finish in living room is teak panels with floor-to-ceiling glass and sliding doors to south. Long roof overhangs and shade louvers control summer heat.

Jon Brenneis



CROWN ZELLERBACH OFFICE, AMERICAN TRUST CO., San Francisco (see PA&B for Nov. '59): Skidmore, Owings & Merrill, architects. New concept in bank design, pavilion is perfect circle 70 ft. in diameter with walls of clear plate glass and accordian pleated roof. Forty slender steel columns support spokes of roof. Central portion consists of steel in form of Gothic rose window through which sun creates shifting patterns as it moves across sky. Darperies were designed by Hella Skowronski.

Jury named for Seattle's international fountain contest

A four-man jury has been selected for Seattle's Civic Center fountain program, an international competition for design of a $250,000 combination of light, water and sculptured form. They are Nathaniel A. Owings, architect, and Garrett Eckbo, landscape architect, both of San Francisco; Bernard Rosenthal, sculptor, Los Angeles; and H. Peter Oberlander, professor of architecture and design, University of British Columbia.

Paul Thiry, Civic Center and Century 21 Exposition primary architect, and Fred B. McCoy, City of Seattle superintendent of buildings, will act as ex-officio jurors. Professional advisor for the competition is J. Lister Holmes, Seattle architect.

Supervising the competition is the Municipal Art Commission at the request of the City Council.

The fountain will be built at the heart of the Civic Center, where the Century 21 Exposition is now under construction, and will be completed by the opening of the fair in April 1962. Five preliminary winners will be selected by the jury and the winning designer from these finalists will be awarded a contract with the city to complete and supervise the fountain, receiving 10% of the cost.

Interest in the competition has been running high. More than 100 inquiries had been received early in August, more than half of them from foreign nations. Deadline for entries is October 13. Registration applications are available from the Seattle Civic Center Fountain Competition, 215 Eighth Ave. N., Seattle, Wash.

University City takes shape in San Diego area

A giant residential building venture—University City—is rising on canyon-corrugated hills just inland from La Jolla, Calif. Twenty-three model homes ranging in price from $16,500 to $35,000 are scheduled to be opened to the public in mid-September.

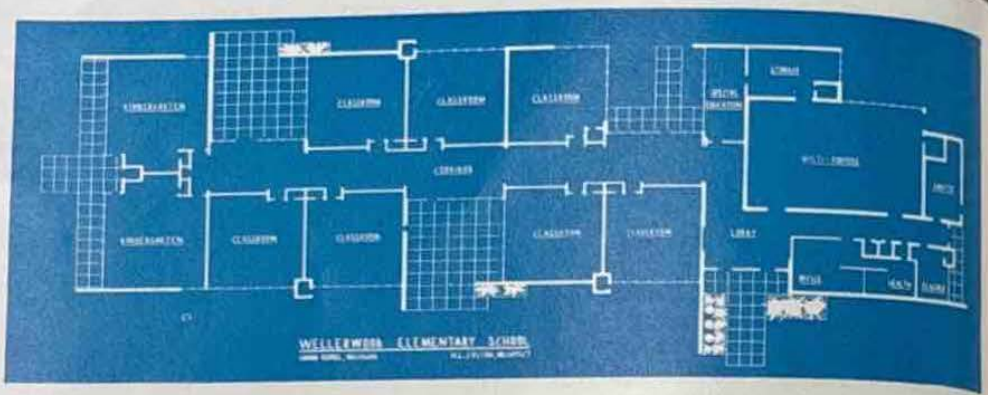
Developers and city planners predict that the new community will have a population of 100,000 within 10 years. By that time it will encircle the campus of the University of California at La Jolla, whose first structure in the multimillion-dollar Graduate School of Engineering and Science is expected to be under construction late this year.

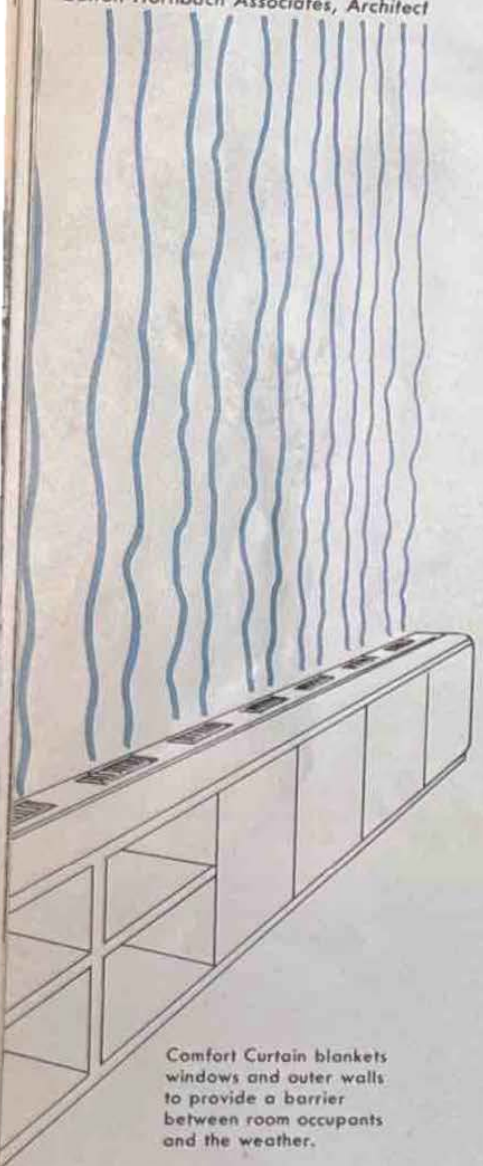
Models are being utilized to study developments on steeper terrain in a move to bring nontechnical personnel connected with the program in closer communication with architects, engineers and builders.

The men behind the mammoth project are Irvin J. Kahn, Carlos Tavares and Norman R. Smith, each an experienced land developer and builder; Ken Mitchell is land planner.



Wellerwood Elementary School
Grand Rapids, Michigan
Colton-Hornbach Associates, Architect





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Decatur, Ga.; th; Los Angeles; Salt Lake City. In Canada: Toronto, Montreal, Calgary, Vancouver, Wi

Urban renewal sessions draw Southland leaders

The many facets of urban renewal were explored by the experts at a recent two-day urban renewal workshop held for southern California community leaders at the University of Southern California.

Opening speaker Milton Breivogel, director of planning for the Los Angeles County Regional Planning Commission, outlined needs for almost 200,000 acres for new industrial plants, commercial developments, schools and parks by 1980. "The basic problem," he said, "is one of coordination in order to obtain a proper balance among land uses and to provide proper facilities at the right place and the right time." Continued research in regional and community planning and development is necessary, he added.

Dr. Gerhard N. Rostvold of Pomona College, discussing the population explosion and growth problems, pointed out that future metropolitan growth in southern California will require an increasing level of expenditures for education, schools, highways, water and fire and police protection. "There is no question about the economy's capacity to meet the public costs of growth," according to Dr. Rostvold. "The problem is primarily one of a willingness to finance the level of public expenditures necessary to assure orderly growth."

Public transportation aspects of urban renewal were taken up by Jack Gilstrap, executive assistant to the director of the Metropolitan Transit Authority, who told the workshop audience: "There can be outstanding plans for the changing metropolis and equally appealing proposals involving transportation and the citizen, but none of these can succeed unless the citizen is shown how he will benefit and is willing to accept them, often changing his own pattern of living."

Architect Wayne R. Williams called for greater public participation in the design and construction of community building projects. Commenting that the opportunity to create is a basic human need, Williams said that youth, senior citizens and business and industrial leaders all want to contribute to the community.

"We must look at the total environment for a sense of beauty," Williams said, urging that environmental thinking be accepted as an integral part of development and planning.

"The true role of the planning specialist may be philosophical rather than technical, acting more in an advisory capacity," he concluded.

"The lost noneconomic or human element" is responsible for the decline of our central business more than any other factor, declared architect and planning consultant Robert Alexander. "Objectives of any central city improvement program should be aimed at improving access, convenience and pure delight. It is not enough to convert the driver into a pedestrian and expect him to be a customer. We must realize that the customer is first of all a human being and acts accordingly. The fundamental environment of the central business district must be made so attractive and appealing and delightful and convenient that they would rather be there than any other place except home."

The workshop was sponsored by the Portland Cement Association in cooperation with the University of Southern California, AIA, American Institute of Planners and Los Angeles Citizens' Urban Renewal Advisory Committee.

Western landscape architects cited at ASLA convention

Five western landscape architects were among the 10 cited for high professional quality at the recent 61st annual convention of the American Society of Landscape Architects in New York. Western firms honored were Royston, Hanamato & Mayes, San Francisco; Arthur G. Barton, Glendale, Calif.; Lawrence Halprin, San Francisco; Eckbo, Dean & Williams, San Francisco; and Harland Bartholomew & Associations, Honolulu.

Pittsburgh was named "City of the Decade" in terms of city planning and urban renewal. Runners up in the preconvention survey of leading landscape architects throughout the country included Los Angeles which received special mention for "renowned and still growing system of freeways, its bold downtown redevelopment program and the excitement of its best architecture."

California architect wins embassy design competition

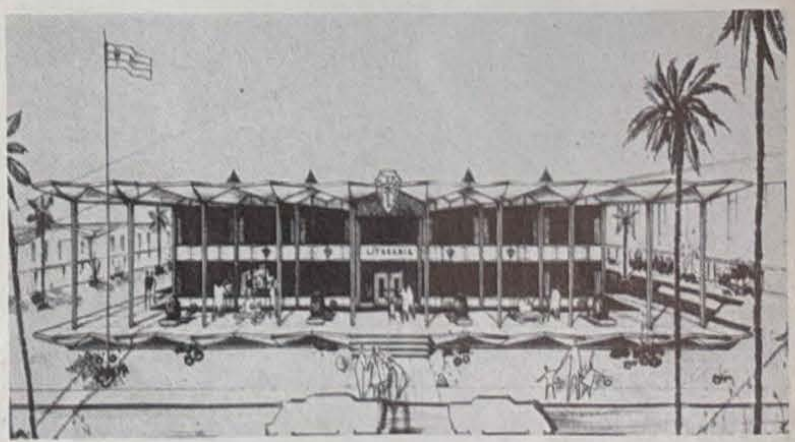
Edmund Arbas, Los Angeles architect, is the first prize winner in an international competition for design of a Lithuanian Embassy reflecting "strong national Lithuanian architectural characteristics" to be built in Brazilia, Brazil's new capital city.

The precast concrete structure designed by Arbas will be built within the next two years on the new city's Embassy Row, Avenue of the Nations, between the Indian and Greek embassies.

It will be a two-story building raised on a podium to give light and air to the basement which will house guest rooms, the library and housekeeper quarters. The country's seal will interrupt the roof line above the entrance and panels celebrating different Lithuanian cities will be placed between the floors. A reflecting pool with fountains will be centered before the embassy. Grounds also will contain a kidney shaped swimming pool, monuments and various groups of conversational islands.

Extensive use of terrazzo tile and parquet wood flooring is planned throughout the building. Main floor will house 18 rooms for offices and administrative functions. Second floor will include a 150-capacity auditorium-chapel and living quarters.

Arbas was employed by the Sacramental architectural firm of Starks, Jozens & Nacht at the time he won the competition.



WINNING DESIGN FOR Lithuanian Embassy in Brazilia submitted by Edmund Arbas sits up on podium. Rather severe roof line is broken above entrance by Lithuanian seal.



DEVELOPERS Perini-San Francisco Associates, architects Wurster, Bernardi & Emmons and DeMars & Reay. "Warmth, intimate character and variety of form and space promise a de lightful human environment."

San Francisco narrows Golden Gateway to three bidders

Which bidder will get the nod in San Francisco's coveted Golden Gateway Redevelopment project probably will not be known for at least another month, but three of the eight developer teams are still in the running.

Seven-man architectural advisory panel (see PA&B for June '60) at the request of the Redevelopment Agency "refrained from establishing any preference among the proposals," but the architects made it clear in their final report that they felt two are head and shoulders above the rest. Highest praise went to the schemes of 1) Perini-San Francisco Associates with architects Wurster, Bernardi & Emmons and DeMars & Reay and 2) Tishman-Cahill Renewal Associates with architects John Carl Warnecke & Associates, Gardner Dailey & Associates and Victor Gruen & Associates.

However, the agency is giving serious consideration to a third proposal —that of Kern County Land Co. and Del E. Webb Construction Co. with architects Welton Becket & Associates and Lawrence Lackey. This group offered far more money for the land than did any other bidder and the architectural facets of the plan come within the agency's overall criteria and are good enough to be accepted.

Agency members are meeting often with representatives of the three developer teams to review basic demands, centering largely around money but including architectural details. But construction phases of the project are a long way off. The agency still has to buy more land and some transactions will have to be decided in court; thus it may take from one to three years before all of the property can be delivered.

However, the agency will enter into a contract with the chosen developer promising to sell the land at a given figure and this in turn will give the developer a great deal of time to make final studies and designs, to lay construction schedules, etc.

The advisory panel's evaluation of the three proposals in contention are published here verbatim.

Perini-San Francisco

"This scheme contains five tower apartments of 22 stories each and three slab buildings almost equal in height. Housing units total 2174. Maisonettes are planned over the roofs of garage structures. Park and recreational facilities are provided, as well as elevated garages and auxiliary surface parking. A public garage and office building are included in the proposal.

"Agreement is unanimous that this proposal is exceptionally successful. The plan is remarkably sensitive with an intimate, yet urban, character. The basic concept of combining high-rise and low-rise structures is convincingly presented. This proposal further succeeds in establishing a prototype solution for high density residential development of gridiron blocks, within the context of the city's general pattern. This has special significance for future growth.

"Elevating the pedestrian onto plazas which form the roofs of the garages and which are connected together with bridges over the streets is excellently conceived. This complete separation of people and vehicular traffic is fundamental to the life of the area. While achieving this separation, the automobile has not simply been buried, but has been granted its claim to streets of valuable access.

"The scale of the buildings is good. The tower and slab apartment buildings and the office building are well composed with the nearby Financial District and Customs House. Buildings have been effectively moved back from the elevated freeways. This general separation from the inherent acoustical problems, glare and motion of the freeway could have been further enhanced if the large surface parking lot were developed as a greenbelt or park. The handsome central park, with its focal position and ease of access by bridges, is excellent. The maisonettes are considered well related to the towers except that they are too numerous and perhaps should appear more anonymous. They also appear quite expensive.

"The tower apartments and slab structures are not considered very well studied individually. Their color is rather garish and the balconies impractical. This is also true of the proposed office building. However, there is convincing reason to believe this would be resolved by further study. The suggestion has been made that other talented architects could well be employed to give these buildings more individual character and elegance of their own.

"This proposal has generated great enthusiasm. The competence evidenced by its authors gives assurance of their ability to carry through to actual completion the eloquent concept they have presented. The pattern of relationships between buildings would be a fine extension of the city; and the warmth, intimate character and variety of form and space promise a delightful human environment."

Tishman-Cahill

"This scheme substantially includes six high-rise towers of 16 stories, three long slablike lower buildings, two- and three-story town houses and a central plaza and shopping center. Three large elevated parking garages and a number of small parks and plazas are provided. The office building and public garage are not included in this proposal.

"There is unanimous admiration of this proposal. It is a sensitive and distinguished solution to a very difficult problem. The carefully studied plan integrates well with the city grid pattern. A variety, elegance and charm, so vital to city living, is ap-

parent. This variety, however, is not without its conflicts.

"The high-rise apartment towers are exceptionally handsome and graceful. The slab apartment structures, by comparison, however, are of rather uninteresting design. They might well be improved with a more chateau-like character. If these apartments were planned to include low rental units, as opposed to the luxury rentals of the towers, occupancy would be brought into range of a greater number of people. The project would thereby become more marketable. Despite their beauty, some concern was voiced that the apartment towers might be more appropriate with greater variety of design.

"The town houses give rise to particular concern. They complicate the project and appear too expensive to justify. The area claimed by these houses could be utilized to better advantage as open space for the several thousand occupants of the project.

"Relationship with the Customs House and future harbor development is good. Landscaping and separation of the site into small manageable land areas appears successful.

"Inadequate consideration has been given the presence of the elevated freeway. The project too closely approaches this highly undesirable element, whereas the provision of at least a greenbelt buffer would have alleviated this problem.

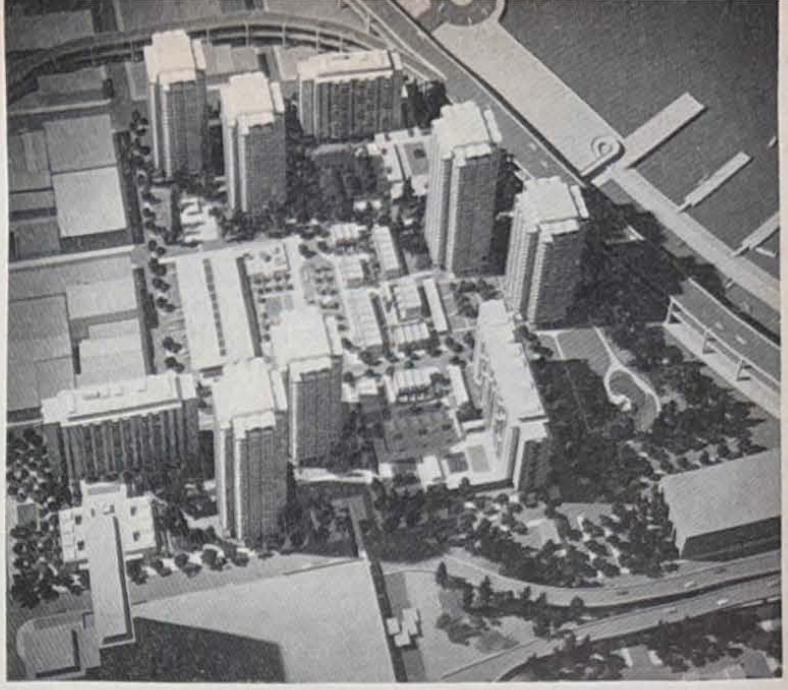
"Considerable concern was manifest over the street pattern within the project. Positive separation of the pedestrian and vehicular traffic has not been provided and this is especially hazardous for families occupying the area. The garages, however, are well placed. The central plaza, with the shopping center, is particularly well conceived.

"The opinion was expressed that this team of architects clearly displayed the capabilities required to carry their proposal on to successful completion, creating an urban development consistent with the character of this city."

Kern County-Webb

"This scheme includes high-rise apartment towers and low slab structures of 2,200 units, with equivalent parking provided. The project also provides for town houses, shopping centers and other related facilities such as a spiritual center, exhibit areas and recreational facilities.

"The authors of this project have made a serious effort to provide a total environment for its occupants. The physical, cultural and spiritual aspects of life, as well as the relationship of the occupants to the general surrounding environment, have been given serious attention. The automobile has been kept in its proper place and the pedestrian circulations have been elevated to form a complete separation between the two functions.



DEVELOPERS Tishman-Cahill Renewal Associates; architects John Carl Warnecke & Associates, Gardner Dailey & Associates and Victor Gruen & Associates. "An urban environment consistent with the character of this city."

"The general plan relates well with the city grid pattern. It does not, however, relate well with the existing Custom House. Furthermore, certain buildings have been placed too close to the elevated freeway, which would result in an obnoxious conflict between heavy traffic and domestic life.

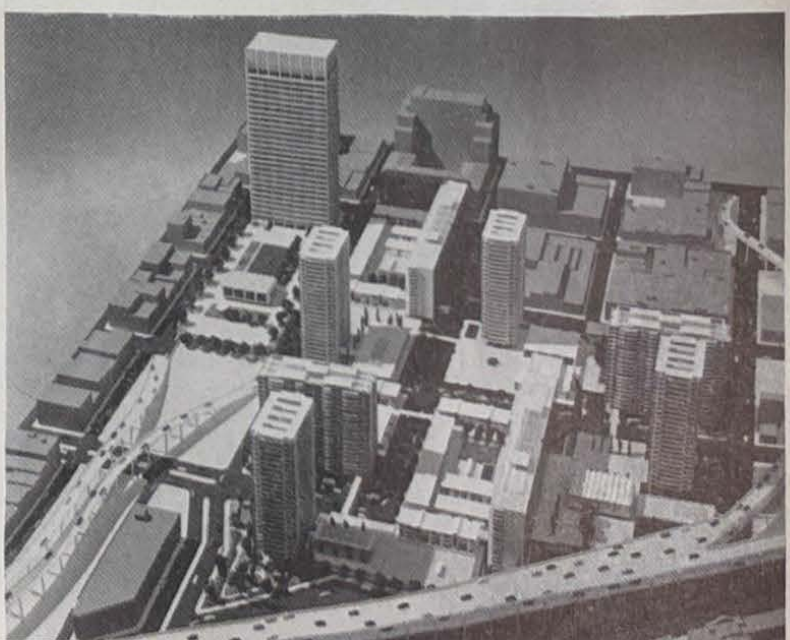
"The general apartment area seems to have been worked out block by block with emphasis on charm and detail rather than as a unified whole and there is a resulting lack of restfulness and serenity.

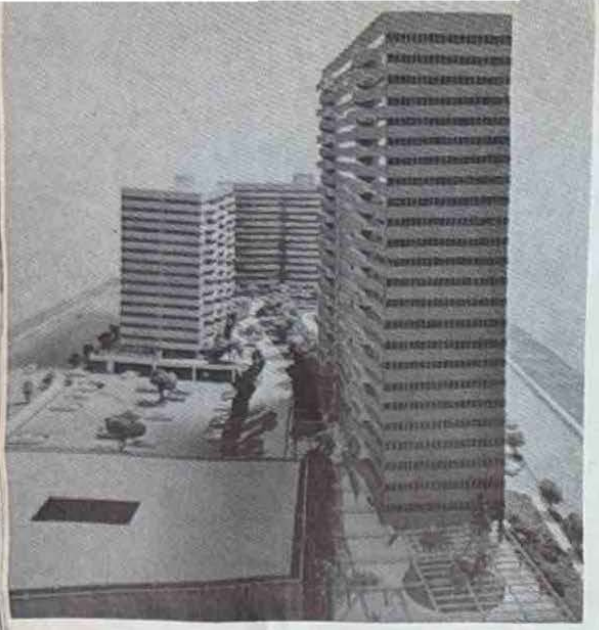
"The interrelationship between high- and low-rise buildings is crowded and confused. The high-rise apartment buildings appear more like office buildings than elements for living and the unprotected balconies do not appear useful. While the concept of bridges between the various blocks is excellent, they should be more pronounced and stronger as architectural statements.

"The office building has been very well studied in its relationship to the mall and public garage. There is some question, however, that it may be too high and out of scale with the surrounding financial district.

"It is generally concluded that this scheme lacks a sufficiently strong philosophy or concept to provide order, clarity and a distinguished architectural and environmental statement."

DEVELOPERS Kern County Land Co. and Del E. Webb Construction Co.; architects Welton Becket & Associates and Lawrence Lackey. "Lacks a sufficiently strong philosophy or concept to provide order, clarity and a distinguished architectural and environmental statement."





APARTMENT DEVELOPMENT, including 26-story structure at right, is possible because of change in Los Angeles building code. Two-story commercial and office building (lower left) will house, among other facilities, restaurant providing hotel-like room service to apartments.

Los Angeles apartment has number of firsts

Construction has begun on the tallest residential structure west of Chicago, a 26-story building on Wilshire Boulevard, in a previously blighted area of West Los Angeles.

The $20 million Barrington Plaza apartment development, which will also include two 17-story buildings and a two-story commercial center, carries with it a number of firsts that will cause it to be closely watched with interest both by the construction industry and investors. It has been granted an insured loan of $16,702,-500, largest ever issued by the FHA; it is the first high-rise urban renewal project in the West; it is the first non-assisted urban renewal project of its type attempted and as such is considered a test case for similar development, designed by the FHA.

The development, designed by Daniel, Mann, Johnson & Mendenhall, will provide luxury apartments for approximately 2,500 in 712 units ranging from bachelor to three-bedroom apartments. It will have underground parking for 824 cars, a swimming pool and a recreational area on its 4.88 acres. Apartment buildings are all oriented to provide a view of the ocean on the west and mountains on the north.

Buildings will be of structural steel framing with exterior facia of glass and bronzed anodized aluminum curtain wall. Construction contract, for $14,171,683, went to Johnson, Drake & Piper, Inc., M. J. Brock & Sons, Inc., and B. C. Deane Co.

NAHB hears report on state of architecture in Alaska

"Is there residential architecture in Alaska"? Edwin Crittenden, Anchorage architect, put this question to members of the National Association of Home Builders at their Alaska housing and finance conference in Anchorage July 14-15 and gave them a modified affirmative reply.

"The best architectural examples here," said Crittenden, "are the log homesteader's house, the house that is the result of three to four years' efforts of the own-home builder and the very expensive house.

"To obtain good architectural research in Alaska, the creative approach must be developed and given opportunity," Crittenden advised, indicating the design problems posed by long elevations to streets, use of outdoors with good view or elevation, icicle formation and lighting in winter.

"We won't create good architecture by looking through magazines, buying stock plans, nor by developing the package house. Good building sites must be developed and good neighborhoods integrated to them. We must rethink the American idea of a plot of land and a little garden. We must come to grips with the endless problems of utilities, densities and what the city planning reports show would result in thinking in terms of a more concentrated housing, even the apartment type of structure."

The technique-built house uses a creative approach, according to Crittenden, who affirmed that "some subdivisions are developed with more than a dollar idea." In advising the use of such an approach, the head of the Anchorage architectural firm sounded a note reiterated by later conference speakers concerned with the need for imagination, further research, planning, lower material costs and community building and development.

Martin Bartling, NAHB president, in a banquet address offered "the harnessing of imagination" as the means of finding solutions to problems, indicating that Alaskans "can come up with new, imaginative ideas without the old laws and restrictions that can hamper a builder."

Norman Mason, Housing and Home Finance Agency administrator, asserted that "the exercise of local ingenuity to bring about community improvement pays," expressing his faith that "leadership by individuals will find solutions to the building problems through research, study, a fresh viewpoint and production of new materials." He urged the builders in their planning to preserve the regional flavor of Alaska.

Harold Grindle of Stewart & Grindle, Alaska builders in the $22,000-$38,000 class and director of the Home Builders of Alaska, pointed out that individualistic ideas create another problem for the builder. "Alaska is an individualistic state with individualistic people," said Grindle. "Somewhere between the extremes of the naturalist and the idealist stands the builder. The requirements of extremely individualistic ideas can be so stringent that accomplishment is impossible."

Excessive costs of material such as brick and the lack of a source of supply create local architectural problems, Grindle reported. He also advocated advance planning to "meet the problems of excessive space and aesthetic view."

Victor Fischer, who heads Alaska's urban renewal program, pointed out that basic capital improvement programs, zoning, subdivision regulation and the assistance offered by federal agencies are all tools the builder can utilize as aids for planning.

The prohibitive costs of land acquisition and building materials were seen by the conferees as key problems in land and community development.

"How can community buildings and community development programs be carried out at a cost of $4,000 an acre plus utilities?" asked Grindle. "How many people want streets, curbs and gutters when the costs of $1,800 per lot would replace a bedroom, garage and basement"?

Speaking on a panel discussion on building problems, A. D. Wallace, land developer and owner of Knik Plumbing and Heating Co. in Spenard, cited utility costs in reference to land development. "The minimum value here of a 10,000 sq. ft. undeveloped lot with roads is $2,000," said Wallace. "This is a good value. However, the cost of utilities may run $1,500 a lot, bringing initial costs up to $3,500 a lot on a $35,000 home."

Providing central water systems and developing means of building individual sewage treatment plants for groups of homes offer partial solutions to mechanical problems, according to Wallace.

Hopeful of a solution to what he terms the present "psychological hazards" of material costs and transportation costs, where everything that goes into the home must be shipped in, was the director of Alaska's Division of Lands, Roscoe Bell.

"The utilization of empty shipping capacity southbound on a special developmental freight rate has real possibility, one that must be explored," said Bell. "Regulation through law of

transportation costs will have a significant impact on the cost of construction materials."

The speaker saw progress toward an answer to cost problems in recent area developments of package shipping, construction of pulp mills and the construction of a local tile and brick plant.

Emerging from all talks given in the two-day meeting were the dual problems of volume production and maintenance of architectural quality.

While Wiley L. Bucher, vice president in charge of all construction loans for Commonwealth, Inc., of Portland, asked his audience "Is there a soul in the house?" naming good architectural design as one of the most important factors for consideration, the emphasis was primarily oriented to the consideration of the home as an industrially produced, manufactured product.

Hugh Askew, who heads the mortgage finance department for NAHB, suggested that housing agencies and government policy agencies "operate the stabilization of the housing industry at the high annual volume of residential housing. The current production level is not satisfying business needs. We are faced with a projected market far in excess of available or forseeable funds."

While builders expressed their cognizance of the demand for architectural quality, John Bair, chief FHA architect for the Alaska office, cited that FHA's allowance of architectural service charges varies a great deal and may go as high as $1,000 on a $20,000 home, but usually is way under that figure. —Helen Crescent

AIA protests inequities in LA building fees

Present methods used by the Los Angeles Building and Safety Department to compute the valuation of buildings to be constructed are unfair to the owners and to the public, a delegation of architects and engineers declared at a recent public hearing. The delegation, headed by C. Day Woodford, vice president of the Southern California Chapter, AIA, and Raymond Ziegler, chairman of the chapter's building code committee, presented case histories at the hearing, held by the Los Angeles City Board of Building and Safety Commissioners.

The hearing has been requested by the AIA to suggest changes in procedures for establishing the valuation of structures for purposes of determining building department fees.

Recent cases reported by the delegation showed that the department has estimated valuation as much as 100% over the contractor's bid.

The AIA recommended a uniform system for computing estimated valuation which could be applied in principle to all types of structures. A systematic method would be devised and published to inform owners how much building fees would be in relation to actual construction costs.

Woodford emphasized at the hearing that the architects themselves would not benefit, but that as a professional organization the AIA is calling the inequities of the present system to the board's attention in order that corrections can be made in the public interest.

The delegation at the hearing included Ray L. Weiss, representative of the Association of Consulting Electrical Engineers, and representatives from the architectural firms of Daniel, Mann, Johnson & Mendenhall; Charles Luckman & Associates; Welton Becket & Associates; Allison & Rible; Woodford & Bernard; Kistner, Wright & Wright; and Albert C. Martin & Associates.

The commissioners voted to review the present method and recommend a solution.



new offices, partnerships

Oluf N. Nielsen has established an office for the practice of architecture at 2535 S. Lowell Blvd., Denver. A graduate of the University of Colorado, he had been associated with W. C. Muchow Associates for the past four years.

Bobby C. Hamilton, Anchorage architect, formerly with the firm of Manley & Mayer, has opened his own office at 508 Sixth Ave.

Howard Leonard Glazer has opened an office for the practice of architecture and community planning at 1028 S.W. First Ave., Portland.

Robert B. Helgeson & Associates, Inc., is the name of a new architectural firm organized in Phoenix, with offices at 501 E. Thomas Road.

Edmundson & Kochendoerfer, architects, and R. Evan Kennedy, structural engineer, have established a branch office in Arlington, Ore., under the direction of George Dickel, a four-year employee of the Portland firm.

James P. LaBarber and Roland K. Kuechle have formed an architectural partnership known as LaBarber & Kuechle, with offices in Room 504, Rosenberg Bldg., Santa Rosa, Calif., and 4132 39th Ave., Oakland. LaBarber will work out of the Santa Rosa office and Kuechle out of Oakland.

Edwin Westberg and Leland Lewis Evison have become associated for the practice of architecture at 696 E. Colorado Blvd., Pasadena, Calif.

Cheyenne, Wyo., architects Robert Postin and Wade Porter have formed a partnership known as Postin-Porter at 109 E. 17th St.

Cornell, Howland, Hayes & Merryfield, consulting engineers, have opened a Seattle office in the Logan Building. Resident partner is Holly A. Cornell, one of the four original partners when the firm was founded in Corvallis, Ore., in 1946. He is being assisted by James W. Poirot, a 1953 graduate of Oregon State College. The firm also has named a new partner, Earl C. Reynolds, who has managed the Boise office since it opened in 1950.

The firm of Jasper & Forker has been organized at 1610 Beverly Blvd., Los Angeles, by Richard N. Jasper, civil engineer, and Donald M. Forker, architect. Jasper is a graduate of the California Institute of Technology and Forker of the University of Southern California.

new partners, associates

The Seattle architectural firm of Paul Hayden Kirk & Associates has become Kirk, Wallace & McKinley, with Donald S. Wallace and David A. McKinley Jr. as the new partners. Jerry R. Geyer is affiliated as an associate. The firm has moved to a new office building at 2000 Fairview Ave. N.

Eugene architects Robert Wilmsen and Charles Endicott have added a third partner, De Norval Unthank Jr., with the new firm, Wilmsen, Endicott & Unthank, continuing its practice at 863 13th Ave. E.

Northwest Region leads off AIA October conferences

The three AIA districts in the West will hold their annual conferences next month, with the Northwest Region leading off October 1-4 in Sun Valley, Idaho.

The California Council has scheduled its sessions for October 19-23 at Yosemite National Park and the Western Mountain Region for October 26-31 in Tucson (more details in PA&B next month).

Speakers at the Northwest conference will include architects O'Neil Ford of San Antonio, James M. Hunter of Boulder, Colo., and Paul Schweikher of Pittsburgh; Stephen W. Jacobs, associate professor of architecture at Cornell University; and Elisabeth Kendall Thompson of Berkeley, senior editor of Architectural Record.

Richard Armour, Scripps College professor and humorist, will satirize "Designing Men" in his banquet address.

Special events will feature an exhibit and sale of creative arts and crafts, collected by Sun Valley's America House especially for the conference and a slide show on the "Artist-Craftsman and Architecture" prepared under the auspices of the American Craftsman's Council and presented by artist Luther Douglas of America House.



STRUCTURAL ENGINEERS Association of California will hold its annual convention in Yosemite National Park October 6-8. Planners include San Franciscans J. Albert Paquette of Paquette & Maurer, state president; Art Smith of Smith & Moorehead, sports chairman; and Howard A. Schirmer of Bethlehem Steel Co., general chairman.

firm changes

The Fairbanks architectural firm of Gray, Rogers, Graham & Osborne is now known as Gray-Rogers & Osborne, with the resignation of Jennings H. Graham to join Olsen & Sands, Juneau architects.

new addresses

Robert W. Corbett, architect, to 317 Main St., Lander, Wyo., where he is associated with Eugene F. Dehnert, formerly of Billings, Mont.

Williams & Martin, architects, to 1801 N.E. Couch St., Portland.

Max E. Kuhr, architect, to Citizens Bank Building Annex, Havre, Mont.

Peter H. Hostmark & Associates, consulting engineers, to 533 12th Ave. N., Seattle (incorrectly listed last month).

elections, appointments

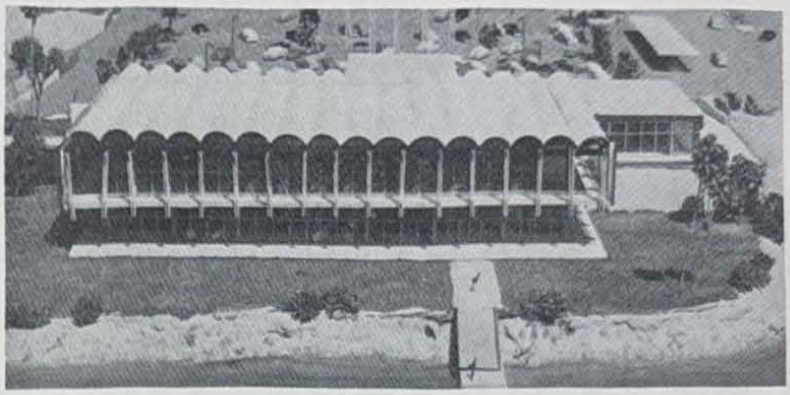
Puget Sound Chapter, Construction Specifications Institute, has named Kenneth C. Helms, partner in Jones, Lovegren, Helms & Jones, Seattle architects-engineers, as its new president. Completing the slate are Walter Bishop, first vice president; Robert Dennis, second vice president; S. W. Baker, secretary; and Lawrence Byington, treasurer.

exhibitions

An exhibition of architecture "Richard Neutra Retrospective" (the Los Angeles architect was the subject of a PA&B profile in May '60) will hang in the National Housing Center, Washington, D.C., September 7-28. Its opening date coincides with that of a pilot project known as the Architectural School for Home Buyers.

honors

Santa Fe architect John Gaw Meem has received an Honorary Doctor of Fine Arts degree from the University of New Mexico.



VAULTED ROOF covers clubhouse and dining center, with boat garages and shop facilities at rear.

Mammoth marina will match growing boat enthusiasm on Lake Mead

Construction should begin shortly on a $1½ million marina to be located at the Hemenway Harbor site on the lower part of Nevada's Lake Mead. The new marina, which will feature an electronically controlled slip system to solve problems caused by changes in the lake level, will be at the present location of the Lake Mead Marina, a 45-minute drive from Las Vegas.

Designed by Jacobson & Coppedge, the main building will house a general store, gift shop, lobby, coffee shop, dining room, lounge and clubroom. Dry boat storage buildings and large boat sales and service building also are planned. Lake Mead Yacht Club members will have their own club, restaurant, meeting rooms and a special trophy room. All facilities will be air conditioned.

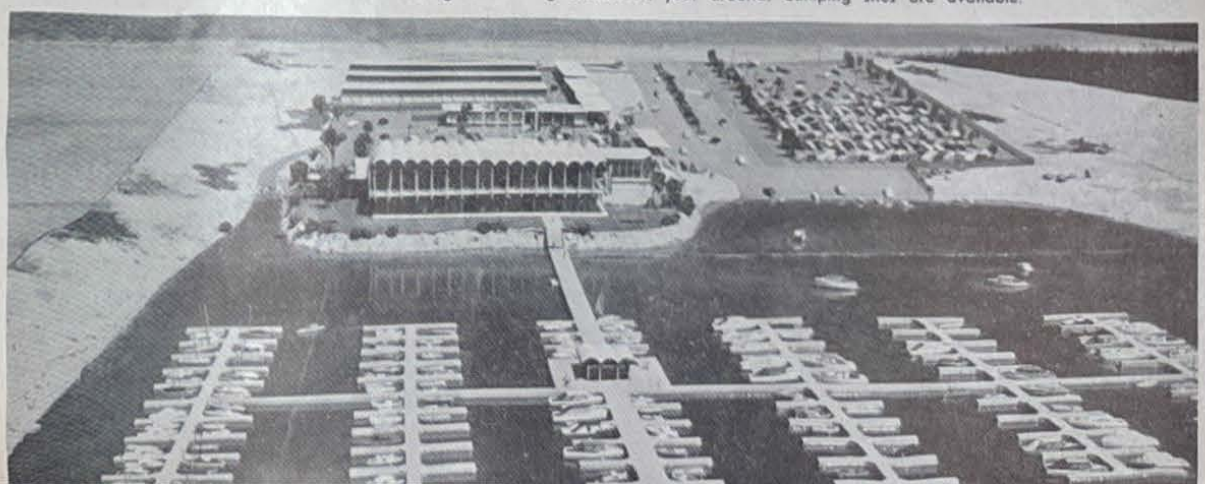
Boat harbor will include complete facilities for all types of aquatic sports in addition to a floating dock containing 400 slips and 160 moorings. The boat slips will be made up of floating concrete docks assembled into slips and piers to make a single unit assembly with ways on each side for entrance and exit of boats.

The main pier, 13 ft. wide, will lead directly down from the administration building to a control and operations building. Entire assembly will be anchored mechanically to a series of cables running perpendicular to the beach and threaded through a series of winch sheaves located on the ends of each pier finger. Winches will be operated by electrical motors, synchronized from the control building. Thus as the lake level is changed, the dock manager can actuate the winch motors, causing the entire slip assembly to move horizontally on the surface of the water to maintain the required minimum draft at the shallow end of the slips nearest the shoreline. The slip system also will be stayed laterally, parallel to the shoreline by a series of anchored cables threaded through the sheave structures under each pier finger and tied to anchors at the shoreline providing a firm anchor to prevent movement due to wind and wave action.

The entire lake is under the jurisdiction of the Department of Interior and supervised by the National Park Service. Concession contract at the site has been transferred from Lake Mead Marina to a newly formed corporation called Marina, Inc. At present more than 4,000 boats are launched from this dock and nearby Las Vegas Wash each week.

If Seattle's experience with Gold Cup racing holds true, the new marina will be completed (summer of 1961) just in time to capitalize on a great spurt of interest in water sports that should follow running of the unlimited hydroplane classic on Lake Mead this November.

DESIGN FOR BUILDING COMPLEX is based in part on poll of some 2,000 boat owners in Southwest. Lake Mead, largest man-made lake in world, extends 115 miles from Hoover Dam and has 550 miles of shoreline. It attracts boating and fishing enthusiasts year around. Camping sites are available.



An Open Letter to the Building Industry

We have just rushed to the hospital a badly bleeding boy who walked against a sliding glass patio door and who thereby missed death by fractions of inches and by only a few moments.

This was not an isolated, unusual or unpredictable accident.

It was duplicated 40,000 times in the nation last year.

- A death in Seattle.
- A near decapitation in Los Angeles.
- A nearly severed right leg south of San Francisco.

It is long past time for concerted action by the glass industry, by the writers of building codes, by architects and builders, by insurance people.

The public has the right to assume that individuals will not be injured by materials in a home or building, just as it can be assumed that specifications prohibit unsafe wiring and unsafe sanitary facilities and prevent structural failures of walls or roofs.

Walking into doors – be they wood, steel or glass – is so common as to be the subject of a hoary explanation for black eyes. It should cause no injury greater than a black eye or a bloody nose.

The answer is simple and inexpensive, adding possibly one-fifth of 1% to the cost of a residence. Use of shatterproof safety glass or of wired plate glass must be mandatory.

Roscoe Laing

GENERAL MANAGER
PACIFIC ARCHITECT & BUILDER

COLOR PALETTE H-602

A.I.A. 23A



Hermosa GLAZED CERAMIC Tile by GLADDING, McBEAN & CO.

please turn the page...



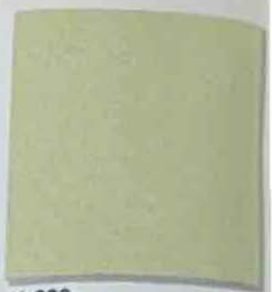
H-271 Marshmallow



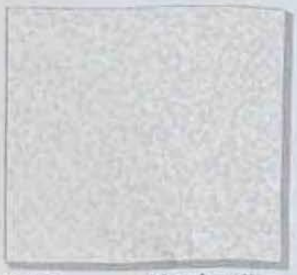
H-289 Inca Gold



H-270 Buttercup



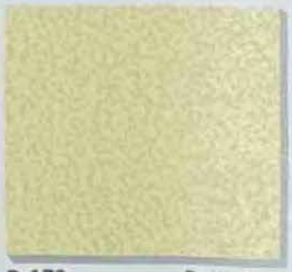
H-280 Sage



D-171 Marshmallow



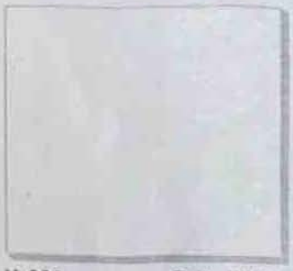
H-292 Desert Smoke



D-170 Buttercup



D-183 Verde



H-201 Brite White



D-192 Desert Smoke



H-260 Ivory



H-283 Verde



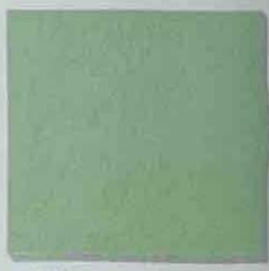
H-209 Salt N' Pepper



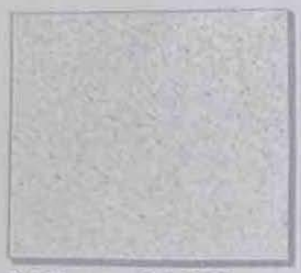
H-275 Morning Mist



H-208 Primrose



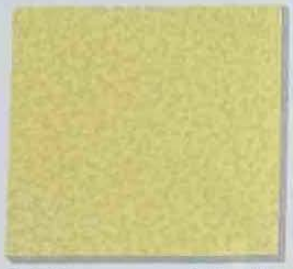
H-273 Aqua



D-109 Salt N' Pepper



D-175 Morning Mist



D-108 Primrose



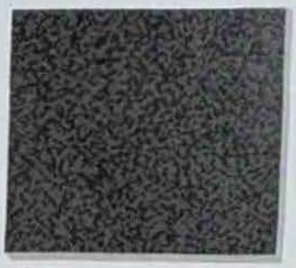
D-173 Aqua



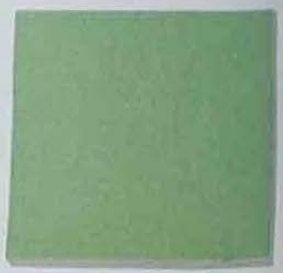
H-259 Ebony



D-115 Graphite



H-399 Black Pearl



H-206 Seafoam





H-293 Dawn Blue



H-296 Peach Bloom



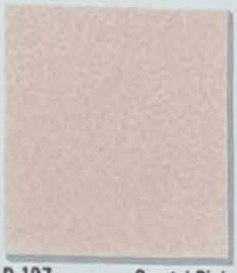
H-294 Rattan



H-269 Oatmeal



D-193 Dawn Blue



D-197 Crystal Pink



D-194 Rattan



D-169 Oatmeal



H-252 Clair de Lune



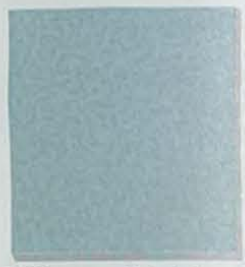
H-297 Crystal Pink



H-268 Amber Rose

6 x 6
6 x 4¼
4¼ x 4¼

Available in all colors including Dura-Glaze (D-prefix)



D-152 Clair de Lune



H-277 Tea Rose



D-168 Amber Rose



H-290 Pebble



D-195 Pine Frost



D-177 Tea Rose



H-291 Nutmeg



D-118 Nut Brown



H-203 Turquoise



H-440 Toreador



H-243 Morocco



H-398 Bronze

COLOR PALETTE

The Hermosa Tile Standard Color Palette of glazed wall tile is indicated by the H-200 series. Dura-Glaze, a textured tile, has been developed especially for use on drainboards, decks, counter tops and residential bathroom floors, and is indicated by the D-100 series. Special decorative effects can be created by the use of the H-300 and H-400 series. The H-300 series is available at the same price as Dura-Glaze. 4¼" x 4¼", 6" x 4¼", 6" x 6", 6" x 12", 6" Triangle, Reflecta, specialty items and all trim shapes are available in the H-200 and H-300 series.

Dura-Glaze is stocked in all wall tile sizes (except 6" x 12" and specialties). The following trim shapes are available in Dura-Glaze colors (D-100 series): A-106, A-107, A-151, A-1663, S-3419, A-3602, A-3611, A-4200, A-4228, S-4249, S-4269, S-4449, S-4469, S-4649, S-4669, A-7250, S-7669, A-8262, A-8660.

Toreador Red (H-440), Burnished Gold (H-450) and Platinum (H-460) are manufactured to order in all flat tile sizes except 6" x 12" and all standard trim shapes except drainboard cap. The H-400 series is sold at special prices.

FRANCISCAN DECORATIVE TILE

Many of the beautiful patterns used on famous Franciscan Dinnerware, one of the products of Gladding, McBean & Co., are available on the 4¼" x 4¼" and 4¼" x 6" Hermosa wall tile colors. A wide variety of patterns featuring metallics and burnished gold are stocked in 4¼" x 4¼", 6" x 4¼", and 6" x 6" size. For additional individualization of installations, there is no limit to the custom decorative tiles available to use with Hermosa Tile colors.

SPECIFICATIONS

Specify—Hermosa, square edge, Tru-joint, white body, dust pressed, standard quality tile in accordance with current government standards SS-T-308B and SPR-61, as manufactured by Gladding, McBean & Co. Selection of colors to be made from standard color palette of H-200 series colors, except drainboard decks, counter tops and bathroom floors shall be selected of Dura-Glaze colors. Installation to be made in accordance with American Standards Association Specification A-108.

"HERMOSA TILE * THINK CENTERS" are located at

LOS ANGELES 39, 2901 LOS FELIZ BLVD...NORMANDY 3-3361 • **SAN FRANCISCO 3,** 1275 HARRISON STREET...UNDERHILL 1-7400
PORTLAND 14, 110 S. E. MAIN STREET...BELMONT 2-6179 • **SEATTLE 99,** 945 ELLIOTT AVE., WEST...ATWATER 2-0330
PHOENIX, 4730 N. 16TH STREET...CRESTWOOD 9-9339

GLADDING, McBEAN & CO. also serves the West as distributor for Olean Mosaic Tile, Murray Quarry Tile, and fine bathroom accessories

7-1-60

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Art Hupy photos

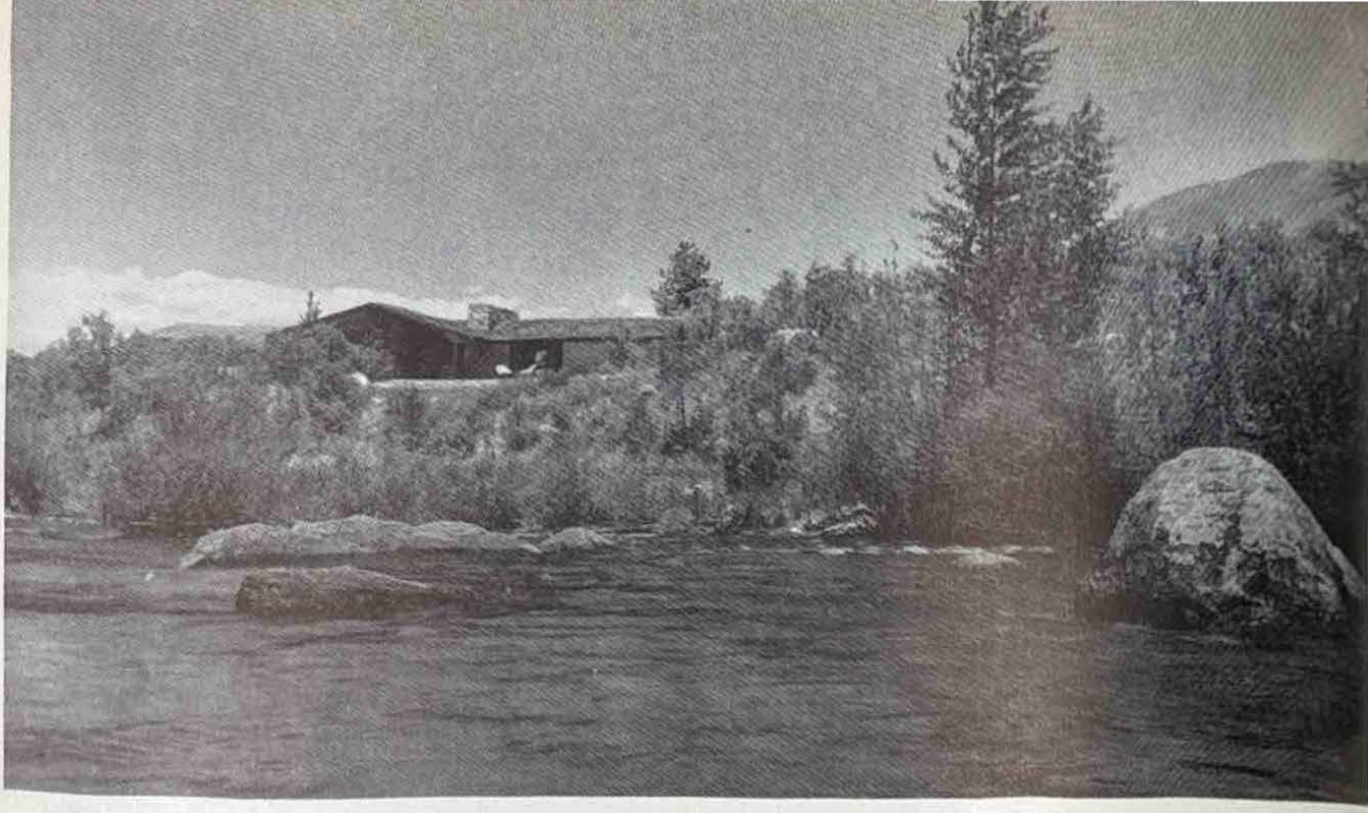


At home midst Aspen's rugged grandeur

Fredric Benedict Residence
Aspen, Colorado

•

FREDRIC BENEDICT
Architect



BENEDICT RESIDENCE

ROARING FORK RIVER cuts through valley toward Independence Pass.



THE WEST has more than its share of truly spectacular residential vistas but few can surpass the splendor of the Aspen area where streams, lakes, forests, snow-capped peaks and lush meadows all share laurels in the Rocky Mountain country. When the architect set out to design his own house, he met the challenge of the site head-on by developing a scheme which would intrude as little as possible upon the natural beauty. This approach is visually implemented at once by the sod roof, stone and rough sawn timber walls and at closer observation by the rambling, yet simple, plan that seems to wrap the structure around the terrain. Living, dining and kitchen areas, for example, are conceived as one large room, reminiscent of a country kitchen and a workable arrangement for the small, servantless family (a four-year-old daughter is the only child).

The architect and his wife both are gardening enthusiasts in a region where the growing season is relatively short because of the 8,000-ft. altitude. Thus a tropical garden becomes an essential part of the house, sunk into the ground on the theory that the heat absorbed from the winter sun helps carry the load at night. With the thermostat set at 45 deg., cost of heating the greenhouse has not been excessive.

Elaborating on the materials used in the construction (he acted as his own contractor), the architect makes these comments: "They represent a strong reaction to the increasing tendency of houses in this country to become standardized through the use of mass-produced items. I have always felt that many of the slick, modern products are inappropriate in such a rural setting. I further believed that if the materials were cheap enough, it did not make much difference in the final cost picture whether considerable labor went into the construction. The ceiling poles were picked up gratis from a ski trail that was being cleared; many of the granite stones came from the site during excavation and the remainder were found within one-fourth mile of the house; bricks for the floors were recovered from an abandoned mine.

"I experimented with a prefabricated system in which all

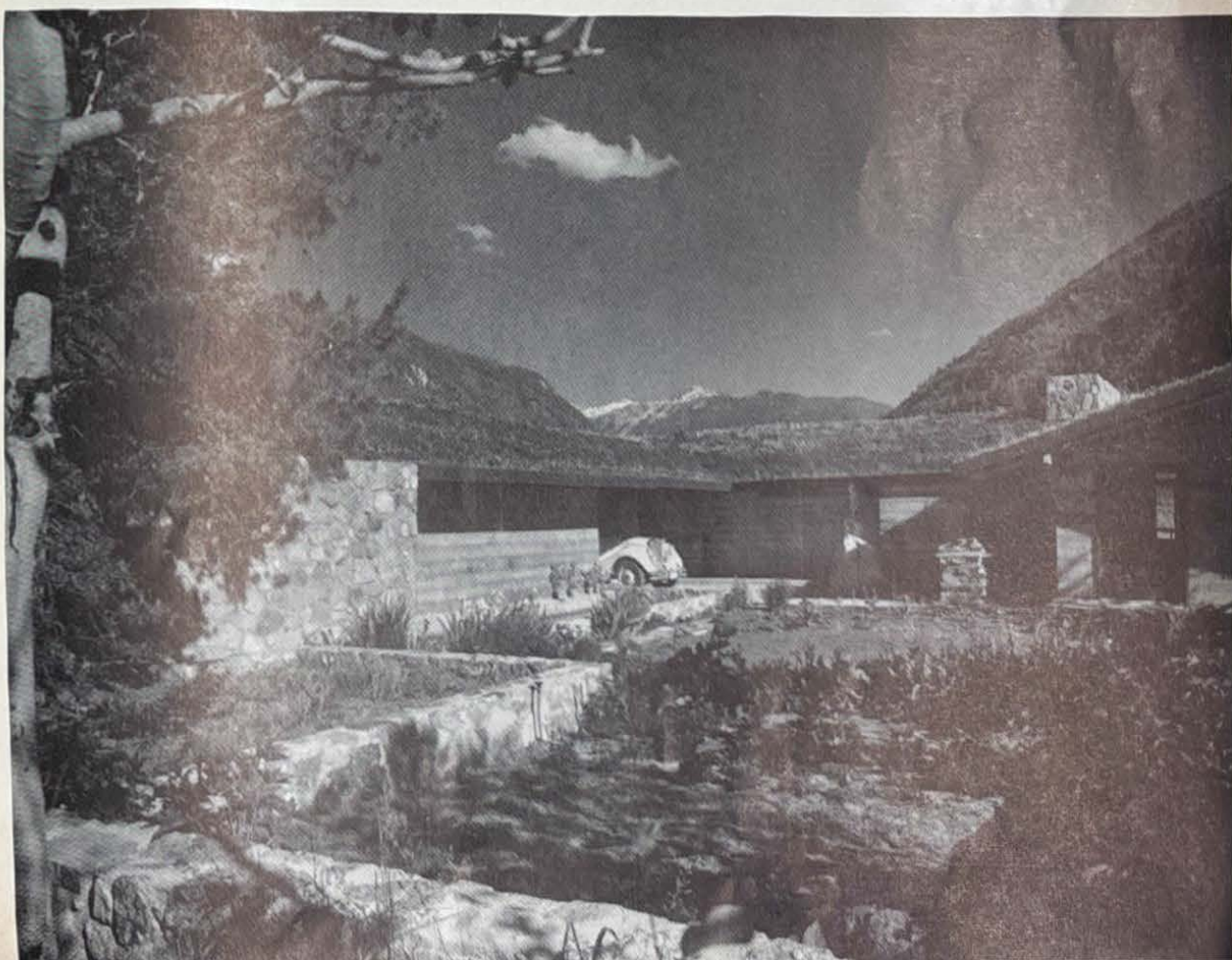


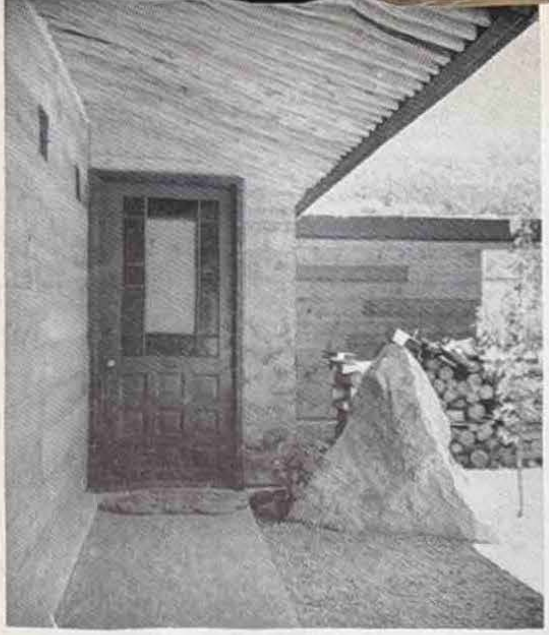
TROPICAL GARDEN, seen here from dining area, sinks into ground at second level.

framing for doors and windows is an integral part of the solid timber walls, erected quite rapidly since very few pieces were employed compared to conventional construction. There are a few knots in the Engleman spruce used for the framing [$80 per 1,000 bd. ft.] but they emphasize the rough character of the house. Timber surfaces inside are stained; the rough sawn exteriors have no finish but will darken from the sun to the rich brown shades that are found only in the mountains."



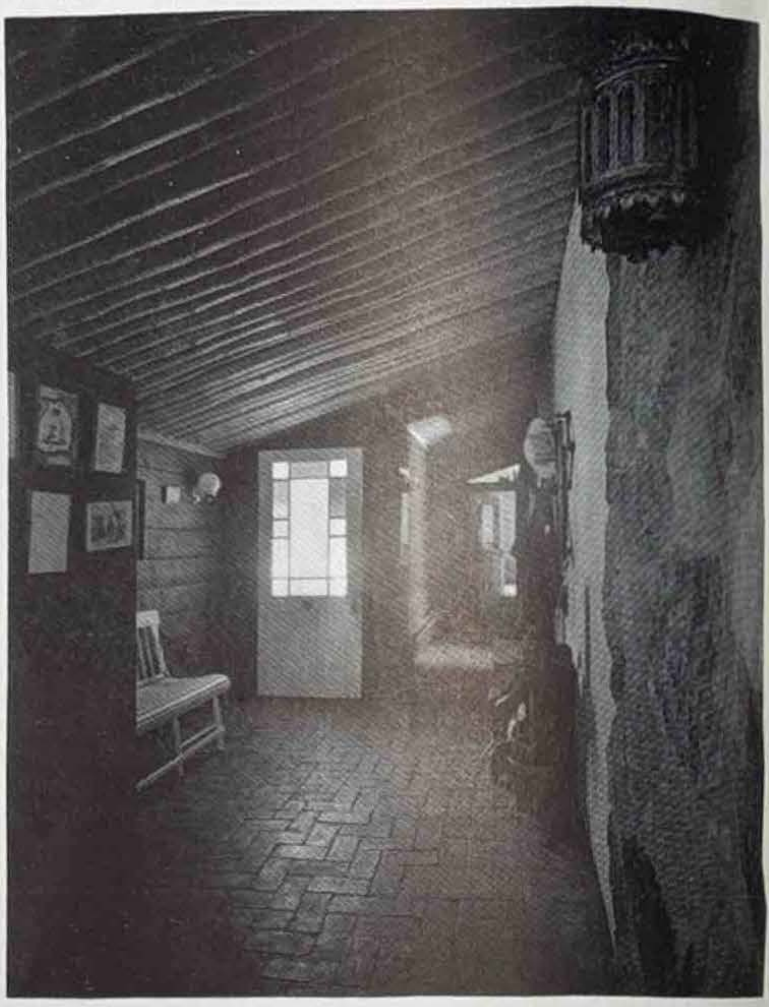
STREAM AND PEBBLED WALK surround part of house. Clover sod roof makes structure part of terrain.





BENEDICT RESIDENCE

SEVERAL VICTORIAN DOORS with colored glass salvaged from old houses in Aspen add special charm, such as one at entry and at end of bedroom corridor.



OUTLINE SPECIFICATIONS

Structure: foundation: poured concrete; frame: Douglas fir ridge beams; roof: lodgepole pine covered by vermiculite concrete, four-ply, built-up; walls: solid Engleman spruce timbers; floors: used brick in sand.

Exterior Finish: unfinished solid wood timbers.

Roof Surfacing: clover sod.

Windows: stained job-built wood frames—Samuel Cabot, Inc.

Doors: French and job-built old Victorian with colored glass.

Floor Surfacing: two coats of hot linseed oil.

Interior Finish: stained wood—Samuel Cabot, Inc.; painted drywall—United States Gypsum Co.

Ceilings: exposed lodgepole pine.

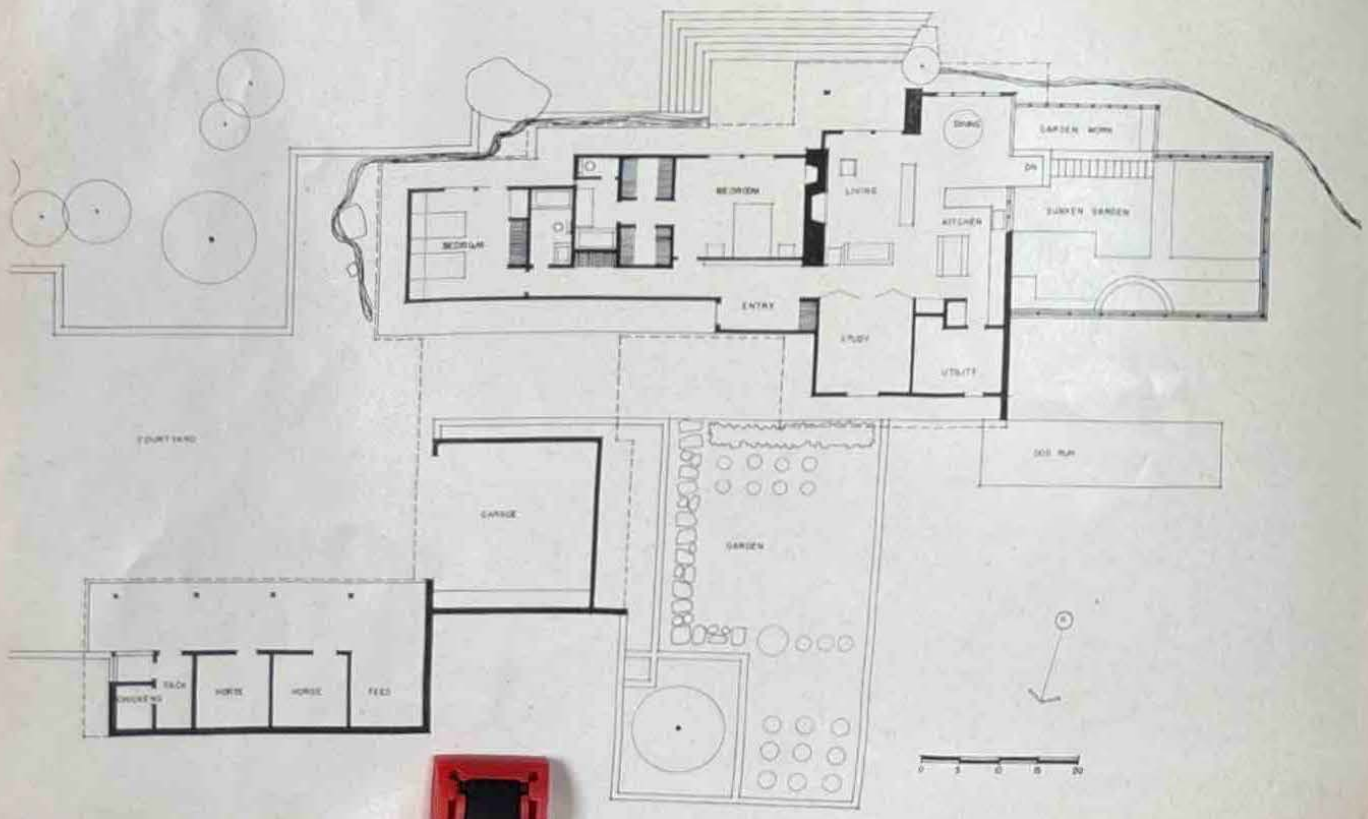
Lighting Fixtures: job-built recessed.

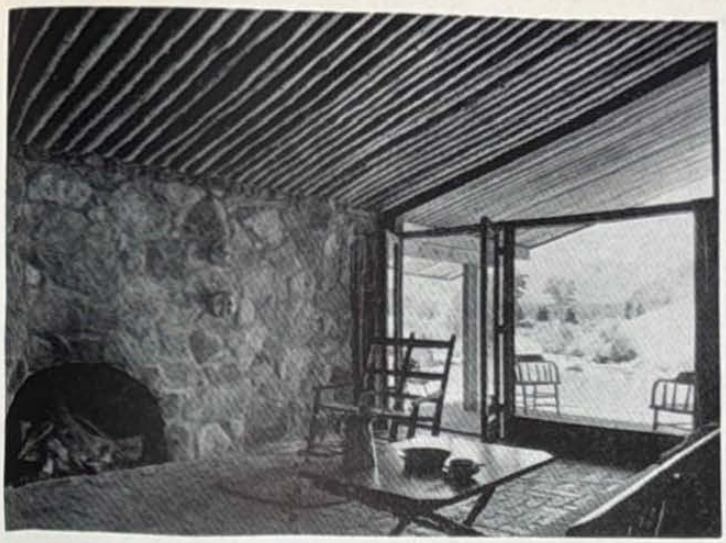
Heating: baseboard convector system—Trane Co.

Plumbing and Sanitary: Kohler Co.

Cost per Square Foot: $14.

Date of Completion: June 1959.



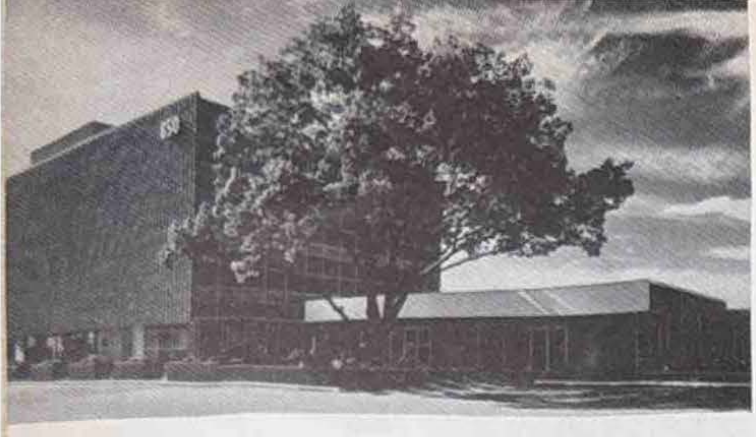




LIVING SPACE (above) and dining-kitchen (right, with sunken garden beyond) are treated as one large room. Used brick floors and lodge-pole pine ceilings are found throughout house.

MASTER BEDROOM is separated from living area by native stone wall.





Professional Building
Arcadia, California

•

JACOBSON & COPPEDGE
Architect and Associate

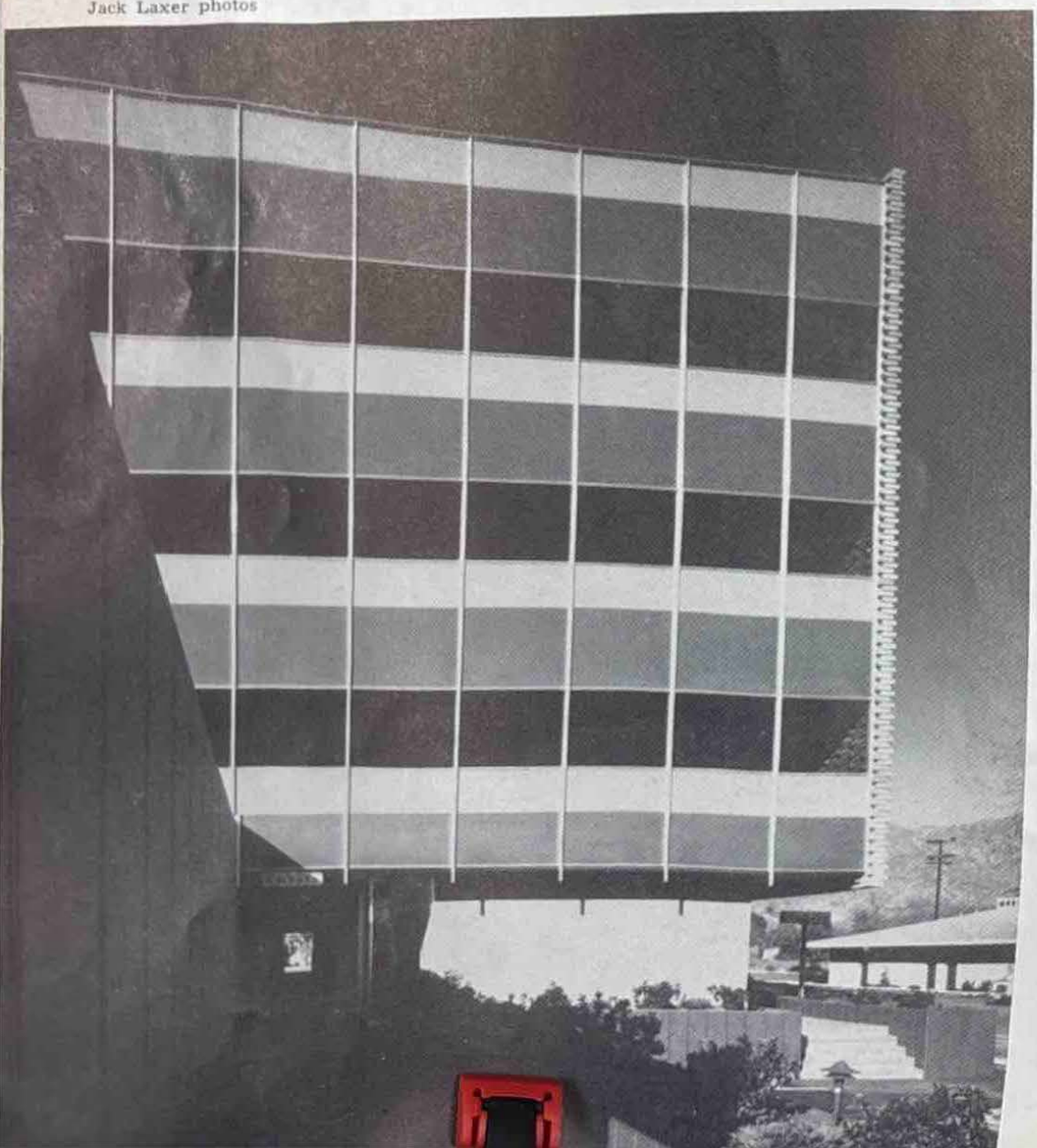
ALAN PALO
Structural Engineer

G. M. SHUMAKER
General Contractor

DELICATE TEXTURE on east and west walls is formed by patterned reinforced modular brick. Curtain wall in light blue and gray on north and south facades consists of porcelain enamel steel and plate glass set in aluminum tubes. Exposed reinforced concrete is painted gray.

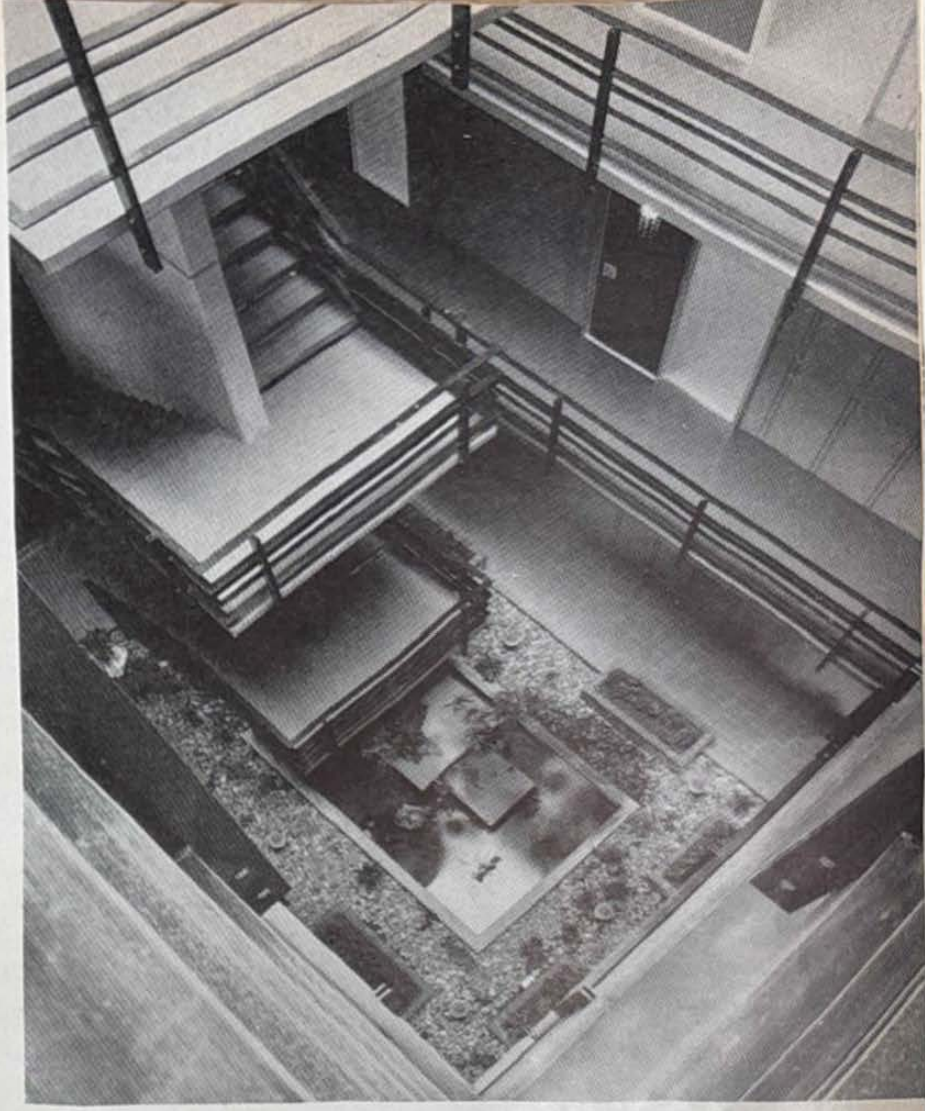


Jack Laxer photos



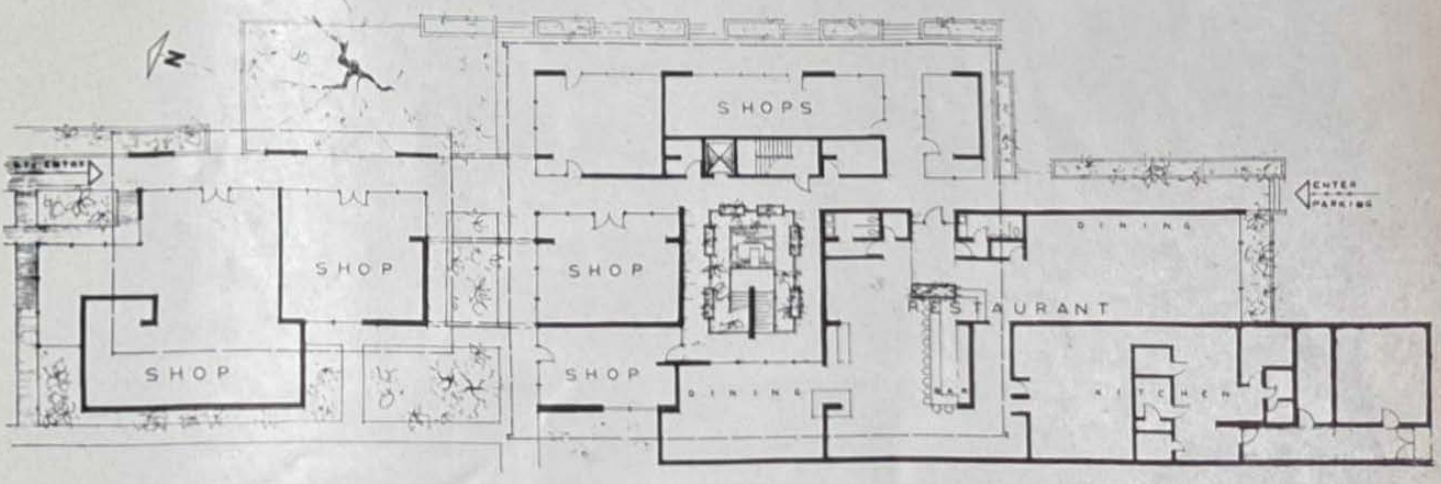
SEVERAL CRITERIA had to be met in developing this 36,000-sq. ft. structure which houses shops and a prestige restaurant on the ground floor and rental offices on the three above. Located in a 45-ft. height limit zone, the lot has narrow frontage in proportion to its depth and parking requirements called for one space for each 350 sq. ft. of rental area. Furthermore, the client requested good sun and view orientation and retention of existing monumental trees.

Building is designed around a hollow square tower with the resulting court open to the sky and landscaped on the ground level. Walls on the east and west are blank; all fenestration is on the north and south. Tower surmounts a ground floor of greater area with rental shops facing the street and a walk and driveway entrance along the easterly side of the property. Main entrance wall carries straight through from the street on the north to the parking area on the south, bringing the public directly into the tower court from which a stairway and elevator serve the upper floors. Since the restaurant caters to diners who drive from a 20-mile radius, it was placed at the rear of the building, adjacent to parking and served by an entry door directly off the north-south public walk.



OPEN CENTRAL COURT has reinforced concrete stairways and sheltered balconies on three sides; fourth opens to elevator and restrooms. Steel railings are black.

Four stories designed around an open court



FIRST FLOOR



HANDSPLIT CEDAR SIDING and shingled roof help make chapel good companion for its residential neighbors.

New meaning to fellowship of man

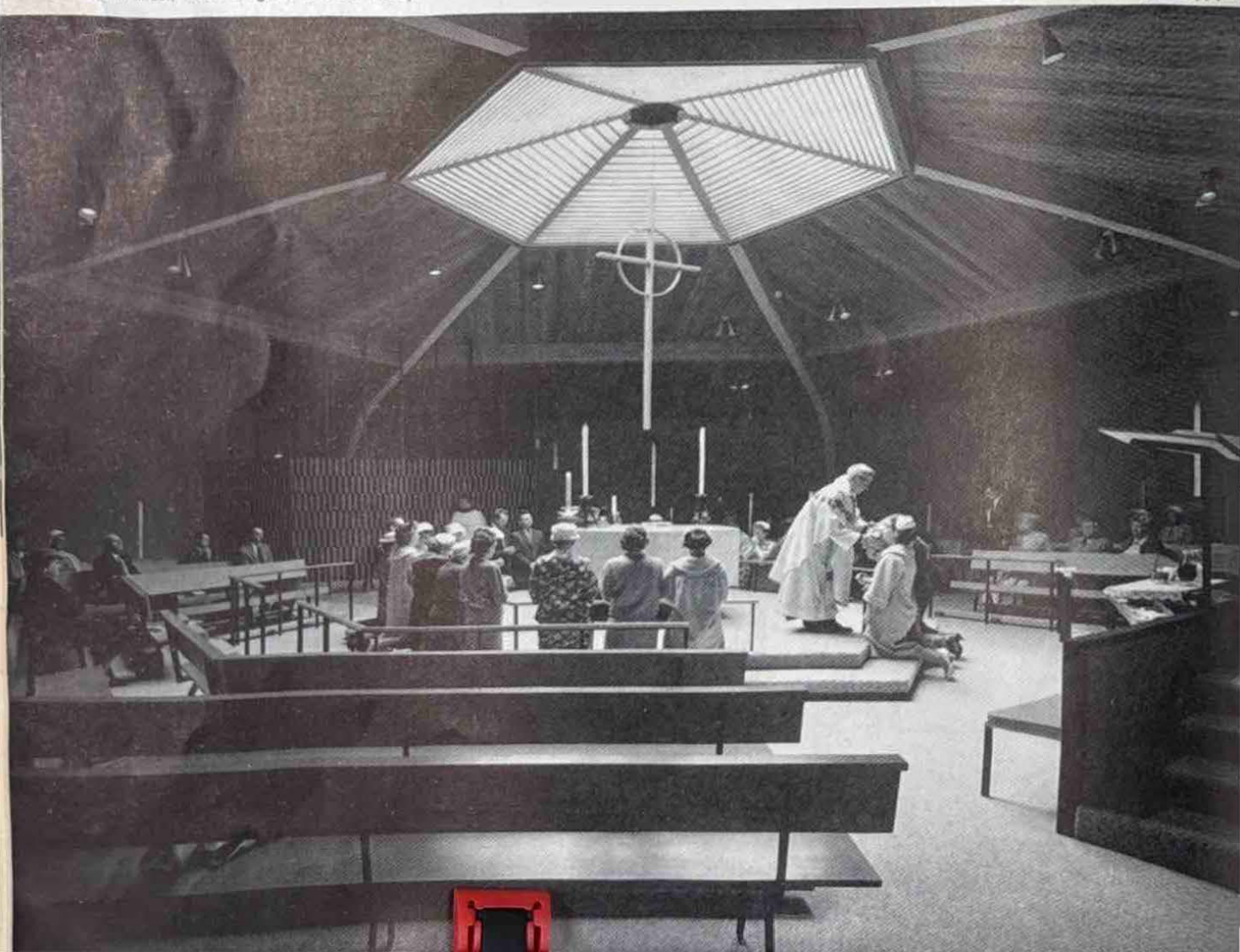
THE DESIGN of this church in the round was predicated on the desire of the congregation—a young parish in suburban Lake City—to worship in a true spirit of fellowship. Intended to serve as a chapel in a three-unit master plan, it will revert to that use when the main sanctuary is erected at a later date. An educational unit also is slated for the site.

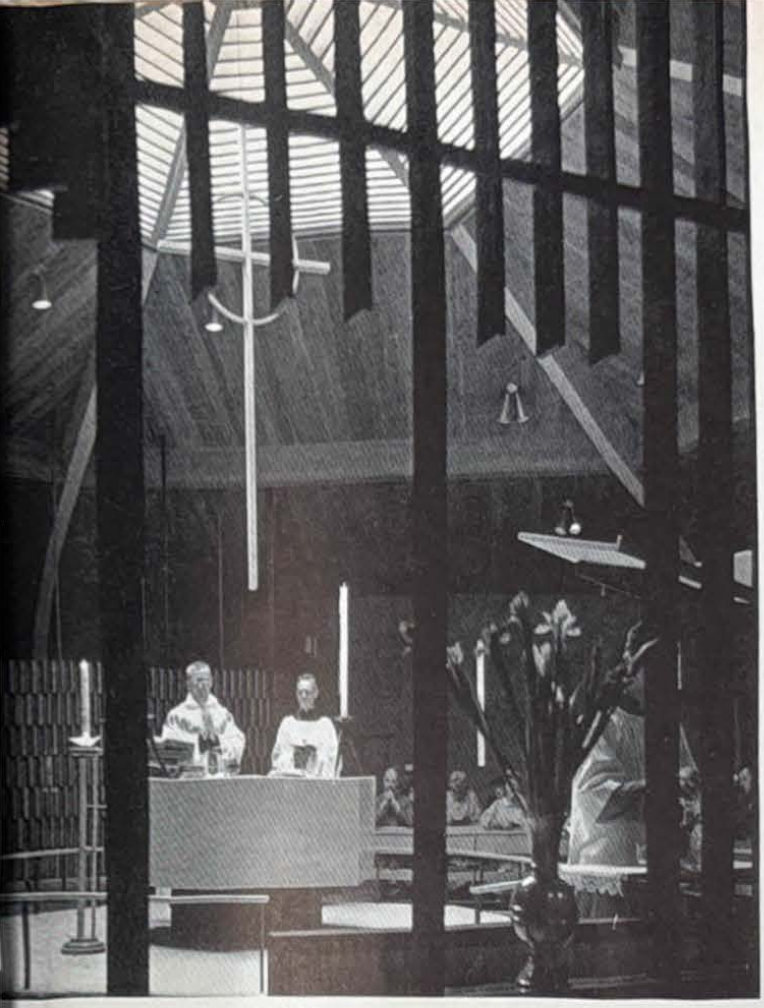
Importance of the altar is accentuated by its central location on a raised platform below a hanging cross and a large directional skylight. The liturgy is performed on each side of the hexagonal travertine altar; hence at no time is the priest positioned with his back directly to the congregation. The choir is placed at the farthest end of the chancel, with the pulpit and baptismal font adjacent to the altar.

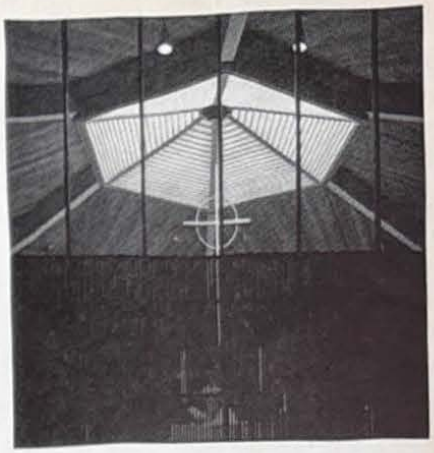
Narthex is entered at grade on the high side of the building. Taking advantage of the sloping site, it becomes two story along the low side to provide for a second entrance at grade and for a more informal development of interior-exterior space for recreation and youth activity. Howard E. Johnson & Associates were electrical engineers.

SEMI-OBSCURE WOOD SCREEN is only separation between narthex and nave. Former has quartzite floor which continues under screen into chancel. Colored glass is used freely.

Art Hupy pho







CHANCEL as seen through screen from nave. Chapel seating capacity is 220; choir area, 28.

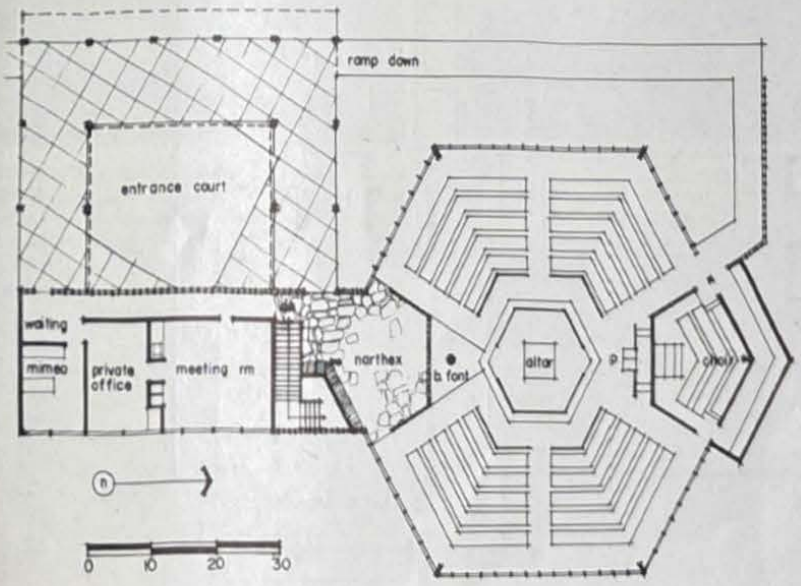


St. George's Episcopal Church
Seattle, Washington

GRANT, COPELAND & CHERVENAK
Architects

WORTHINGTON, SKILLING, HELLE & JACKSON
Structural Engineers

C.B.S. CONSTRUCTION CO.
General Contractor



OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: wood; roof: cedar decking on glued laminated beams; floors: concrete on grade and joists above.

Exterior Finish: handsplit cedar siding; enamel surface cement-asbestos board.

Roof Surfacing: built-up and asbestos shingles—Johns-Manville Corp.

Windows: wood frames, aluminum vents.

Doors: mahogany.

Floor Surfacing: quartzite stone; vinyl-asbestos tile—Armstrong Cork Co.

Interior Finish: painted ⅝-in. plasterboard.

Ceilings: painted ⅜-in. plasterboard; natural cedar.

Lighting Fixtures: swivel type louvered bottom aluminum cone; fluorescent under plastic over altar.

Heating: forced hot air system.

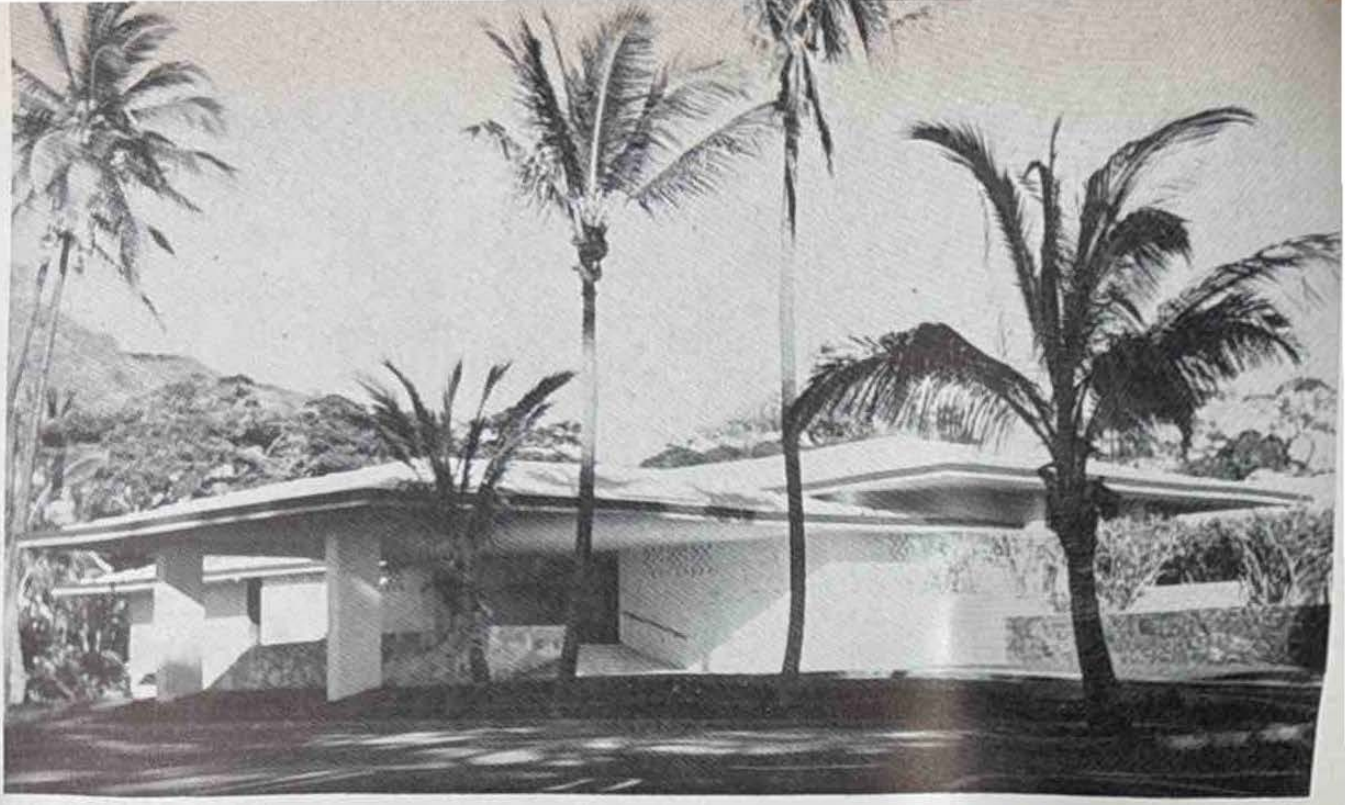
Plumbing and Sanitary: American-Standard.

Total Area: 9,041 sq. ft.

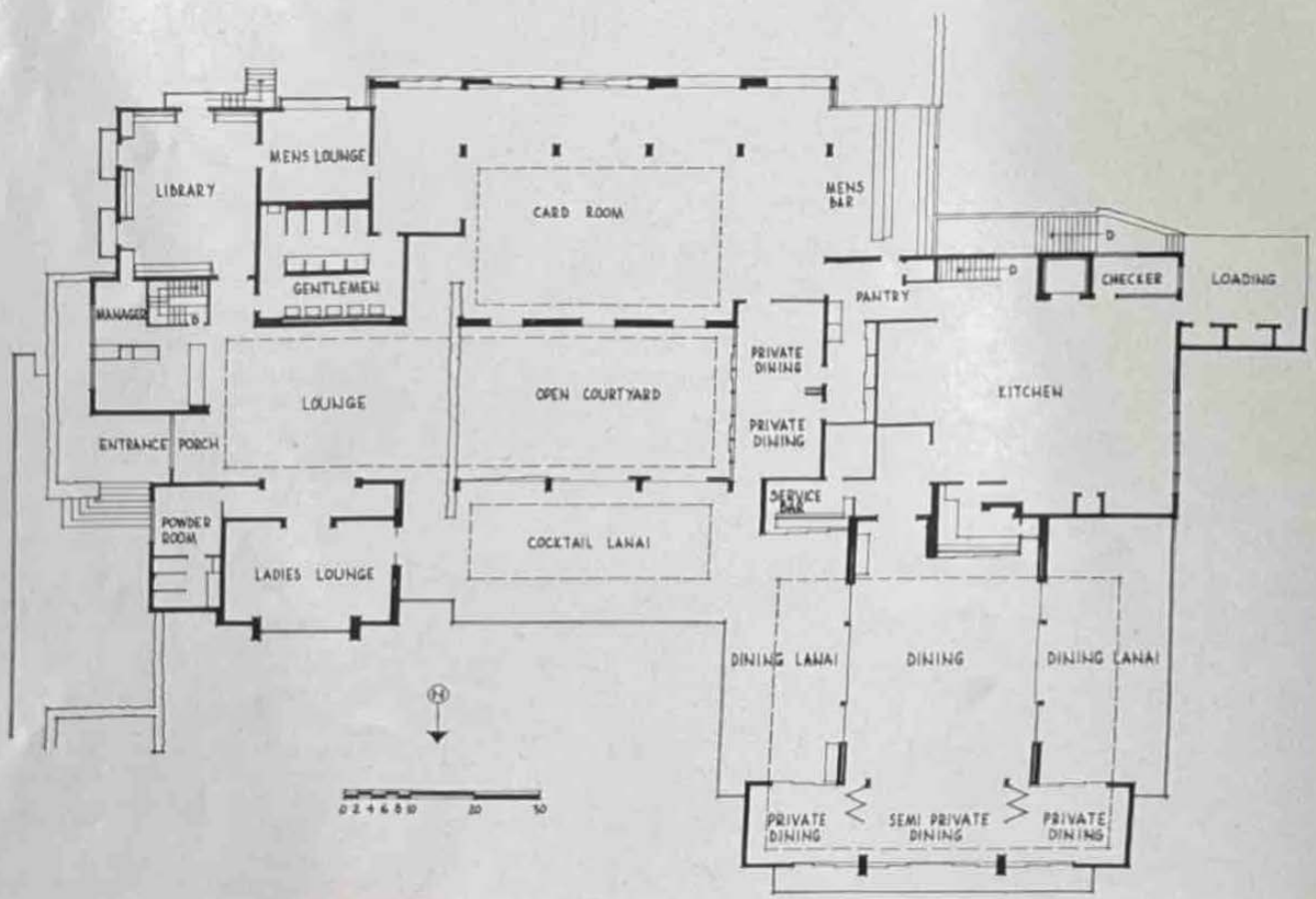
Total Cost: $102,342 (excluding sales tax and architects' fees).

Cost per Square Foot: $11.32.

Date of Completion: December 1959.



Traditional approach expressed in language of today



THE MAJOR PROBLEM in designing a new building for the oldest men's club west of the Rocky Mountains was twofold: to retain the facilities of the existing club (although the new one does not provide living quarters) and to carry out a traditional Hawaiian architecture meaningfully expressed in the idiom of today. The latter is achieved in part by the large, portico entrance of the steel frame structure finished in off-white stucco and Wainae sandstone and by the lightweight concrete roof poured in continuous bands with copper and redwood fascia.

Inside, uncovered spaces and walkways tend to isolate such facilities as the men's clubrooms and library where solitude and quiet dignity are suggested by rich koa wood paneling, warm green and brown furnishings, and reflected light bouncing in against peaked, white ceilings.

The dining room takes full benefit of the pleasant trade winds through the elimination of walls wherever possible. Landscape architects were Thompson & Thompson.

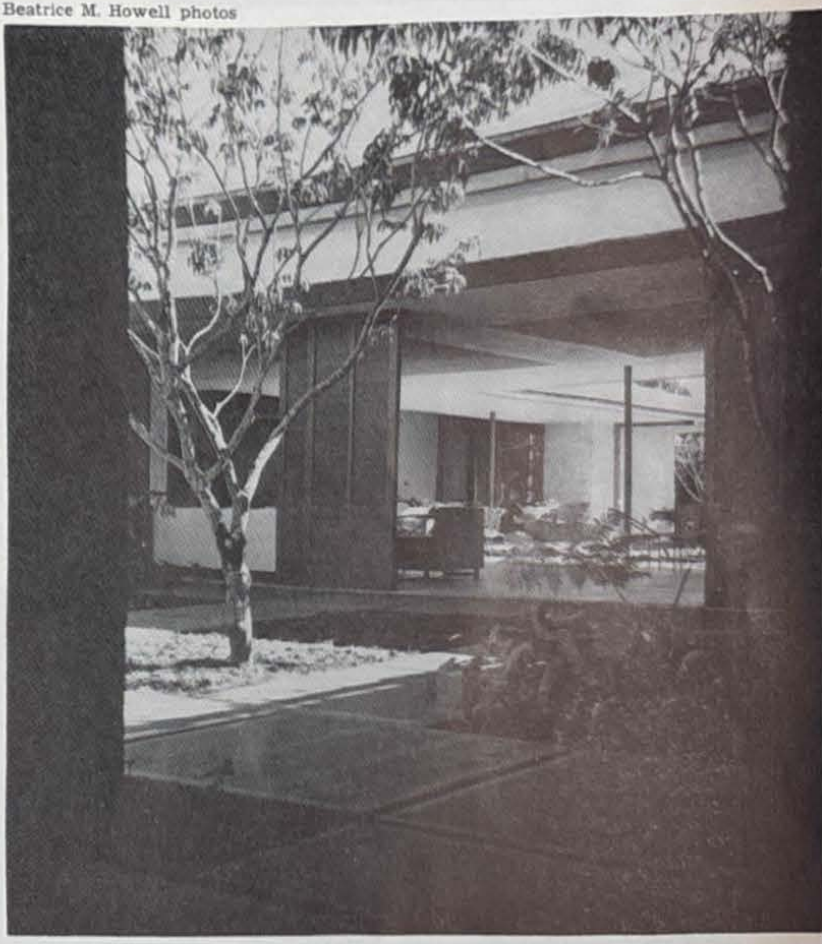
Pacific Club
Honolulu, Hawaii

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OSSIPOFF and MERRILL, SIMMS & ROEHRIG
and HARRY W. SECKEL
Architects

TOWN CONSTRUCTION CO.
General Contractor

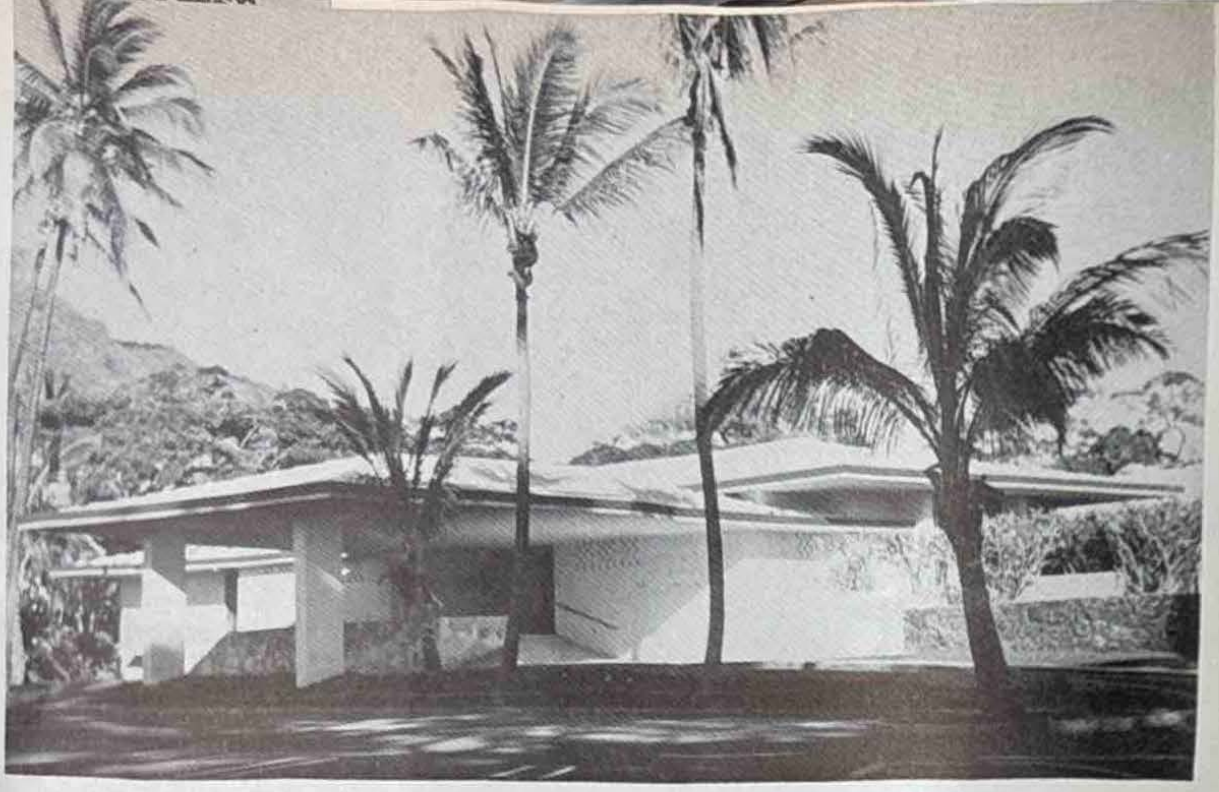
Beatrice M. Howell photos



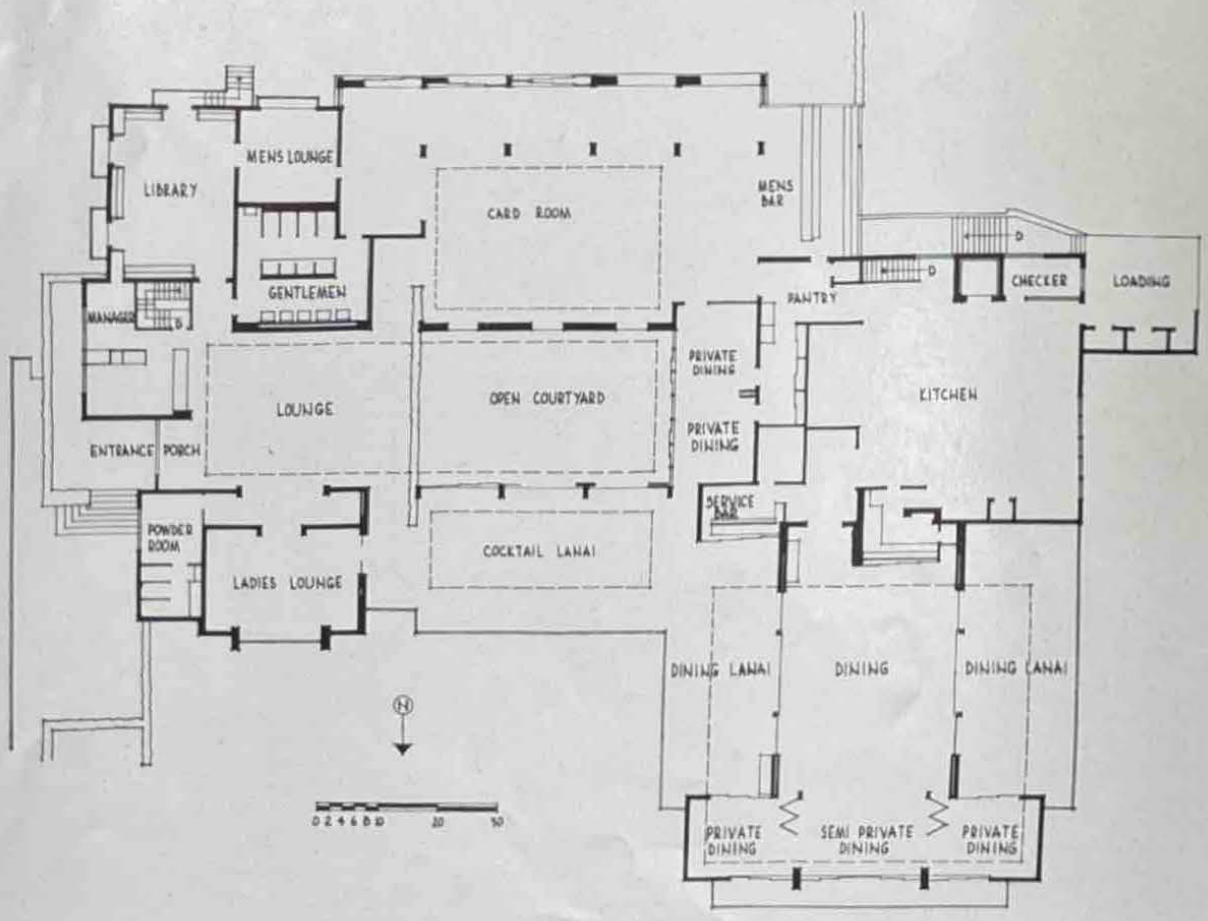


ENTRANCE LOUNGE combines green wall, coral sandstone partition and koa wood paneling, leads through shaded lanai (above) to exposed dining room on far side. View from cardroom (above, right) shows courtyard leading into cocktail lanai and dining area.





Traditional approach expressed in language of today



THE MAJOR PROBLEM in designing a new building for the oldest men's club west of the Rocky Mountains was twofold: to retain the facilities of the existing club (although the new one does not provide living quarters) and to carry out a traditional Hawaiian architecture meaningfully expressed in the idiom of today. The latter is achieved in part by the large, portico entrance of the steel frame structure finished in off-white stucco and Wainae sandstone and by the lightweight concrete roof poured in continuous bands with copper and redwood fascia.

Inside, uncovered spaces and walkways tend to isolate such facilities as the men's clubrooms and library where solitude and quiet dignity are suggested by rich koa wood paneling, warm green and brown furnishings, and reflected light bouncing in against peaked, white ceilings.

The dining room takes full benefit of the pleasant trade winds through the elimination of walls wherever possible. Landscape architects were Thompson & Thompson.

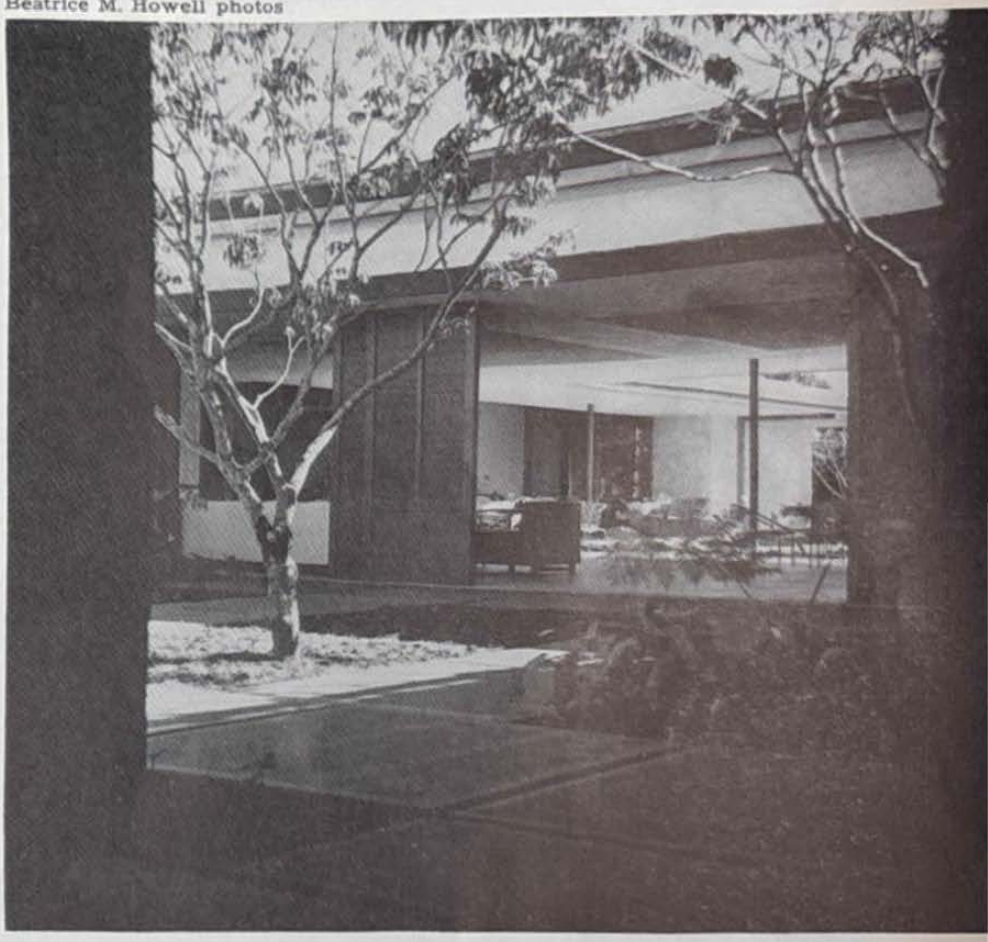
Pacific Club
Honolulu, Hawaii

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OSSIPOFF and MERRILL, SIMMS & ROEHRIG
and HARRY W. SECKEL
Architects

TOWN CONSTRUCTION CO.
General Contractor

Beatrice M. Howell photos





ENTRANCE LOUNGE combines green wall, coral sandstone partition and koa wood paneling, leads through shaded lanai (above) to exposed dining room on far side. View from cardroom (above, right) shows courtyard leading into cocktail lanai and dining area.





Home Office Building
Lytton Savings & Loan Association
Hollywood, California

•

HAGMAN & MEYER
Architects

JOHNSON & NIELSEN
Structural Engineers

SIMPSON CONSTRUCTION CO.
General Contractor

FIRST PHASE of $6 million development which ultimately will include stores, shops and multistory office tower, three-level structure (one floor below grade) is situated in midst of 2½-acre park-like plaza.

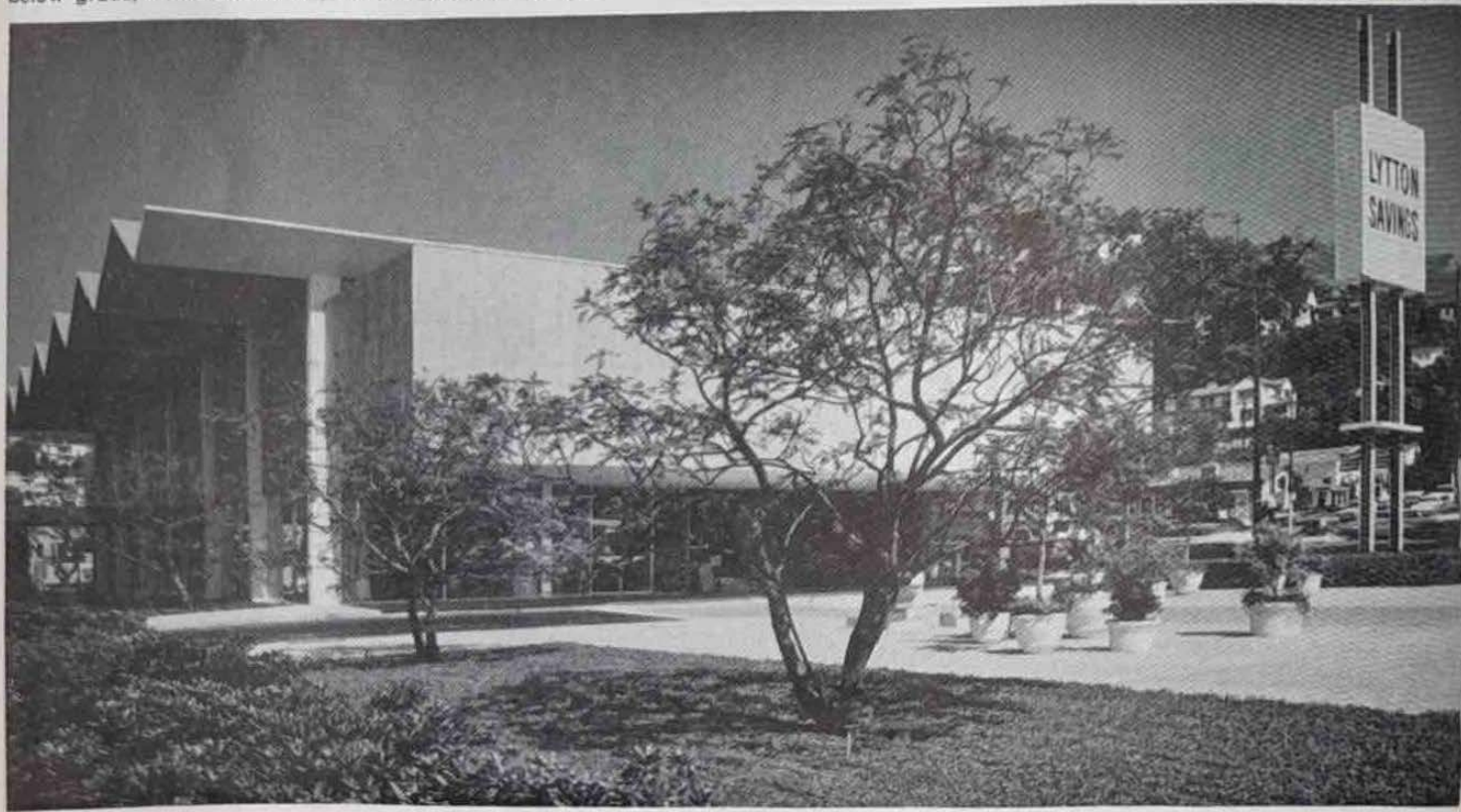
Folded plate r

CONCRETE SLABS believed to be the large and longest ever raised make up the folde plate roof of this 30,000-sq. ft. buildin known as the Lytton Center. Comprised six 47-ton, V-shaped, precast slabs, eac section is 100 ft. long, 8 ft. high and 18 f wide. Exterior walls on the ground floor a largely of glass with a section of rare Bo quet Canyon stone. Upper level walls are Italy-imported travertine marble.

Noteworthy is the relatively small use land for the building and the great amoun of space devoted to gardens, shade tree promenades, fountains and benches. Occu pying a place of prominence on one exteri is a bronze sculpture by David Green ent tled "Family Life." Showing a lively grou of youngsters at play, it is displayed agains a stone background.

Inside, where the earth tones of bronz bronze green and old gold relate to the ex terior, a collection of sculpture and painting sets a tone of quiet refinement. Among th pieces of art is a multicolored stained glass in-concrete screen which divides the busines area from the executive offices. Created b Roger Darricarere, it is 23 ft. long, 8 ft. hig and 2 ft. in depth.

Julius Shulman photo



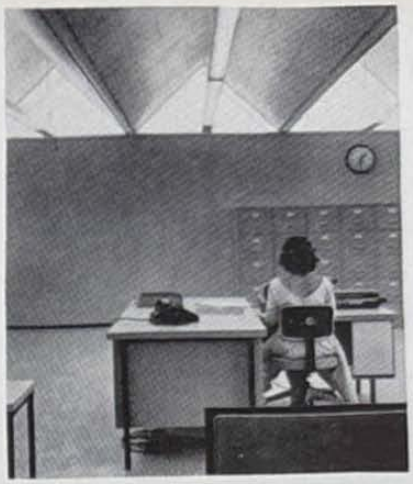
n two mediums

EXTERNAL NOISE caused by jet aircraft whose takeoff pattern leaving the San Francisco International Airport leads them directly over the site at low altitudes was a primary consideration in designing this office-warehouse building. The folded plate roof was introduced to solve this problem as well as a lesser one: the need to span 30 ft. to keep interiors free of columns.

V-sections fabricated of 2x4s with plywood over the exterior shell run the entire length of the office, the valley and peak longitudinal lines coinciding almost exactly with the path of the jets. After the V-sections were erected, the office ceiling area was covered with acoustical tile but the V-shapes were not altered.

Office units are all designed in 6-ft. modules, including the roof segments from valley bottom to valley bottom. With single-tube fluorescent fixtures running the length of these V's and centered on plane with their bottoms, the direct and reflected light is uniform. Thus the client has complete flexibility in arrangement of office furniture, with desks figured at 5 ft.

Office contains 2,270 sq. ft.; warehouse, 4,410 sq. ft.; loading dock, 150 sq. ft.





Western Division Headquarters
Chicago Pneumatic Tool Co.
South San Francisco, California

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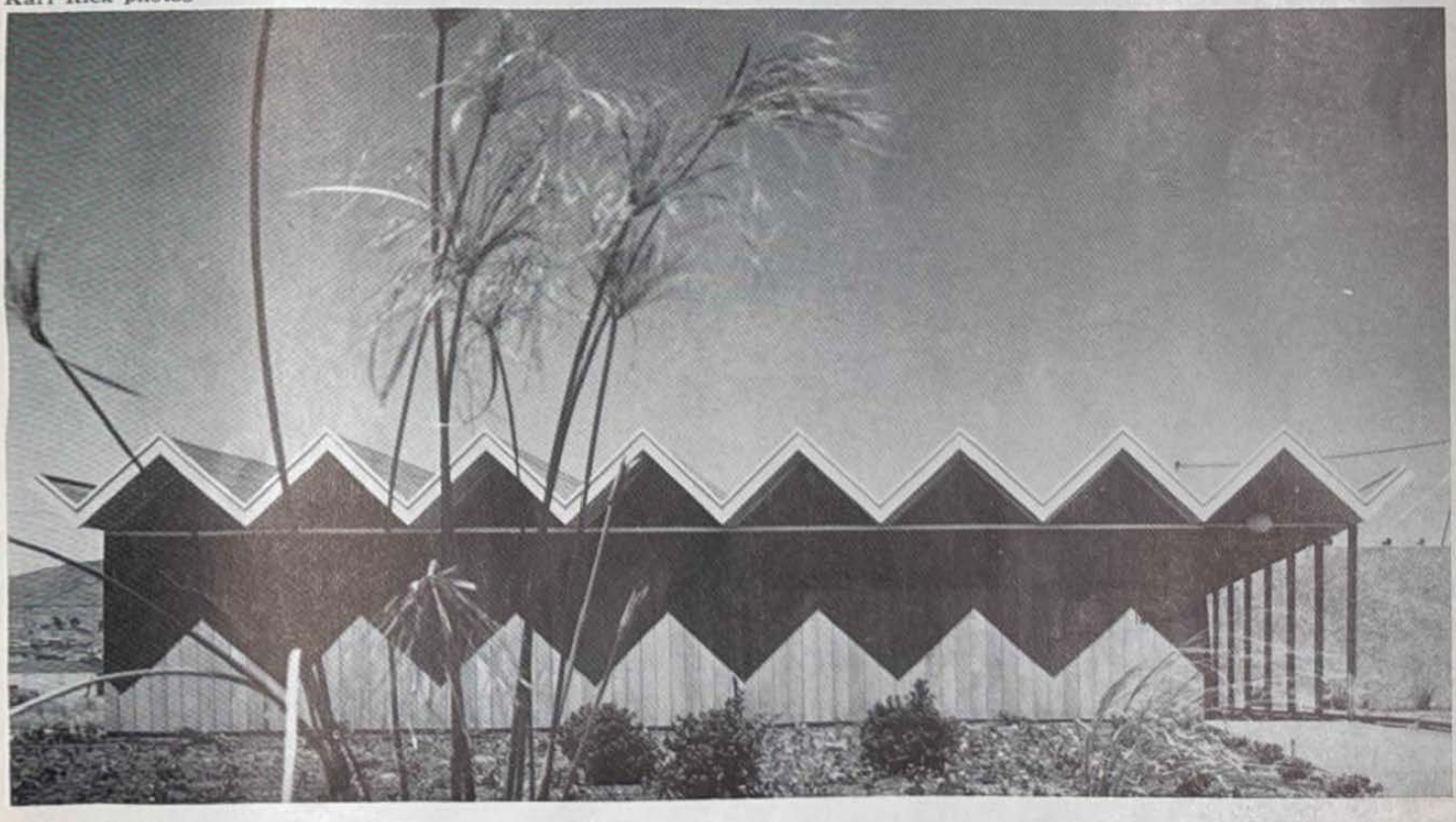
KNORR & ELLIOTT
Architects

STEFAN J. MEDWADOWSKI
Structural Engineer

PEARCE, McALLISTER & THORSELL
General Contractors

EXTERIOR WALLS consist of wood for office portion and reinforced concrete, washed and brushed to expose aggregates, for warehouse. Windows and doors are mainly sliding glass set in aluminum frames.

Karl Riek photos





Folded plate ro

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Home Office Building
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Hollywood, California

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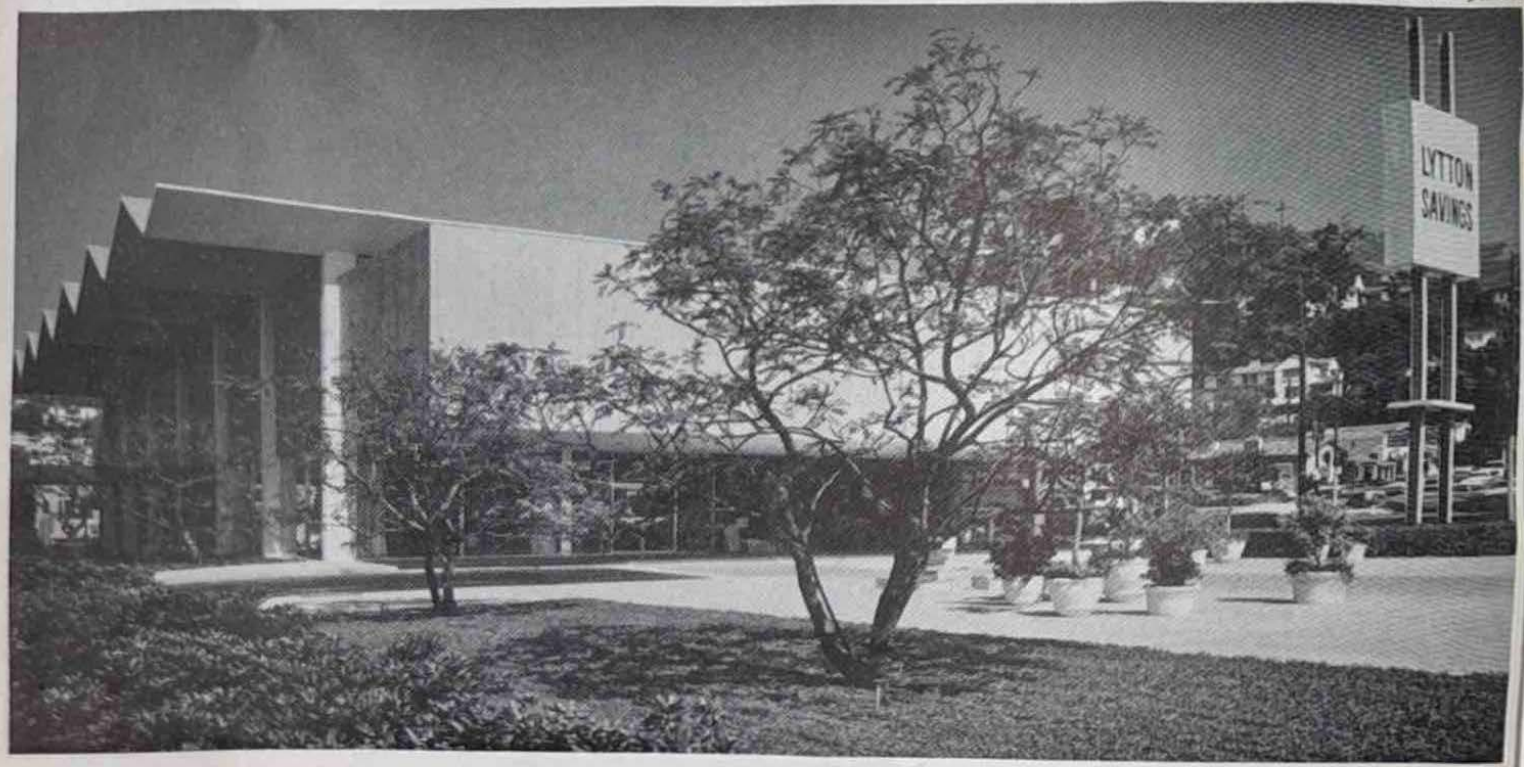
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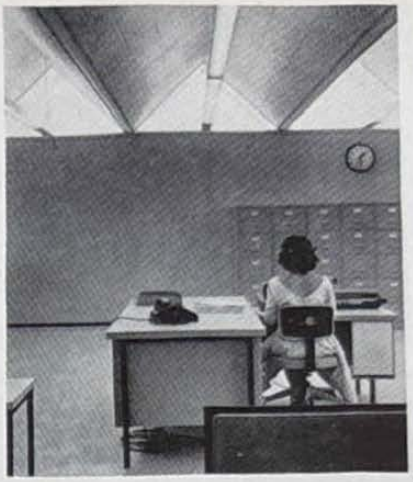
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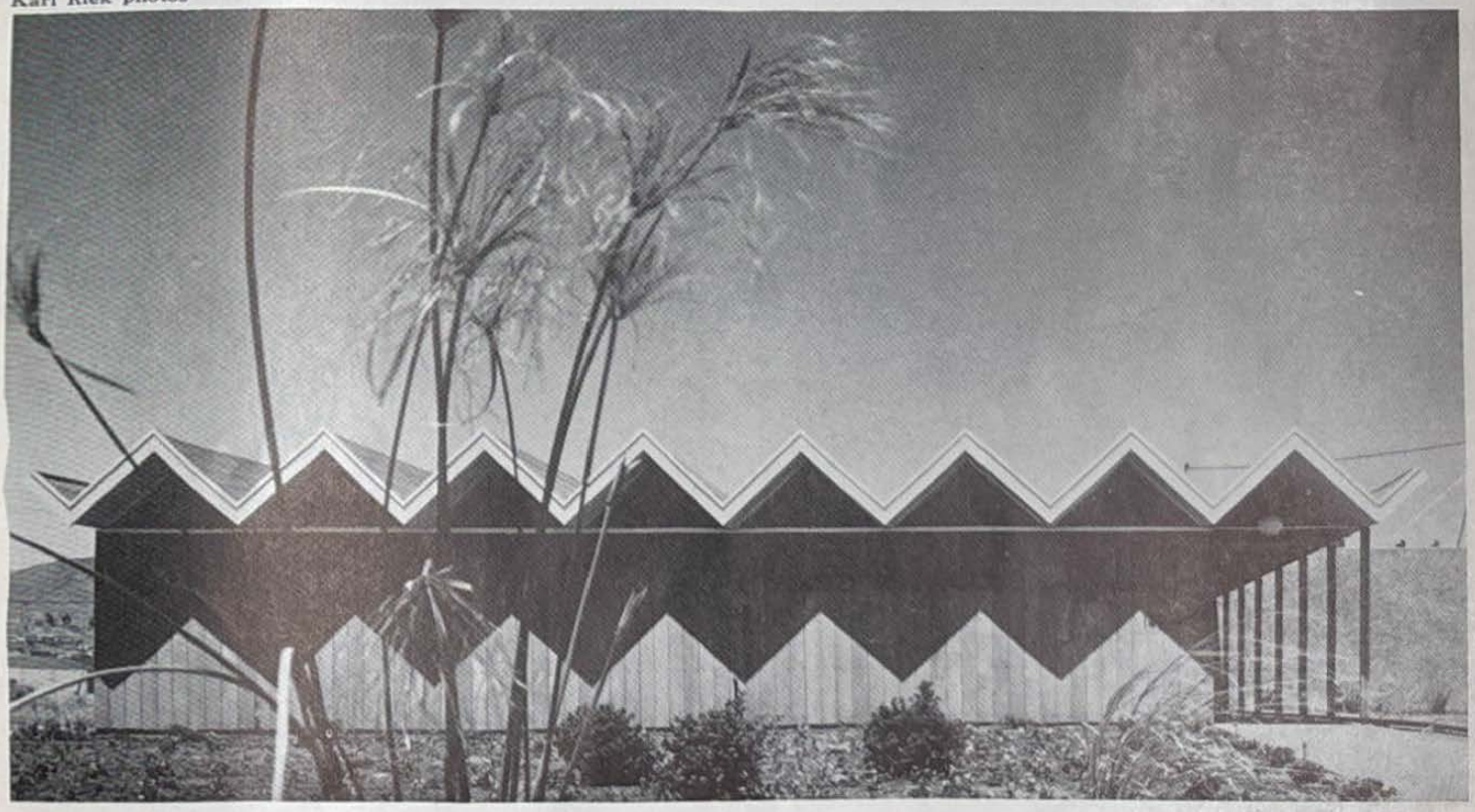
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Architects

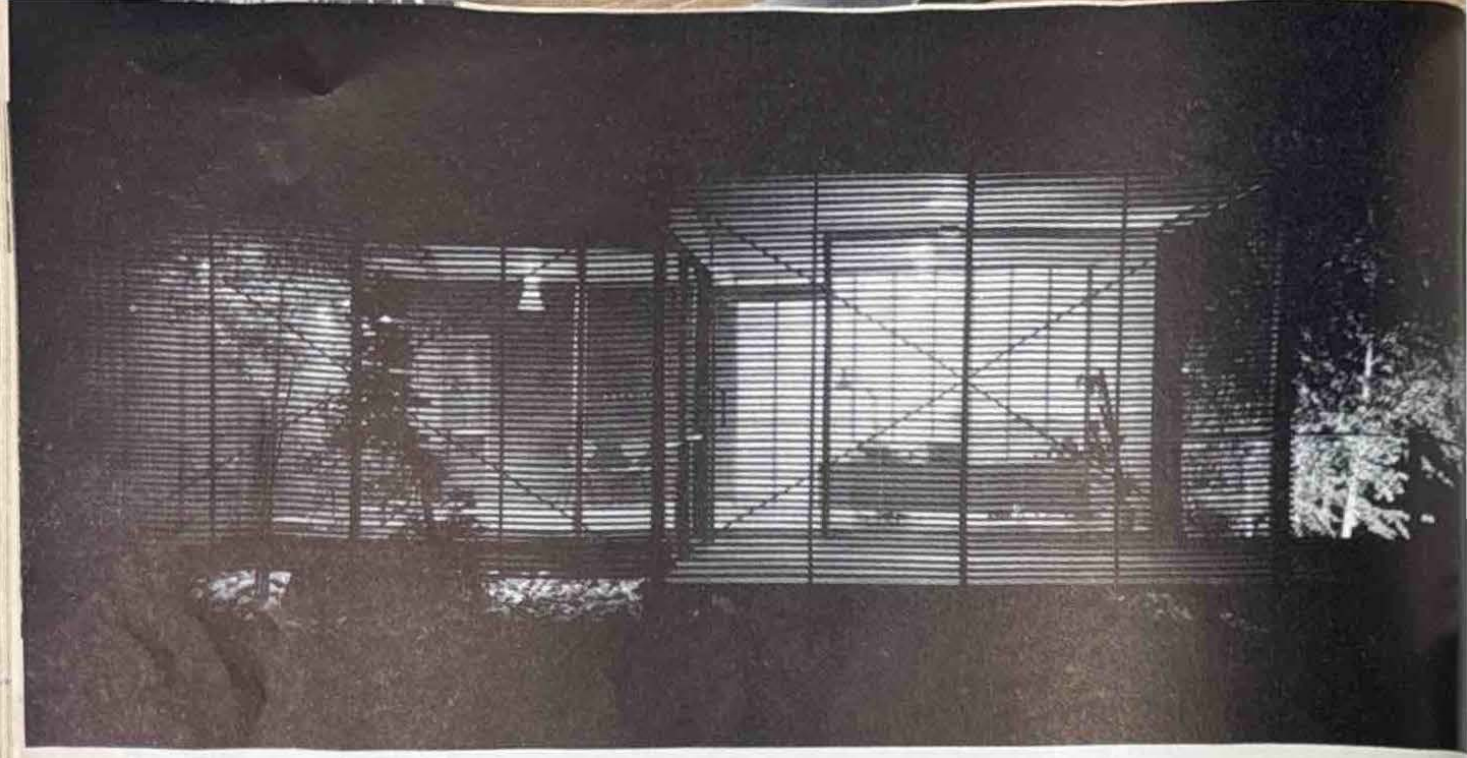
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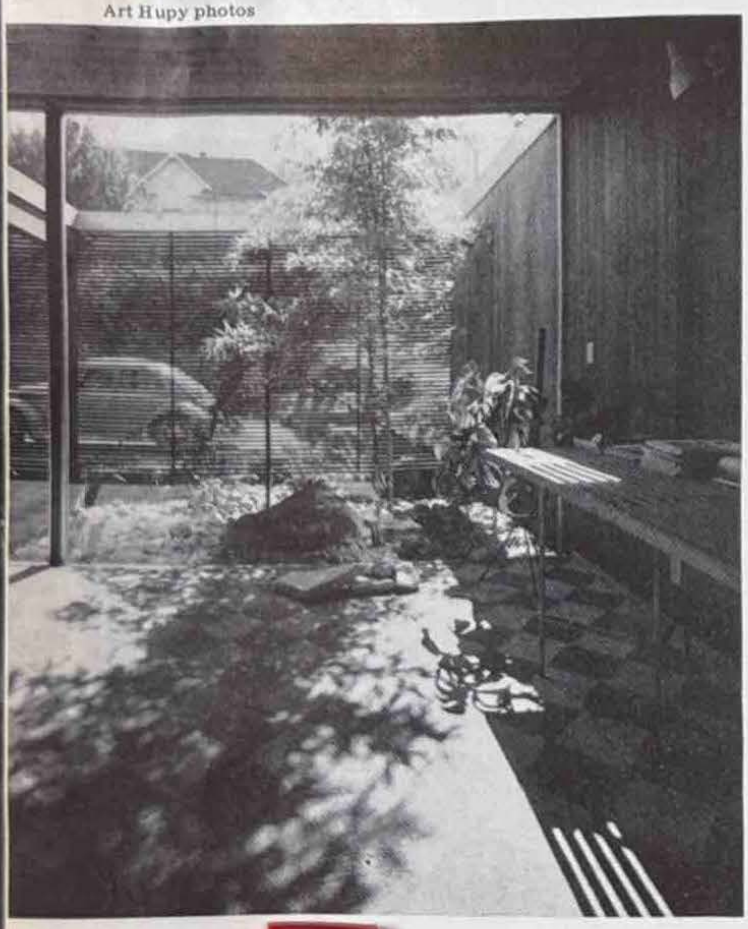


LOUVERED SCREEN of 1x2 redwood is spaced 1 in. apart, repeats opposite end of structure where it provides sun protection.

Where architects hang their hats

STEINHART, THERIAULT & ANDERSON
Seattle, Washington

Art Hupy photos



PUBLIC AWARENESS of architects and the professional services they perform can be developed in a number of ways. A notable example in the Pacific Northwest is this little office building—a real eye-stopper with an overall design quality that removes it from the "gimmick" category. Furthermore, motorists traveling between downtown Seattle and the northeast section virtually "look over the shoulders" of the architects at their drafting boards.

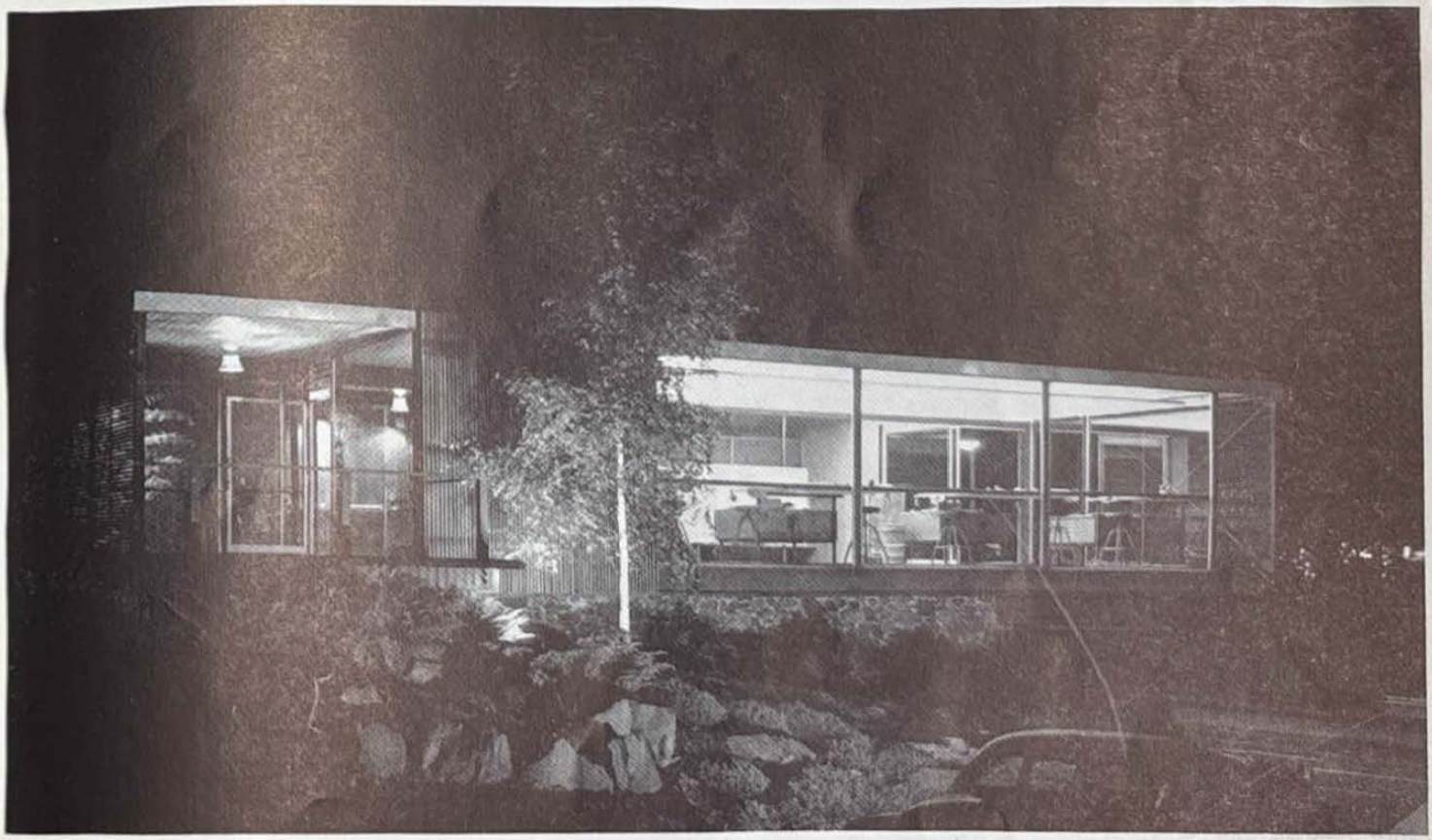
The office staff is small—six to eight including the three partners—and the building implements the firm's policy of "a limited volume of work with personal attention to the client's problem." By cantilevering the sides and one end of the structure beyond a small basement and by extending the planting area underneath the frame, the smallness of the site is camouflaged. At the same time, Shuksan stone walls at the base give a rugged stability to the lighter appearing building which balances above.

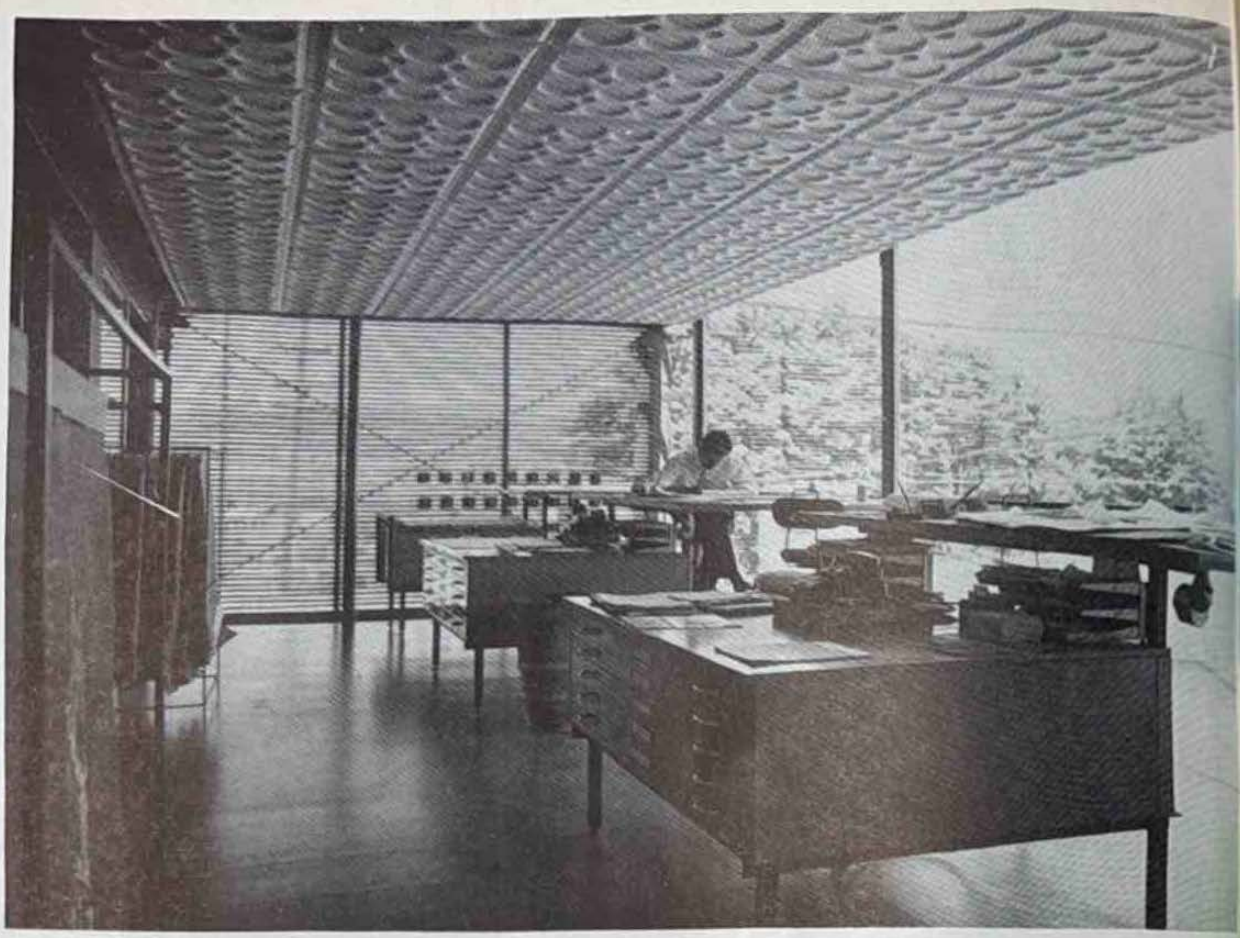
Deck is a steel web with joists fitted into the flanges of five steel beams which run longitudinally with the structure. The 14-in. wide flange exterior beams are welded to form a continuous frame 40 ft. long and 28 ft. wide. Steel cross beams are welded to the longitudinal beams to form three bays. Glued laminated beams and columns with t&g cedar decking and redwood walls introduce a warmth and informality to the structure. C.B.S. Construction Co. was general contractor; Donald G. Radcliffe, structural engineer.



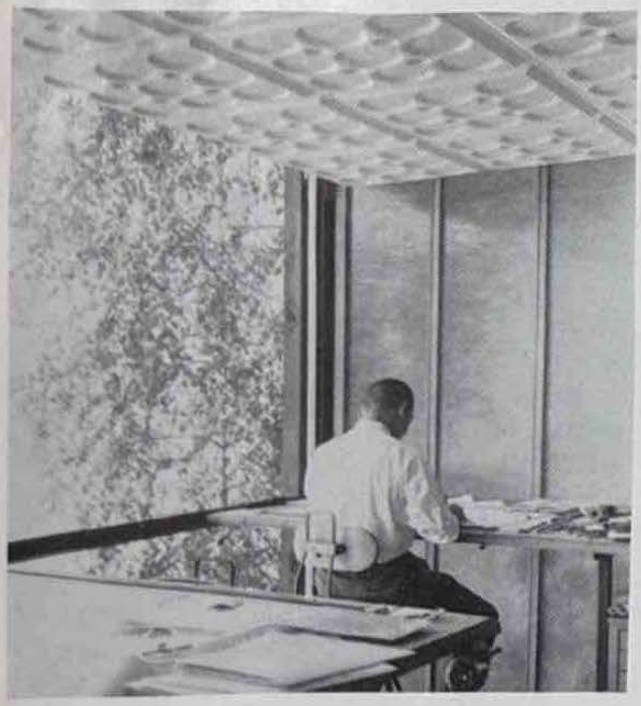
END CANTILEVER is 14 ft. Small garden with its river type rock and bamboo stock at entry creates pleasant vista from reception area.





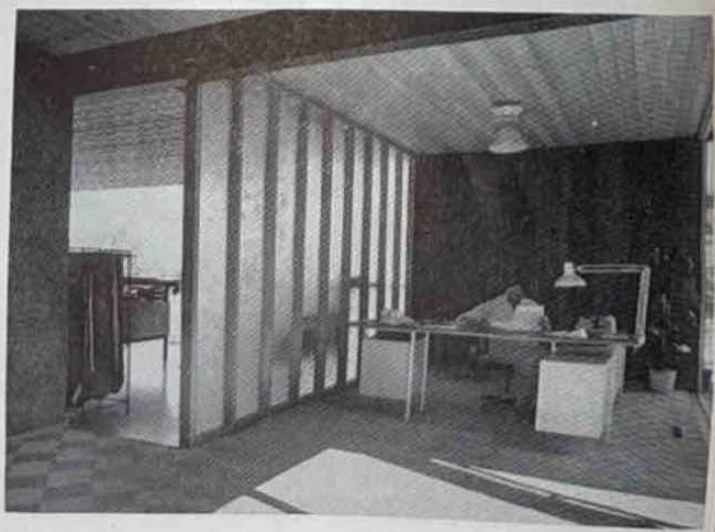


LIGHT DIFFUSING CEILING has acoustical properties. Cork floors are quiet.



WHERE ARCHITECTS HANG THEIR HATS

FIBERGLASS SCREEN in vertical wood stops separates office and drafting room. Architects designed teak furniture.



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Turquoise Matte



Grey Facet



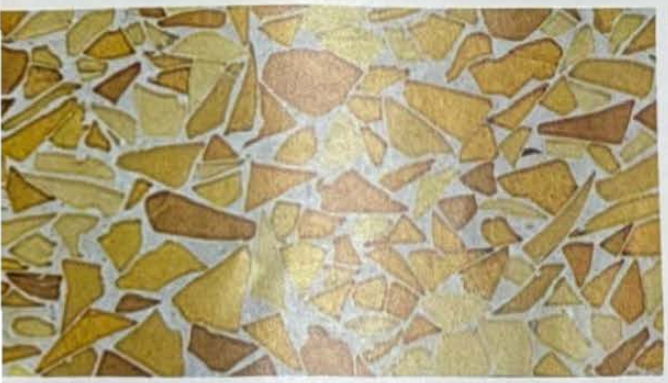
High Rise Apartment, Spokane, Washington.
Mosaica facing covers the end elevation with contrasting Mosaica panels in the wall system.
Dayton N. Holloway & Partners, Architect



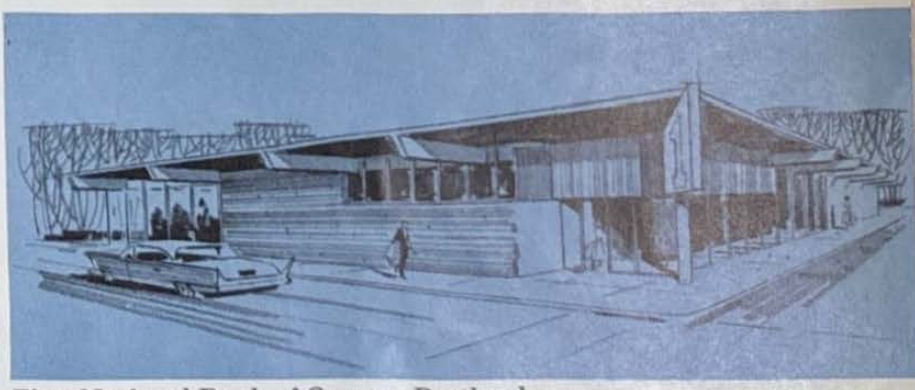
Office building, Los Angeles. Tower faced in black facet.
Lane & Schlick, A.I.A., Architects



Black Facet



Gold Facet



First National Bank of Oregon, Portland.
Exterior wall facing and entrance way column surround.
Jensen & Gilham, Architects

MOSAICA

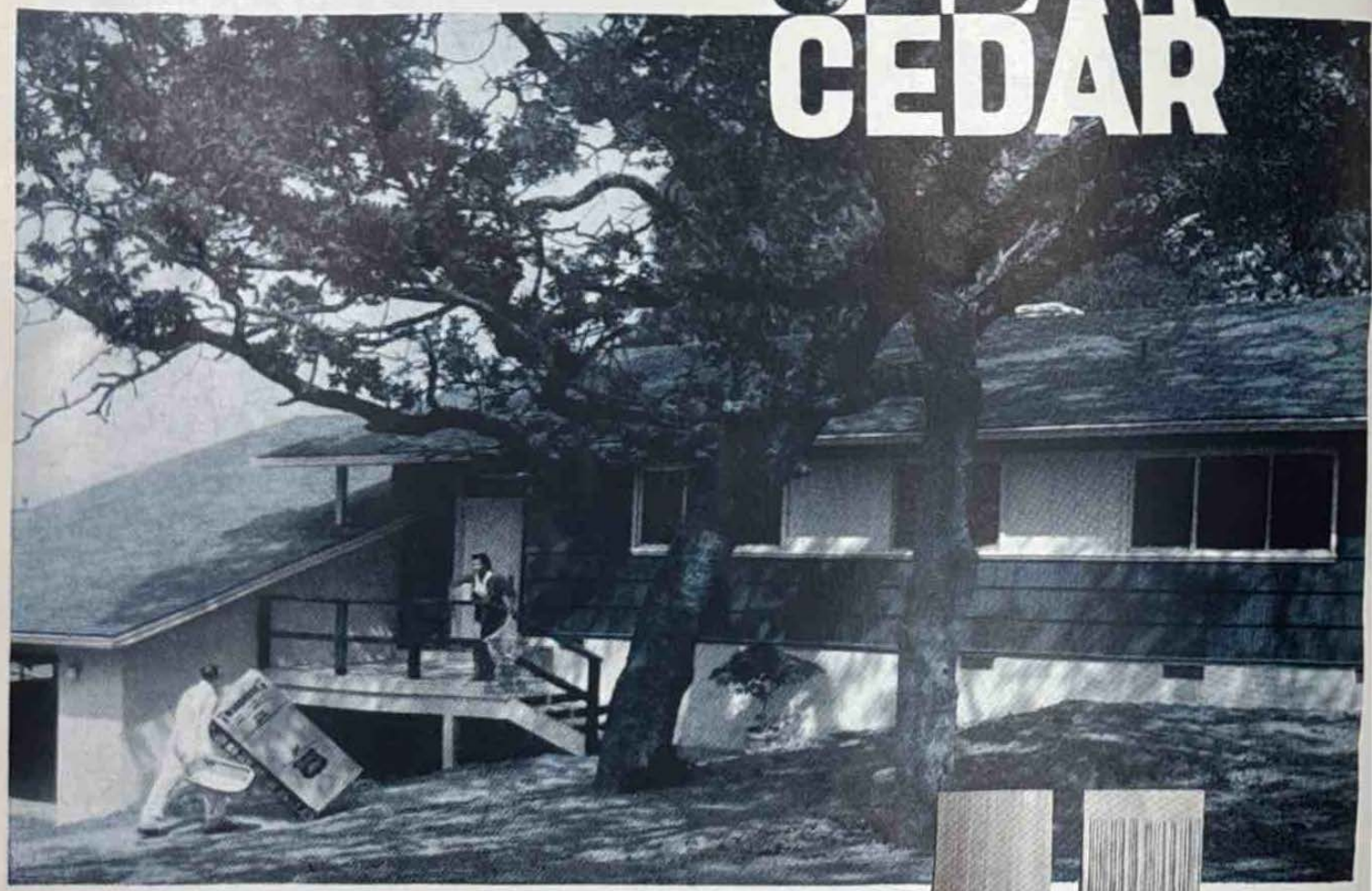
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Cranes solve ticklish space problem

Two German-made cranes are helping to solve a major problem—lack of working space—in the construction of San Francisco's 13-story Comstock Apartments project.

Designed by architects Hammarberg & Herman, the $8 million reinforced concrete structure completely covers the 120x275-ft. site on Nob Hill. The city permitted the blocking of the parking strip along one face of the building, the only area available for the construction crew and materials storage outside the structure itself.

While Pacific Co. is using one 35-ton P&H truck crane for concrete pours, other materials obviously have to be handled by different on-site methods. To do this job, the general contractor has installed two Universal-Leibherr Model 50 HB cranes, designed so that they can be mounted in elevator or ventilating shafts inside the building. By a simple yet efficient technique, they can be moved to new positions in the shaft by using their own power.

Each of the cranes can be run by remote controls, which permits the operator to walk to the edge of the structure as the crane is positioned to pick up materials from the ground, thus enabling him to keep a close watch on all operations without the need for a signal man.

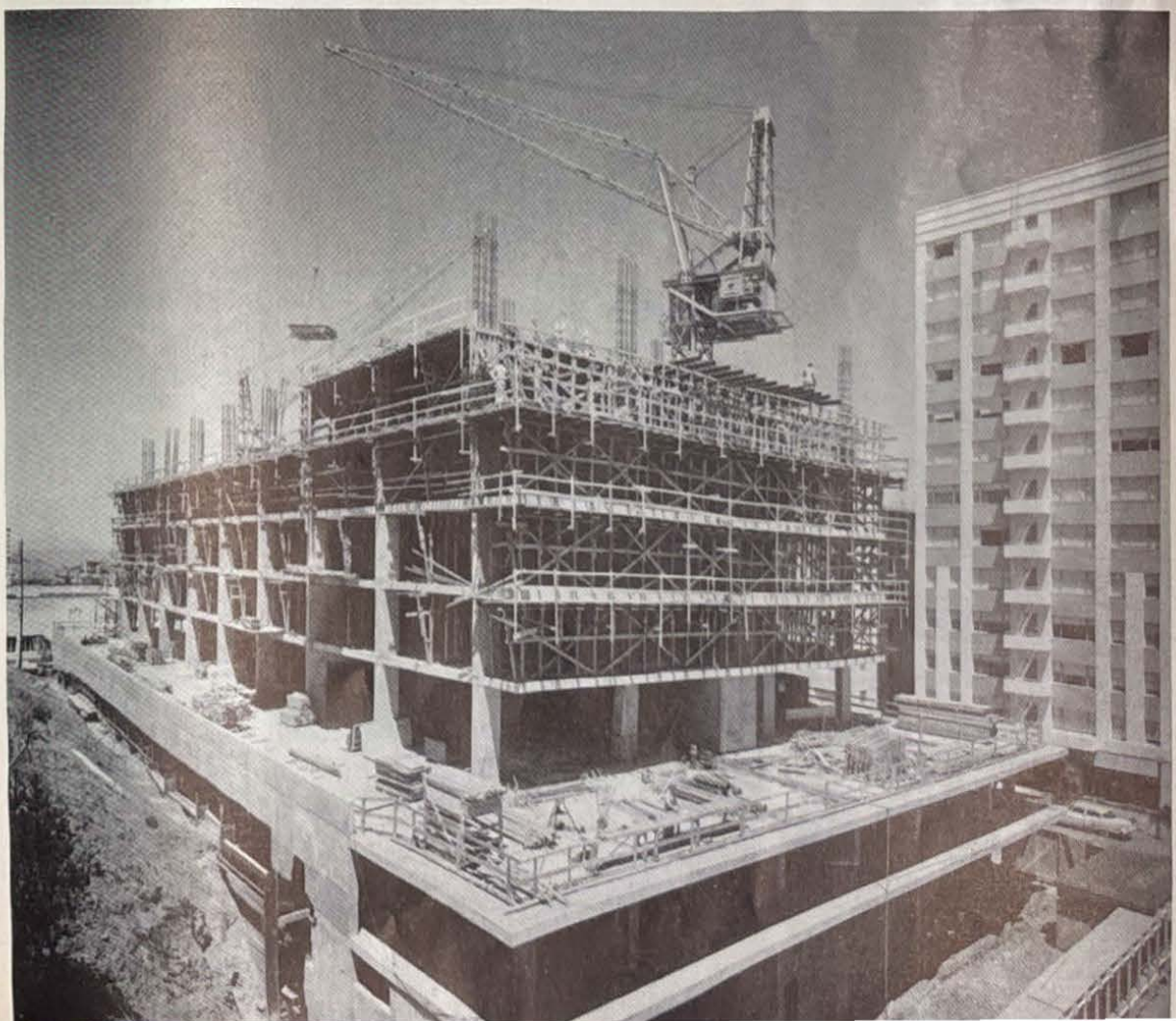
Presently handling all materials except the concrete, the two cranes are stationed so that their 100-ft. booms can reach any spot on a floor under construction.

Over 700 cu. yd. of concrete is going into each floor and the method chosen has enabled the contractor to pour as much as 1,971 cu. yd. during one 21-day working period. The P&H crane with boom extensions allowing it to reach the top floor is the key machine. It picks up concrete from Pacific Cement & Aggregates, Inc., transit mix trucks and dumps into concrete buggies operating on plywood run-



DOGGING OFF CABLE after crane has reached new position.

ONLY WORKING AND STORAGE SPACE available outside structure itself is contained in parking strip on one side of building, portion of which is shown at lower right. Architects and contractor elected to use two German-made cranes to move materials other than concrete. This is their first use in West.





CABLES run through center of crane in preparation for move to new working area.



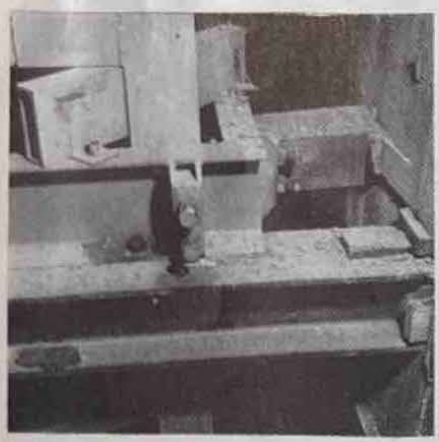
SETUP OF PULLEYS around which cables roll as seen from bottom view.



CRANE hoists itself up shaft with minimum of down time, its main advantage.



LEGS extending down three floors into shaft are shimmed against braces at three points.



CONNECTION between legs and bracings at one floor level is shown here. Leg at upper left is held in position by cross braces anchored to steel frame which in turn is bolted to steel members cast in concrete of shaft. Turn screws and shims provide accurate positioning.



STEEL BEAMS to which crane is anchored at three levels are cast into concrete of shaft. When crane is to be moved higher, beams on lowest level are removed and then cast into next rise of shaft for reuse. Holes left by beams are plugged with concrete.

ways kept above grade by 14-in. horses.

In designing the reinforced concrete structure, the architects had to overcome the problem which would arise from massive weights of the 13-in. thick concrete slab floors on the upper level. Richvoids, fiberboard tubes which create 9-in. voids in the slab, are placed before each pour, reducing thicknesses at the thinnest sections to 4 in. With reinforcing steel mats placed both below and above these tubes, a double slab actually is produced to provide extra strength.

To capitalize on the view, all exterior walls will consist of floor-to-ceiling glass, tested to withstand winds up to 95 mph. The first three floors will be utilized for parking, lobby and office space; the next nine, stepped back to 86x225 ft., will each contain 10 apartment units; and the top will consist of five penthouses.

Longspan joists eliminate supporting columns

When the office building for the Unemployment Compensation Commission of Montana is completed next spring in Helena it will be the largest structure of its type without supporting columns in the U. S. Key to the building's unusually large unobstructed floor space, 51½x118 ft., are sturdy longspan open web steel joists supplied by Berger Steel Co., Inc., which make it possible to eliminate the supporting columns.

Lightness of the joists also permits use of lighter framing and footings. Because Helena is in an earthquake zone, use of steel beams was particularly desirable. If prestressed concrete had been employed, it would have required concrete T-beams the same depth as the steel joists, plus heavier framing and footings with considerable additional expense, according to a report by the joist manufacturer.

The steel joists are placed in the building immediately after the main supporting members are erected, making it possible for construction to be carried on in all kinds of weather, including Montana cold. As soon as joists are erected and bridged, a working platform is available for the immediate followup of allied trades, allowing field work to progress quickly. Also speeding up the field work is the fact that each joist is a complete stable and independent unit.

Shallow depth of the joists makes it possible to reduce masonry work by reducing the required height of building walls.

Architects and structural engineers for the four-story, $600,000 building are Evans & LaMont. A & B Construction Co. is general contractor. Depending upon seasonal variance in work load, the building will house from 100 to 125 employees.



LONGSPAN open web steel joists support large, multistory office building now under construction for state of Montana in Helena.

Seattleites cross over the bridge 75 ft. in the sky

Billed as "a glass span that takes you directly from car to counter, out of the weather, above the traffic," Seattle's newly opened "sky bridge" is an interesting addition to the heart of the city. Spanning 90 ft. to connect the sixth floor of the Bon Marche department store and the eighth floor of a huge self-parking garage 75 ft. above street level, it is 14 ft. wide overall and 10½ ft. high.

The bridge presented a more than ordinary challenge to architects Krona, Wilson & Ziegler and engineer Carroll L. Brown since it is the first structure of its kind to be built in the city. It involved, for example, considerable contact with a variety of agencies, including the City Building, Engineering and Public Works Departments, the Fine Arts Commission and the Seattle Transit System.

The structure is a single warren truss at the center with cantilevered outlookers at the floor and roof on both sides. At the ends of these members, 12½ ft. o.c., are 4x6-in. continuous wide flange units.

Floor and roof systems consist of steel decking welded to the structural frame. Floor decking is surfaced with 1½ in. of lightweight concrete and vinyl-asbestos tile. Roof is clad with a 1-in. standing seam galvanized covering, with a continuous built-in gutter down the center. A downspout at each end carries off rainwater.

Arrangement of one truss at the center allowed complete design freedom at the outer edges where aluminum curtain wall is fastened. It also provides for directional travel on either side of the centerline.

The curtain wall is composed of heavy aluminum frames with Hex-Aire panels in the top and bottom and clear wire glass in the center section to afford a spectacular view up and down Third Avenue. This marks the first installation of the Seattle-made Hex-Aire product, a honeycomb shaped aluminum core held together between two pieces of clear glass by epoxy resins, forming a sandwich panel of considerable strength. While the core may be any color desired, in this particular case the panels are a medium gray, contrasting with black, white and aluminum plus a red panel at one entrance.

The window wall is built on a 4 ft. 2 in. module with ribbon type mullions to provide for any movement or expansion. The Seattle building code requires that the structure be allowed to move laterally 10 in. in the event of a major earthquake. The manner in which the bridge is fastened to the store building will permit movement in three ways: up and down, endways and sideways.

Structure around the garage side entrance and ticket booth for validation and payment of parking charges is covered with gray corrugated aluminum sheets, as is the underside of the frame. Garage itself is a 3-in. waffle slab formed with 30x30x14-in. steel domes spaced at 3-ft. centers.

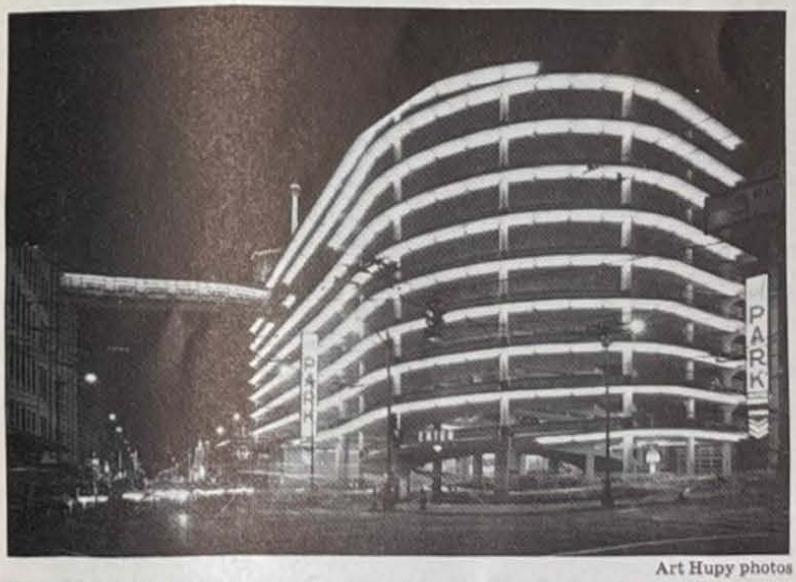
Utah Construction & Mining Co. was general contractor for both the bridge and the garage; Howard E. Schroedel & Associates, mechanical engineers.



RIBBONS OF LIGHT as viewed from 18-story apartment house several blocks away.



PEDESTRIAN OVERPASS cambers 12 in. at center, can accommodate up to 400 persons at any one time. Automatic doors lead to store lounge whose facilities include coffee shop, bakery, telephones, restrooms, checkrooms and radio booth from which weekday newscast is heard during noon hour.

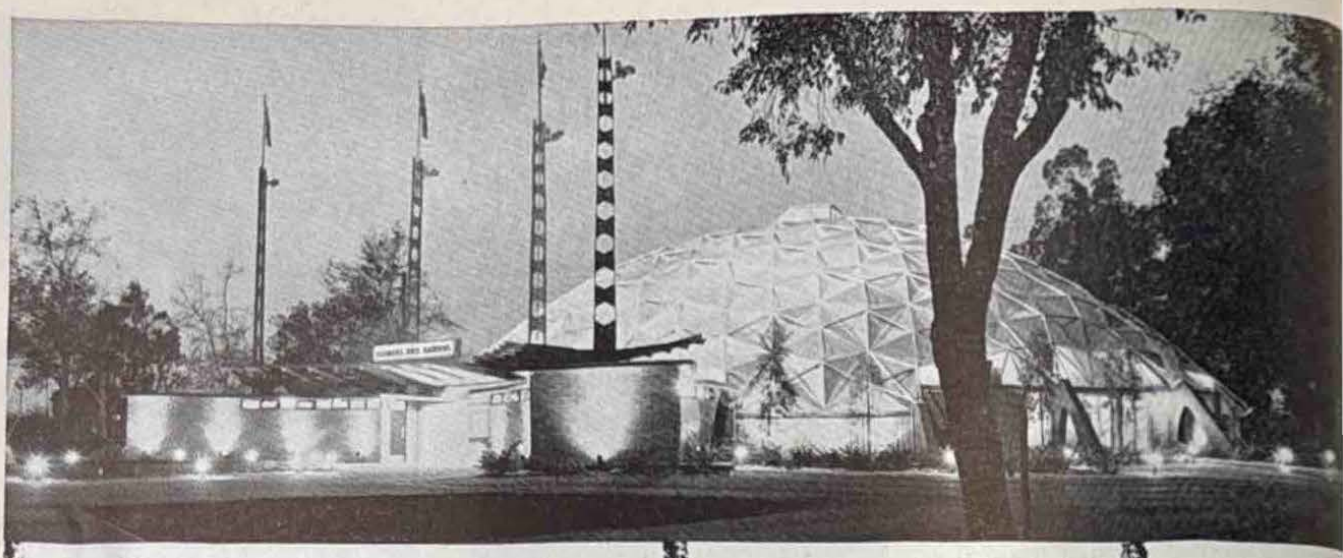


Art Hupy photos

SELF-PARKING GARAGE is patterned after, yet larger, than counterpart in downtown San Francisco (see PA&B for June '55), designed by architect George Applegarth with Ellison, Sedgwick & Associates, structural engineers. Ten floors with 1,267 stalls can park up to 3,000 cars per day. Entire parking operation takes only two minutes under normal traffic conditions.



CLEAR WIRE GLASS provides this view.



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NATIONAL ORANGE SHOW

exhibition hall at San Bernardino, Calif. is a 125-foot-diameter Kaiser dome providing some 11,500 sq. ft. of usable floor space.

Architect: Lee Evison, Pasadena



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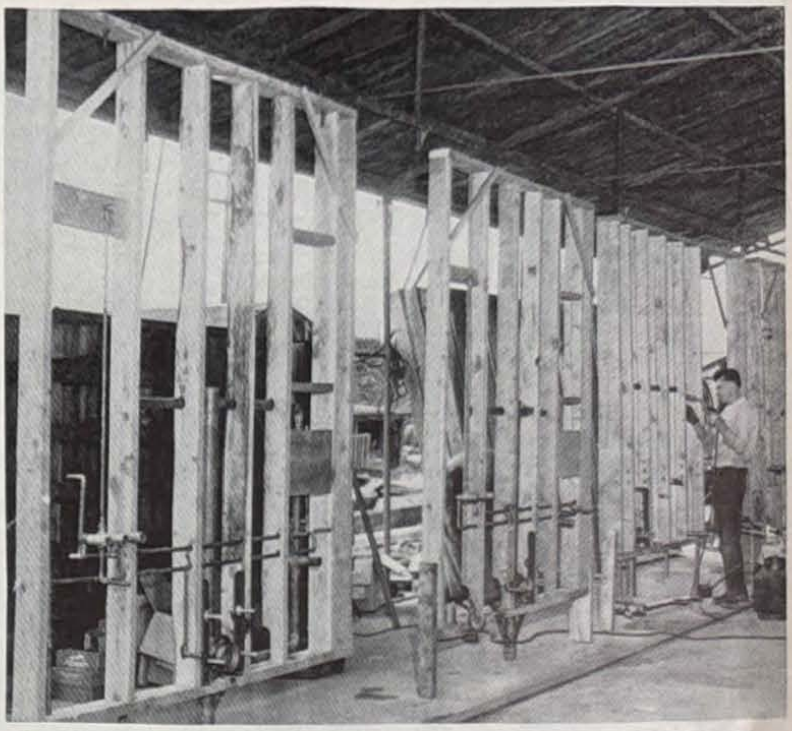
Mahon-West Sales-Engineering offices at 2600 Monterey St., Torrance, Calif. and 821 Market St., San Francisco.

MAHON

PREPLUMBED PANEL prefabricated on an assembly line basis to contain all the pipes for bathroom fixtures and a water heater can cut costs as much as $100 a home. This is the estimate of R. E. Hunton, president of West Coast Plumbing and Heating Co., which is prefabricating such panels for a Neah Bay, Wash., housing project. The plumbing pipes are inside a standard-size panel complete with 2x6-in. studs ready for fixtures and finishing materials. Only two on-site connections are needed. Tubing is of copper and complies with the national plumbing code. The 7x8-ft. panels can be used in both single and multistory construction.

—pa&b memo—

DOUGLAS FIR WOOD from the 10 western states is undergoing intensive tests to determine the influence that locality of growth may have on its strength properties and density. Study project, sponsored by the Western Pine Association, is being conducted by the Industrial Research Division of the Washington State Institute of Technology at Pullman and the Oregon Forest Research Center at Corvallis. It will include laboratory testing of samples from 400 sawmills. Results will be analyzed primarily to determine whether differences, if any, between the strength properties of inland and coastal Douglas fir species are statistically significant.



COPPER BATHROOM PIPES are installed in wall panel at Seattle firm.



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luminous ceiling

A luminous ceiling material called APC Litelam has been developed specifically for architect-designed systems that can be integrated with other materials in a room. Translucencies and colors of the laminated vinyl vary from clear to shades of white with various fabrics, botanical materials or textures laminated between plies of the vinyl. Thicknesses vary according to design specification. Product may be integrated into any suspension mechanism. In a recent application in Denver, designed by Raymond Harry Ervin & Associates, a pattern of natural manila hemp was combined with an oiled walnut suspension system to harmonize with the walls of a savings and loan company office.—Architectural Plastics Corp.

(Item No. 1)

fiberglass duct liner

Two different densities add to the performance characteristics of Micro-Bar duct liner, a resilient, semirigid insulation blanket of glass fibers bonded by a thermosetting resin. Heavy density fiberglass is designed for resistance to high air velocities. A tough product that doesn't need to be babied, it can be formed easily into integral nosings at the leading edges, eliminating metal holding strips and nosings. Underneath is a light density portion for good sound absorption and thermal performance. Fire hazard rating meets Standard No. 80A of the National Fire Protection Association and National Board of Fire Underwriters.—Johns-Manville Corp.

(Item No. 2)



stone veneer

Silvara stone, quarried in 1-in. thicknesses, retains the distinctiveness of natural stone at considerably less weight and cost. Suggested for lobbies, dining room and coffee shop interiors, room accent walls and the like, it can be applied over side walls without a special foundation footer. Each stone is grooved at top and bottom for special clips and corrosion-resistant nails that hold it securely. Silvara stone can be applied over any type side wall, including concrete block, masonry, plywood and wood sheathing.—Shakertown Corp.

(Item No. 3)

prefabricated fireplace

Majestic has added a corner fireplace to its line of all-metal prefabricated units. Hearthside corner opening model is designed for either floor level or raised hearth and requires no mortar or masonry for installation. It is equipped with a firebox floor of high-temperature ceramic. Side and back are of heavy metal and smoke dome section and flue connection are of corrosion-resistant steel alloy. Inner air circulation provides adequate clearances for butting directly against combustible surfaces with safety. Included in the package is a metal prefabricated chimney consisting of a triple wall, sectional round flue that also can be butted against combustible surfaces at ceiling and roof level and a metal simulated brick chimney top housing in brick red, tan or off-white. —Majestic Co.

(Item No. 4)



concrete tamping roller

To eliminate wading in the mix and slushing grout into the workman's footprints, Goldblatt has developed a tool used like a float that tamps a strip of concrete 35 in. wide as it is rolled out and back across the pour. Called the Jitterbug roller, it consists of 91 steel rods mounted on 15-in. diameter wheels that ride the mix, pushing the larger aggregate just below the surface and out of the way of the finishing trowel. Roller is equipped with a 12-ft. handle; extensions are available.—The Goldblatt Tool Co.

(Item No. 5)

plastic plumbing pipe

A vinyl plastic that can withstand operating temperatures to 200 deg and pressures up to 150 psi. has been introduced by B. F. Goodrich. The material, a polyvinyl dichloride called hi-temp Geon, can be used in household hot water plumbing and industrial hot-acid piping. Company suggests that Geon's lightweight (one-sixth that of copper) makes possible prefabricated plumbing walls which could be trucked to jobsites and swung into position by light cranes. A test two-story installation already has been tried out at the NAHB research house in East Lansing, Mich.—B. F. Goodrich Chemical Co.

(Item No. 6)

elevator mural

Removable tile mural panels from the entire back wall of an elevator car unveiled recently at the convention of the National Association of Building Owners and Managers. Mural in the exhibit car is an abstraction of a city skyline. Tiles are mounted on three large panels that are easily removed to change the decor. Side panels of Brazilian rose wood also are removable. Soft, even lighting is provided through a drop ceiling of milk white plexiglass panels.—Otis Elevator Co.

(Item No. 7)

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unusual bathroom fittings

Bathroom fittings in six rather exotic patterns are being produced on a standardized basis by a new Los Angeles firm. Fittings will be available in basin, shower and tub sets and shower heads in five different finishes: stain gold, polished gold, polished brass, satin chrome and polished chrome. Gold and brass finishes are protected by clear baked enamel. Patterns range from Contemporary, a simple modern design, to ornate Oriental Fantasy with appliqued design and matching dragon handles.—Artistic Brass, Inc. **(Item No. 8)**

green glass panels

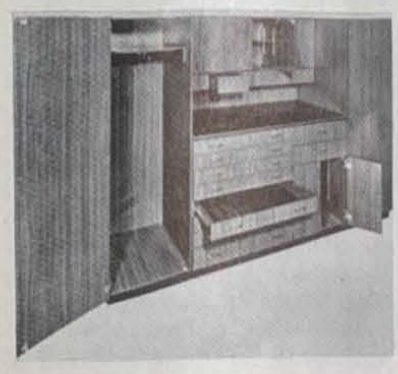
Hollow glass tile panels in a soft shade of green are now available for incorporation in the Thinlite curtain wall system. Color, which is processed in the glass, is expected to add a cool appearance to interiors and help reduce sun brightness and heat. Tiles are offered in two sizes: 12-in. square and 6x12-in. — Kimble Glass Co., Owens-Illinois. **(Item No. 9)**

pecan hardwood paneling

The hardy pecan, formerly strictly an orchard tree, has now joined the ranks of construction products in the form of a hardwood paneling. Veneers are sliced from the heartwood, a warm reddish brown accented by darker shades. Paneling has a triple coating of baked-on finish said to resist scuffs and grease spatters.—Georgia-Pacific Corp. **(Item No. 10)**

modular church furniture

Modular cabinet units designed especially for the church sacristy and vestry can be used individually or combined to meet most any custom requirements. Units include wardrobes, adjustable shelves and drawers, all surfaced inside and out with Nevamar plastic laminate that resists scars and stains and does not need waxing or refinishing. Interior plastic surfacing provides snag-free storage for vestments, clothing and other articles. Six wood grain patterns are offered. —National School Furniture Co. **(Item No. 11)**

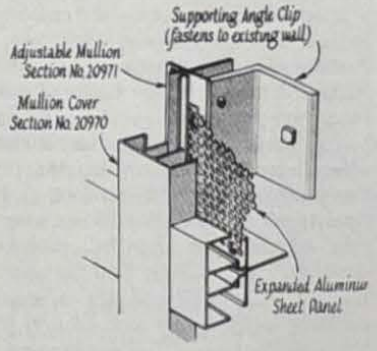


aluminum-asbestos roof

A siliconed aluminum-asbestos roof coating in several colors is being offered by Monroe for application on asphalt and asbestos shingles or composition roofs. As the coating sets, the aluminum flakes rise to the surface to form a reflective insulating shield permanently bonded to the roof surface. Siliconed Asbestolite also can be used on concrete block, metal and stucco walls or on asbestos cement siding.—The Monroe Co., Inc. **(Item No. 12)**

store modernization

A relatively low cost system for modernizing aged store fronts and commercial buildings has been developed



by Reynolds. Called the standard expanded grid system, it consists of expanded meshlike aluminum sheet in natural or colored finishes fastened to a grid of aluminum mullions. Sheet permits light and air to pass through the facing material so that windows on upper stores are not sealed off. Standard aluminum sheet or extrusions also can be used in the system. Cost is estimated at about $3 per square foot installed. — Reynolds Metals Co. **(Item No. 13)**

nailess bridging

Nailess compression steel bridging eliminates fitting and cutting or split bridging and requires no nails, as the name indicates. Bridging can be installed at the rate of a pair per minute after the floor is laid. It tightens as the floor load is applied due to the sharp pointed ends being forced into the joists. Bridging is manufactured from cold rolled steel treated to resist rust. Distribution on the Pacific Coast is expected soon.—Rockford Fastener Co. **(Item No. 14)**



colorful fencing

Latest suggestion for softening the institutional look of chain link fencing consists of a shaped aluminum strip which locks into the valley of the fencing in a variety of patterns and colors providing complete or semi-privacy. Panelweve comes precut for all heights of fences; has a baked enamel semigloss finish in seven colors; and snaps firmly into either the standard 2-in. mesh or the newer 2¼-in. mesh.—All Products Co. **(Item No. 15)**

roof insulation nail

A nail designed especially for anchoring fiberboard insulation and vapor barrier to flat or sloped metal roof decks is being marketed under the trade name Riv-Nail. In addition to eliminating the need for adhesive applications, the nail safeguards against delamination. Riv-Nail is driven with a regular hammer. Because of an hermetic sealing feature, it prevents vapor migration and bitumin leakage at point of penetration. A number of insurance rating agencies have accepted the fastener for Class 1 construction.—ES Products, Inc. **(Item No. 16)**

vinyl-steel window

American rights to produce and distribute a vinyl-clad steel window for monumental buildings have been purchased by Fenestra and Hope's Windows from a German manufacturer. Tubular steel skeleton of the window is covered by ⅛-in. thick vinyl which provides a permanent insulating and sound deadening barrier. Three separate vinyl seals are built into the window perimeter to prevent passage of air and sound. Ferroplast assembly procedure makes it possible for frame and sash colors to match or to contrast and for inside and outside colors to differ. Window will be available in three styles most suitable for monumental buildings.—Fenestra, Inc. **(Item No. 17)**

materials from seven Washington plants in Bellevue, Everett, Tacoma, Olympia, Centralia, Aberdeen and Shelton. It is a subsidiary of Boise Cascade Corp., Boise.

● **The National Plastic Products Co.** has selected Frank J. Krikava as sales representative for Saranspun drapery fabrics in the western states. Krikava, who has been associated with the interior decorating field in the Los Angeles area the past 12 years, will work out of the company's Long Beach, Calif., office.

● **Asbestos Bonding Corp.,** Napa, Calif., subsidiary of Clute Corp., has appointed James R. Price to direct product development and research. Price has been associated as partner, vice president and sales manager with Star Stucco Products, Inc., Fresno, Calif., for the past five years.

● **Sabre, Inc.,** has been formed to manufacture aluminum building products in Denver. The company is headed by Henry C. Cope, former manager of architectural and building products sales for Reynolds Metals Co. in Denver. Products to be manufactured will include baked enamel residential aluminum siding and accessories. The company will have its own distribution in the Denver area. Dealers will be appointed in Arizona, Wyoming, Montana, Utah, Idaho, New Mexico and Colorado. Plant is at 4990 E. Asbury Ave.

● **McKinney Manufacturing Co.** appointed John Whitehouse to head West Coast regional sales office of the builders' hardware firm in San Francisco. Since 1952 he has been San Francisco branch sales manager for a firm specializing in the hardware and millwork fields.

● **Jaywoth Permaroof, Inc.,** will build a completely automatic factory for the production of colored concrete roofing tiles near San Francisco. Machinery for tile production will be made by Adams Powel Equipment Ltd., of England while the automatic racking and curing systems will be built by Columbia Machine, Inc., Vancouver, Wash. The plant will consist of a conveyor system on which oiled aluminum pallets carry the tiles through different machines completely untouched by hand until they are finished and ready for the stock yard. In addition two semiautomatic machines will be installed for production of special shapes.

● **Ramset Fastening System** has named Warren Duggan Sparks as district sales representative in the Los Angeles area. He formerly was branch manager for Thieme Construction Supplies, Inc., Fontana, Calif.

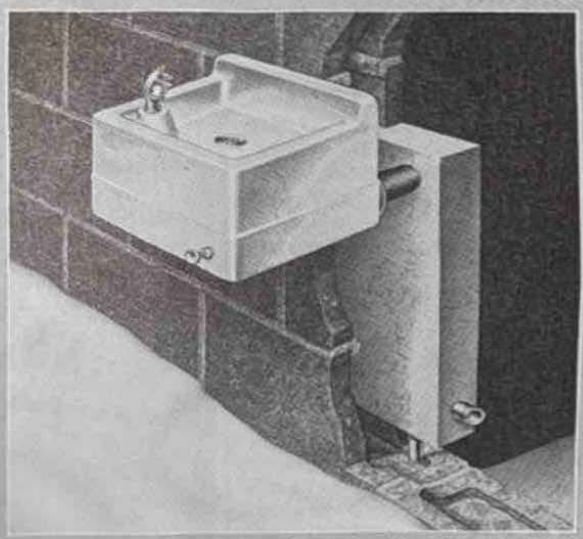
● **Certain-Teed Products Corp.** plant in Tacoma, Wash., was one of three company installations awarded trophies from the Asphalt Roofing Industry Bureau and the National Safety Council for operating throughout 1959 without a lost-time injury.

● **Mearl Chemical Corp.** has appointed Elias Morris & Sons Co., Salt Lake City, as franchised erector for Mearlcrete foam concrete in roof decks and floor fills. The Utah firm will serve the entire state plus the southeastern portion of Idaho and eastern Nevada.

● **Plan Hold Corp.** has increased its warehousing capacity at South Gate, Calif.

● **Weyerhaeuser Co.'s** Silvatek Division has named Roddis Plywood Corp. as distributor for the division's panel products.

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• **Olympic Stained Products Co.,** Seattle, reports the sale of its controlling interest to stockholders of Seattle Cedar Lumber Manufacturing Co., operating as a separate organization under new management. Alan F. Black, secretary-treasurer of Seattle Cedar, has been named president of Olympic; John N. Anderson, executive vice president and general manager; and George Oistad, general sales manager. Philip W. Bailey, founder of the firm in 1933, will remain on the board of directors.

• **The Republic Supply Co. of California** has named George Cadet resident salesman for the new $250,000 Sacramento branch of the waterworks and pipelines supply firm.

• **Kohlenberger Engineering Co.,** Fullerton, Calif., has appointed Joseph T. Noland and Robert E. Britton as project engineers for designing, supervising and inspecting installations of industrial refrigeration equipment.

• **The Dow Chemical Co.** has begun construction on the first unit of its Ygnacio Valley Research Center near Walnut Creek, 30 miles from San Francisco. The center will be built in stages, the first housing eight chemists. Eventually it will be expanded to provide facilities for 500 scientists and technicians. Architect is G. M. McCue.

ASSOCIATIONS

• **Producers' Council** officers nominated for the October election include Donald A. Proudfoot, marketing manager for Simpson Timber Co., Seattle, who has been slated to become first vice president. Elmer A. Lundberg, director of architectural services for Pittsburgh Plate Glass Co., has been nominated for the presidency.

• **Gypsum Association** has appointed Lloyd H. Yeager as western manager with headquarters in Hollywood, Calif. Yeager is a registered professional engineer with over 12 years of sales engineering experience in the gypsum and construction industry fields.

• **Concrete Products Association of Washington** recently elected officers and awarded two honorary memberships at its annual meeting in Gearhart, Ore. New president is Robert W. Hutton, general manager of Bellingham Builders Supply Co. Other officers: H. James Lindstrom, Seattle, vice president; H. L. James, Longview, secretary; Don Jordan, Seattle, treasurer. Honorary memberships in recognition of their service to the concrete products industry went to Charles Delling, formerly with Puyallup Shope Brick Co., and John R. Sherman, Yakima Cement Products Co.

• **California Redwood Association** has shifted Charles S. Dickinson from field work supervisor to secretary of the promotion committee. He will also serve as chairman of the staff promotion planning group, replacing Owen T. Stebbins, who has resigned to join the sales staff of Pacific Lumber Co. Putnam S. Robbins has been appointed to the newly created position of coordinator of market research.

• **West Coast Lumbermen's Association** lost its Washington, D.C., manager when Cecil A. Luce, 58, died of a heart attack in June. A native of Newport, Wash., he spent 25 years in the western pine industry.

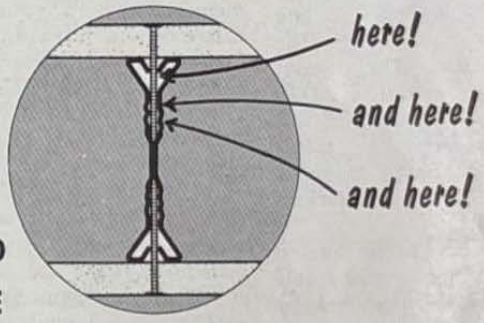
• **National Plywood Distributors Association** has elected Dean Trumbo of M. Trumbo Co., Portland, president for 1960-61. Grant Dixon, Spokane, was named a director.

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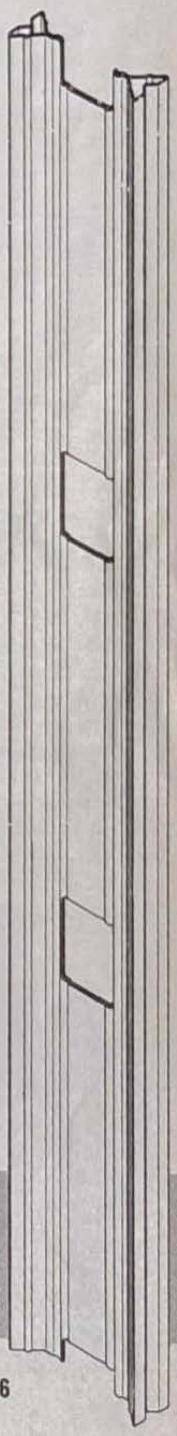
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A monument for F.D.R.: what will the competition produce?

The Franklin Delano Roosevelt Memorial Competition now underway promises to be one of the largest ever held, with registrants from 46 states, headed by New York and California. Albert Bush-Brown, associate professor of architectural history at MIT, discussed the difficulties that face competitors in a recent issue of The Reporter. The majority of his remarks are printed here.*

Lacking great artists and great patrons, a nation may flounder in fatted prosperity, but it cannot hymn its heroes or long remember the battles it fought. That a national will needs memory, that memory in turn needs art, Americans have long believed. Washington itself occasionally speaks majestically, nowhere better than on the long axis from the Capitol through the Washington Monument to the figure of Lincoln enshrined on the shore of the Potomac. The current competition for a memorial to F.D.R. in Washington, whose final result will be announced in December, offers modern artists a challenge to speak nobly of renewed faith in American ideals.

The challenge has been greeted lightly, even derisively, by many able artists. Their posture might readily be dismissed as mere indifference to contests for talent these days when art galleries sell almost anything and the vacuous halls of commerce scream for decoration. Unhappily, their responses cut deeper, revealing the dilemma of artists in a prodigal, often hedonist and unillusioned America which some artists occasionally protest but more merely reflect and exploit.

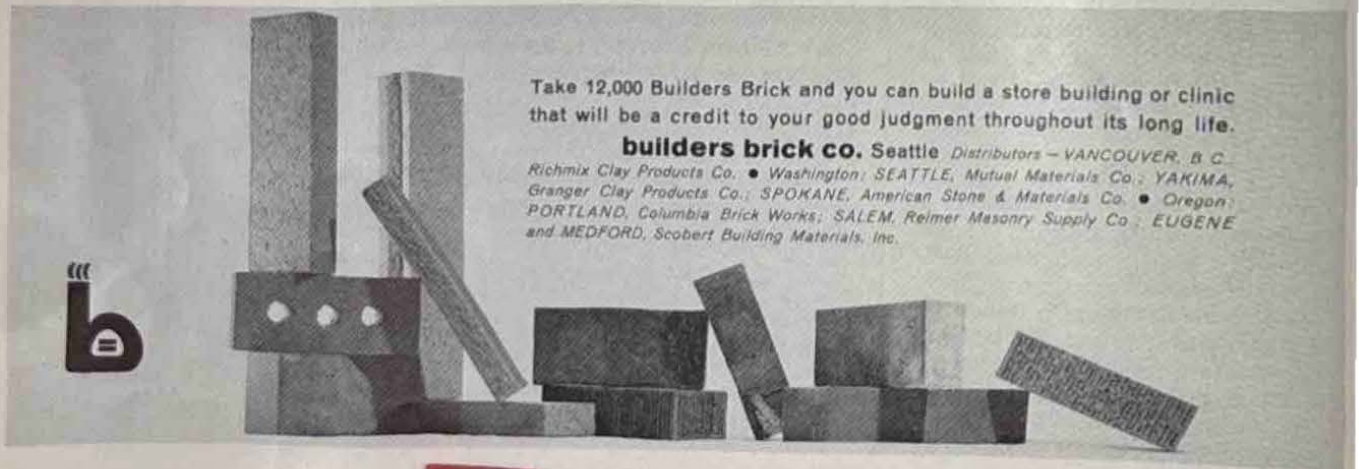
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The competition has a single, deceptively simple requirement: that the essential Roosevelt be commemorated by a memorial in West Potomac Park, between the Lincoln and Jefferson Memorials. Nothing is said about how this should be done and the competitor has complete freedom to interpret the theme. What in this complex man was truly **essential?** How should it be expressed. What will stand well on a difficult site, the featureless, traffic-ridden southwest quadrant left by formidable axes; what will survive the powerful monuments to Lincoln, Washington, and Jefferson? Moreover, what is meant by the request for any appropriate form, provided it be harmonious in design with its classical neighbors? And, not least troublesome, can a memorial say anything about the man's beliefs, his warmth for people, his courage, his sense of destiny, his code of generosity, his faith in the unity of mankind? Not since the 1920s have artists faced as difficult a problem.

How much simpler it all seemed then: A generation ago, architects would have used the language of Athens or Rome and, in the tradition of Botticelli, painters would have offered Mars laying aside his armor and touching the flank of Venus to suggest that war's turmoil was over and peace had arrived in the land. But now the gods are dead — dead long before our symbols acknowledged their passing.

Dead though the old symbol is, the big classic temple sheltering silent inscriptions, a sculptural portrait and pale allegorical paintings remains the image of a memorial for most of the American public, including Congress. One more such Golden Calf raised to Roosevelt would be a national disaster. No classic building, nor indeed any building, can be made to stand between the Jefferson and Lincoln Memorials without interfering with them and disturbing the vistas from the Washington Monument. And beyond the demands made by the site, American society clamors for its own stimulants, the rhetoric of inspiration, the message of discontent, not classical soporifics. To speak of man today, our symbols must be fashioned out of our elemental insight into earth, fire, water, and air; they stand an excellent chance to do so if official patronage will only refrain from insisting upon the columns, obelisks and spires of yesterday — but little recent evidence suggests that the public and Congress, who must finance F.D.R.'s monument, are eager to allow the art of our times to shape an environment expressive of modern science and humanism.

Indeed, however hopefully we watch the stages of the competition, it is difficult to suppress our trepidation. Some young artists, whom competitions are expected to discover, may remain indifferent. A Boston sculptor, unvexed, shrugs the whole challenge aside: "I'm feeling very un-Roosevelt—not pro, not anti, just un." New Yorkers and Chicagoans are making nobler starts: momentarily, their imaginations race through the vocabulary of modern form, seeking a conoid or paraboloid to drop among the classic giants on the landscape. Unable to deliver a shape not already defiled by tawdry uses, they dream of restful gardens and dashing fountains, surely a statue and perhaps a pedestrian path fashioned as a political way-of-the-cross with inscriptions of the Four Freedoms and Fireside Chats: or, on a modern note, beacons and chimes and pyrotechnic, chromatic chords to ruffle the night. As the magic lights and sounds subside, they give way to humor: a cigarette holder tilted jauntily at the sky; Fala,



ears cocked at the loud speaker on the White House hearth; a restroom, the Jefferson Memorial—Wright said it was that!—with the Roosevelt Memorial Restaurant attached and a sign, "Caterers to Royalty, Hot Dogs Our Specialty." Such cartoons, the banter of the drafting room, are not intended to be blasphemous; they are the tension-breaking release for energies not yet focussed on a viable theme.

The false starts, the hesitancies, the humor do not proceed from dissatisfaction with the competition's sponsoring commission, which is estimable, nor with the constituency of the jury for awards who, in this instance, are known to aim at quality. Rather, the artist is suspicious of American taste, he is uncertain of Roosevelt's meaning and he is baffled by unsolved problems within his own art.

The most recent evidence of national memorial taste, the Taft carillon beside the Capitol, fails to hearten the artist who relishes the beautiful natural geometries modern science discloses, who cherishes fine proportions and scale. It seems to be the latest banality in a line leading backward through General Grant's Tomb at New York to Greenough's statue of Washington, an enthroned Roman god that once occupied the Capitol but now, mercifully, presides over a lesser room in the Smithsonian.

Nor, seeking happier evidence, can the artist sense a nation that endows the reverable with permanence. The senescent appliance, the obsolete die, the oscillating fashion in automobiles and haberdashery are tokens of a Kleenex civilization that uses and discards. Even the benevolent art occasioned by the private corporation's marriage with advertising does not often provide permanent, fine spaces; rather, from its entrance lobby to its warren of jumbled rooms behind each receptionist, the new office building is a house of cards with flimsy, dismantleable partitions, waiting to be swept away and rearranged for tomorrow's occupant if he will pay more for each square foot. The real payoff, ironically, comes in Washington itself, indeed on the site now proposed for the new Memorial, where ugly office buildings, labeled "Temporary," have defaced the Mall since the First World War.

Meanwhile, architects have seen some of their finest heirlooms disappear. True, we ocassionally recall our past: we prop up a log cabin, repoint the bricks of the Moravian Village at Winston-Salem and rebuild a Williamsburg that never existed. But those reminiscences are seldom memorable for their quality as form.

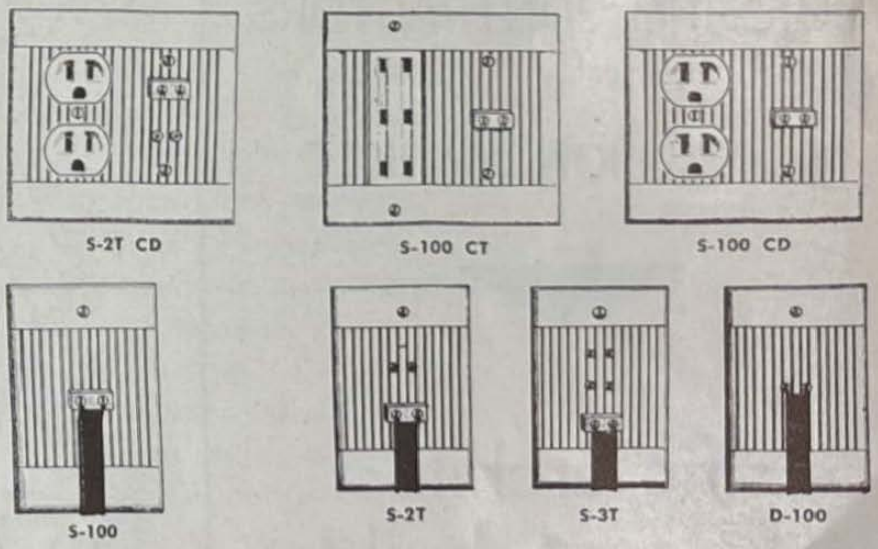
But even when we do try to absolve our national sin by awarding permanence to a few transcendent ideas, public patrons of the arts show little understanding of quality. So flagrantly confused is Washington on this matter that the monument to Iwo Jima was aimed at faithfully reproducing a scene that was superbly stirring as a photograph but lamentably vulgar as a colossus. Art in our day does not seem to survive federal patronage.

Fine artists and architects throughout the country still smart from the blows they received at the hands of a Congress or federal commission intent upon matching amateur taste against the prize-winning design for the Smithsonian Institution (rejected), the professional advice not to move the East Front of the Capitol (rejected), the brilliant chapel for the Air Force Academy (accepted but after prolonged controversy). Meanwhile Pentagons and Taft Memorials and a hybrid classic Smithsonian slipped easily into the Washington scene, as though quality were a function of style, a hallmark especially of classic style.

But if the style of the new memorial is expected to harmonize with that of its classic neighbors, then truly the competition is lost, as we learn on every college campus where mistaken ideas of coherence among buildings force modern architects to simulate some Gothic Old Main or Founder's Hall. Coherence is a function of balances, rhythms, proportions, scales —composition, in short, in whatever style. Style is society's language of mass and plane and space as current beliefs and current technology shape them. If we seek to be represented by quality, we must now encourage artists to compose skillfully in today's language. Unfortunately, that condition for great art has already suffered, for, however its jury may interpret "harmony," the new competition is open only to Americans, therefore to a search not for quality unqualified, but for American ideas and, we suspect, for an "American" style which, in spite of the awards the excellent jury may make, may still result in one more mute, classical monument.

That possibility for disappointment intensifies the artist's concern over the "essential Roosevelt" who is to be memorialized. The most powerful monuments stand as testimonials to a faith, to a courage, to a tragedy at its climax. A barrow or cairn marks the hour when heroism hallowed the soil. But Roosevelt had no summit hour, no moment of promise snatched by premature death, no tragic embrace with an assassin. Nor did he

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mark a place of national disaster.

Still, monuments may speak of a man, even if they are great national institutions. The Colosseum and Amiens Cathedral are monuments, though their memorial function is history's abstraction, just as the rusting barbed wire and grim barracks at Auschwitz and Buchenwald are now monuments to inhuman brutalities, demonic tortures heretofore assigned to gods alone. But none is personal; all are testimonials to ideas and surely that suggests hope for the Roosevelt Memorial.

In fact we already have his monuments: if not the UN, what better than the great Hiwassee Dam of the TVA? If such admirable instruments of his program for social welfare must now be implemented by a monument at Washington, why not make it a useful one? The ideas F.D.R. stood for suggest a memorial institution: a center for the study of urban problems, for example, since no federal agency has continued those brilliant studies of the metropolis begun by Roosevelt and his uncle, Frederick Delano, 25 years ago.

That an institution dedicated to an idea can be beautifully housed, we know from William Wurster's Center for Advanced Study in the Behavioral Sciences at Palo Alto and Kenzo Tange's Peace Hall at Hiroshima. Hopes for a similar success at Washington cannot be entertained, for architecture cannot arise until the institution demands it and, furthermore, the Roosevelt Memorial's site, while entirely ample, is incompatible with useful functions. Solely in being monumental, the site suggests, the memorial will gain sufficient utility—which conceals an irony: that the champion of an American welfare state, the chief architect of PWA-sponsored schools, post offices, museums, libraries, and housing projects throughout the nation, will be denied an opportunity to be memorialized by an institution epitomizing his concern for social problems.

Thus our artists are driven to the treacherous and nebulous concept of a memorial intensely expressive of Roosevelt the Man, not his ideas. Possessed, as no classic or medieval people were, with the idea that the individual is of godly historic consequence—not the archetype of a leader, a saint, or a prince, but a hero deserving veneration — we naturally jump at the Roosevelt biographies to find some telling portrait — some image that captures the man of great personal courage, the man who had a way of quelling fear. Yet the time is too soon for the image to rise untainted by frailties, to shake the slander which is the presidency's ordeal. We see now, a majestic Lincoln purified of frontier brawls, family dissensions and political tactic, and it is the function of art so to transform reality, to hallow it, to dramatize it, to make the very heavens pour out fire when mad King Lear lurches into the night.

Art is not fidelity: it is myth-making, and although the myth already popularly embraces Roosevelt as stayer of the Depression, it has not yet decided between the man of quick and noble decision and the disputed man of Yalta—nor have we assurance that our long experience in abstract art has nurtured sculptors and painters who should dare to declare the myth. At worst, we shall gain an insipid portrait like the Roosevelt Monument in London's Grosvenor Square.

Recent visual arts, which promise a great future, have not often solved problems of monumentality successfully. Too often the architect forgets the lesson of the Lincoln Memorial—that a building may be merely a serene vessel for a fine statue—and aims instead at an arresting plastic form intended to suffice as its own sculpture, even if it is a contrived and vapid Trylon and Perisphere.

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Still, when he seeks symbolism in an unusual geometry, the architect receives no mandate that society will protect his symbol's integrity and that it will not appear tomorrow as the emblem of a gasoline station or diner. Attempting to avoid such pilfering, the architect may be driven to invent something unique, refusing to subordinate himself and succumbing to that quest for originality which prevents the perfecting of a new Parthenon through centuries of use. There is now some evidence in the buildings of Minoru Yamasaki and Edward Stone that modern architecture too has passed into a classic stage, but there is less evidence that any architect in America has the skill of the Finn, Alvar Aalto or the Dane, Arne Jacobsen, in handling the syncopated rhythms and occult balances that the site for the memorial requires.

Furthermore, relating the arts remains troublesome. With good reason, the modern painter has sought the riches of intense visual experience and he has denounced the kind of allegorical painting that appears in the two unfortunate side chambers in the Lincoln Memorial.

Lacking a base in a common metaphysics, the arts today are prevented from giving full and exact expression of meaning. When they are not merely decorative, they offer personal vagaries as universal truths or, seeking a universality, they present white emptiness as a bland consensus, a void of timid noncommitment. Yet, rightly designed, a void, perhaps, a meditative rest from restless Washington, might be the best memorial to Roosevelt: a quiet plaza with a simple sculpture stating a powerful idea, like the abstract, steel-cage "The Political Prisoner" in London, made by the Italian, Mirko. Preferably such "voids" should be carved throughout urban America, but the competition does not suggest that further dream.

Only by trying will we find the language to speak our beliefs for our time, not our grandfathers'. The competition is bound to result in failure if its artists and patrons fail to see that the site, its neighbors, the subject and the potentialities of modern art all demand a new, not a traditional monument. If, as I suspect, the public taste may still prevent a fine design from being built, the competition is nonetheless worthwhile, for it may serve, as I intend my remarks, to provoke a climate receptive to admirable national art. That stimulus should now be kindled nationally, for it has been the glory of the artist that he can outleap his time and create the wonderful, even where critics expect only the probable.

pacific architect & builder

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on deck at p

It is apparent that lumber yard st tures for the most part do not sp from an architect's drawing b and when such a building typ cited for its design qualities, i even more of a rarity. Next mo we'll illustrate why the jury wh reviewed some ninety entries in recent San Diego Chapter, AIA, c petition had such high praise for this kind of project, referring to "expression and capitalization of very character of a lumber yard self." Other design features will clude a church in Colorado and outstanding research laboratory fa ty in the Northwest.

A heat pump installation—one room—in a 16-room elementary sc will lead off the methods and terials section. And for those who faithful readers of the contents p the article entitled "Electronic Controlled Louvers Cool Los Ang Building" was the victim of l minute rescheduling and will app in October.

plaud

Los Angeles architect Henry Wright has the honor of having intermediate school in the Norwa La Mirada City School Distr named after him. His firm, Kistn Wright & Wright, has designed schools in the district.

bucky and the russia

A lecture by R. Buckminster Ful may not always be easy to follow b it is bound to be punctuated wi provocative ideas. The talk he ga at the University of Colorado in Ju was no exception. Referring to h own recent visit behind the Iron Cu tain, he predicted that within 10 yea the Russians will be prefabricatin whole cities and setting them dow wherever they wish. Furthermor Fuller expects the Soviets to cov their prefabricated cities with stru tures similar to his own geodes domes so that the bitter Russian wi ter weather can be completely con trolled.

The USSR is going to use its sur plus of skilled manpower and tools t improve the housing of its own people he said. "Unless we wake up, th Russians will be offering people better life while we're still offerin armaments." America has plenty o design talent, he admitted. The prob lem is to recognize the Russian chal lenge in time and beat them to th draw. R.E.K

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"Problem Solved in Graceful and Economical Manner"

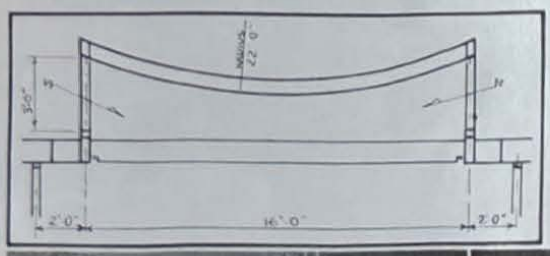
Elimination of the cold "institutional" look was the achievement of Paul H. Kirk & Associates, architects for the Northgate Clinic, Seattle, Washington. "We feel the laminated wood used in the inverted vault for the waiting room ceiling solved our problem in an economical and graceful manner," states Paul H. Kirk, "and other laminated wood in entries and exposed decking areas also gave us a lightness of scale and permanence of surface that are most remarkable."

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Group Health Cooperative, Northgate Clinic, Seattle, Wash. Architect: Paul H. Kirk, F.A.I.A. & Associates, Seattle, Wash. Constructed with 31 Rilco laminated wood curved members 3" x 9¾" in section with 22" radius, 10 flat beams 3" x 11⅞" and 3" x 9¾" in section.





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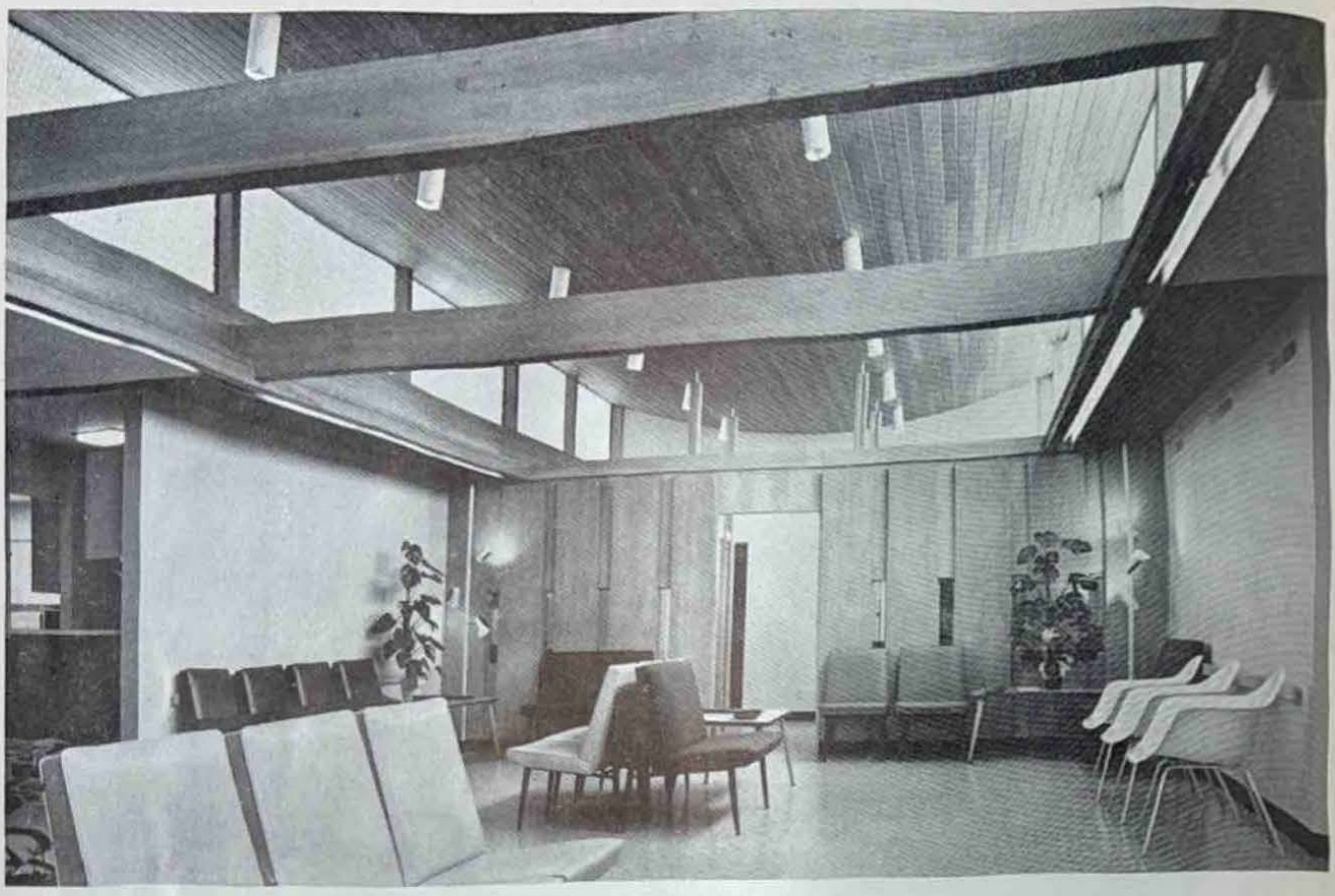
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COVER: Western Lumber Co. Office Building, San Diego (p. 14)—Johnson & Anderson, Architects; Douglas Simmonds photo.



"Problem Solved in Graceful and Economical Manner"

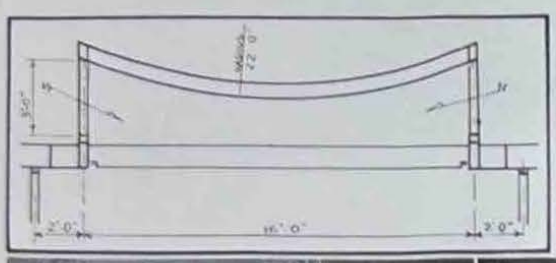
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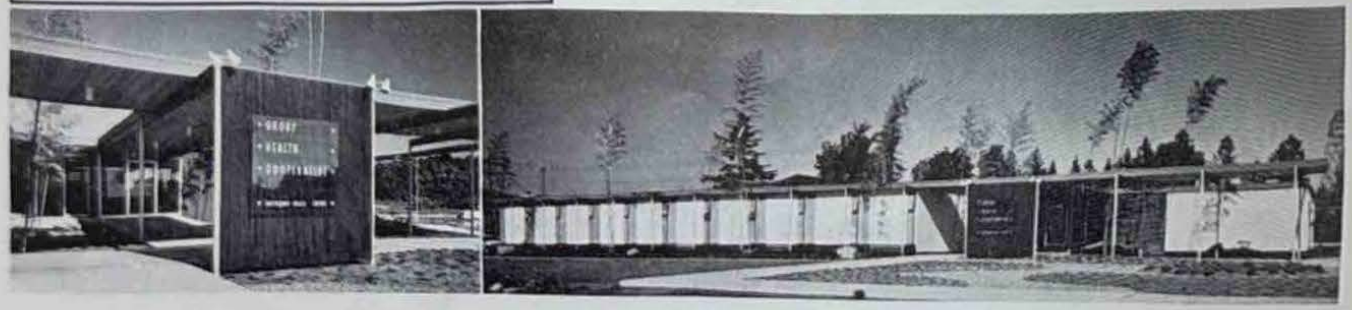
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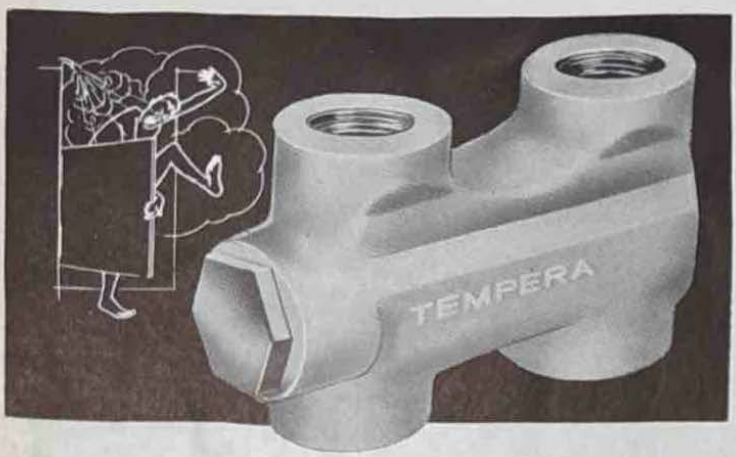
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Dollar volume up $25 million in West

Building permit volume for the 13 western states in August totals $351,558,132, an increase of $25.5 million over the same period a year ago. Gains are centered in five states. Oregon, aided by an exceptionally large Portland total, is up $13 million; Hawaii, $6.8 million; California, $6.4 million; Washington, $4.5 million; and Alaska, $3.8 million. Eight state totals are below August 1959, although none by a substantial margin. Utah and Arizona each are down $2.1 milion; Colorado, $1.6 million; New Mexico, $1.4 million; Montana, $598,000; Nevada, $570,000; Idaho, $502,000; and Wyoming, $13,000.

Top 15 agencies

Among the top 15 agencies, eight are in California; two each in Washington and Arizona; one each in Oregon, Hawaii and Colorado. A number of partcularly large individual permits in Portland, $7.5 million for the Post Office Annex, $6 million for the Hilton Hotel and $2.2 million for the Oregon Medical School Research Laboratories, boosted the Portland total to a $19.8 million total and third place on the list.

	August 1960	August 1959
1. Los Angeles	$60,122,278	$52,329,175
2. Los Angeles County	20,824,159	28,379,947
3. Portland	19,830,290	4,545,445
4. Honolulu	13,386,497	7,052,965
5. King County, Wash.	12,178,867	11,662,506
6. San Diego	12,040,208	15,069,575
7. Sacramento County	11,381,500	10,880,940
8. San Diego County	10,602,800	11,691,700
9. San Jose	10,123,462	17,251,219
10. Phoenix	9,510,304	9,265,091
11. Seattle	8,025,068	8,408,914
12. Orange County, Calif.	7,951,465	9,003,052
13. Denver	6,831,895	8,543,499
14. San Francisco	6,175,403	7,299,549
15. Maricopa County, Ariz.	6,024,338	11,563,399

Eight-month totals

Dollar volume for the first eight months of 1960 is $2,515,586,120, some $61.7 million below the same period in 1959. Box score by states shows seven running ahead of last year, led by Hawaii with a substantial $43.7 million increase. Oregon is $12.9 million ahead; Alaska, $11.2 million; Nevada, $10.9 million; Arizona, $9.6 million; Wyoming, $3.4 million; and Montana, $272,000. States trailing last year are California, down $75.2 million for the eight months; Washington, $37.5 million; Colorado, $19.2 million; Utah, $8.4 million; New Mexico, $7.3 million; and Idaho, $6.1 million.

Analysis of selected areas—August

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$12,212,511	$3,129,390	*$4,283,100
Orange County	5,196,009	2,291,075	119,000
Sacramento County	8,322,146	770,941	2,096,638
Las Vegas	1,937,002	930,179	47,315
Denver	1,161,885	2,111,720	
Seattle	2,530,796	5,264,717	52,000
King County	8,077,220	1,416,510	2,492,250
Honolulu	7,348,541	3,608,231	2,278,055

*Does not include $267,824 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for August

CALIFORNIA	Aug. 1960	Aug. 1959
Alameda County	$ 3,208,000	$ 1,393,956
Anaheim	4,403,370	4,071,972
Bakersfield	1,858,260	754,486
Burbank	776,773	892,911
Contra Costa County	4,385,120	4,117,536
Fresno	2,170,238	2,113,649
Fullerton	2,170,811	748,166
Glendale	2,092,861	1,203,132
Inglewood	1,721,938	653,570
Long Beach	3,603,315	3,476,450
Los Angeles	60,122,278	52,329,175
Los Angeles County	20,824,159	28,379,947
Oakland	3,884,042	3,361,182
Ontario	826,879	929,186
Orange County	7,951,465	9,003,052
Palo Alto	1,367,463	1,641,784
Pasadena	1,227,459	2,293,553
Pomona	4,173,667	846,065
Richmond	667,605	756,674
Riverside	1,647,619	804,946
Sacramento	3,713,515	2,986,509
Sacramento County	11,381,500	10,880,940
San Bernardino	1,224,908	1,556,945
San Bernardino County	4,299,425	5,442,905
San Diego	12,040,208	15,069,375
San Diego County	10,602,800	11,691,700
San Francisco	6,175,403	7,299,549
San Jose	10,123,462	17,251,219
San Mateo	1,882,492	1,422,603
San Mateo County	1,489,942	1,187,501
Santa Ana	4,537,270	2,612,540
Santa Monica	1,024,548	1,318,217
Stockton	1,102,534	715,312
Sunnyvale	1,855,548	2,799,610
Torrance	4,026,089	4,491,164
West Covina	624,275	1,213,640
TOTAL	**$205,117,241**	**$198,708,263**

OREGON	Aug. 1960	Aug. 1959
Albany	$ 379,625	$ 209,036
Astoria	8,410	26,463
Baker	143,808	141,600
Bend	89,975	89,032
Coos Bay	356,547	35,935
Corvallis	169,409	300,020
Eugene	801,335	651,052
Grants Pass	503,450	146,485
Gresham	39,080	81,300
Hillsboro	183,719	793,784
Klamath Falls	67,532	140,500
LaGrande		127,570
Lane County	1,262,814	1,665,230
Medford	314,500	258,145
Multnomah County	2,889,883	2,395,123
North Bend	68,380	180,168
Oregon City	133,600	33,255
Portland	19,830,290	4,545,445
Roseburg	117,300	849,400
Salem	1,994,891	3,722,784
Springfield	114,408	100,329
The Dalles	101,875	58,600
TOTAL	**$ 29,570,823**	**$ 16,551,256**

WASHINGTON	Aug. 1960	Aug. 1959
Aberdeen	$ 33,271	$ 95,647
Anacortes	32,720	80,601
Auburn	90,650	139,120
Bellingham	285,670	390,295
Bremerton	118,125	413,610
Centralia	83,315	70,664
Chehalis	42,711	25,912
Ellensburg	47,660	48,450
Ephrata	11,495	5,190
Everett	230,202	254,330
Kelso	53,163	36,100
Kennewick	110,850	115,550
King County	12,178,867	11,662,506
Kirkland	89,650	68,000
Longview	180,201	630,650
Moses Lake	180,084	58,400
Olympia	5,648,789	327,426
Pasco	264,475	108,292
Pierce County	2,079,955	1,570,404
Port Angeles	67,260	109,650
Puyallup	84,835	108,075
Seattle	8,025,068	8,408,914
Spokane	999,390	2,734,676
Spokane County	1,603,480	1,783,630
Tacoma	2,468,264	2,192,520
Vancouver	776,435	614,850
Walla Walla	405,451	87,051
Wenatchee	183,344	131,772
Yakima	847,396	431,990
TOTAL	**$ 37,222,764**	**$ 32,704,275**

ALASKA	Aug. 1960	Aug. 1959
Anchorage	$ 5,203,374	$ 1,393,515
Fairbanks		
Juneau	6,400	23,750
Ketchikan	70,400	6,300
TOTAL	**$ 5,280,174**	**$ 1,423,565**

IDAHO	Aug. 1960	Aug. 1959
Boise	$ 564,664	$ 290,947
Caldwell	47,550	201,545
Coeur d'Alene	521,419	35,300
Idaho Falls	441,877	1,161,520
Jerome	13,000	15,800
Lewiston	159,227	103,083
Nampa	65,375	199,878
Payette	15,530	32,050
Pocatello	142,972	400,323
Sandpoint	17,500	30,100
St. Maries	17,000	9,000
Twin Falls	144,670	274,200
TOTAL	**$ 2,150,784**	**$ 2,653,746**

MONTANA	Aug. 1960	Aug. 1959
Billings	$ 3,525,350	$ 2,027,250
Bozeman	98,000	1,451,240
Butte	38,950	30,500
Glasgow	69,500	63,500
Glendive	8,250	776,900
Great Falls	960,324	632,514
Helena	146,210	515,305
Kalispell	137,475	65,250
Lewistown	101,600	66,700
Livingston	15,825	29,500
Miles City	46,246	99,837
Missoula	128,370	115,795
TOTAL	**$ 5,276,100**	**$ 5,874,341**

WYOMING	Aug. 1960	Aug. 1959
Casper	$ 609,044	$ 1,332,020
Cheyenne	1,494,118	847,153
Sheridan	142,785	80,026
TOTAL	**$ 2,245,947**	**$ 2,259,199**

COLORADO	Aug. 1960	Aug. 1959
Aurora	$ 1,164,132	$ 957,639
Boulder	1,097,380	736,787
Denver	6,831,895	8,543,499
Englewood	856,563	395,644
Fort Collins	645,672	621,637
Grand Junction	137,479	254,850
Greeley	439,526	447,575
Pueblo	1,127,101	1,987,123
Trinidad	30,195	26,348
TOTAL	**$ 12,329,943**	**$ 13,971,104**

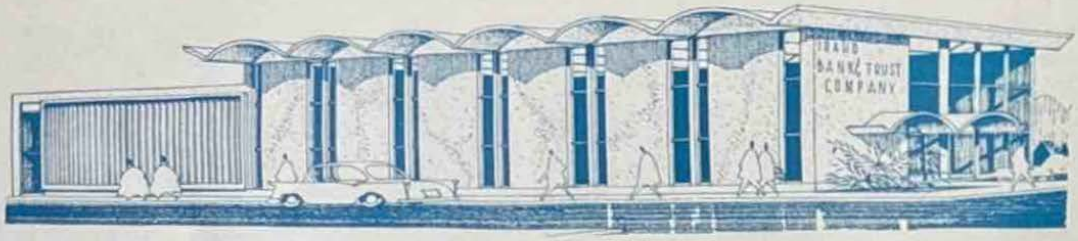
UTAH	Aug. 1960	Aug. 1959
Logan	$ 98,100	$ 269,300
Murray	214,200	129,100
Ogden	1,660,290	1,026,600
Provo	260,525	2,766,150
Salt Lake City	2,055,653	2,234,013
TOTAL	**$ 4,288,768**	**$ 6,425,163**

NEVADA	Aug. 1960	Aug. 1959
Elko	$ 102,980	$ 57,600
Las Vegas	2,952,302	1,949,990
Reno	822,031	1,888,071
Sparks	50,128	601,907
TOTAL	**$ 3,927,441**	**$ 4,497,568**

ARIZONA	Aug. 1960	Aug. 1959
Douglas	$ 225,166	$ 16,188
Flagstaff	1,109,762	200,264
Glendale	147,850	169,050
Maricopa County	6,024,338	11,563,399
Mesa	1,812,758	1,024,578
Phoenix	9,510,304	9,265,091
Tucson	3,930,749	2,739,625
Yuma	81,910	38,550
TOTAL	**$ 22,842,837**	**$ 25,016,745**

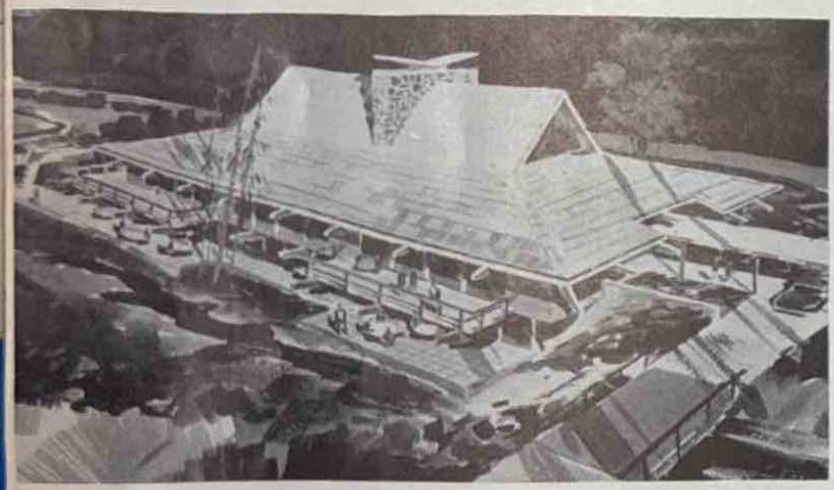
NEW MEXICO	Aug. 1960	Aug. 1959
Albuquerque	$ 3,255,525	$ 5,448,865
Carlsbad	140,950	247,400
Clovis	406,684	473,990
Gallup	466,745	904,530
Hobbs	427,000	208,990
Las Cruces	224,750	263,000
Roswell	1,018,904	557,750
Santa Fe	853,863	181,590
TOTAL	**$ 6,794,421**	**$ 8,286,115**

HAWAII	Aug. 1960	Aug. 1959
Hawaii County	$ 511,214	$ 492,540
Honolulu (city-county)	13,386,497	7,052,965
Maui County	613,178	113,841
TOTAL	**$ 14,510,889**	**$ 7,659,346**
GRAND TOTAL	**$351,558,132**	**$326,030,686**



BLACKFOOT BRANCH

of Idaho Bank and Trust Co. will have two innovations for city: drive-in window service and community room complete with kitchen to be offered for public meetings. Plans for $225,000 building call for concrete foundation, open web steel joists, thin shell reinforced concrete roof, pierced masonry interior dividers and exposed aggregate veneer exterior, with adjustable vertical aluminum light control louvers. Main floor and finished basement will each total 6,050 sq. ft. Architect: Cedric M. Allen; structural engineers: Ballif Associates; consultants: Ketchum, Konkel & Hastings.



FAMILY RECREATION

year around will be provided at Meadowdale Country Club located on 43-acre waterfront tract at Edmonds, Wash. Two-story clubhouse will have facilities for dining, dancing, games and banquets. Fresh and salt water swimming, fishing, camping, picnic sites, tennis courts, golf driving range, baseball diamond and children's outdoor play area are planned. First phase—75-ft. pool—is now underway, to be followed by bathhouse construction. Architect: Don F. Miller.

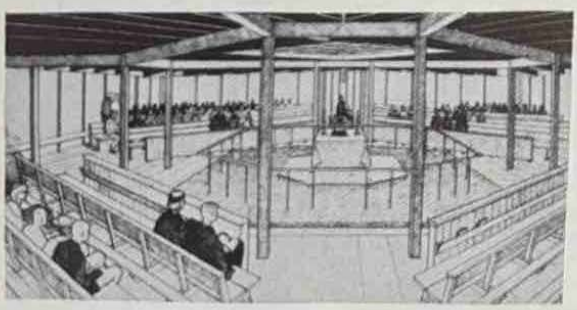


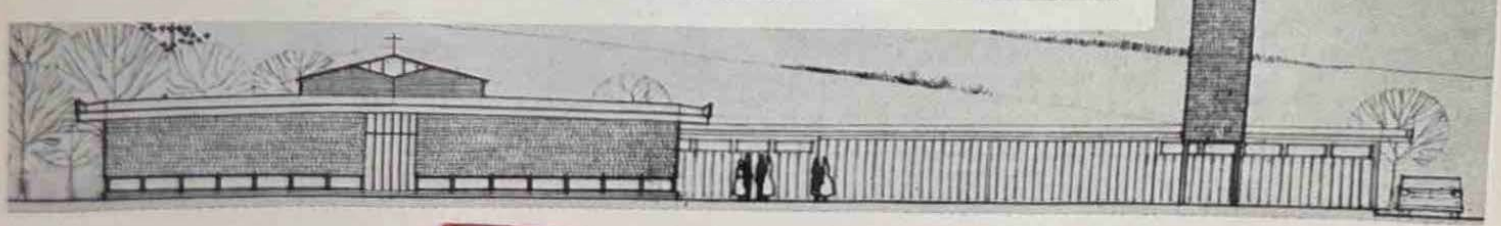
HAWAIIAN RETIREMENT HOME

named Pohai-Nani (surrounded by beauty) will be constructed on 16-acre site in Kaneohe area, 12 miles from Honolulu. Under present plans main building will have room for 231 in apartments ranging from single-room units up to two-bedroom suites, each with lanai, plus offices, library, lounge, chapel, recreational facilities, kitchen and dining room. Cottages also are planned, as well as infirmary. Architects: Lemmon, Freeth, Haines & Jones; consultants, Neptune & Thomas.

CHURCH IN THE ROUND

for St. Anselm's Parish in Lafayette, Calif., will be exposed timber structure with large central skylight over holy table. Windows on exterior walls will run in strips at floor, and unobstrusive combination of incandescent and fluorescent light sources will be utilized. Covered passageway will lead to parish hall, housing vicar's office, sacristy, kitchen, etc. All buildings, including future church school, have been kept to simple lines and finishes. Tower, unornamented and rectilinear, rises out of piazza on four steel legs, providing vertical accent to otherwise horizontal scheme. Architects: Marquis & Stoller, in association with Olav Hammerstrom.





First design clinic on West Coast proves real success

The case for good design in the home building industry was put forth strongly in points ranging from the specific to generalized philosophy by some of the top experts in the field at the first West Coast Design Clinic held in mid-August on the Stanford University campus.

The clinic was sponsored jointly by the AIA and the NAHB in cooperation with the Associated Home Builders, Inc., of San Francisco. More than 100 builders, architects, designers and materials men came from the western states to attend the four-day conference.

"Two words, successful and stimulating," describe the clinic, commented Edward H. Fickett, chairman of the AIA's national home building industry committee, who served as moderator of a panel dealing with planning aspects of the house and community. "As the program progressed and each speaker made major contributions, it was easy to see and understand the importance of the color consultant, the significance of the architect, the continued necessity for better architect and builder relations and the economic aspects of good land use as well as the necessity for a designed product that would sell and return a reasonable profit to the investor, developer and contractor."

Fickett added that he does not feel that the housing industry is creating slums of the future or that adequate housing has not been successfully provided for low-cost income groups. "I do believe, however, that there is a growing tendency to overlook the fact that we are now at a point where land cost and land use demand new thinking in land planning, new zoning ordinances and a total respect for the relation of the house to the site and the site to the house.

"I do not think we should lose sight of new materials which may expand our perspective and allow us unlimited freedom of design. I certainly do not feel that, although incomes have increased, everyone can afford a $16,000 or $18,000 home, and inasmuch as all of the subjects and prerequisites for a successful housing venture were touched on at this meeting, it would certainly give all who attended something to think about. As we think, we continue to better understand and appreciate that our long-range programs and future activities must include a place for the professionals."



FICKETT

"Individuality of expression is really a major problem in mass housing," Richard L. Neutra, Los Angeles architect, told the assemblage at the closing night banquet. "It is not being done by three or four types of Cinderella designs in one block. It's much more subtle. What makes somebody belong to a spot of the surface of the earth? If you cannot give people this, you have not housed them."

Neutra began by pointing out that what Americans do with housing and all other aspects of their living standards is watched most carefully in other areas of the world. "It is envied, criticized and imitated at the same time . . . What are they really looking toward? What is really our particular point of view when it comes to housing or anything else? We still believe in liberty, in individual expression where the best man wins, even in the subdivision game."

"It isn't just an empty, sentimental hangover," he said. "It is really that we do believe and have had something which the man in the Congo or Russia didn't have—individual expression."

The connection between this feeling for individual expression and an architect's practice is obvious, he commented. It also has something to do with the problem of housing terrific masses and more and more masses of people. It is difficult, he said, for many people to realize what indivdual expression is possible under present conditions with the tremendous growth in population. "I wish I could give you the answer in full, but instead of doing that I would like to say that it is not only an American dream to have some individual expresson. It is, in reality, not a dream; it is a scientific assumption that this is necessary."

It is a scientific fact, he continued, that the individual is the one who deviates. "The individual is the one who doesn't do entirely what the others do. On this, evolution is based. If this would stop there wouldn't be any evolution. If there would be only conformists we would be frozen stiff forever, for eternity . . . and you can readily see that if the individual is washed out then everything is just mass transaction and conformity, that we are at the end of our organic career.

"What has this to do with housing? The architect and the home building



PROVOCATIVE MESSAGE is given by windup speaker Richard J. Neutra, shown at Sunset reception with publisher L. W. (Bill) Lane Jr.

ARCHITECT-BUILDER TEAMS COMPETE FOR AWARD

Entries for the annual Award of Honor, only prize offered jointly by the AIA and the NAHB, must be postmarked not later than midnight, November 14. The award is made to the architect and builder team who has contributed most toward better communities and homes for Americans, according to Edward H. Fickett, chairman of the AIA national home building industry committee.

Competition is open to any team who has cooperated on a project completed within the last five years. A jury of three architects and three builders, to be appointed by the two national organizations, will choose recipients November 18. Winning builder will receive his award during the NAHB convention in Chicago in January, while a duplicate award will be made to the architect during the AIA convention in Philadelphia in April.

Entries should be addressed to the Award of Honor Committee, American Institute of Architects, 1735 New York Ave. N.W., Washington 6, D. C.

industry accommodate individuals, not equal organisms like those in a beehive or in a termite stock. It is entirely ridiculous to put an emblem of a beehive over a community. It is poetic idiocy."

Neutra spoke of the importance of giving people a tie with nature through views from their houses. "The transparency of enclosures is one of the greatest inventions man has made in the home building industry." He admitted that a beautiful, panoramic view was often impossible to provide in mass produced homes, but pointed out that this has been solved and the solution used for centuries in old Spanish and Japanese towns and cities where "a great deal of nature has been caged in a small area," the enclosed patio-garden.

During two of the evening sessions architects and builders had the chance to lean back and take hefty swings at each other. Wednesday evening a panel of architects and architectural magazine editors presented a criticism of design features of typical mass produced houses in the Bay area. The panel, moderated by San Francisco architect Robert Anshen, hesitated not the least bit in telling the builders what was good and bad about the houses pictured by the slides.

The next evening the builders had their turn. That evening a panel composed of six California builders, with Norman V. Cole of Millbrae as moderator, criticized designs by prize-winning architects.

Morning and afternoon sessions were devoted to short talks, each one dealing with some facet of the home building industry. Some key points:

Speculative builders have a tremendous responsibility to give much thought to design because they create entire communities and their influence, good or bad, must be felt in a region. — Victor Thompson, architect and professor at Stanford University.

Main reasons some builders are reluctant to use architects are the cost and the fear they would lose some of their own identity if too firmly associated with an architect. — Joseph Eichler, builder, Palo Alto.

The golden age of suburban living actually died before 1930 and can't be revived because people don't live the way today that they once did. There still may be a place for a few of the types of towns where traffic is kept to the periphery and people walk to shops.—George Young, designer with Edward D. Stone, architect, Palo Alto.

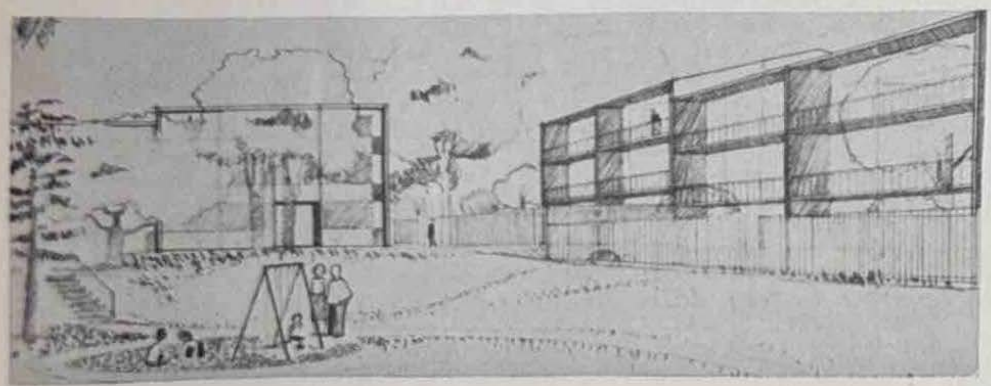
While building standards and codes are generally satisfactory, the variations from area to area are annoying and more adoptions of the national uniform code and standards would be helpful to the industry.—John Worsley, architect and lecturer at Stanford University.

Too much progress in one gulp can scare the buyer or client away. A strong educational program is needed directed at both the consumer and government agencies.—George Rockrise, architect, San Francisco.

Design starts the selling process. But design of housing often falls far short of good design and as a result the home building industry has only scratched the surface of a much larger market. Thousands of families want and can buy new homes but they are waiting for the improved model. — James San Jule, Young & Rubicam, Inc., San Francisco.



LOW-RISE STRUCTURES will contain 322 units with one-, two- and three-bedroom apartments available in middle income housing project, estimated to cost $5 million. Typical common recreational area is seen below.



Cooperative housing project in Western Addition okayed

What will rise in San Francisco's Western Addition area to replace the slum type structures is rapidly taking shape on the drawing boards in a number of architectural offices.

The San Francisco Redevelopment Agency either through auctions or negotiations already has sold a good portion of the land to developers. Those participating thus far have agreed to work with the Western Addition Architectural Council, a group composed of the architects who are engaged in designing units for the developers. Purpose of the council, which is meeting often to review plans submitted for the various parcels, is to provide a unified standard of architecture for the entire Western Addition, including landscaping.

One of the more interesting parcels is nearing final design stages, with Marquis & Stoller, architects, and Lawrence Halprin, landscape architect. To be developed by ILWU Corp. (composed of the International Longshoremen's & Warehousemen's Union and the Pacific Maritime Association, an employer's group), this one is noteworthy because it is the largest parcel set aside for cooperative housing, because the agency required that the developer provide truly middle income housing and because it has attracted the most attention from the

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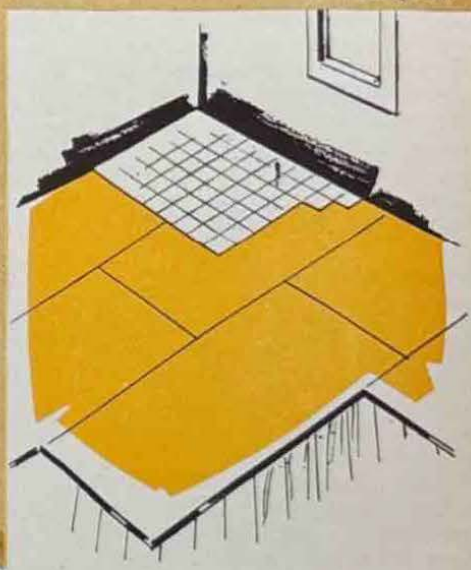
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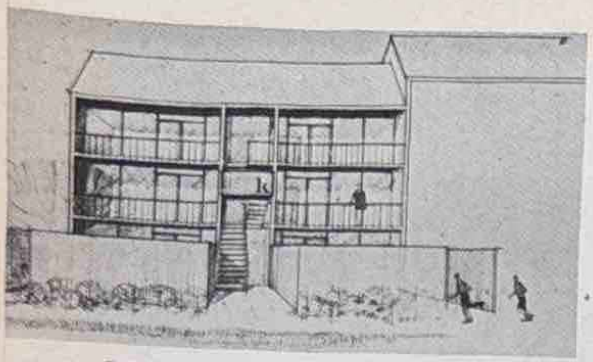
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THREE-STORY WALKUPS to be used throughout project will have fenced-in patios on ground level, decks on second and third.

public. Proposals were submitted by five other developers.

The Marquis & Stoller solution was chosen because the design is good, the size of the units is adequate, costs to apartment buyers will be lowest of any proposal and finally the sponsors stated that they hope to reduce financing costs to buyers through use of ILWU's pension trust fund.

Land included in this parcel, which went to ILWU Corp. for a price of $825,000, consists of two contiguous city blocks bounded by Geary, Webster, O'Farrell and Laguna streets and an adjacent block bounded by Ellis, Buchanan, Laguna and O'Farrell streets.

Of 322 apartments to be constructed on this land, 180 will be three-bedroom units; 124, two-bedroom; and 18, one-bedroom. One-third will have private, fenced-in patios and all others will have large decks running the width of the units. All structures will be three-story walkups.

Down payments will range from $565 for small units to $815 for large ones, with monthly payments ranging from $95 to $138. Units will be 90% FHA financed but these costs may be reduced if the union's pension fund is utilized.

The architects are taking advantage of a ruling by the city that the streets between the three blocks may be closed and used for landscaping or play areas. This permits a plan whereby automobiles will be separated from the project interior, allowing good relationship of buildings to land and excellent possibilities for pedestrian walkways and the like. While cars will be kept to the periphery, none of the tenants will be forced to walk a great distance from the parking area to his apartment.

Basic appliances will be furnished in all units at the purchase prices mentioned above. Each will be heated by forced air with individual controls and will have large glass areas with sliding doors leading to the patios or decks.

DeMars is juror for competition to plan mobile home parks

A Californian has been named to a five-man jury to judge a nationwide competition to stimulate interest in better design for mobile home parks. He is Vernon DeMars, professor and chairman of the department of architecture, University of California, with the firm of DeMars & Reay of Berkeley.

The competition will be divided into two categories, one for students and the other for professionals. The first is open to students in landscape architecture, architecture and city planning who are enrolled in U.S. schools. The second category is for all registered landscape architects in states whose laws require such licensure; in other states, to landscape architects of equal professional qualifications or to associations of planners, architects and others provided that each association includes a landsape architect and that all competitors are U.S. residents.

The student competition will include a design of a mobile home park, a plan and other data to be announced. The professional competition will consist of a plan, sectional elevation and perspective of a mobile home park.

The co-sponsors—the Mobile Home Research Foundation of Chicago and Rogers Industries of Detroit, supplier of window equipment and aluminum extrusions to mobile home manufacturers—will award cash prizes totaling $9,350. First prize in the student category will be $1,000 and in the professional, $4,000.

Registrations are due by November 1, 1960, and January 15, 1961, for students and professionals respectively. Further information is available from John L. Bloom, Professional Advisor, Mobile Home Park Competition, 20 N. Wacker Drive, Chicago 6. Ill.

Alcoa joins Webb & Knapp to construct 'city' in L.A.

Aluminum Company of America has joined forces with Webb & Knapp, Inc., to create a model "city of tomorrow" on a Los Angeles tract to be acquired from Twentieth Century Fox Film Corp. The site, 265 acres of the most choice undeveloped land in the Beverly Hills area, will be purchased at a cash price of $43 million.

Century City, a self-contained community for 30,000 people, will represent the largest privately financed urban development in the U.S. Over $250 million of buildings will be constructed, with Welton Becket & Associates as the master planners. (The architectural firm has moved into its own office building on the site.) Groundbreaking for the first structures is tentatively set for next spring.

Broadway Hale Stores, a major West Coast retailing concern, has agreed to purchase part of the area for a large department store. Meanwhile, plans are being drawn for a complete shopping center, luxury cooperative apartments, middle income apartments and office buildings.

Alcoa's primary interest in the venture lies in the program's opportunity to develop new uses for aluminum in apartment housing and other structures in what the sponsors term a "world-recognized showcase of contemporary architecture."

ACI regional meeting is set for Tucson

Eighteen papers and reports will be presented during the American Concrete Institute's 13th regional meeting in Tucson's Pioneer Hotel October 31-November 2.

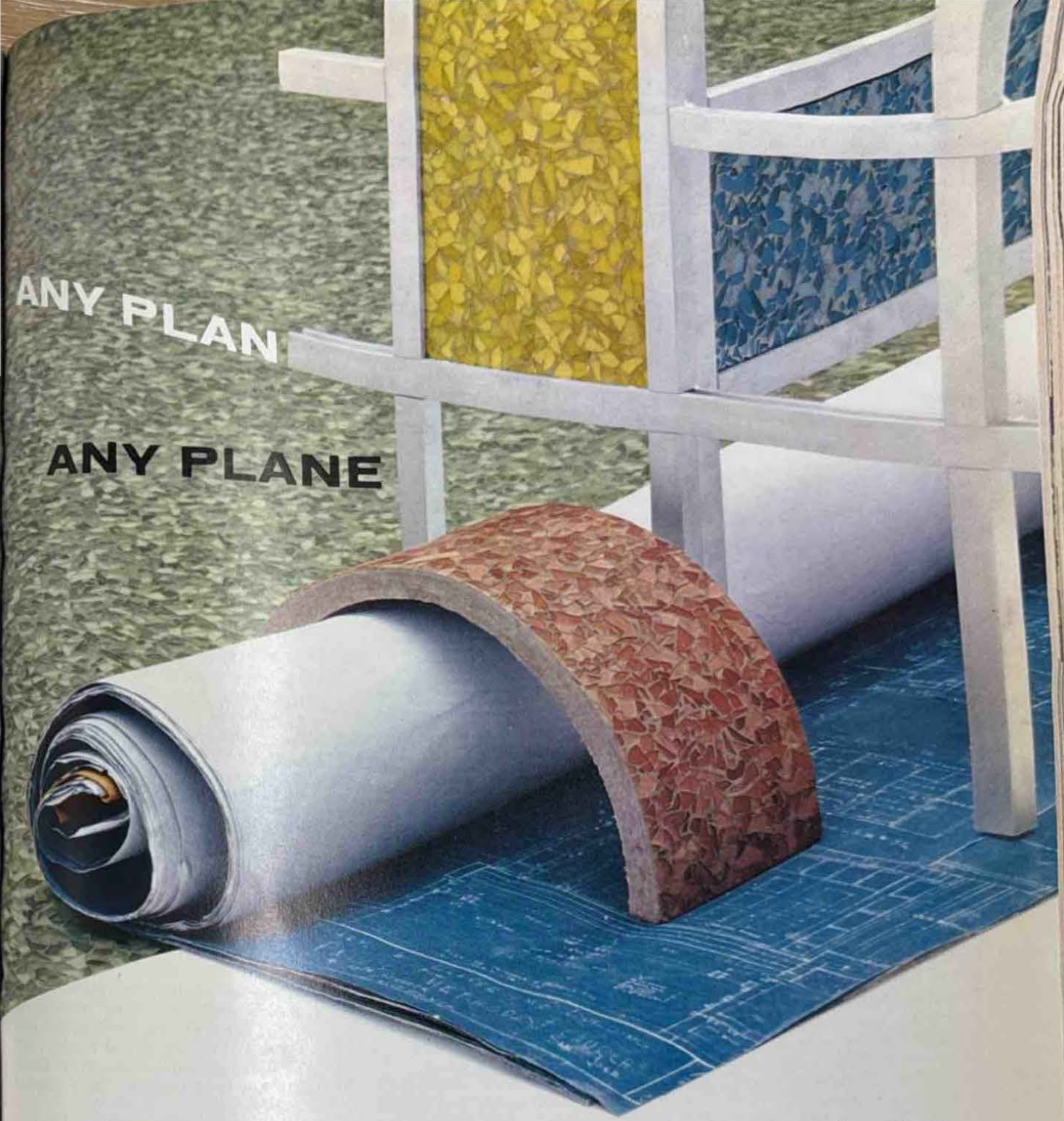
The conference also will feature a joint research session of the ACI and the American Society for Testing Materials on the last afternoon. Dr. A. Allan Bates, president of the ASTM and an ACI director, will speak at the pre-session luncheon. He is vice president of research and development for the Portland Cement Association.

Among the subjects to be discussed during the three-day meeting: lift slab construction for the Motorola Building, Phoenix; effects of recent Mexican earthquakes on reinforced concrete structures; solution of structural problems through model analysis; prestressed composite design in multistory building construction; prestressed girder design, testing and construction for the Norton Building, Seattle; hyperbolic reinforced concrete cooling towers; prismatic folded plates; and abnormally slow-hardening concrete.

General chairman is Dr. Gene M. Norby, head of the civil engineering department, University of Arizona.

Prestressed concrete subject of California meetings

Two conferences on prestressed concrete will be presented in November by the University of California Extension and Department of Engineering. The two-day meetings are scheduled for November 14-15 at the Biltmore Hotel in Los Angeles and November 21-22 at the Sheraton-Palace Hotel in San Francisco.



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new offices, partnerships

Richard D. Lowe has established an office for the practice of architecture at 302 Kiesel Bldg., Ogden, Utah.

John I. Weaver, architect, has opened an office at 2904 N. Blackstone Ave., Fresno, Calif.

Wm. Ronald Wright has opened his own office for the practice of architecture at 2120 S. Ash, Denver.

Rumont W. Hougan has established his own architectural practice at 3542-C E. Coast Highway, Corona del Mar, Calif.

Louis Pursel has opened an architectural and engineering office at 830 Ala Moana Blvd., Hawaii, under the name of Louis Pursel & Associates. He formerly was managing architect for Thomas Bourne & Associates in Tokyo.

Cripe-Scholl & Associates, Indianapolis architectural-engineering firm, has opened an office at 332 E. McDowell Road, Phoenix. J. Richard Osborn, associated with the firm in Indiana for eight years, is manager of the new operation.

D. Stewart Kerr, architect, and Thomas C. Beggs, mechanical engineer, have established an office for the general practice of architecture at 633 E. Main, Santa Maria, Calif. Kerr continues an affiliation with architect H. L. Gogerty to handle production of major works.

Louis O. Britt has opened an office under the name of Britt & Associates in the Racoon Strait Maritime Center, Tiburon, Calif., to do consulting civil, sanitary, mechanical and electrical design. He formerly was vice president and general manager of Dudley Deane & Associates, San Francisco consulting engineers.

Haulman, Dyer, Faller, Associates, Inc., has been formed for the practice of architecture and planning at 2809 N. Blackstone Ave., Fresno, Calif. Principals are Donald J. Haulman, architect; Robert E. Dyer, city and regional planner; and Stanley B. Faller, design coordinator.

firm changes

The architectural office of Theo. Damm, Seattle, has been succeeded by Damm, Daum & Associates, with the practice continuing at 516 James St. Harold J. Daum, who has been with the firm for 10 years, becomes a partner with his father. New associates are T. Gordon Peterson and James H. Cannon Jr., who have been employed by Damm for nine and six years respectively.

The architectural firm of Pleger, Blurock & Ellerbroek has been succeeded by Blurock, Ellerbroek & Associates, remaining at 2515 E. Coast Highway, Corona del Mar, Calif. Richard H. Pleger has established his own practice in new offices at the same address.

McCreary-Koretsky Engineers is the consulting engineering firm created when Porter, Urquhart, McCreary & O'Brien dissolved due to the death of Col. Leonard C. Urquhart last March. Operating out of the same address at 1140 Howard St., San Francisco, the new firm also maintains offices in Sacramento and Seattle.

new associates

The Los Angeles architectural firm of Victor Gruen Associates has named five new associates: Richard D. Berry, Millard E. Gooch, Joseph L. Kurily, Steve V. Pappas and Edwin Sweeting.

new addresses

Logan & Murtaugh, architects, to 415 N.E. 12th Ave., Portland.

Floyd M. Reister, architect, to 609 Insurance Bldg., 831 14th St., Denver.

Therkildsen & Meese, architects, to the Oxford Business and Professional Center, 1915 Oxford Lane, Casper, Wyo.

Charles R. Hiller, architect, to 905 N. Euclid, Anaheim, Calif.

James Longwood, architect, to 2505 Capital Drive, Eugene.

Welton Becket & Associates, architects-engineers, to 10000 Santa Monica Blvd., Los Angeles.

William L. Pereira & Associates, architects, to 5657 Wilshire Blvd., Los Angeles (Becket's former offices).

Sullam & Aehle, architects, to 1519 14th Ave., Seattle.

Haluk Azol and Harold Butzbach, structural engineers, to 507 Howard St., San Francisco.

Felix M. Warburg, architect, to 24 H. St., San Rafael, Calif.

George W. Heideman, architect, to 2925 Fuhrman Ave., Seattle.

Stanley Goldin, architect, to 851 Atlantic Ave., Long Beach, Calif.

John P. O'Neill, architect, to 176 S. Stevens St., Spokane.

Henry J. Friel, architect, to 1840 S. Elena, Redondo Beach, Calif.

Albert A. Erkel & Associates, consulting structural engineers, to 2330 Barham Blvd., Los Angeles.

new quarters

Kenneth E. Koehler, architect, now occupies new quarters at the site of his former office, remodeled into a split level store and office building at 5100 Dawson St., Seattle.

deaths

Arnold C. Amundsen Jr., 35, associate architect in the Seattle firm of Naramore, Bain, Brady & Johanson, died August 31 from injuries suffered in a Washington, D.C., automobile accident. A graduate of the University of Washington, he specialized in hospital design and planning.

Frederick R. Collins, 86, for many years head of a San Francisco architectural firm, died September 8 in Sonoma, Calif., where he had lived since his retirement. He had been a student of the late Bernard Maybeck and laid out the city of Ely, Nev., for the Guggenheim family.

Charles Stanley, 76, retired Seattle architect-engineer, died August 27 after a heart attack. Among the projects of the University of Pennsylvania graduate were the Elks Lodge buildings in Anacortes, Port Angeles and Olympia.

elections, appointments

Structural Engineers Association of Oregon have elected these officers: Lloyd A. Pajunen, Oswego, president; Robert R. Adams, Corvallis, vice president; and Miles R. Abel, Beaverton, secretary-treasurer.

Jack Zimmerman is now resident engineer for Wilson & Wilson, consulting structural engineers, Fresno, Calif.

Harry B. Wilson Jr., partner-in-charge of the New York office of

Charles Luckman Associates, has returned to Los Angeles to become vice president and general manager of all operations of the architectural-engineering firm.

Richard A. Baynton, chief architect of the FHA office in Casper, Wyo., has resigned to join the staff of Denham Homes, Inc., to direct the firm's design, advertising and sales programs.

New building official for the City of Fairbanks is Robert E. Friel. Former vice president of the International Conference of Building Officials, Colorado Chapter, he was employed by the U.S. Army Engineers before going to Alaska.

Yosemite and Tucson to host AIA conferences this month

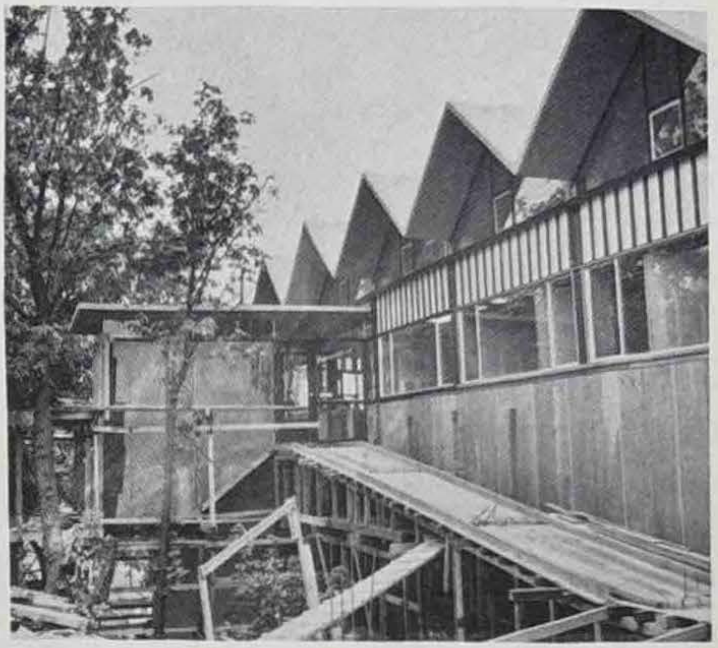
October is regional conference month for architects throughout the West. Californians will meet in Yosemite National Park October 19-23, while Western Mountain delegates will convene in Tucson October 26-29. The Northwest sessions are getting underway in Sun Valley as this issue of PA&B goes into the mail.

Nearly 1,000 registrants, including wives and exhibitors, are expected to attend the Yosemite convention, devoted to "The Changing Practice of Architecture." Headlining the speakers: Marcel Breuer, who helped to introduce European modernism into the U.S., and Eduardo Torroja, Spanish architect-engineer.

Four architects, each representing a basically different philosophy of practice, will join hands for a panel discussion. They include AIA President Philip Will Jr., Chicago; Harwell Hamilton Harris, Dallas, and A. Quincy Jones and Charles Luckman, both of Los Angeles. Adrian N. Langius, director of Michigan State's Building Division, where he has successfully established and maintained a policy of state building design by private architectural firms, will be among several participating in a session on governmental influences.

Principal speaker in Tucson, where the theme will be "Architecture and Planning for Arid Regions," will be Carl Feiss, urban planner of Washington, D.C. President Will also will appear on this program, as will Second Vice President James M. Hunter of Boulder, Colo., assigned to address the awards luncheon.

A six-day post-convention tour will leave for Mexico City October 30, returning to Tucson November 4.



APPROACH to PA&B's new quarters as photographed with about two week's work to go. Staging comes down to make way for horizontal t&g cedar siding and concrete ramp being formed in foreground. Roof overhangs glass and white plastic panels topped in brown stained fir. Enclosed stairwell at left descends to printing level and under-building parking area without interrupting interior clear span spaces.

We've a new roof over our heads at a new address:

1945 Yale Place N.
Seattle 2, Wash.
Phone: EAst 3-7007

Much to the dismay of plumbers, steamfitters, painters and miscellaneous other craftsmen, linotypes are operating and presses are rolling on the printing floor as finishing touches are put on the publishing floor of the headquarters building for Pacific Architect & Builder and its publisher. Progress reports (Dec. '59, March and July '60) have highlighted construction details of the three-level structure and design aspects will be covered in January. A. O. Bumgardner is the architect; Worthington, Skilling, Helle & Jackson, Jack Christiansen, associate, structural engineers; and Riley Pleas, Inc., general contractor.

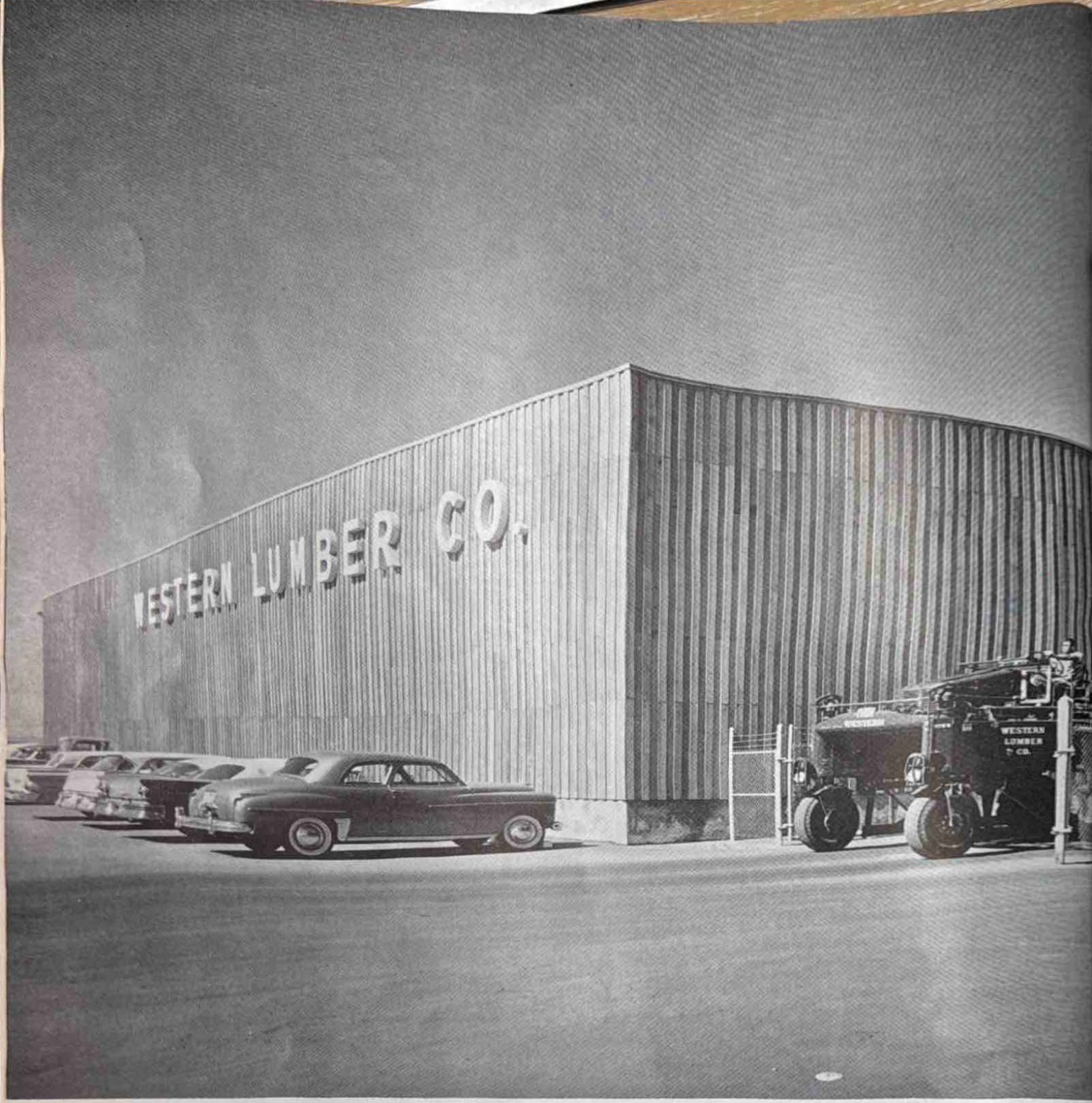


LAING

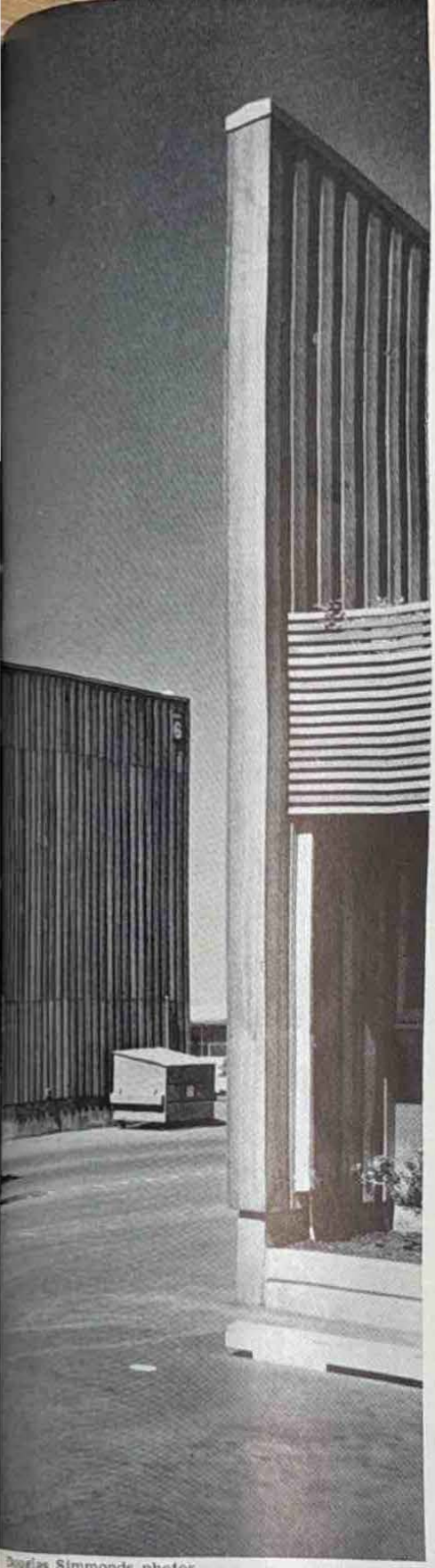
Sited on a steeply sloping lot overlooking Lake Union, the reinforced concrete structure is dominated by a 2½-in. thin shell concrete hyperbolic paraboloid roof which allows clear span areas of 45x83-ft. on each floor and unrestricted cross ventilation. A balcony sets the general office area well back under the roof overhang to protect from westerly sunshine and provides a promenade from the lounge-lunchroom for an encompassing view of the waterfront and downtown Seattle.

Simultaneous with the move, Roscoe E. Laing, general manager of PA&B, has been elected vice president of the three corporations which will occupy the building: Pacific Builder & Engineer, Inc., which publishes this and three other publications for the construction industry; Pacific Printing Co.; and Printers Building & Equipment Co.

N. B. Chapin continues as president and Llewellyn F. Wing as secretary-treasurer of the same corporations. Laing's election fills the position left vacant by the death of the late William Anderson.



STORAGE SHED is work of structural engineer George R. Saunders. Architects master planned site and designed office building at right.



Douglas Simmonds photos

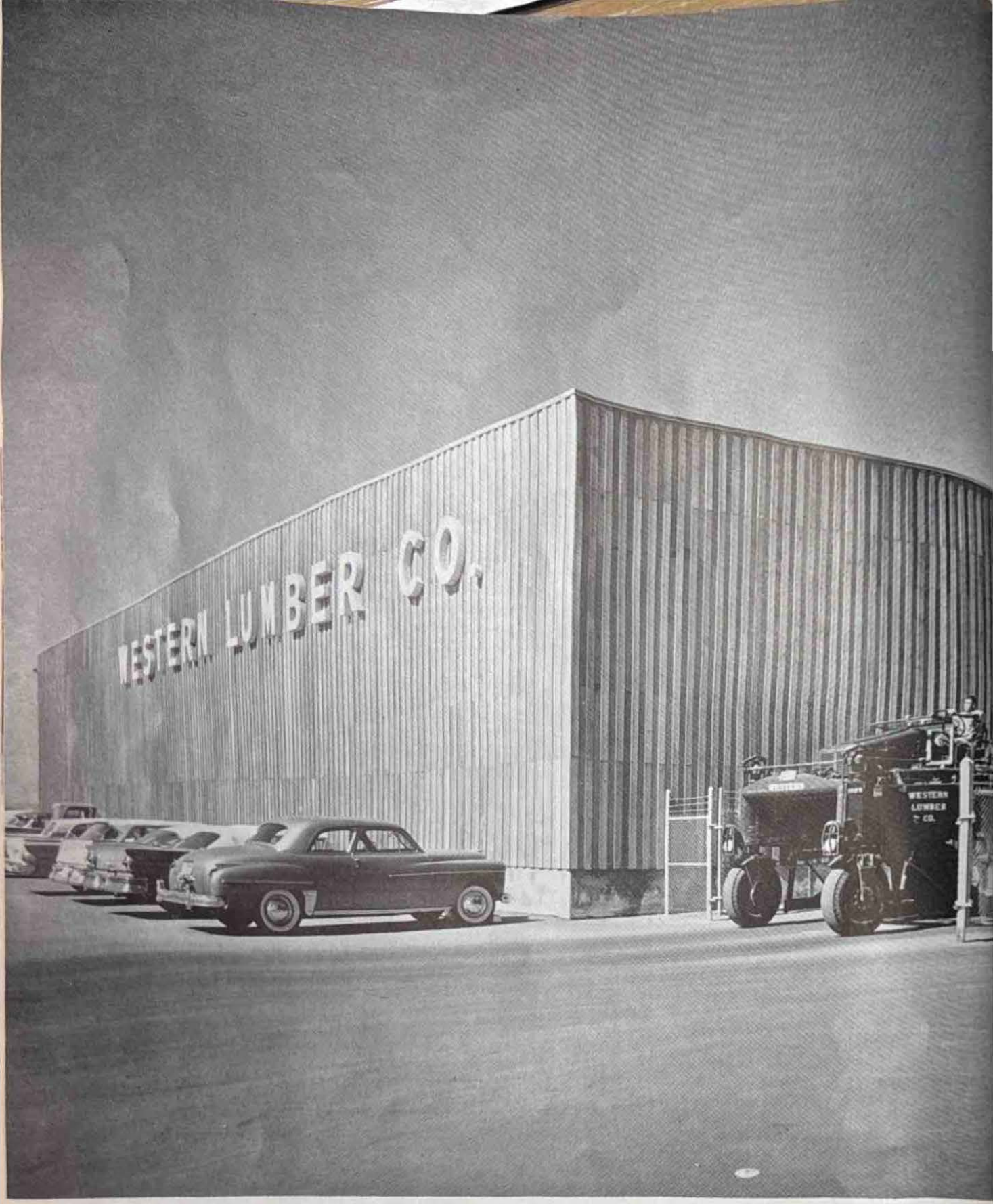
A most appropriate use of materials

Western Lumber Co.
Office Building
National City, California

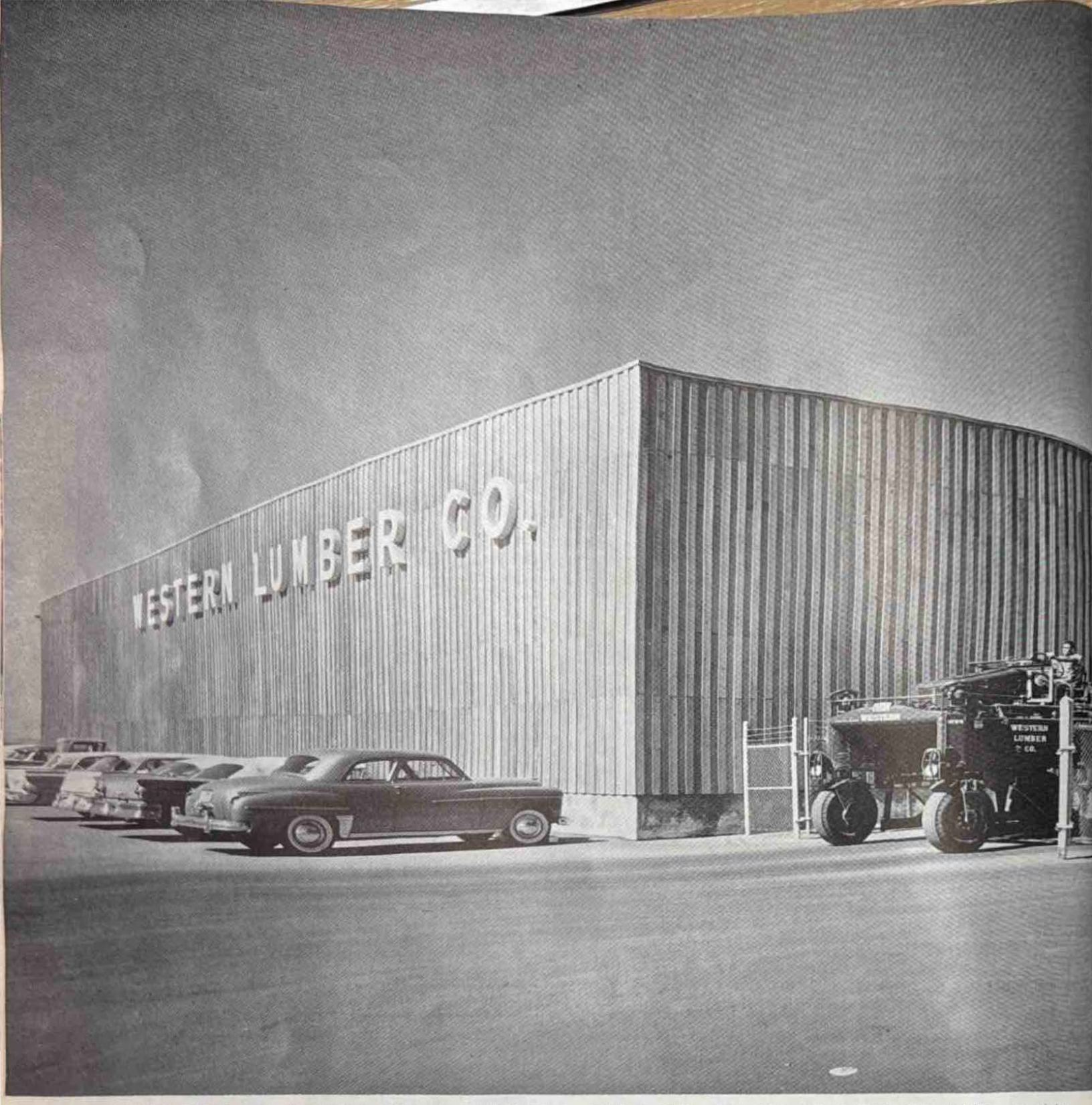
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JOHNSON & ANDERSON
Architects

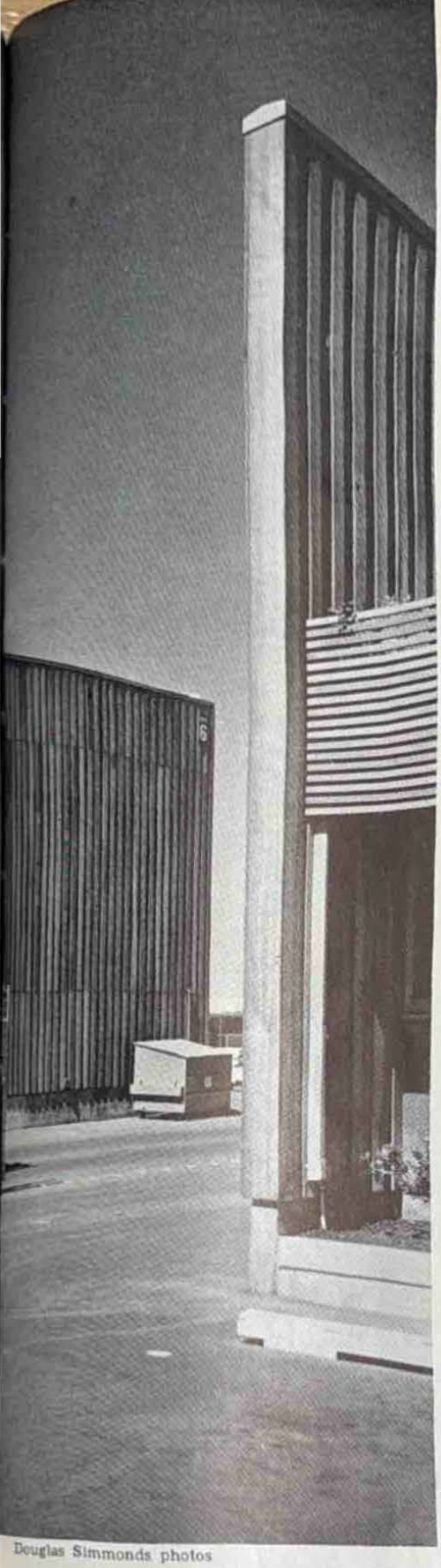
C. A. LARSEN CONSTRUCTION CO.
General Contractor



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Western Lumber Co.
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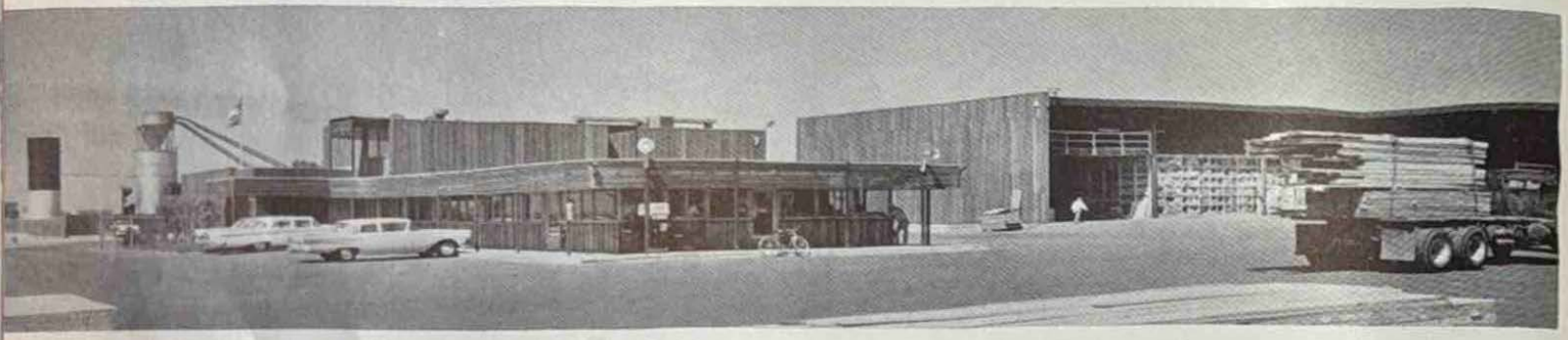
JOHNSON & ANDERSON
Architects

C. A. LARSEN CONSTRUCTION CO.
General Contractor

WESTERN LUMBER OFFICE BUILDING



TOTAL DEVELOPMENT reveals careful integration, yet allows office structure to dominate entire new facility, costing about $750,000. Plant has county's largest inventory of redwood which, appropriately enough, is used for exterior siding in natural color stain.

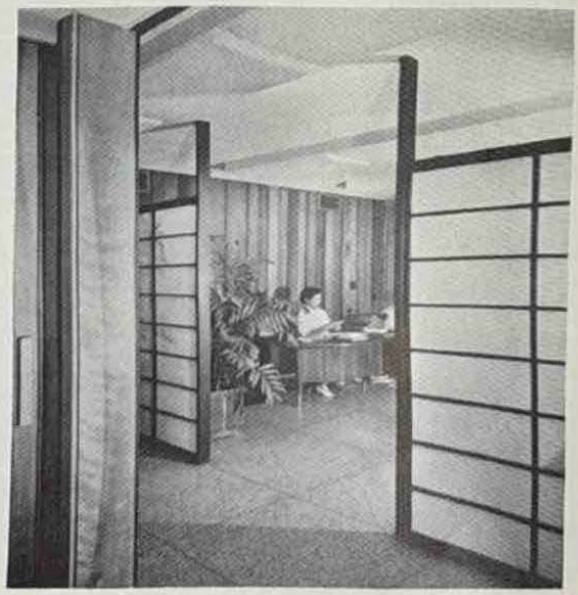


THE CLIENT, who maintains several branch lumber yards in the San Diego area, desired a main office building which would provide a pleasant environment for employees in the midst of a manufacturing complex. The architects master planned the 14-acre site (adjoining space is available for expansion) but the surrounding structures themselves—mill, shops and warehouses—were designed by structural engineer George R. Saunders.

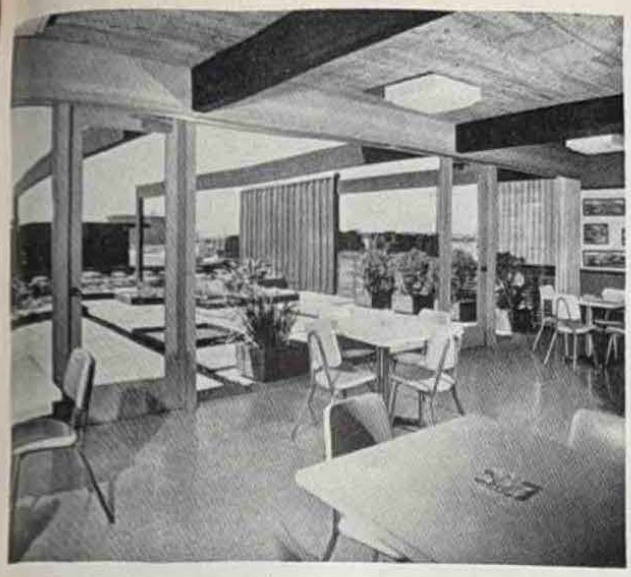
Total concept is beautifully coordinated and shows integrity in its straightforward use of wood. And as a focal point of the complex, the award-winning office building is "an excellent expression and capitalization of the very character of a lumber yard itself," as the jury for the San Diego AIA competition put it.

Exterior's vertical resawn redwood board on board is dipped in a natural color stain. Exposed laminated wood beams over the roof terrace—a noteworthy example of industrial plant landscaping by Harriet Wimmer and Joseph Yamada—and their supporting columns are stained a dark brown, as are the covered walkway Douglas fir posts. Horizontal 2x2 redwood screen is spaced to prevent the sun from directly hitting the extensive glass areas.

Vertical resawn redwood is repeated inside, along with waxed, smooth vertical redwood, Douglas fir plywood, cedar decking and exposed laminated beams. Terrace decking, 2x2 Douglas fir spaced strips assembled in 4x4-ft. grids, is placed over fiberglass reinforced roofing.



SHOJI SCREENS in lobby are woven textured plastic in stained Douglas fir dividers.



EMPLOYEE LOUNGE has one wall of glass, two of stained wood and fourth for mounting photos. Cedar decking is in natural finish, exposed beams are deep brown stain, floor is vinyl asbestos.

OUTLINE SPECIFICATIONS

Structure: foundations: concrete grade beams; frame: wood post and beam; roof: wood joists; floors: concrete.

Exterior Finish: redwood board on board dipped in natural color stain—(Woodlife). Protection Products Mfg. Co.

Roof Surfacing: asbestos felt, asphalt and gravel—Johns-Manville Corp.

Windows: natural finish wood sliding—(Westy) Western Lumber Co.

Doors: exterior: natural finish wood rail and plate glass; interior: flush natural finish birch.

Floor Surfacing: vinyl asbestos tile; oak plank in shipping office.

Insulation: batts in ceiling—United States Gypsum Co.

Interior Finish: stained and lacquered plywood; waxed redwood; painted gypsum board.

Ceilings: acoustical tile; integrated plastic eggcrate in executive offices; exposed natural finish cedar in lounge.

Lighting Fixtures: fluorescent — Columbia Electric & Manufacturing Co.

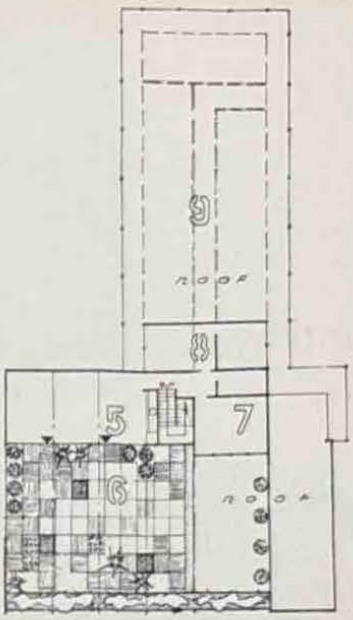
Heating: heat pumps with air conditioning for all rooms, consisting of seven separate zones.

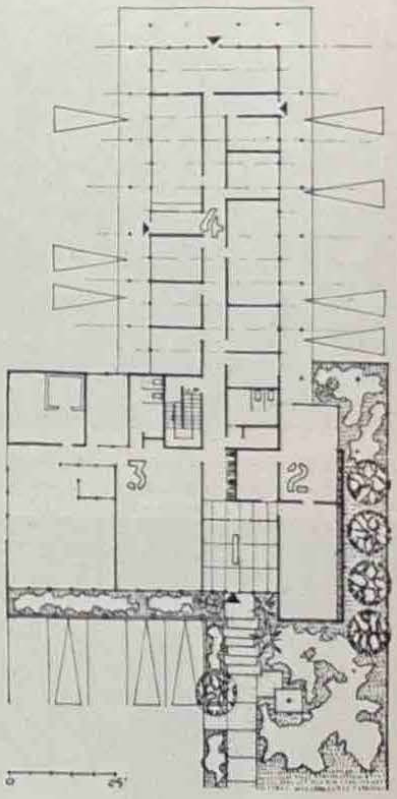
Total Area: 9,059 sq. ft.

Total Cost: $126,000.

Cost per Square Foot: $13.90.

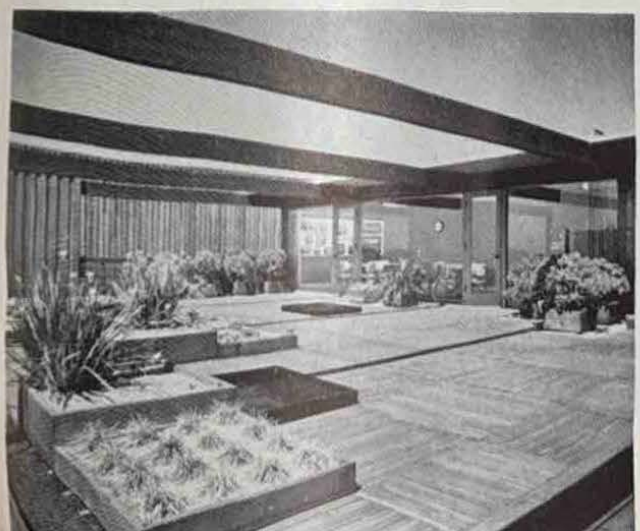
Date of Completion: May 1960.





1. reception lobby; 2. executive offices; 3. accounting department; 4. general offices 5. employees' lounge; 6. roof terrace; 7. mechanical equipment; 8. "transitional stage" office (first phase of future addition); 9. future addition.

TERRACE DECK off employee lounge incorporates Douglas fir strips in 4x4 grids, redwood tub planters and fiberglass reflecting pools.

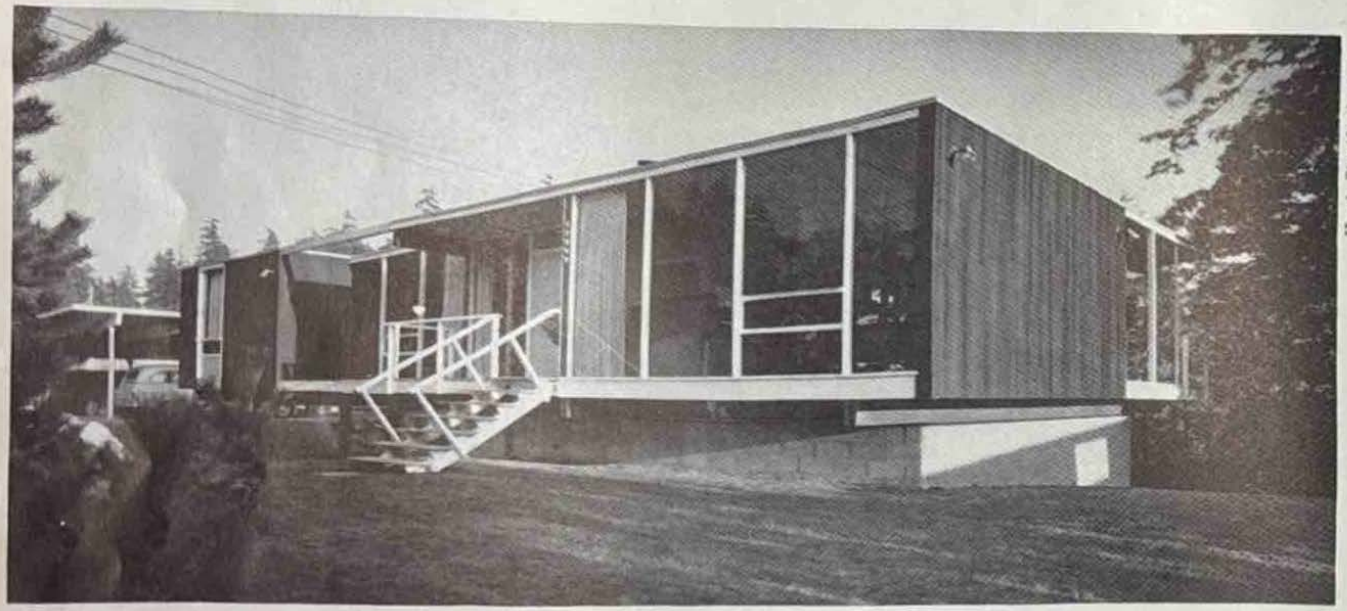


Stephen M. Dam Residence
Seattle, Washington

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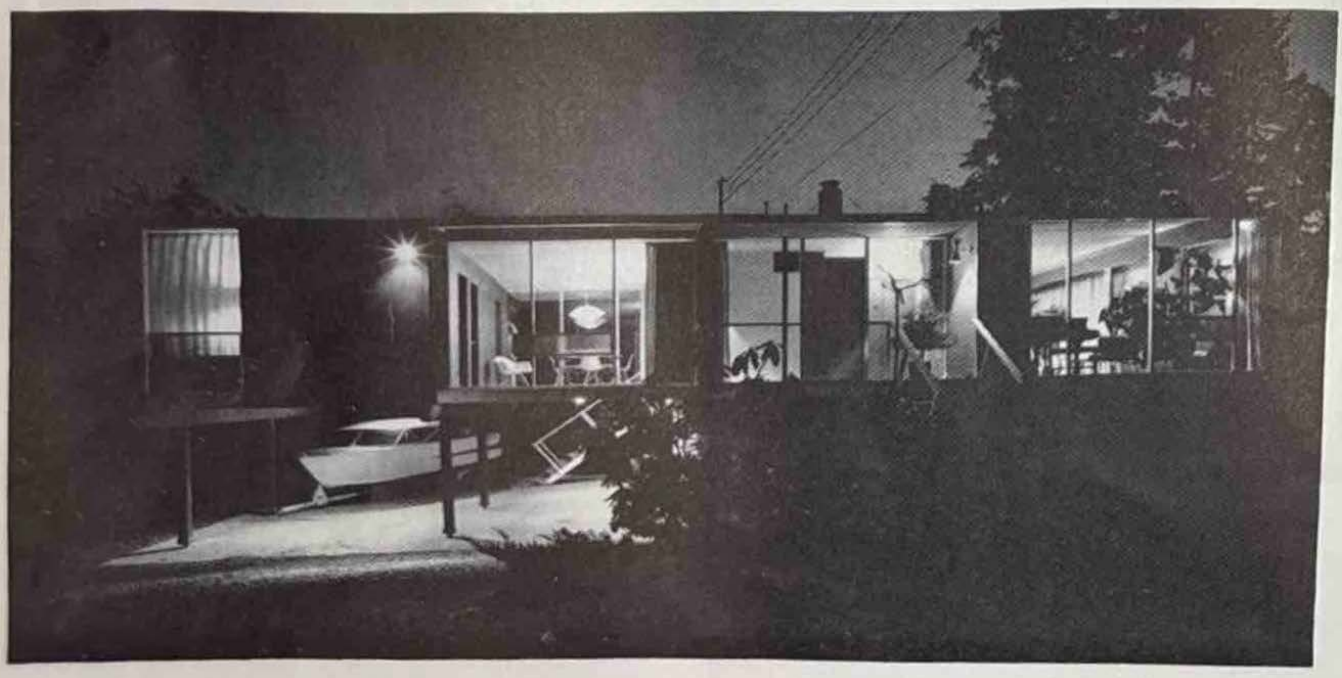
STEPHEN M. DAM
Architect

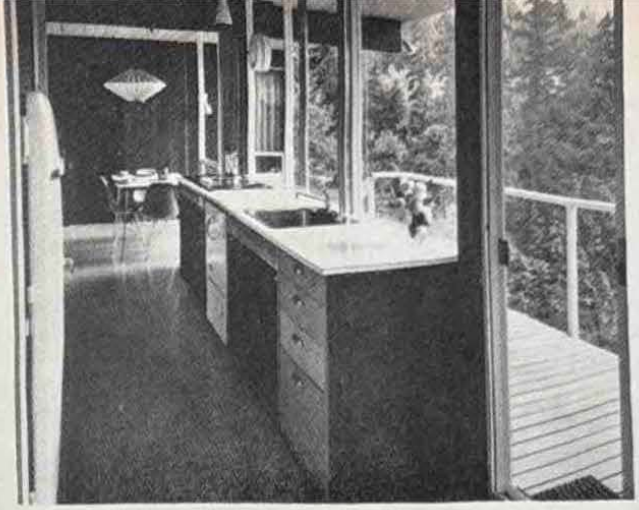
Cantilevered design sparks small suburban house



Hugh Stratford photos

SUBURBAN SITE forms one side of wooded canyon with view of small lake and creek at rear of property. House was placed near front of lot to ease street accessibility and save ground cover. Carport was placed under house to minimize lot coverage.



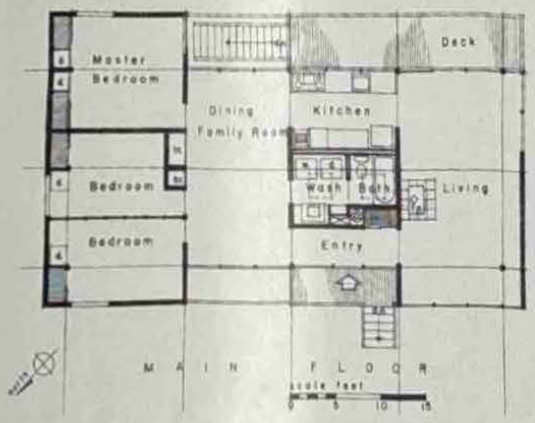


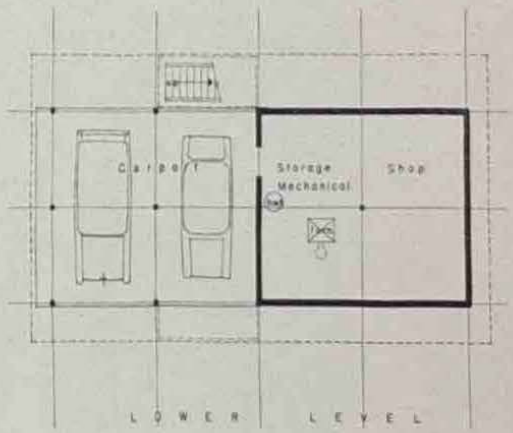
KITCHEN serves directly to the family room, living room and rear deck.

WHEN AN ARCHITECT sets out to design his own home he is, in effect, translating his design philosophy into actual living. In this case the owner was also faced with the problem of a limited budget for a family of four, the need for simplification of construction and detailing so that most of the work could be done by himself and his wife, and a steep slope on three-fourths of the lot.

"A compact, two-level plan was developed since a limited depth of building property was available and it was desired to retain as large a front yard as possible," comments the architect. "Considerable glass area is used to visually increase the enclosed space and to open up the indoor areas to the exterior natural surroundings. To further emphasize the indoor-outdoor relationship of space, the vertical siding is carried from the exterior to the interior and the exposed decking runs from the overhangs to the ceiling inside."

Upper level, cantilevering in four directions from the foundation, is an open plan with two exterior covered decks. Central core contains the kitchen, bathroom and laundry, mechanical facilities and guest closet. Living room is on one end separated from the bedrooms and family room grouped on the other end. Basement area adjacent to the carport was designed as a utility core and for workshop and storage.





OUTLINE SPECIFICATIONS

Structure: foundation: concrete pier footings and concrete block basement walls; frame: H-section laminated wood posts on 12x10-ft. module supporting laminated beams of double 2x12s; roof: 3x6 cedar t&g decking; floor: 2x8 wood joists.

Exterior Finish: 1x4 t&g cedar; cement-asbestos panels—(Flexboard) Johns-Manville Corp.; exposed concrete block.

Roof Surfacing: three layers of asbestos felt on rigid insulation—The Flintkote Co.

Windows: steel vents—Fentron Industries, Inc.; Belgian crystal glass stopped in fixed wood frames.

Doors: exterior: hollow core birch; steel sliding glass—Steelbilt, Inc.; interior: hollow core hardboard.

Floor Surfacing: vinyl asbestos tile—(Terraflex) Johns-Manville Corp.; carpeting.

Interior Finish: painted gypsum board—(Sheetrock) United States Gypsum Co.; 1x4 t&g cedar—Weyerhaeuser Co.; ceramic tile in bathroom—Mosaic Tile Co.; Italian terrazzo fireplace hearth.

Lighting Fixtures: pendant and wall mounted incandescent—Gotham Lighting Corp.

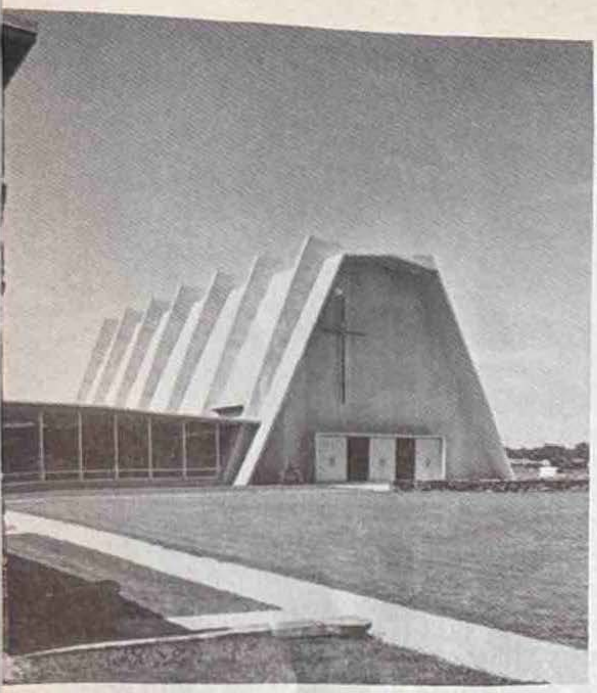
Heating: forced warm air with low pressure oil fired furnace—General Electric Co.

Plumbing and Sanitary: Crane Co.

Special Equipment: steel frame clear plastic skylight—Wasco Products, Inc.; wood folding doors on bedroom wardrobes—(RaTox) Hough Mfg. Corp.; steel fireplace—Manchester Pierce.

Total Area: 1,300 sq. ft. (enclosed space).

Date of Completion: 1956.



Guy Burgess photos

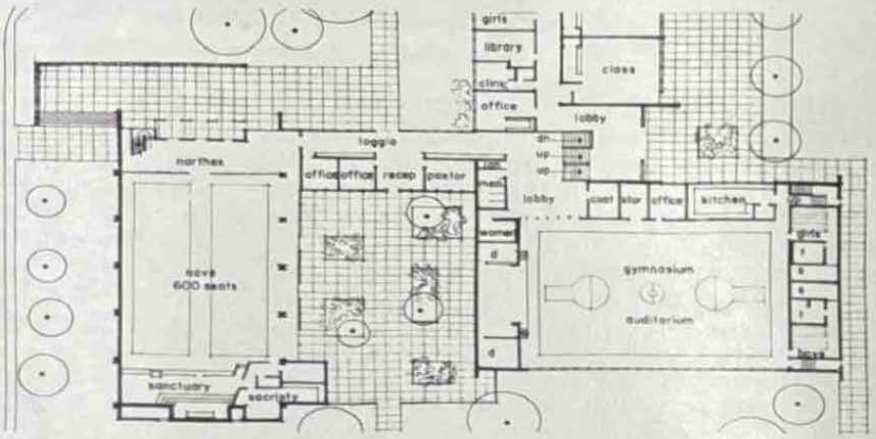
Grace Lutheran Church
Denver, Colorado

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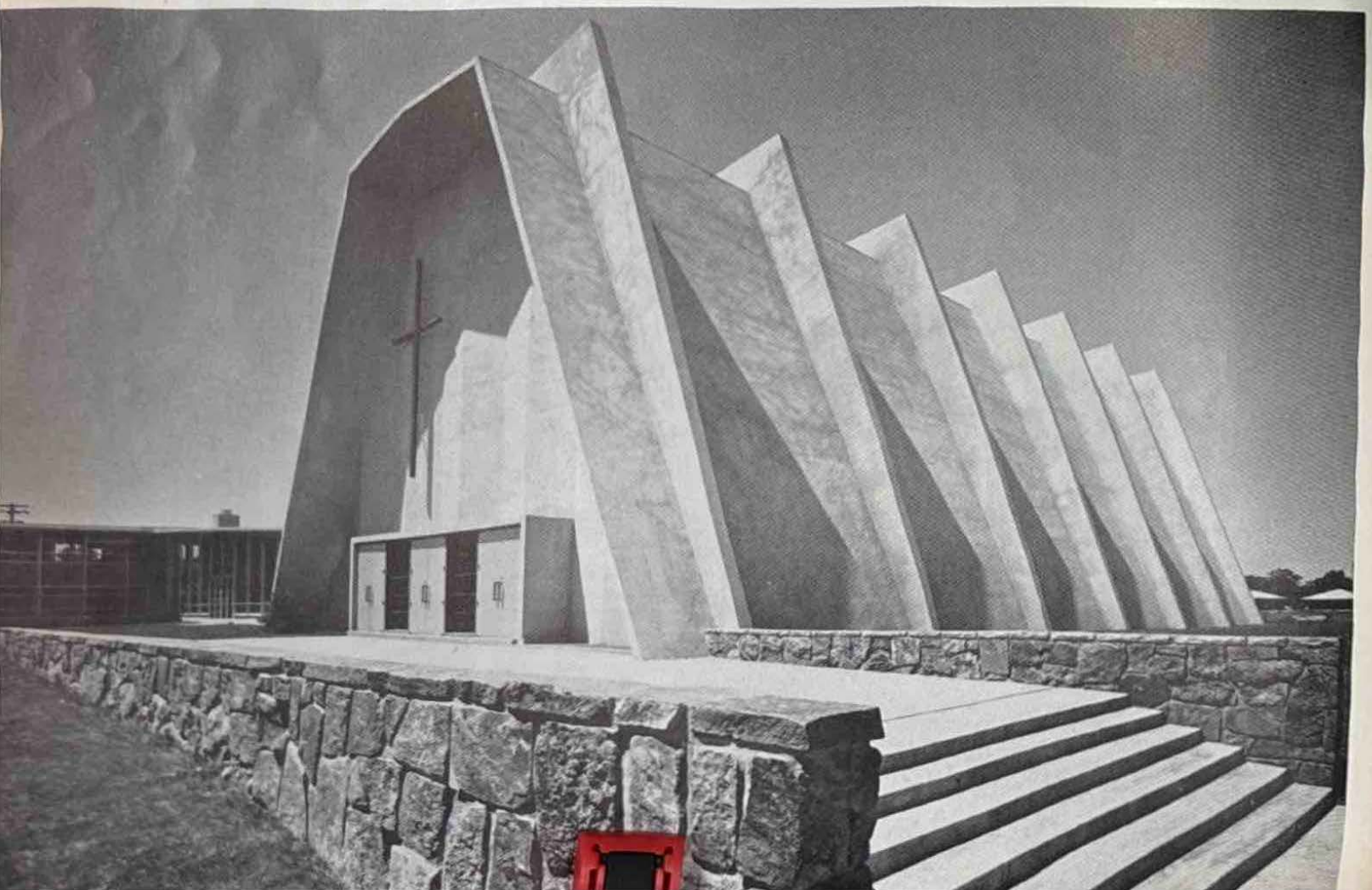
BAUME & POLIVNICK
Architects

KETCHUM, KONKEL & HASTINGS
Structural Engineers

LIPPERT BROS. CONSTRUCTION CO.
General Contractor



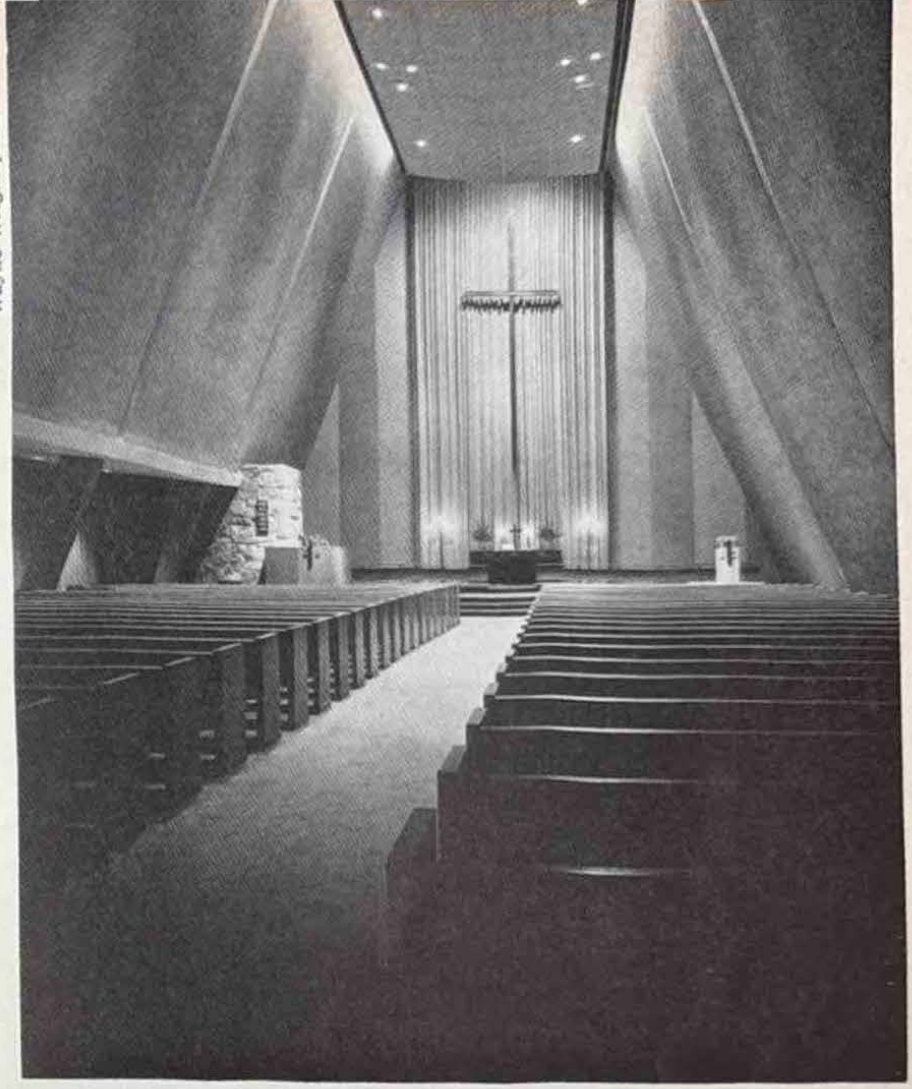
STAINED GLASS ENTRANCE, door pulls and special crosses are work of Robert Propst. Educational unit (partially shown in plan) is completed; gymnasium will be built later.





SUSPENDED CEILING in center of church is metal acoustical system, acting as plenum for ducts and lights. Sliding doors open entire south wall to what will be social court, enclosed on three sides with building complex and on fourth with decorative fence.

Wayne Wright photos



Deep spiritual quality etched in concrete

MASSIVE 46-ft. concrete arches supply both the frame and the dominating aspects of this church, drawing attention to its place as a focal point in a three-building religious and educational complex. Other elements have been deliberately kept low in order to accentuate the church.

"We aimed at achieving the simplest possible architectural form that would create a spiritual quality in the building and still meet the usual requirements of utility, moderate cost, etc.," the architects comment. "The exploration of many different structural methods led us to believe that the desired results could best be achieved through the medium of concrete."

Three-hinge concrete arches carry the main structure. Problem here was to design an arch which could be lifted and tilted into place without breaking. Excessive deflection was the main concern since each half arch weighs approximately 11 tons, is 46 ft. high from the floor to its center, 50 ft. across at the bottom and 18 ft. across the top. All concrete was poured on the site, cured and then erected with cranes and guyed into place. All the arches were set in place without a single crack in spite of deflection during lifting that appeared to be as great as 7 ft. in some instances.

Foundation on which the arches rest is placed on concrete caissons. Bottoms of arches are tied together with tension rods. Corrugated east and west end walls were poured in place as a single upright monolithic slab. Wall panels are 6 in. thick and weigh from 20 to 34 tons. Smallest panels are 18x30 ft. Others are 18x45 ft. and 24x45 ft.

Final finish over the entire church area consists of a coat of sealer and a spray coat of silicone. Interior finish is exposed concrete with a coat of texture paint. Heating system is radiant heat in the floors with a ventilation system in the upper area plenum to remove the stratified air.

Parochial school building includes four classrooms, office, clinic, library, all-purpose room and toilet rooms. Cost of the church and school was $345,284. Gymnasium will be constructed when funds are available.

Mechanical engineers were Marshall & Johnson; electrical engineers, Swanson-Rink & Associates; acoustical consultants, Bolt, Beranek & Newman, Inc.

Boeing Scientific Research Laboratories
Seattle, Washington

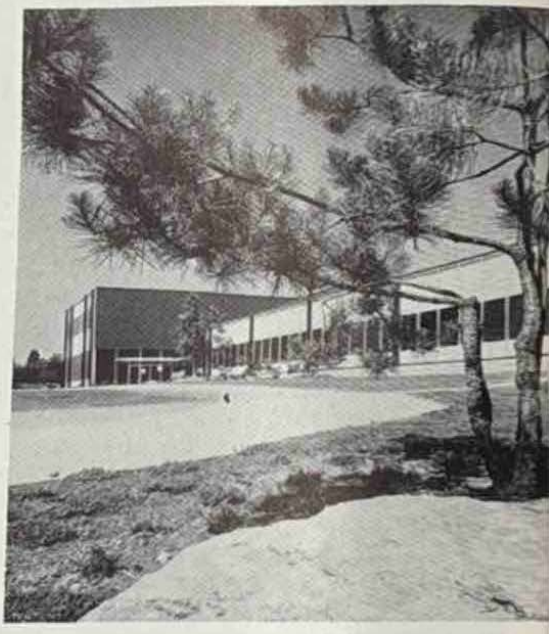
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AUSTIN ASSOCIATES
WALTER DORWIN TEAGUE ASSOCIATES
Designers

AUSTIN CO.
General Contractor

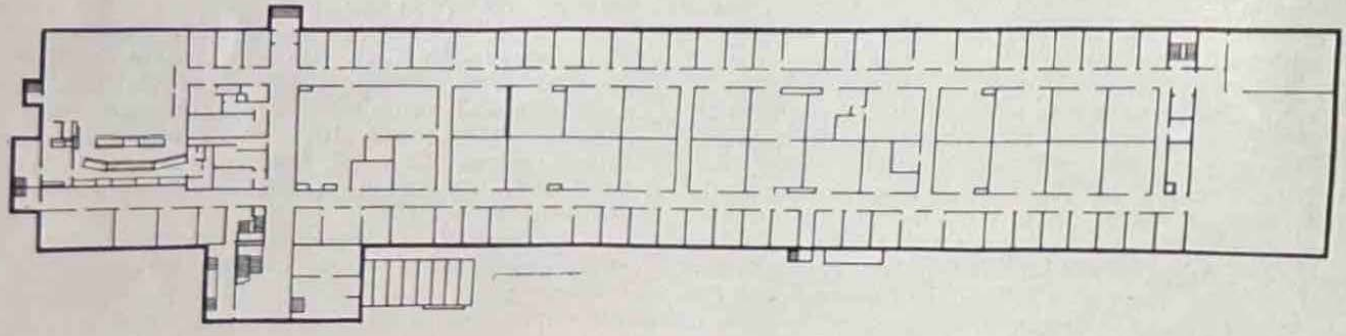


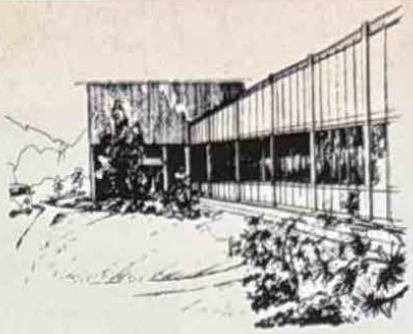
BASIC ONE-STORY STRUCTURE incorporates glare- and heat-resistant glass, insulated porcelain enamel curtain wall panels, aluminum sash and monolithic poured-in-place concrete foundation. Block pattern was obtained by application of simple molding on inside of standard plywood forms. Exterior colors are yellow and charcoal brown; accents inside are used with discretion.



LANDSCAPED PATIO adjoins dining room at one end of building. Benches placed here and next to other planting areas encourage out-of-door relaxation.







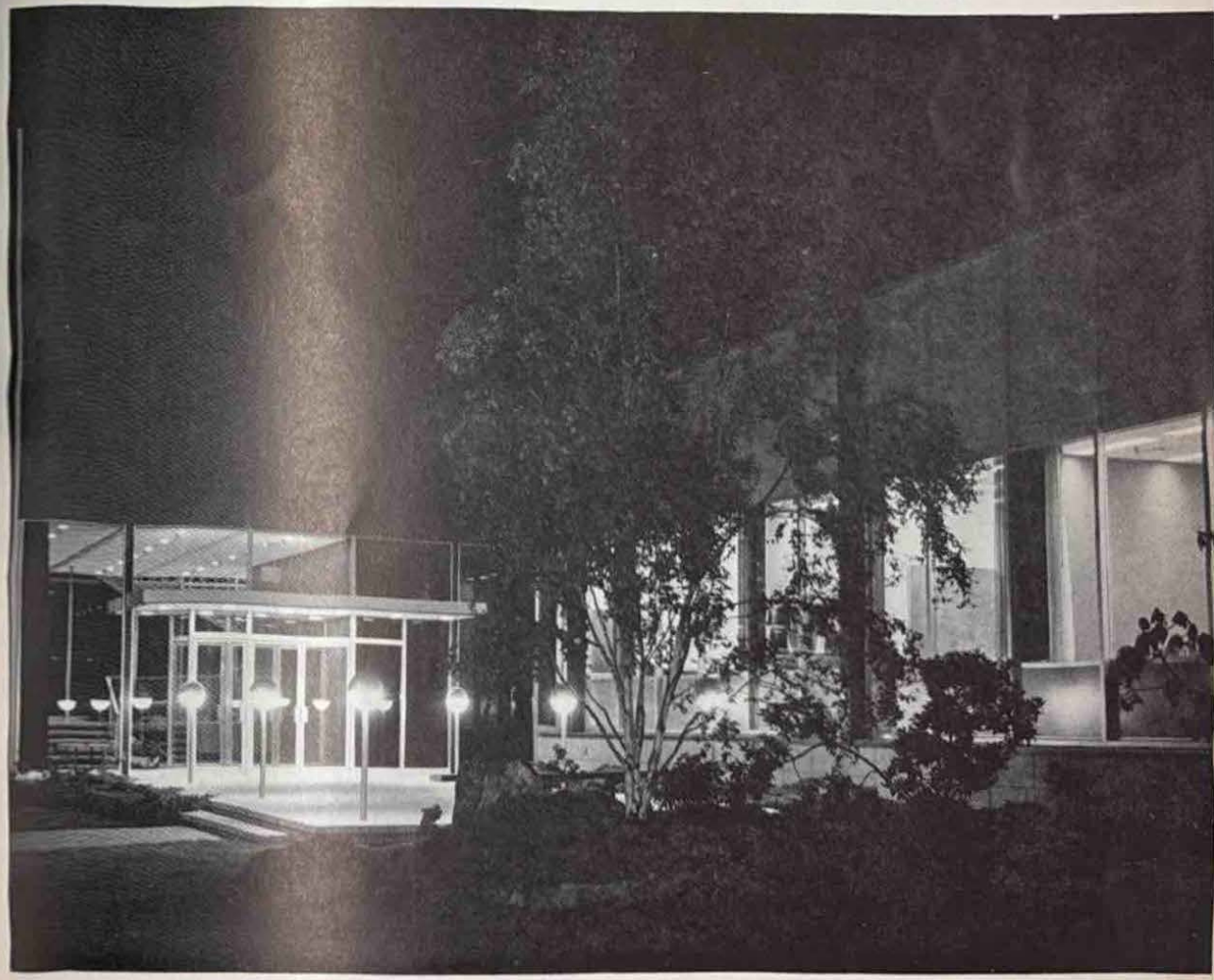
Flexibility—with sense—for basic research

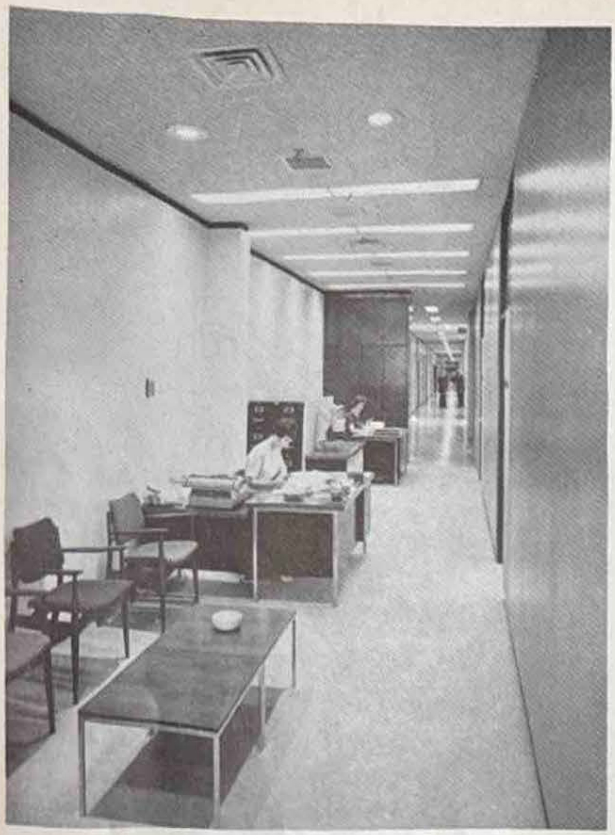
THE ATMOSPHERE, both inside and out, that permeates the $2,250,000 research facility of Boeing Airplane Co. is more reminiscent of an academic environment than an industrial operation. Here top-flight scientists from all over the world are free from limiting rules, distracting interruptions and annoyances (fences, guards and other security measures are notable for their absence), just as they are free from the specific development and technical assignments that typify the usual product- or process-oriented research center.

Says BSRL director Guilford L. Hollingsworth: "Our sole objective in designing, constructing and equipping this building has been to ensure that the only real limitations on what we can accomplish will be that imposed by each individual's capabilities and efforts."

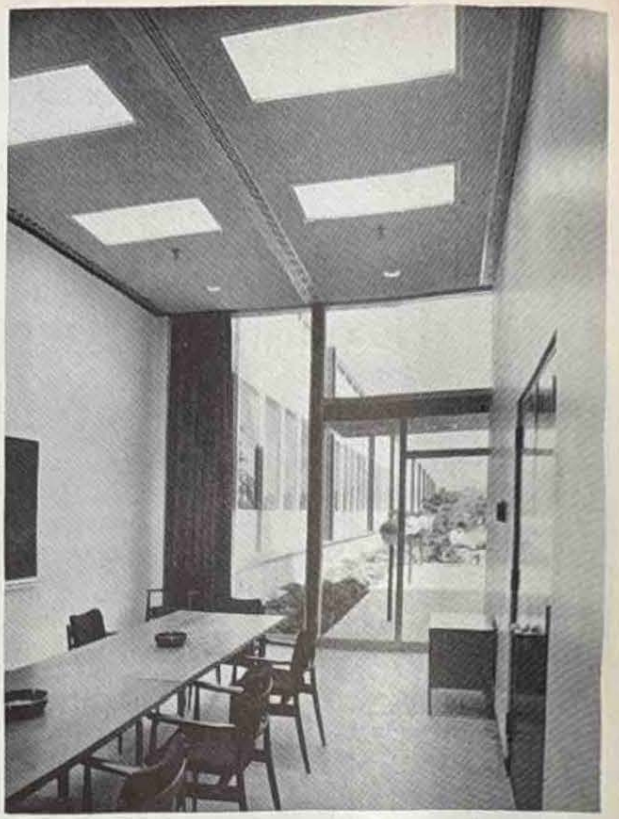
The straightforward expandable 65,000-sq. ft. structure is sited on a former Boeing parking area just across the Duwamish River from the company's big Plant No. 2 and is in view of its new Developmental Center, but has a character that

RECESSED SPOTLIGHTS in lobby's acoustical tile ceiling add to dramatic impact of entrance at night. Landscaping in this area helps to minimize sea of cars in parking lot as seen from office interiors.





SECRETARIES to administrators occupy this carpeted area next to executive offices at right. Colorful furnishings are in good taste.



CONFERENCE ROOM off entrance lobby illustrates indoor-outdoor planning used throughout. Ceiling has louvered ventilators.



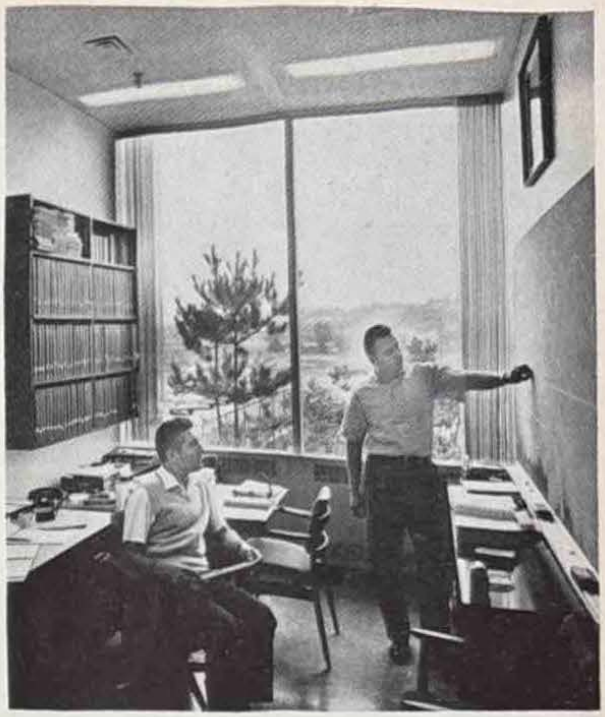
SECRETARIAL ALCOVE is typical of areas provided at half dozen strategically located control points along two corridors which separate scientists' private offices and laboratories. "Call director" telephone system is controlled from central locations like this.

BOEING RESEARCH LABORATORIES

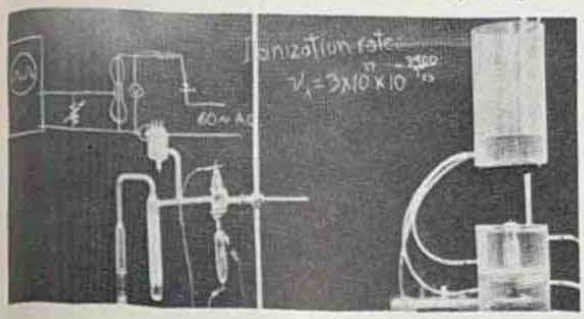
sets it completely apart from this industrial scene. Situated somewhat higher than its neighbors on a solid rock formation of glaciated sandstone, it is encircled by expansive lawns and landscaped embankments that screen out the surroundings.

Seismographic tests made during the early stages of construction, in which some 25,000 cu. yd. of rock had to be removed by blasting, indicate that the building occupies one of the "quietest" sites in the oft-troubled Seattle area—a fact that has a direct bearing on the use of delicate precision instruments for certain laboratory work.

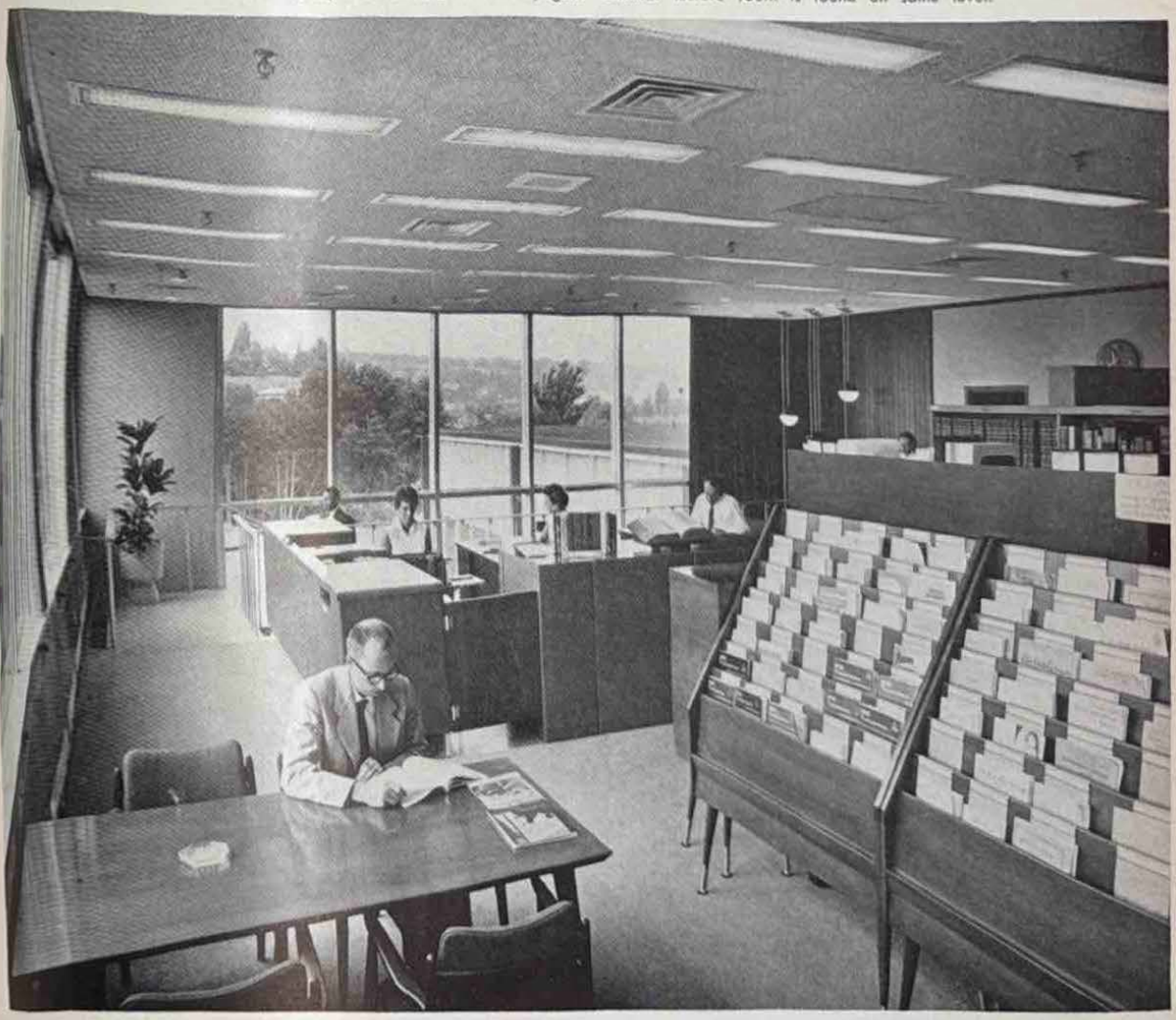
Both the basic one-story design and the choice of construction materials were selected on the determination of BSRL executives to provide the detached quiet and physical comfort that enable men to think alone or talk together. The scientists who occupy 58 one- and two-man offices along the north and south sides of the 450-ft. long building can enjoy broad outlooking vistas, including Mount Rainier and the far Cascades, through room-sized windows. Much of their work requires ready access to a diversity of complex equipment. All such facilities are located in 24 separate laboratories which have been laid out back to back between two corridors in the central portion of the main floor. This places each laboratory in close proximity to the office "retreats" of the several scientists who use it. The laboratories themselves have movable steel partitions and are served by a central underfloor utility service tunnel with access openings at intervals on either side of the dividing partition

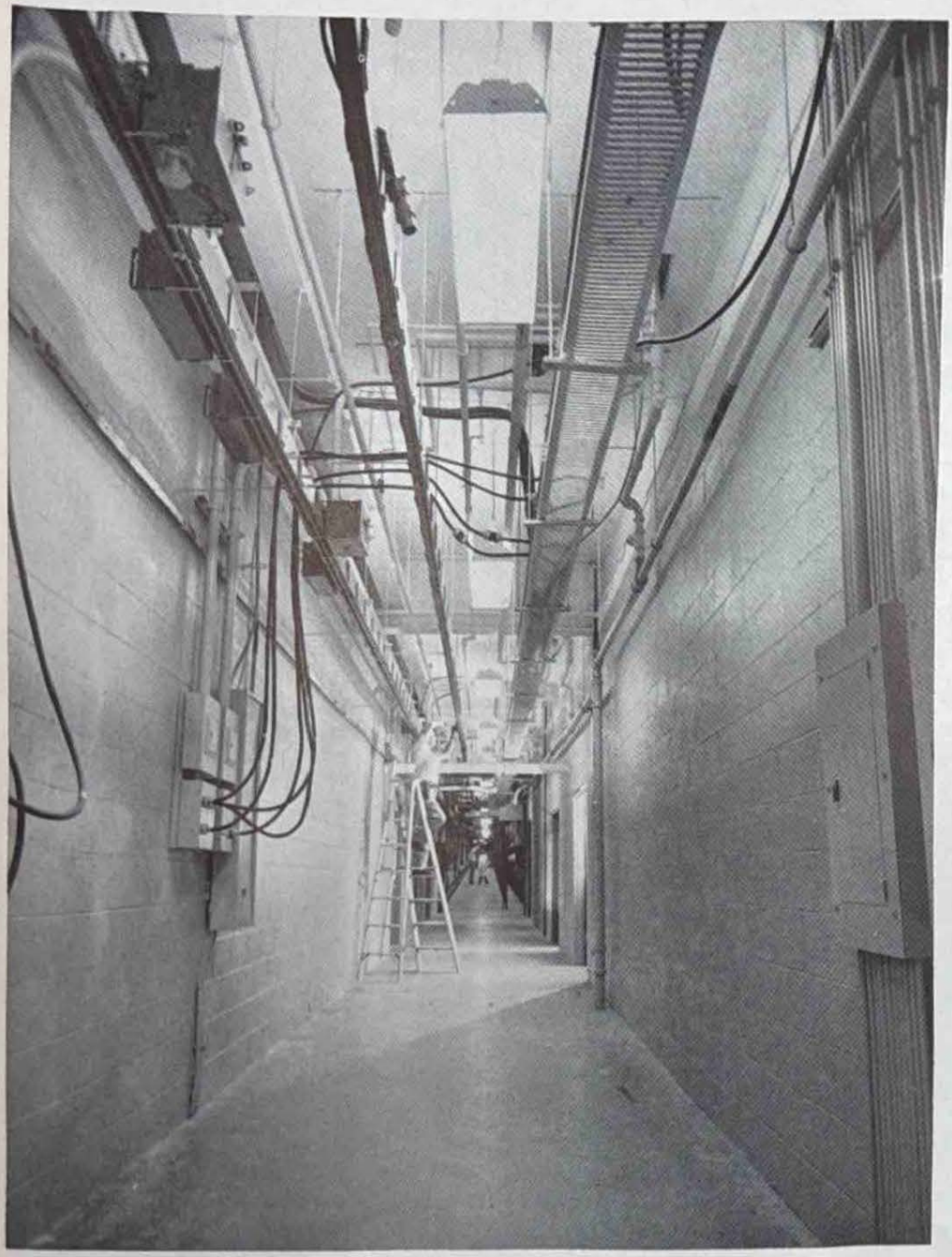


SCIENTISTS selected colors for their own offices—58 in all—from assortment of available shades and have been supplied with hanging bookcases, blackboards and built-in cabinets in accordance with individual needs. Vertical venetian blinds supplement special glass.



WELL-STAFFED LIBRARY directly above entrance lobby is reached via terrazzo stairs supported by welded steel column, has abundance of daylight. Seminar lecture room is found on same level.





CENTRAL UTILITY TUNNEL, which shares lower level with shops, boiler and refrigeration equipment and other service facilities, is essentially heart of building. Bus duct extending entire length of office area above allows telephones, electrical outlets, water connections, etc., to be moved at will without interrupting service elsewhere.

wall so that there is a maximum of flexibility to meet ever-changing laboratory needs.

Sound-deadening construction and quiet air conditioning with individual thermostatic controls in each laboratory area, as well as in key office locations, have been supplemented by a "call director" system for regulating incoming telephone messages. This system enables the scientists to divert the ringing signal on their phones to nearby secretaries whenever they want to work undisturbed.

Administrative offices are located just off the aluminum and glass enclosed entrance lobby and near the dining room which doubles as an auditorium. The latter has an abstract mural by Val Laigo entitled "To Seek We Must—To Find We Know Not What." A sizable library directly above the lobby is staffed by three professional librarians and two clerical assistants. It shares the second floor of the building with a seminar lecture room where a permanent projection booth is installed. Air handling equipment is on the same level.

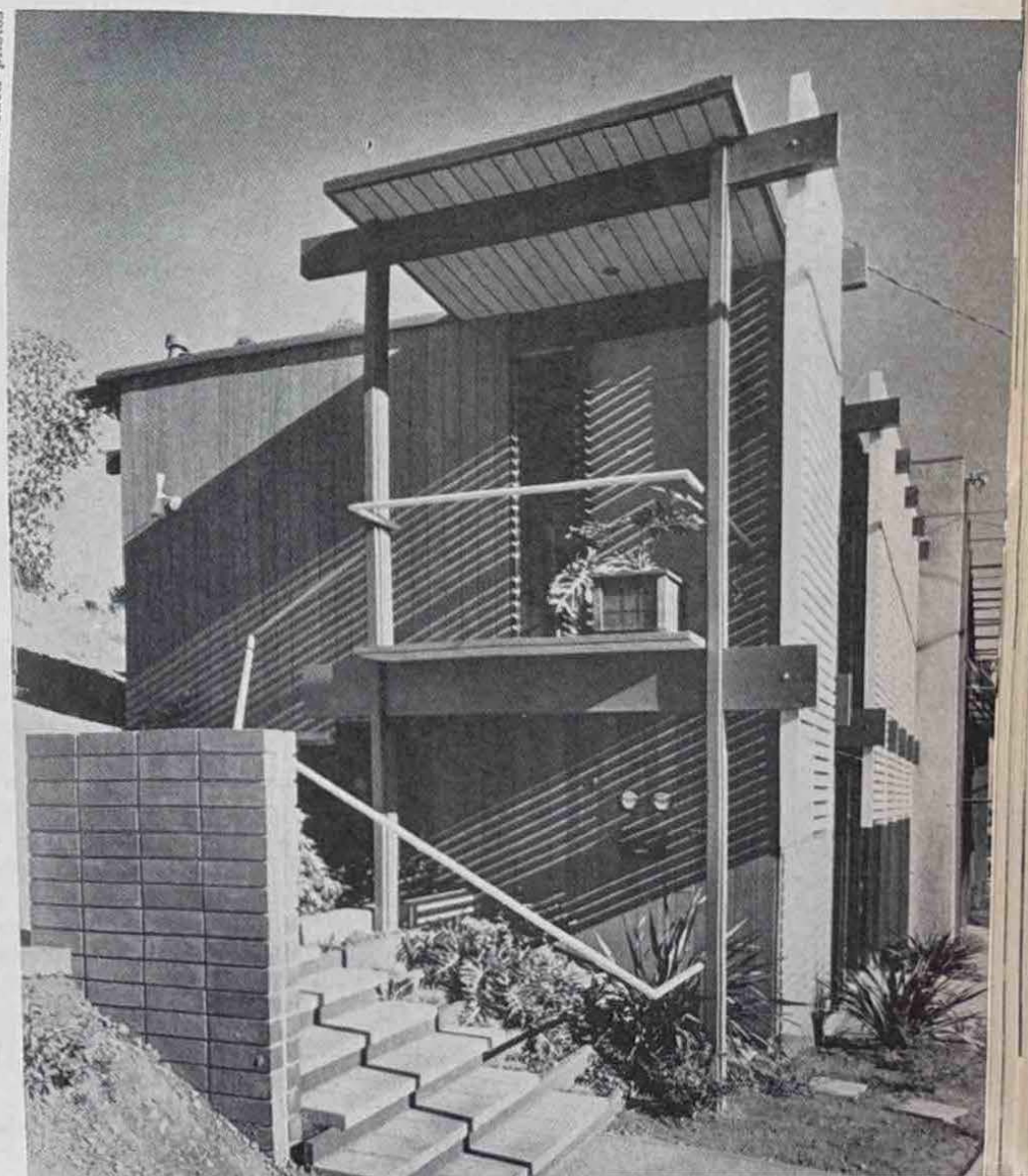
Where architects hang their hats

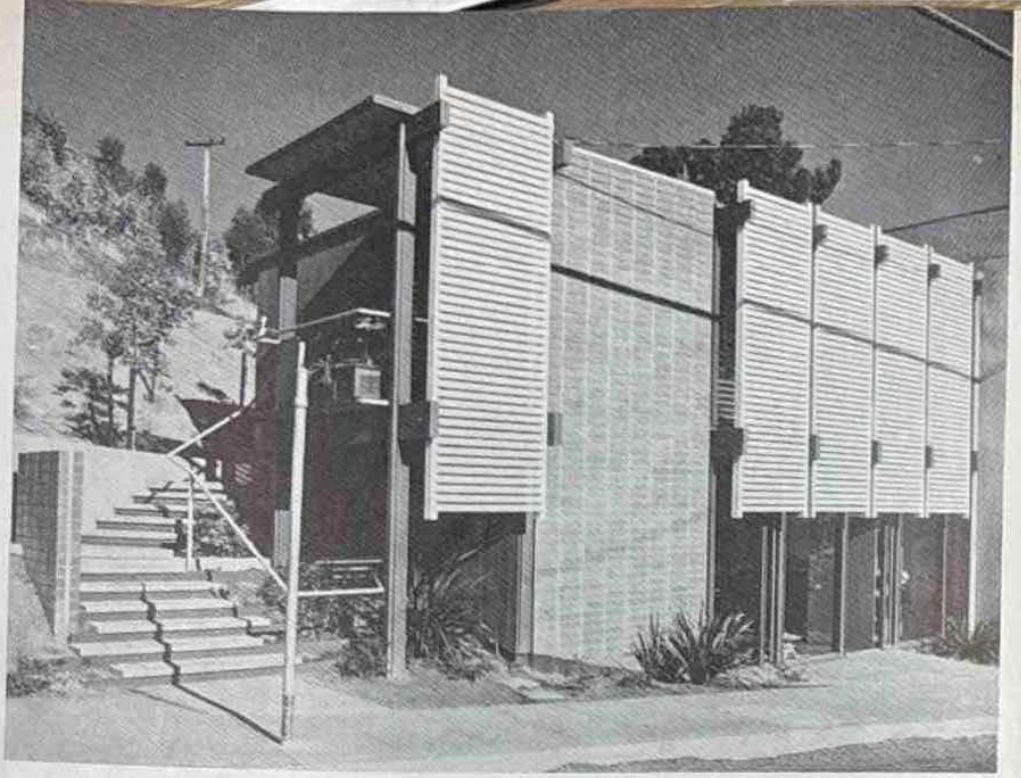
GOETZ & HANSEN
Oakland, California

LOCATED in a small, close-in suburban area of Oakland, this office perches on a steep slope at the edge of a three-square block shopping area developed essentially in the late 30s. After the war, home building began to expand rapidly in the general surrounding area and the shopping section flourished right along with it, a natural location for architects starting up a practice (in 1953). But this particular lot had remained empty due to its steep upgrade slope of 45 deg. from the street. It would have been almost useless except for an abandoned railroad right-of-way which existed at the rear, making it possible to grade back to a slope of 2-1.

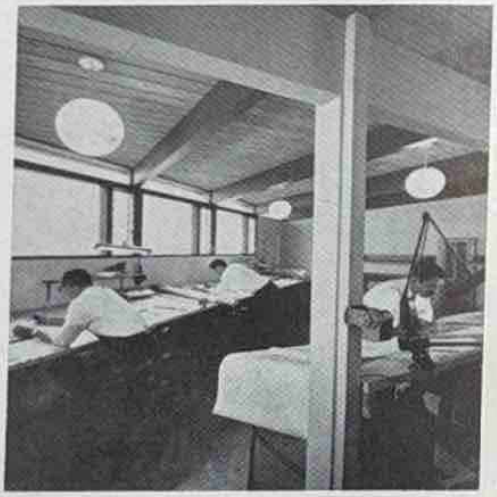
Building has approximately 750 sq. ft. per floor, with the architects upstairs and the lower floor presently being rented to a gift shop. Office layout was planned to provide an entry-secretarial area where both clients and salesmen could be received and channeled to the conference room without disturbing the drafting

Karl Riek photos









EXTERIOR consists of redwood siding and natural brick shear wall. Partitions are gypsum board; flooring is white vinyl at entry, matting in conference area and asphalt tile in drafting room.

WHERE ARCHITECTS HANG THEIR HATS

area. Shallowness of the lot dictated a plan admitting excellent light into all portions of the space. "Our only lighting concern," the architects report, "was the need to shield the west facade (secretarial and conference area) from about two hours of sun glare each afternoon." This problem has been partially solved by installing a screen of 1x3 redwood slats painted white in front of the windows on the street side, a measure which also serves to partially obscure a rather ugly building directly across the street.

Color scheme is one the architects frequently use: charcoal for mullions, beams, etc., which helps to hide any imperfections due to shrinkage and cracks; beige or white walls; and small areas of intense color, in this case an orange front door, a wide orange stripe in the conference room and a yellow wall in the entry.

Structure is post and beam with insulated plank second floor and roof systems. Rear wall is a 10-ft. high retaining wall holding up the bank in back, sandblasted at the portions which are exposed to view. Contractor: Merritt Construction Co.



A BOLD NEW BUILDING TO MATCH THE MAGNITUDE OF BOOMING LONG BEACH HARBOR

Brilliantly conceived...skillfully achieved...the new Long Beach Harbor Commission Administration Building is an exceptional building in many ways. The exterior facing of this large seven-story building employed prefabricated ceramic veneer panels bolted to the steel structure. The complete fabrication of its 75 foot by 17 foot mural took place at Gladding, McBean & Co.'s Lincoln, California plant. It consisted of three operations...bisquing the ceramic veneer, hand decorating the design, and final firing of the complete mural. It is interesting to note that the architects considered many materials, but settled on CV because the Harbor Commission wanted an easy-to-maintain surface that could be hosed down. Easy cleaning had to be the criterion, for the harbor area is naturally subject to much fog which causes rusting and dulling to most other surfaces.

CV can't stain...never effloresces. Colors never fade. CV is available in an infinite variety of colors, glazes and textures; in adhesion, anchored and hand pressed types. Isn't CV's combination of easy maintenance and beauty important to your next project? Consult with a Gladding, McBean & Co. representative. He'll give you full details on Ceramic Veneer

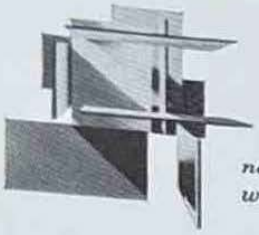


Mural for Long Beach Harbor Commission Building depicts Harbor's growth from shell-gathering Indians to present dynamic scene. Architects: *Warren Dedrick and James R. Friend* • Muralist: *Sheridan Stanton* • General Contractors: *Millie & Severson and C. L. Peck, Joint Venture* • Mason Contractor: *A. H. Maxted, Inc.* • Cost: *Approximately $3,500,000.*

Ceramic Veneer

by **GLADDING, McBEAN & CO.**

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new perspectives
with gypsum drywall systems

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U.S.G. brings inspiring "new perspectives" to western building—five new gypsum drywall systems for walls, ceilings, and partitions in non-residential construction that combine *freedom of design* with realistic control of cost! Among these innovations is the USG METAL STUD Partition System.

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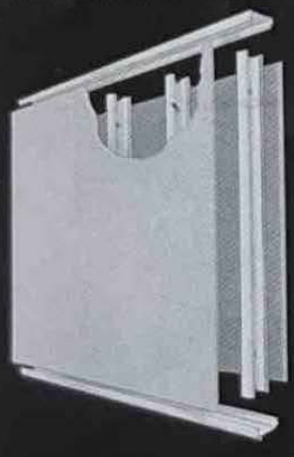
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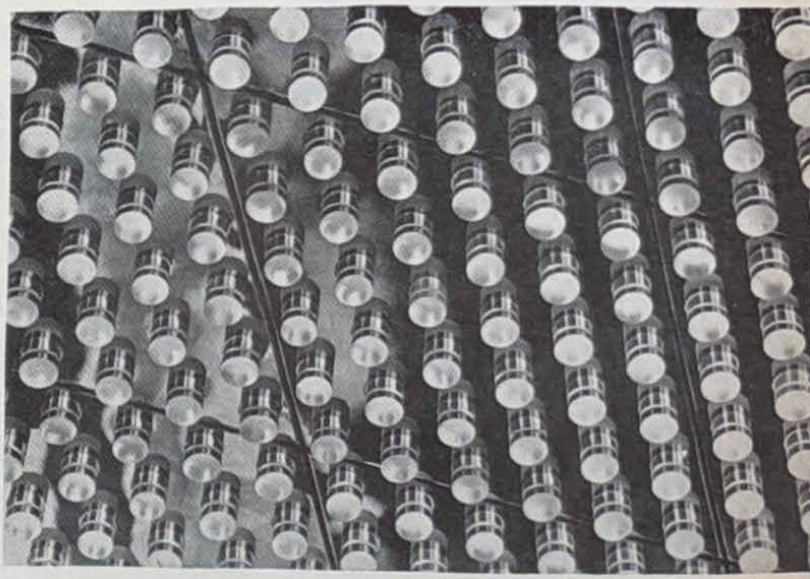
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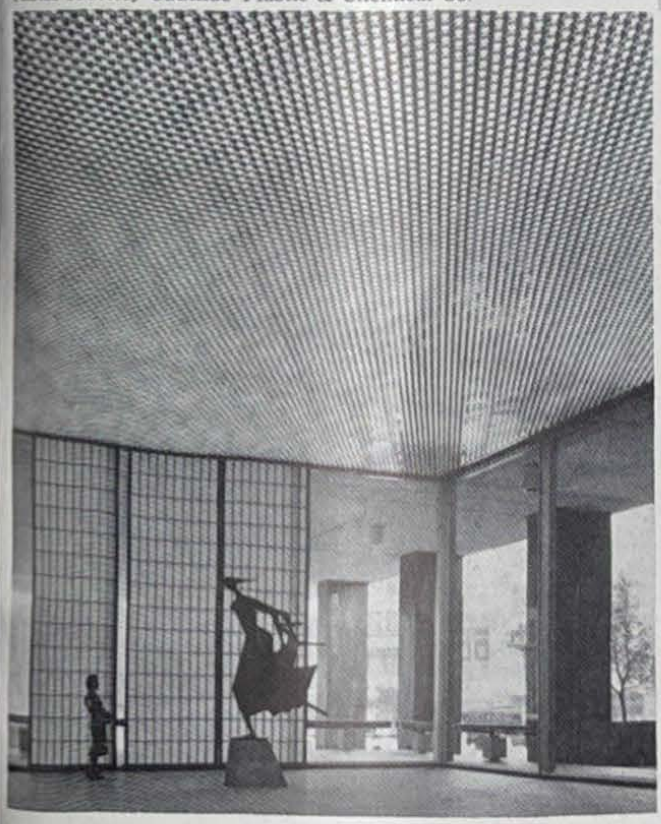


METHODS and MATERIALS

PACIFIC ARCHITECT & BUILDER, as its name implies, attempts to serve the needs and interests of the architect and the builder in one editorial package. Our continual efforts to better fulfill this objective find the placement of more and more emphasis on the "Methods and Materials" section. In July, for example, we introduced "PA&B Memo: Ideas/Forecasts/Trends," a department devoted to useful bits of information about product development and application. This month we use the leadoff page to usher in an offspring, a kind of pictorial presentation which will deal with ingenious uses of established materials. It will run whenever we come across a product employed in the 13-state West which we feel merits particular attention. *The Editors*

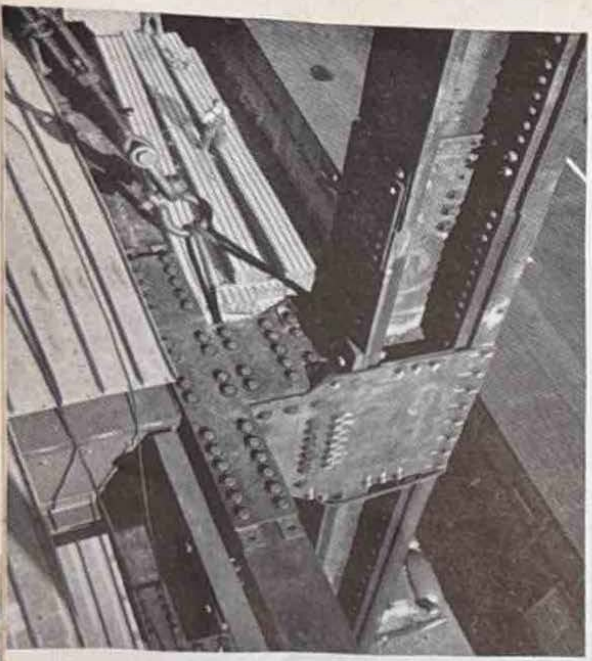


Photos courtesy Cadillac Plastic & Chemical Co.



PA&B SPOTLIGHT: *PRODUCT IN FOCUS*

Distinctive lobby ceiling in the Crown Zellerbach Building in downtown San Francisco diffuses light through more than 16,000 plugs of Cado cast acrylic rod. The plugs, 2 in. long and 2 in. in diameter, hang through perforations in the highly polished brass ceiling. Lower end of the plug is sanded to give light diffusion and a square of acrylic sheet is cemented to the other end to serve as a hanger. (Fabricator: Arrow Manufacturing Co., a division of Electrical Products Corp., Los Angeles.) Ceiling provides an extremely uniform level of transmitted light along with extraordinary luminosity, with each plug having its individual brilliance. Associated architects: Hertzka & Knowles and Skidmore, Owings & Merrill; general contractors: Haas & Hynie.

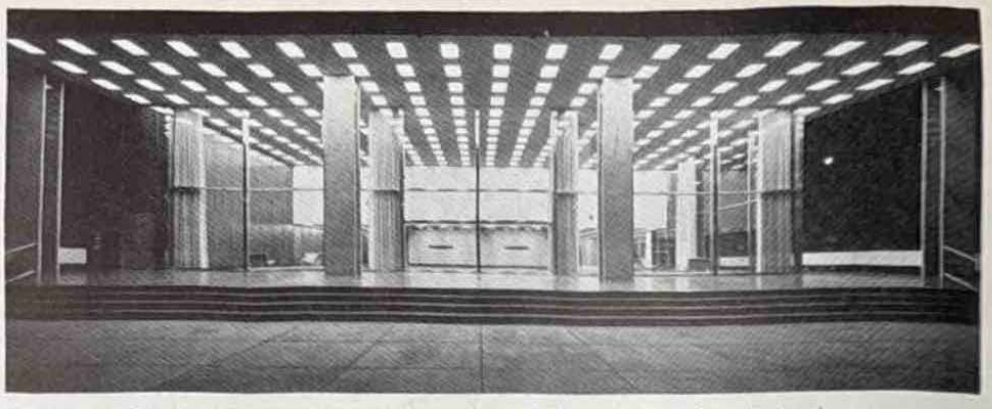


STEEL SPANDREL GIRDERS are 2 ft. 8 in. inside of exterior column centerlines. Only connection for columns are transverse steel girders into which spandrels are framed.



FIELD MEASUREMENTS of periods of vibration caused by building activity are conducted by John A. Blume & Associates during construction of building with portable seismograph (above) and with vibration meters (below).





FIFTEEN-STORY BUILDING is set on platform elevated 30 in. above sidewalk level.

Building frame will serve as seismic laboratory

Instruments built into the steel skeleton of Bethlehem Steel Co.'s new Pacific Coast division headquarters will make it in effect a laboratory for the measurement of the building frame's reaction to seismic or wind forces. The 15-story building in downtown San Francisco is equipped with two types of instruments, accelerometers and interstory displacement gages.

While this is not the first building in San Francisco to house accelerometer devices, it is the first such installation in a modern steel frame structure and the first to employ strain gages between floors.

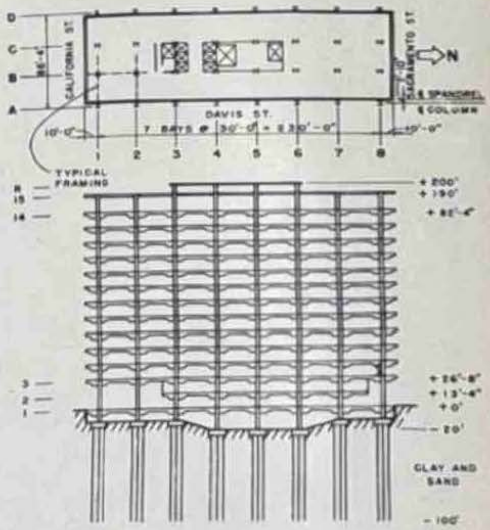
Construction of the building makes it a particularly ideal test laboratory because it is designed to resist seismic and wind forces without lateral bracing or interior shear walls.

Steel spandrel girders are 2 ft. 8 in. inside of the exterior column centerlines. The only connection for the columns are the transverse steel girders into which the spandrels are framed. Since the spandrel girders form part of the moment-resistant building frame, box girders were devised to transmit large seismic moments to the columns. Exterior ends of the box girders are haunched, forming a torque box out of steel plate to join the column and girder on the long sides of the buildings. This design was necessary because the transfer of moments involves torsion in the spandrel section.

U. S. Coast and Geodetic Survey type accelerometers are set up in the basement and on the 12th floor to record building accelerations and displacements during strong earthquake or wind motion.

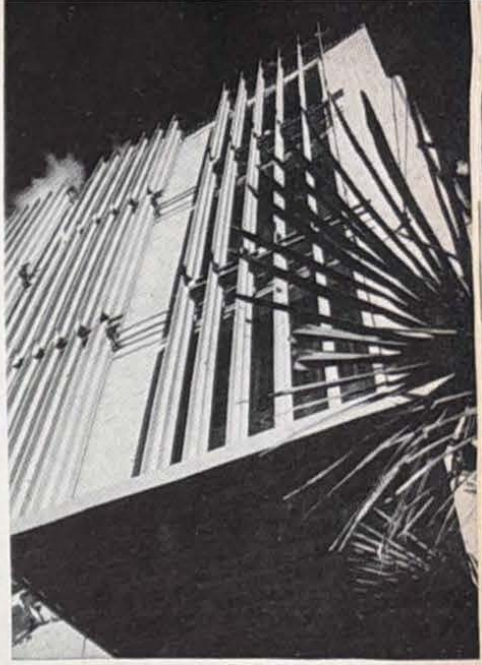
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Jack Laxer photos

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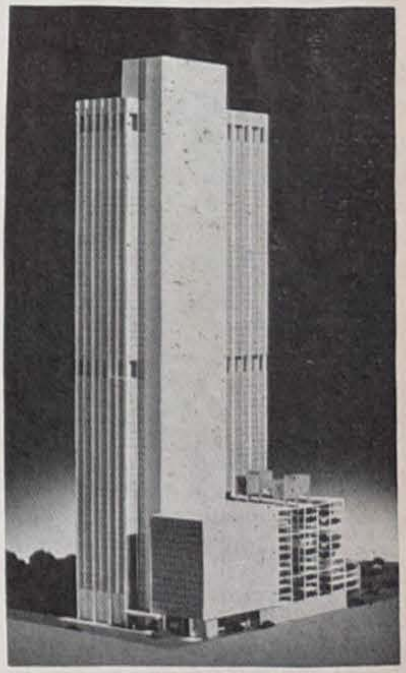
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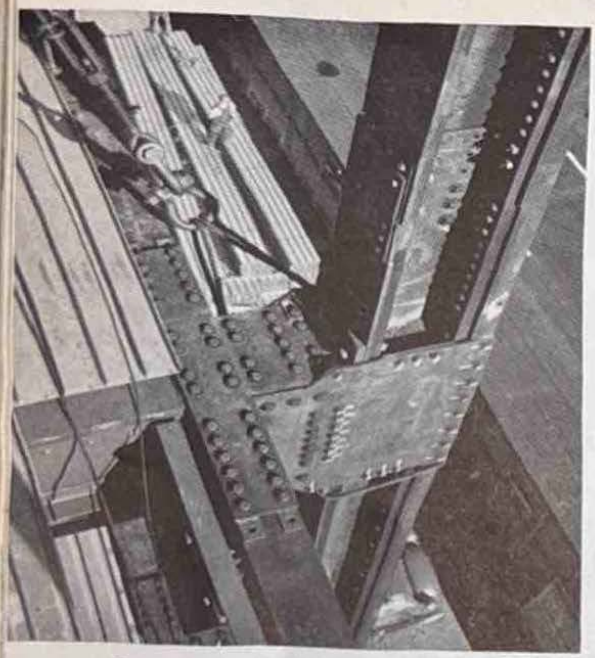


OFFICE BUILDING with garage at rear elevation (right) will represent $30 million investment.

Served by 14 automatic passenger elevators, the building will occupy more than one acre of land and will have a total area of 615,000 sq. ft., with floor areas ranging from about 15,000 to 22,000 sq. ft.

The 500-car parking facility will employ aluminum crane elevator towers to whisk vehicles from ground level to its top 14th floor in 45 seconds. Use of aluminum instead of steel on these towers is another innovation. Where present-day mechanical parking units pick up the car under the frame, the system devised by engineers Don Grove and C. F. Manaugh lifts it by dollies under the tires, thus eliminating any possibility of under-car damage.

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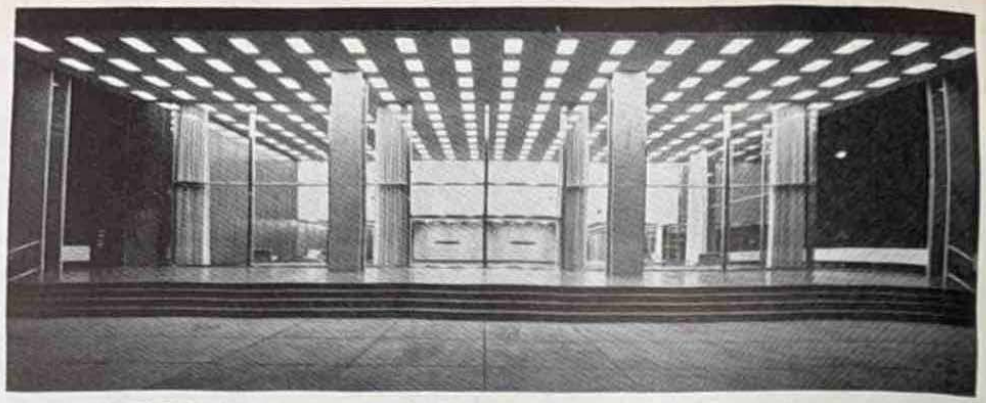


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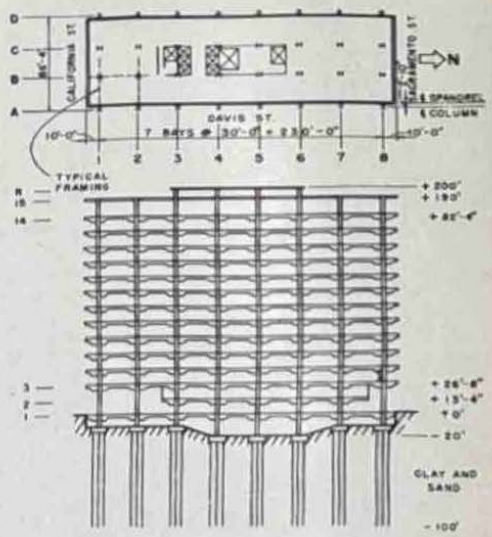
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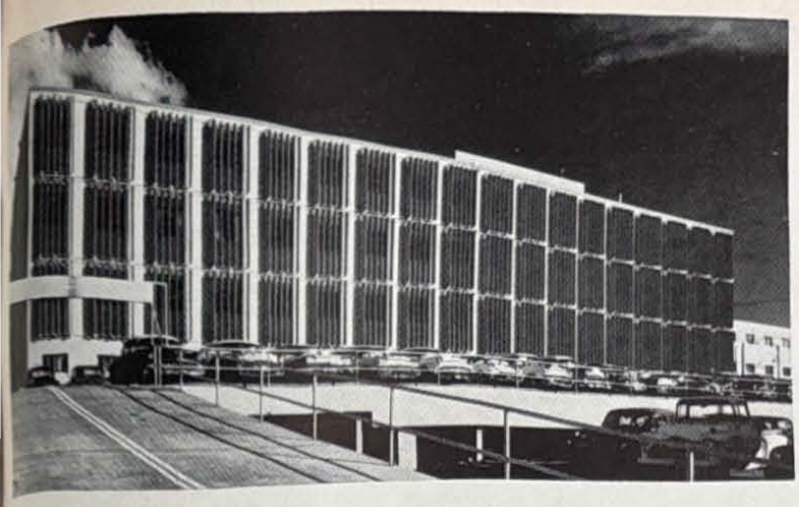
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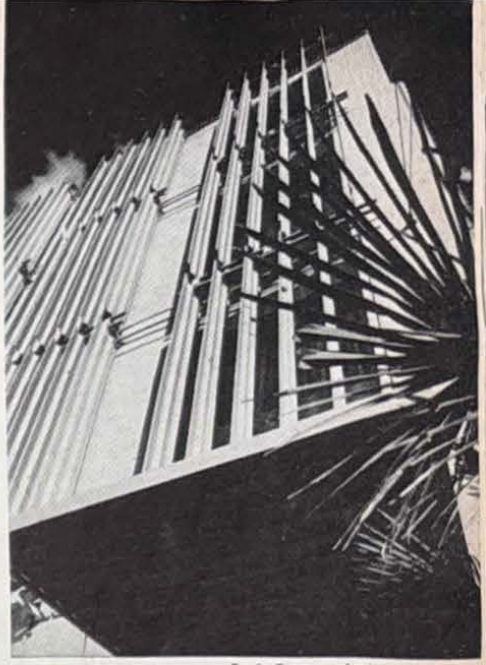
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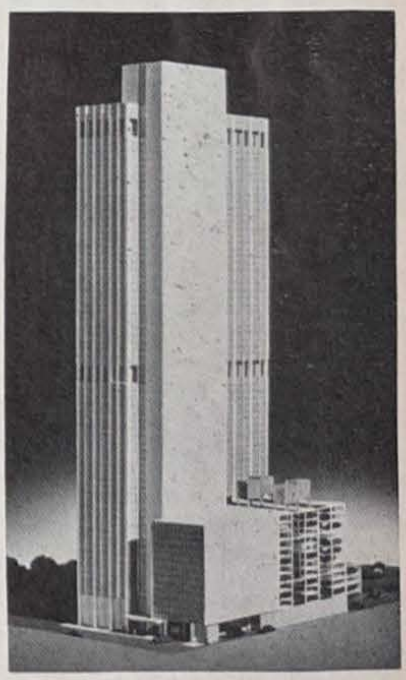
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Pressure treated wood battles termites in Hawaii

by CLINTON T. HALLSTEAD, Honolulu Wood Treating Co., Ltd.

What nature builds, nature can tear down.

This statement can be no better exemplified than in the case of termites in Hawaii and their quest for food. They need cellulose and thus wood, with cellulose content, is their best meal ticket.

During 1956, the City of Honolulu's Building Department estimated through its permit applications that there was more than $3 million in damage to structures due to termites. This did not include the do-it-yourself repairman or any of the military damage which was repaired by force labor.

The ubiquitous termite in Hawaii is primarily of two varieties: the subterranean or ground-nesting type and the drywood. The former starts its colony in the ground within some cellulose type material. As the colony enlarges, its members must find more food and in their search, usually discover the wood in a home or other buildings to their liking. The problem of infestation is becoming more acute because tract housing is robbing the termites of their natural habitat and food. As land is cleared for more housing, the dead stumps, branches, stems and roots of trees and bushes are cleared away. Termites are forced into the housing and concrete slabs are no barrier. They will penetrate minute cracks as narrow as 1/64 in. and will go into the wood above.

Proper construction is a requirement in keeping subterranean termites out. All wood and debris used in building should be cleared out. Pretreating the ground with soil poisoning such as chlordane, dieldrim, and aldrin is said to be effective for up to 10 years. The vacuum pressure treatment of the wood that goes into the building is the most effective method in that it will be good protection for the life of the structure against both types of termites and against fungi causing decay or dry rot. A dwelling that has all of the framing and structural wood pressure treated before installation and employs redwood siding is well protected against termite damage. This protection will normally cost from 1% to 2% of the cost of the residence, but it is low cost insurance when it lasts for the life of the structure.

Comparing termites, the University of Hawaii reports that the subterranean type do 75% of the damage while drywoods do 25%. It is reported by the state entomologist that practically every frame home in Honolulu has drywood termites in it. The university entomologist points out that drywood termites are very active in furniture, millwork, and plywood products. A new pressure treatment is being used to protect these materials from infestation.

Pretreatment is done in huge steel cylinders under vacuum with pressure up to 150 psi. to force the chemicals into the wood.

A recent survey of all architects in Honolulu showed that 98% of them specify pressure treatment for protection against termites. With proper building methods and pretreatment of the wood, the problem in new construction can be licked.



EFFICIENT SEPARATION of 350-ton concrete floor slabs cast on top of each other during construction of world's tallest slip form, lift slab building in San Francisco is achieved with Thompson's water seal as bond breaker. Builder George Belcher employed troweling-in process with water seal for curing all 13 slabs.

Plastic coat shields buildings from weather damage

Application of an epoxied vinyl surface coating on the exteriors of a number of buildings in the Pacific Northwest has proved to be a successful answer to maintenance problems caused by both moisture and hot sun. The product, Ren-Coat, was developed by R. L. Stevenson Co. of Seattle and is now being marketed by Ren Plastics, Inc., of Lansing, Mich.

In Tacoma, Ren-Coat was used on a modular, four-classroom satellite school, covering both the fir plywood domical roof and the walls, a combination of wood and metal panels and masonry in various colors. After several years of wear, appearance of the building has remained unchanged and maintenance costs have been kept to a minimum.

Perhaps the most unusual application so far has been on the exterior of a lighthouse at Westport, Wash. Surface of the tower was constantly peeling and showing extensive wear from salt water saturation, storm activity and reflection of bright summer sun off the water. On the inside, seepage of moisture caused a mosslike growth and oxidation on the cast iron. Since the Ren-Coat application three years ago, the elastic and nonporous membrane film has been unaffected by salt water and other weathering and the inside has remained free from absorption of moisture through the walls.

The product is sprayed on in two applications — an all-purpose primer which bonds the elastic film to the surface so that structural movements will leave undisturbed the adhesion between coating and surface and the epoxied vinyl coat which can be done in any of numerous color combinations or to match existing surfaces and natural wood finishes.

Application is usually in 6- to 10-mil thicknesses. Product is unaffected by temperatures between -65 and 350 deg. and can be washed with warm water and mild detergents.



ENTIRE EXTERIOR of this four-classroom unit is sprayed with epoxied vinyl membrane film which protects it from elements and heavy impact. Architect: Robert B. Price.

LONG-WAY JOISTS in homes can cut construction costs by reducing the volume of lumber needed and providing a base for economical sheet-board subflooring, according to studies by the Western Pine Association research laboratory. The long-way system also allows use of narrower joists. The study showed that an extra joist running the length of the structure will add adequate strength for central load-bearing partitions. The extra joist is not necessary where open planning or truss rafters are used. Cost comparisons using a typical house with basement 28x40 ft. in size revealed that conventional joist framing required 1,916 bd. ft. of lumber while the long-way joist system using three cross beams required 1,629 bd.

—pa&b memo—

WINDOW SPECIFICATIONS have been put on a less confusing basis by recent action of Western Architectural Metal Manufacturers who adopted the residential window specifications of the Aluminum Window Manufacturers Association as WAMM standards. The two associations also have agreed to tighten communication lines, beginning with an exchange of minutes, bulletins and research data.

—pa&b memo—

NEW STEEL, called A36, should help lower building costs when it becomes available this fall. The American Institute of Steel Construction reports that A36 will have nearly 10% more strength on a yield point basis, resulting in a 10% reduction in weight and accompanying building economies. The new steel is being boomed as a part of the organization's stepped-up promotion program to meet the challenge of competitive materials. AISI area engineering staffs also are being beefed up to provide better and more concentrated services.

—pa&b memo—

REDWOOD STUDS grade-marked Two Star have been approved for use in construction designed to meet FHA minimum property standards. The Two Star grade in 2x4-in. size has been authorized for load bearing studs in lieu of construction heart or sap common dimensions, the FHA says. Grading rules for redwood studs were announced last May.

—pa&b memo—

PERLITE-GYPSUM plastered ceiling on Pabco Key-Grip indented lath has successfully passed a standard ceiling-floor fire test conducted by the Fire Prevention Research Institute in California. After 64 minutes of exposure to smoke and flame, the maximum temperature rise of the unexposed floor surface protected by Key-Grip and plaster was 82 deg., manufacturer Fibreboard Paper Products Corp. reports. Maximum rise of 325 deg. is allowed.

—pa&b memo—

PLASTIC MATERIALS could be utilized much more extensively within the framework of present building codes, a study by the Southwest Research Institute in Texas indicates. The study, sponsored by the plastics group of the Manufacturing Chemists' Association, showed a "wide gap between the specified and possible uses of plastics." Insulating plastics might serve as components of fire-resistive constructions, the institute commented. "It is possible that some plastics building materials, such as insulations, can be used in combination with other building materials in a manner that would qualify them for use where fire-resistance is required." Another suggested use was the protection of such materials as steel to prevent collapse during the period of time prescribed by safety regulations.

—pa&b memo—

ALUMINUM'S growing use in construction is reflected in end-use statistics for the first quarter of 1960 which show that building products accounted for the largest share, 18.6%, of aluminum shipments reported by members of the Aluminum Association. Transportation field, which includes mobile homes, was second with 18%.

—pa&b memo—

ELECTRIC HEATING is assuming growing importance in a field previously dominated by gas and oil, reports the building material division of the U.S. Business and Defense Services Administration. In 1959 manufacturers' shipments of electric heating equipment to be permanently attached amounted to $27.8 million, a record volume. Biggest share of this market went to baseboard and convector type radiation. The line-up of all types of residential heating sources based on annual manufacturing volume of $387 million is 46% gas, 42% oil, 7% electricity and 5% solid fuel, according to the government survey.

AIR CONDITIONING installed as a central system in new homes will be as common as bathrooms in many sections of the nation by 1970, predicts S. J. Seibert, manager of the air conditioning department of Amana Refrigeration, Inc. Seibert bases his prediction on two factors: mass production of compact single-unit packages and the growing market as living standards rise.

—pa&b memo—

STEEL GIRDER with inclined corner plates for strengthening is expected to provide a number of design benefits, including less unbraced depth for the vertical web, lighter weight, high torsional resistance, outstanding resistance against lateral deflection and economies in fabrication costs. Girder was designed by Homer M. Hadley,



RESULTS OF LOAD TEST, conducted on 2,500,000-lb. Baldwin machine, are checked by Homer M. Hadley (right), designer of new girder, and Prof. F. B. Farquharson, director of University of Washington's Engineering Experiment Station.

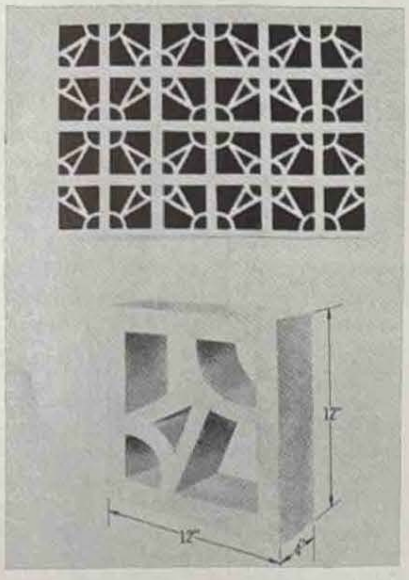
Seattle engineer. Cooperating with him in the project were the Pacific Northwest Steel Fabricators Association, American Institute of Steel Construction and Pacific Car & Foundry Co., which constructed the prototype for testing at the University of Washington. Design incorporates a basic I-shaped girder with a pair of full-length inclined plates welded across the upper corners. The plates are welded to each side of the vertical web at a point equaling three-quarters of the vertical distance, creating a pair of closed triangular boxes extending the full length of the girder. All commonly used vertical stiffners are eliminated except at points of heavy load concentrations. Automatic welding is used for the fabrication.

prefinished doors

To help eliminate door rejection problems, a California firm is now producing natural prefinished, prefit and wrapped doors offered either completely finished or ready for a final coating. Custom-Coat doors are presized, bored according to customer's specifications and dapped. Each door is individually encased in a wrapper that remains through installation, application of all hardware and painting and plastering of adjacent materials. Wrapper has a transparent window for inspection. Finish includes resin sealing, tinted to bring out natural grain characteristics. — California Wood Products, Inc. **(No. 1)**

invisible sound barrier

For partitions, dividers and window walls in factories, office buildings, schools and the like, Monsanto has developed a transparent sound-reducing product based on a principle called viscoelastic damping. The almost invisible sound barrier consists of thin, transparent panels of special laminated safety glass made with the company's Saflex polyvinyl butyral plastic sheet. It is tuned to be especially effective at frequencies of 1,000 to 4,000 cycles per second, the range of many vocal and mechanical sounds. The company explains that thin walls and windows normally transmit noises by vibrating in response to sound waves. Sound energy vibrating the new glass is dissipated by the molecules of the Saflex interlayer where it is converted by friction into tiny amounts of heat instead of passing through as noise. The product is now available from a number of commercial glass laminators. — Monsanto Chemical Co. **(No. 2)**



concrete screen wall designs

Expanding use of concrete screen walls has prompted a California manufacturer to offer a series of eight designs in concrete block for commercial or residential use. Called the Satel-Lite series, they range in style from classically simple to intricately detailed and can be arranged in many individualistic pattern forms. Designs were created by well-known architectural firms. — North Hollywood Concrete Tile Co. **(No. 3)**

wood sliding doors

A line of wood paneled sliding glass doors reinforced with steel is being marketed under the Pella trademark. Wood frames of 1¾-in. thick Ponderosa pine can be painted or finished according to interior and exterior decorating schemes. Panels are reinforced with steel T-sections on all four sides. Muntins in regular or diamond shape snap in and out to simplify maintenance. Screens are inside. Exposed hardware is solid bronze. Pella doors are available for ¼-in. plate and ⅝- or 1-in. insulating glass.— Rolscreen Co. **(No. 4)**



removable window dividers

For those who want the decorative advantages of divided windows without the disadvantages when it comes to cleaning and painting them, Zegers is introducing sets of muntin bars that snap in and out. Called Windo-Bar, the muntins are made of wood and held in place by tiny metal clips. Sets are available to fit a large variety of window sizes and to meet a wide choice in number of panes for traditional or Swiss diamond shaped designs.—Zegers, Inc. **(No. 5)**

sprayed-on roofing

A three-nozzle spray gun that can apply roofing in a single operation has been introduced by Flintkote for the application of asphalt or other materials combined with glass fibers. One nozzle of the Sealzit gun is for the glass fibers, the other two for coatings. A three-man crew using the Monoform roof system can install between 15,000 and 18,000 sq. ft. a day.— The Flintkote Co. **(No. 6)**

stressed skin curtain wall

Prefabricated, insulating, low cost curtain wall panel weighing 1.8 lb. per square foot has been developed by Dresser-Ideco. Called Condo-Wall, it owes its high strength to weight ratio to a stressed skin design which permits use of light gage skins without sacrifice of strength or rigidity in the double-walled panel. Fiberglass batts and ventilated air spaces between the metal walls provide U-factors down to .13. Panels have ribbed aluminum or galvanized steel skins fluted on the outside and of the V-type on the interior. Baked-on enamel finishes are available. Fiberglass boards are used as structural shear members between the metal skins. Window and door openings can be cut with an electric handsaw. Installation, as little as $1.60 per square foot, takes only hand tools.—Dresser-Ideco Co. **(No. 7)**

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smooth surfaced formed board

German-developed Bison system for producing wood formed board is getting its first application in the U. S. at a new plant in Albany, Ore., where Duraflake is being manufactured from wood salvage. The system forms a progressively graduated board by using an air separator spreader which concentrates larger chips to the center and finer chips to the exterior, producing a smooth surface. Resin is applied uniformly to each wood particle, regardless of the size, giving the board its strong internal bond. No crossbanding is needed to stop telegraphing or grain show through and Duraflake can be tooled and machined successfully. Board is expected to find wide use as floor underlayment, single wall partition and in counter and cabinetwork, although the bulk probably will be employed in the furniture manufacturing industry.—Wood Fibreboard Co. (No. 8)

steel pilaster form

Symons is now marketing a steel pilaster form which can be used in pairs with the Steel-Ply forms to produce pilasters from 2 to 12 in. deep in 2-in. increments. Each form has a 3-in. face toward the parent wall requiring an opposing filler or panel 6 in. wider than the width of the pilaster. Standard sizes are available. —Symons Clamp & Mfg. Co. (No. 9)

damper regulator

Invention of an insulation contractor who worked out the idea for his own projects is now being marketed as the Trim-Lok damper regulator for installation on ducts, plenums and ceilings. Product provides an integral flange for insulation trim, ensuring a neatly finished appearance. Damper blade regulated by Trim-Lok is installed parallel with the handle, visually indicating exact position. — Rinco. (No. 10)

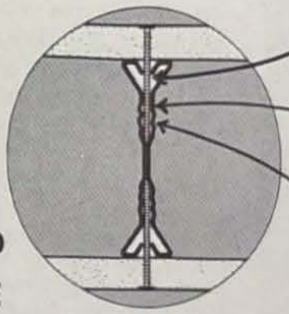
protective coating

For areas where corrosion is a major problem, Owens-Corning has developed a spray coating that can be applied to metals, wood or concrete. Coating is a homogeneous mixture of Fiberglas flake, resin, fillers, accelerator and pigment if desired, holding shrinkage to a minimum and increasing impact resistance. Crawling of the coating is reported to be impossible because of the high shear force that exists between the layers of flake and resin as applied. Suggested uses include jackets for industrial stack insulation, liners for concrete industrial flooring, water sealants for concrete block and slab walls in industrial and residential construction and for swimming pools.—Owens-Corning Fiberglas Corp. (No. 11)

acoustical ceiling

Soundblock was specifically designed to eliminate room-to-room sound transmission in spaces with ceiling-high movable partitions. A metal lay-in ceiling panel, it has high sound absorption, as well as an average sound transmission loss of 39.3 decibels. Soundblock panels are made of honeycomb cells adhered to a solid steel back surface and a perforated face surface. Cells are filled with fibrous glass. A textured, flat baked-on white enamel provides light reflecting surface and softens the metallic look usually associated with such ceilings. Standard panel is 2 ft. by 4 ft. by 1 in.—Kemp Corp. (No. 12)

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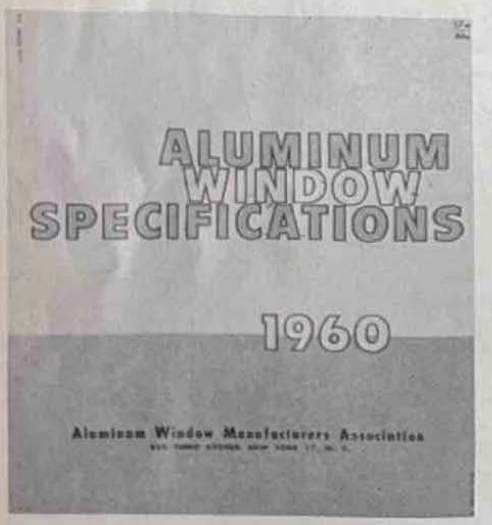
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pa&b pick of the month

A number of revisions have been made to update the AWMA's "Aluminum Window Specifications" in the 1960 edition (AIA 16-E) now available. Changes have been made in the double-hung, awning, jalousie, horizontal and vertical sliding window specifications and new or expanded treatment has been given to alloys, material thickness, fasteners, protective coatings and like subjects. The 32-page publication contains general requirements applicable to all aluminum windows; specific requirements for double-hung, casement, etc.; and a new section covering hurricane specifications. Recommended standard sizes are shown and manufacturers whose windows have been tested and approved are listed. Last publication date was in 1958.—Aluminum Window Manufacturers Association, 630 Third Ave., New York 17, N. Y.



Heifetz Design Gallery: catalogs chandeliers, pendant and wall fixtures for commercial and residential lighting, with photographs, drawings and specification charts; 64 pp.—Heifetz Co., Clinton, Conn.

Lumber Grades, Uses, Specifications: provides data on Douglas fir, West Coast hemlock, western red cedar, Sitka spruce and white fir, with photographs of typical grades and patterns and conversion tables from fbm. to square footage; 20 pp.—West Coast Lumbermen's Association, 1410 S.W. Morrison St., Portland 5, Ore.

Sturd-i-wall: outlines various types of this siding-sheathing method of construction; gives insulation values, bracing strength and construction details; 12 pp.—Douglas Fir Plywood Association, 1119 A St., Tacoma 2, Wash.

Windows by Albro (AIA 16-E): describes custom-made metal windows with detail drawings and specifications; 20 pp.—Albro Metal Products Corp., 944 Longfellow Ave., New York 59, N. Y.

Pattern Glass: introduces 26 patterns in decorative, rolled and wire glass manufactured in England to be distributed in the U. S. by LOF; 32 pp.—Libbey-Owens-Ford Glass Co., 811 Madison Ave., Toledo 3, Ohio.

Plasterite Steel Door Frames: outlines procedures for installing door before plastering; 4 pp.—Kewanee Manufacturing Co., Kewanee, Ill.

Cellulite Expanded Polystyrene: describes plastic foam material and its use as an insulation plaster base, shingle backer, cavity wall insulation and others; 6 pp.—The Gilman Brothers Co., Gilman, Conn.

Door Frame for Hospitals: presents gliding door frame which can be vacuumed without removing the door; 4 pp.—National Cylinder Gas Division, Chemetron Corp., 840 N. Michigan Ave., Chicago 11, Ill.

Lumi-flo Troffers: describes system for providing light, cool and warm air from same concealed fixture with manufacturer's cross reference for suspended ceiling systems and comprehensive selection data; 44 pp.—Benjamin Division, Thomas Industries, Inc., 207 E. Broadway, Louisville, Ky.

Facts and Counsel on Elevator Planning: outlines services offered by engineering consulting firm specializing in vertical transportation; 12 pp.—Charles W. Lerch & Associates, Board of Trade Bldg., Chicago 4, Ill.

Herculene Drafting Film: introduces tracing film that can be washed with soap and water and includes sample of Herculene plus Duralar pencil for drawing waterproof plastic line; 4 pp.—Keuffel & Esser Co., Third and Adams Streets, Hoboken, N. J.

Facebrick (AIA 3-F-1): catalogs in color residential facebrick offered in Pacific Northwest; 4 pp.—Gladding, McBean & Co., 945 Elliott Ave. W., Seattle, Wash.

Residential and Commercial Lighting: provides data prepared for contractors on some 100 fixtures and brackets; 8 pp.—EJS Lighting Corp., 921 E. Pico Blvd., Los Angeles 21, Calif.

Cornell Sliding Grilles (AIA 16-D) offers detail drawings, specifications and installation photographs for line of protective screening; 4 pp.—Cornell Iron Works, Inc., 36th Ave. and 13th St., Long Island City 6, N. Y.

Contact Sheeting System (AIA 2-B) describes system of horizontal sheeting for supporting deep, tight excavations said to save considerable labor, time and material; 4 pp.—Contact Sheeting, Inc., 55 E. 43rd St., New York 17, N. Y.

Chemelad Doors (AIA 19-E-13): outlines advantages of custom-made doors of stressed skin construction with plastic laminate faces; 4 pp.—Bourne Manufacturing Co., 1573 E. Larned St., Detroit 7, Mich.

Comfort Conditioning (AIA 31-F-2 and 30-E): introduces combination light and air diffusers developed by Barber-Colman and Day-Brite Lighting, Inc., with extensive selection data; 24 pp.—Barber-Colman, 1300 Rock St., Rockford, Ill.

Aluminum Plumbing Fixtures: presents data on Super Secur Ware line, including combination closet and lavatory; 8 pp.—Aluminum Plumbing Fixture Corp., 778 Burlway Road, Burlingame, Calif.

Hydrocide S-X Hycon Water Repellent (AIA 3-B-1): gives technical and application data on silicone waterproofing material for masonry said to have extra long life; 8 pp.—Building

OFFICE AID

To simplify the task of designing and installing gas vent systems, architects and builders are being offered a pocket-sized calculator that determines correct vent sizes. Based on the Metalbestos gas vent tables, the calculator uses rated input, lengths of runs and number of connectors to size single and multi-appliance systems up to 1,000,000 Btu.—Metalbestos Division, William Wallace Co., Belmont, Calif.

roducts Division, Sonneborn Chemi- and Refining Corp., 404 Park Ave., ew York 16, N. Y.

hilippine Mahogany: shows silhou- es of moldings, paneling and siding roduced by the company; 12 pp.— ssular Lumber Co., 1405 Locust St., hiladelphia 2, Pa.

-Chord Longspan Joists (AIA 13-G): ves detailed information on steel ists now offered up to 175 ft. long; cludes load tables; 20 pp.—Haven- sch Co., 3443 Chicago Drive S.W., randville, Mich.

ittenhouse Sound System: depicts ilt-in, transistorized home sound stem with FM-AM radio, intercom rvice, recorded music and electronic or chime; 4 pp.—The Rittenhouse ., Inc., 1315 Howard St., San Fran- sco 3, Calif.

omputer Pedestal Floor Surfacing: esents specially compounded vinyl or tiles for this purpose, called ustom Corlon, with maintenance tips solve unusual conditions in com- ter installations; 12 pp.—Armstrong ork Co., 5983 E. Smithway St., Los ngeles 22, Calif.



OFFICE AID

A calculator that takes into account all the variables that affect daylighting design, floor area, ceiling height, interior finish, windows, visual task, roof well depth and climate, and translates them into the size, number, type and spacing of required skylights is offered by Wasco Products. Called the Daylighting Calculator, it translates into linear logarithms most of the final computations developed by the firm's engineering service over a number of years of field and laboratory work. Naturally, it is keyed to selection of Wasco Skydomes.—Wasco Products, Inc., 5 Bay State Road, Cambridge 38, Mass.

FILMS

Building with Prestressed Concrete. Colorado Fuel and Iron Corp., Box 1920, Denver, Colo. Sound, color, 16mm, 20 min.

Illustrates how the use of prestressed concrete strand increases strength and rigidity while providing for more efficient manufacture of such materials either at the fabricating plant or construction site.

Houses Have Four Sides. Aluminum Company of America, Vancouver, Wash. Sound, color, 16mm, 30 min.

Tells the home builder or home improvement contractors how to sell and install new Alcoa siding, with instructions on how to estimate the job, utilize the accessories and complete the installation.

Automation in Concrete Block Manufacturing. North Hollywood Concrete Co., 12323 Sherman Way, North Hollywood, Calif. Color, 16mm, 30 min.

Shows how company techniques helped to reduce overall costs and assure a higher degree of quality control than standard methods.

Architectural Aluminum. American Art Metals Co., Box 7188, Atlanta 9, Ga. Sound, color, 16mm, 17 min.

Combines humor and music as it reviews finishing, fabrication and installation of the building material.

Prestressed Concrete. Calaveras Cement Co., 315 Montgomery St., San Francisco 4, Calif. Sound, color, 16mm, 22 min.

Covers the history and future of this form of construction in addition to describing its present applications, with Prof. T. Y. Lin of the University of California as narrator.

This Is Cemesto. The Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill. Sound, color, 16mm, 20 min.

Describes applications and advantages of low cost curtain wall construction using lightweight structural insulating panels on steel or wood framing.

A Letter to Moscow. Armstrong Cork Co., Lancaster, Pa. Sound, color, 16mm, 28 min.

Answers challenges voiced by Soviet Premier Nikita Khrushchev during his 1959 visit to the U.S. and illustrates how the nation's competitive enterprise system contributes to the high standard of living realized by the American people. The film is sponsored by the company as part of its centennial observance.

Man and Masonry. Allied Masonry Council, 1520 18th St. N.W., Washington 6, D.C. Sound, 16mm.

Examines masonry through scale, nature, form, light, screens, pattern, texture, sculpture and emotion, the result

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of a year-long study under the direction of Bernd Foerster, assistant professor of architecture at Rensselaer Polytechnic Institute. Also available are a book and a hi-fi recording made from the soundtrack by the National Symphony Orchestra.

Fury of the Winds. Bethlehem Steel Co., Bethlehem, Pa. Sound, color, 16mm, 25 min.

Follows an Atlantic hurricane from the moment of its detection in the Caribbean Sea through its buildup into a raging fury and on to the full climax of its destructive force. Viewer goes behind the scenes with the U. S. Weather Bureau, watching its hurricane-tracking activities. And finally the film shows how, through proper design, construction and use of steel, structures can be built to withstand the elements.

Farmville. Formica Corp., 4554 Spring Grove Ave., Cincinnati 32, Ohio. Sound, 16mm, 15 min.

Quality Under the Skin. Same producer. Sound, color, 16mm, 15 min.

First film tours the Flakeboard plant in Farmville, N.C., world's largest and most completely automated particleboard plant; second shows applications of the product as an underlayment for laminated plastics.

Engineer's Vest-Pocket Book. Ottenheimer Publishers, Inc., 4805 Nelson Ave., Baltimore 15, Md. 1960. 192 pp. 90 cents.

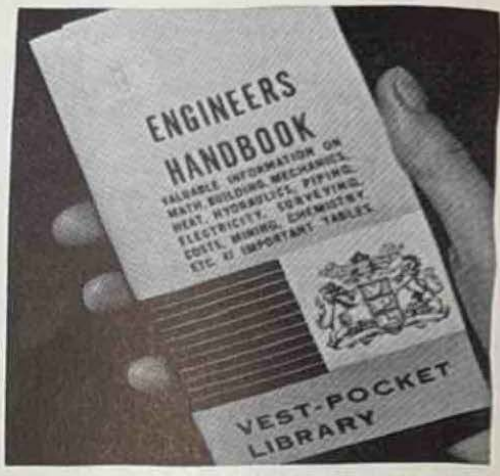
Contains data under 12 indexed headings — mathematics, building, mechanics, heat, hydraulics, pipes, electricity, surveying, costing, mining, chemistry and miscellaneous—plus 47 tables. Its chief drawback: hard-to-read print.

Plastics for Architects, Artists and Interior Designers. By Armand G. Winfield. Society of Plastic Engineers, Inc., 65 Prospect St., Stamford, Conn. 1960. 50 pp. $2.

Comprehensive survey illustrating applications of plastics in the building industry, divided into two parts detailing use of both thermosetting resins and thermoplastics. Also included are a glossary of terms and lists of designers, associations and publishers in the plastics field.

Reference Manual for School Construction Inspectors. California Council, American Institute of Architects, 916 Kearny St., San Francisco 11, Calif. 1960. 24 pp. $1 (plus 4% sales tax).

New feature of the revised manual first published last December is a Project Final Check List, containing 16 items to be reviewed by the inspector at completion of the job. Revisions include clarifications in the wording of certain passages and a more consistent numbering system.



Footcandle Levels and Interior Lighting Design. Westinghouse Lamp Division, Westinghouse Electric Corp., Bloomfield, N.J. 1960. 60 pp. 10 cents.

Pocket-size manual has recommended footcandles for a myriad of industrial, commercial and residential applications, data on distribution and light



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measurements, precalculated footcandle tables, coefficients of utilization and maintenance factors, etc.

The Engineering Index-1959. Edited by Carolyn M. Flanagan and others. Engineering Index, Inc., 29 W. 39th St., New York 18, N.Y. 1960. 1532 pp. $70.

Contains more than 39,000 annotations of articles reviewed in some 1,700 publications, arranged under 249 "field of interest" divisions.

ASTM Standards in Building Codes. American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa. 1960. 270 pp. $3.25.

Calls attention to the revised standards and the new and revised tentatives that have been accepted by the ASTM since the appearance of the 1958 edition.

Fatigue of Concrete. American Concrete Institute, Box 4754, Redford Station, Detroit 19, Mich. 1960. 38 pp. $2.50.

Bibliography lists and annotates 114 significant works published since 1898 on the fatigue of plain and reinforced concrete.

Special Services (Welfare and Recreation) Facilities. Bureau of Yards and Docks, Department of the Navy, Washington 25, D.C. Reprint of 1953 document. 62 pp. $1.75.

While this publication presents criteria for use in the design and construction of facilities at naval installations, it contains information which should be helpful to those who are planning similar community or industrial projects. Data cover swimming pools, gymnasiums, auditoriums, tennis courts, chapels, etc., with emphasis on providing these facilities at a reasonable cost while holding fire and health hazards to a mininum. Design factors, formulas and graphs are intended as engineering guides in solving structural problems, including acoustics, seating arrangements and lighting.

The Light Side of Decorating. Superior Electric Co., Bristol, Conn. 1960. 36 pp. 25 cents.

Contains 40 full-color illustrations of well-lighted rooms in the home, each keyed to wiring diagrams and installation sketches.

Symposium on Durability and Weathering of Structural Sandwich Construction. American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa. 1960. 72 pp. $3.

Answers some questions concerning service performance in this relatively new area. Book is well illustrated and contains extensive references.

Recommended Design Practices Manual. Metal Building Manufacturers Association, 2130 Keith Bldg., Cleveland 15, Ohio. 1960. 27 pp. Free.

Covers new grading rules and grade names for framing, joists, planks and roof decking, including stress grades, approved recently by the association. Framing grade changes for all 11 species produced in the western pine region—Douglas fir, white fir, larch, hemlock, Ponderosa pine, Idaho white pine, sugar pine, Engelmann spruce, lodgepole pine, incense cedar and red cedar—are detailed.

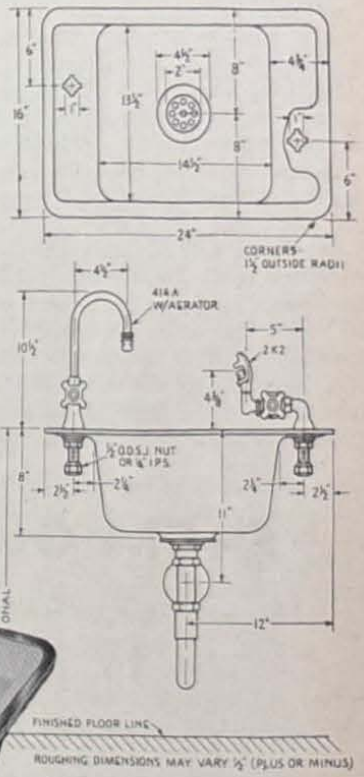
Supplement, 1960 Standard Western Pine Lumber Grading Book. Western Pine Association, 510 Yeon Bldg., Portland 4, Ore. 1960. 112 pp. 15 cents.

Takes up application of roof dead and live loads, wind loads, crane loads, etc., along with minimum standard for thickness, aluminum panels and plastic panels in regard to metal buildings. Includes tables and illustrates typical examples.

Building Design Handbook. Wire Reinforcement Institute, 1049 National Press Bldg., Washington 4, D.C. 1960. 168 pp. Free.

Intended for use by architects, engineers, consultants and others concerned with reinforced concrete construction, this volume is divided into two parts: general text and pictures describing the ways to which steel wire fabric is employed and a series of actual design tables.

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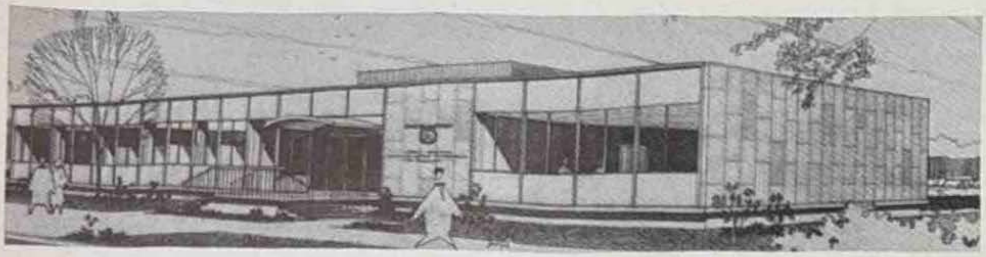
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Idaho AGC to get new office building in Boise

A new office building now being built in Boise for the Idaho Branch, AGC, will house its office staff and serve as construction headquarters for the nearly 300 contractor, affiliate and associate members from throughout the state. Curtain wall structure will be 120x43 ft., costing $120,789.

Main floor will contain a lobby and reception room, general office space, conference room and plans room with 11 booths and tables. Downstairs, the 60x42-ft. general conference room will have folding doors for dividing into smaller committee rooms, duplicating and boiler rooms, storage space, kitchenette and utilities. Parking lot will accommodate 30 cars.

New building is expected to be dedicated during the AGC's annual membership convention December 1.

BRIEFS

• **San Diego Chapter, AGC,** has moved its offices to 2231 W. Camino, Del Rio.

• **Portland Chapter, AGC,** will host the fall conference of the western chapters October 20-21 in the Multnomah Hotel, with President Carl Halvorson presiding.

• **John Lindsay,** 69, owner of Lindsay Construction Co., Seattle, died July 3 after six months' illness. Born in Washington's Thurston County, he was the son of the late John Lindsay, cabinetmaker.

• **Graeme Moore MacDonald,** whose construction projects dot the San Francisco skyline, died August 16 at the age of 70. He was the last of three brothers, each of whom made a major contribution to building in the West.

• **Floyd N. Chapman,** 76, retired building contractor of Seattle, died June 22. Born in Kewanee, Ill., he came to the Northwest 55 years ago and with a brother, the late Joseph Chapman, organized the firm of Chapman & Chapman.

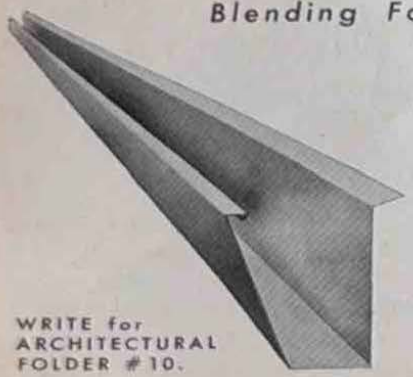
• **Roy O. Smith,** chief of the construction division, Seattle Army Engineer District, has resigned to accept a position with Boeing Airplane Co. in the development of its Minuteman program. A career employee in the federal service, Smith had directed millions of dollars' worth of construction during the past few years in the Seattle and Spokane areas.

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• **Carmel Steel Products** has been formed in Downey, Calif., to manufacture and nationally market steel framed sliding glass doors, steel window wall and related architectural steel products. President Charles B. Le Bon says that the new company has purchased from Arcadia Metal Products, Fullerton, its entire line of steel sliding glass doors, including certain mechanical patents which govern uses of exclusive features on sliding glass doors. Arcadia has decided to discontinue its steel production in order to devote all its efforts to the production of aluminum products. A former vice president of Arcadia, Le Bon continues to serve as a director on its board.

• **Fibreboard Paper Products Corp.** has established a new northern sales district under management of R. W. (Bob) Gray, formerly manager of the central district which now comprises Oakland, Fresno and Sacramento in California and the Salt Lake territory. Both will headquarter in San Francisco. G. D. Page Jr. has been transferred from manager of the Intermountain district to the post of Northwest district sales manager at Portland of the Pabco roofing division. Patrick H. Ryan has been named sales administration manager for the roofing division.

• **Pacific Curtainwall, Inc.**, Long Beach, Calif., has named Dante Brusatori as its Honolulu resident manager. He will serve as representative for sales, service and installation of the company's curtain wall systems in the Pacific Basin.

• **Great Lakes Steel,** Detroit-headquartered division of National Steel Corp., has established a nationwide representation for its new family of specialty steels, including Ducommun Metals & Supply Co., Los Angeles.

• **Western Aggregates,** Everett, Wash., has appointed W. M. Carney as executive vice president and general manager.

• **Calaveras Cement Co.** has opened a new bulk transfer plant in Springfield, Ore., which will serve as a distributing point for truck delivery in the 13 southern counties of Oregon. Charles Evans Jr. has been appointed plant manager.

• **Stack Steel and Supply Co.,** Seattle, has made several management changes. Eugene Stack moves up from president to chairman of the board; Harold E. Stack to president; Sterling W. May to vice president and treasurer; and Wayne F. MacRae, from director of purchasing to assistant vice president and general manager of sales.

• **Graystone, Inc.,** Seattle, has appointed Thomas K. Breitfuss as manager of pipe operations. Previously he was assistant general sales manager for two years for a national concrete pipe manufacturer located in the Midwest.

• **Luma Industries Co.** is the name of a new manufacturing firm established in Petaluma, Calif., for the production of extruded plastic products. Partners in the venture are Philip J. Blanchett and Orwin G. Maxson, both formerly with Dow Chemical Co. Blanchett, who is in charge of sales, spent most of his 14 years service with Dow in the Pacific Northwest. Maxson, who is handling production, was a technical representative in plastics for Dow in Los Angeles the past five years.

• **Filon Plastics Corp.,** Hawthorne, Calif., has named Allen J. Aron to the post of technical and field services coordinator. He formerly was with a distribution company in the Midwest.

• **Thompson Ramo Wooldridge, Inc.,** has consolidated the educational sales groups of its subsidiary, Magnetic Recording Industries, and the parent firm's Dage Television Division to form an educational electronics division which will be responsible for marketing closed circuit TV systems, language laboratories, teaching machines and the like to schools. Dr. Paul E. King, president of Magnetic Recording, will serve as manager of the new division and Jack Kay will be sales manager.

• **Fuller Co.'s** Lehigh Fan and Blower Division has appointed W. A. (Bill) Crowder of Seattle as factory representative for central and western Washington and Alaska.

• **Gladding, McBean & Co.** has entered into an agreement with Ina Seito Kaisha, Ltd., under which the Japanese firm will manufacture glazed wall tile and unglazed ceramic mosaic tile to Gladding, McBean specifications. C. W. Planje, president of the Los Angeles-based firm, says the agreement will enable his company to combat the inroads made by low price tile being imported in increasing amounts. It also will permit sale of tile into markets now closed to domestic tile because of price. The tile manufactured in Japan will be marketed in the West early in 1961.

Gladding, McBean also announces that it has purchased controlling interest in Utah Fire Clay Co. of Salt Lake City and Murray Refractories Co. of Murray, Utah. They will be operated as subsidiaries with A. A. Eck directing operations as regional manager.

• **New Castle Products, Inc.,** has appointed Rothwell Construction Co., Ltd., as distributor for Modernfold doors in Hawaii. Frank Rothwell, president, plans to form an affiliate company under the name of Modernfold of Hawaii to handle the product.

• **Pacific Lumber Co.,** San Francisco, has acquired the manufacturing plant of Hampton Plywood Co.

• **Weyerhaeuser Co.** has named two new panel products distributors in Arizona for its Silvatek Division: Foxgal, Inc., Phoenix, and Stewart Building & Roofing Supply, Inc., Tucson.

• **Goodyear Tire & Rubber Co.** has appointed Construction Supply of Boise as distributor of its flooring products in the state of Idaho south of Lewiston and a section of Oregon including Wallowa, Union, Malheur and Baker counties.

• **Crowl Chemical Corp.** has added 10,000 sq. ft. to its El Monte, Calif., plant to house one of the West's largest laminating presses. "The new press," says President Charles A. Crowl, "is the heart of an extensive installation which will produce plastic laminated sheets in sizes 4x8 ft. The press is capable of turning out 50,000 ft. per day, 1,000,000 ft. per month."

• **Dyna-Therm Chemical Corp.,** Culver City, Calif., has appointed Philip H. Augerson as vice president and Robert F. Dawson as vice president for marketing. Augerson joined the firm in 1958 as secretary and controller and he will retain these two positions. Dawson has been general sales manager for the past two years.

• **Bethlehem Steel Co.** is constructing an addition to its Seattle industrial fastener plant and installing new equipment for cold-forging bolts, rivets and special fasteners that will materially increase capacity and pro-

duct range. Completion is expected early in 1961.

• **Harvey Aluminum** has appointed Don Fullerton as district sales manager in Portland.

• **Kilsby-Tubesupply** has transferred Julian Fotre Jr. from Los Angeles to San Francisco where he will be manager of the northern California division. Robert K. Hughes has been named assistant sales manager at the Los Angeles headquarters and Donald L. Byrnes, manager of out-of-state agency sales and structural tubing sales.

• **Chem Seal Corp.** has named Conrad Sovig Co. of San Francisco as a distributor for the firm's polysulfide and epoxy coatings, adhesives and sealants.

• **Permanente Cement Co.** intends to construct a $5 million cement plant adjacent to the Alaska Railroad line at Sutton, near Anchorage. Plans call for a highly automated plant to have initial productive capacity of approximately 500,000 bbl. of cement per year. Permanente has filed claims covering 240 acres of high grade limestone deposits in the Upper King's River Valley near Anchorage.

• **Granco Steel Products Co.** has appointed Robert L. Casten as district sales engineer in the San Francisco office.

• **Gaspro, Ltd.,** will no longer manufacture structural clay products in Hawaii. The decision is part of a move towards increased production of Stahlton prestressed floor and roof systems and follows a trip by L. H. Bingham, president, to the Stahlton organization in Switzerland where he saw in use a new more rapid device for pouring the prestressed beams.

• **Farr Co.** has opened a district sales office for northern California in San Francisco and named Kenneth DeBaun to head it. DeBaun formerly was district manager in New York.

• **Formica Corp.** has named Aloha State Sales Co. of Honolulu as a distributor for all products of the company.

• **American-International Aluminum Corp.,** a Florida firm, has begun production at a new automated aluminum extrusion plant in San Jose, Calif. The firm will extrude aluminum components for western manufacturers of construction products, electronic equipment, etc. H. C. (Bud) Frenck is general manager of the western division.

• **Olin Mathieson Chemical Corp.** has transferred its Pacific Coast metals division headquarters from San Francisco to 3243 Wilshire Blvd., Los Angeles, where R. R. Johns is in charge. In another move to strengthen its aluminum sales organization in the West, the company has moved two industrial sales representatives from other districts: Curt D. Hoffman to Los Angeles from Louisville and Wayne A. Liebich to San Francisco from Minneapolis.

• **Morris Kurtzon, Inc.,** has chosen Larry Tomei of Pacific Engineering Co., Oakland, as representative in northern California for Karvalum screens and grills.

• **Utility Appliance Corp.,** Los Angeles, has named Fred B. Hartney Jr. as general sales manager for its Gaffers & Sattler products.

ASSOCIATIONS

• **Red Cedar Shingle Bureau,** which represents all the shingle mills in the Northwest from its Seattle headquarters, lost its president when Norman

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A. English, about 70, of Vancouver, B.C., died July 30. At the time of his death he owned and operated Northwest Cedar Products, Ltd.

• **Sliding Glass Door & Window Institute,** which headquarters in Los Angeles, will hold its national convention at the Sheraton-Dallas Hotel in Dallas October 9-12.

COMMENTS and OPINIONS

"Although plastics have solved problems and enabled us to achieve lighting effects never before possible, lighting designers would like even more advanced products . . . larger plastic luminous ceiling panels to span greater areas than now possible without danger of deflection . . . more pendant type shapes in both plain and bright colors."—Charles Jones, an associate of Victor Gruen Associates, in a speech before the Society of the Plastics Industry in Los Angeles.

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on deck at pa&b

When the Sacramento Chapter, AIA, held its eighth annual exhibition on the third floor of Breuner's in June, Philip C. Freshwater of the Sacramento Bee wrote a kind of sensitive criticism that is not expected in the daily press. He found the Dreyfuss & Blackford exhibit "most disappointing because their most exciting building—and the most interesting structure in Sacramento—is not displayed. Their design for the new headquarters of the Sacramento Municipal Utility District is, to my mind, the high point of current architecture in Sacramento. In it they have achieved an astonishing amount of enclosed space (the aim of the building) within a handsome exterior which is both firmly attached to its site and soaring into the air." Next month our readers can see for themselves whether they agree with Mr. Freshwater's impressions.

on the move

It is with only a little nostalgia that we begin to clean out files, pack up the typewriter and all the rest—we're mighty thankful the linotypes and presses are not under our jurisdiction—for the move to our new home at 1945 Yale Place N. We have literally burst out of our seams at the corner of Third and Wall, close to downtown Seattle, and now we're looking forward to publishing and printing in what we feel is an exciting building, one which typifies PA&B's growth and operation; to the cooling breezes of Lake Union; and to one of the city's most interesting views.

the balance sheet

We don't expect it to start a trend but it was interesting to note a recent release from the public relations department of Charles Luckman Associates, indicating its financial progress in 1959. We quote in part: "President Charles Luckman announced that the dollar volume of fees is up 1% over last year for an all-time high and that profits show a proportionate increase over the corresponding period.

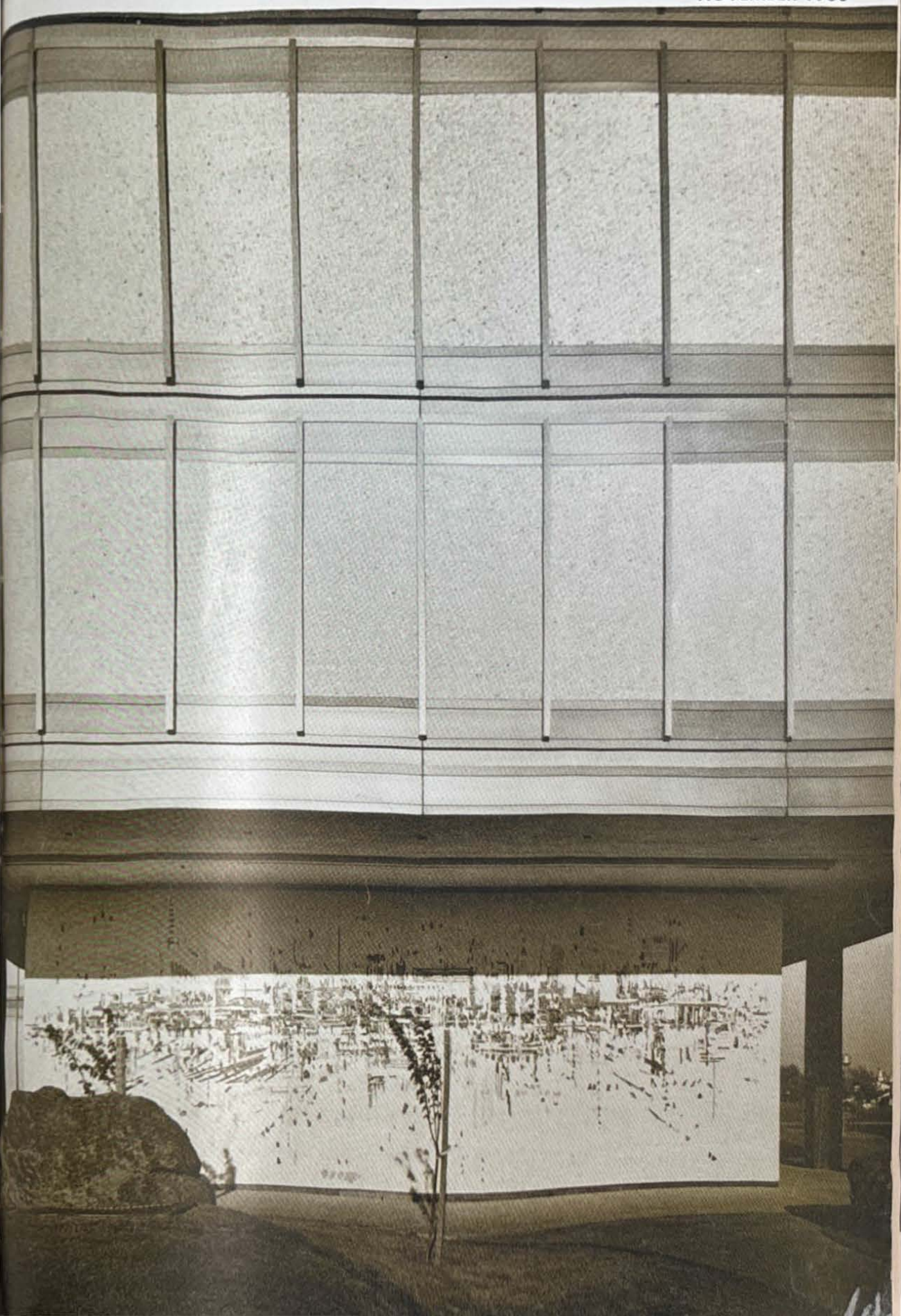
"Luckman also said that the firm has under actual construction this year projects which total more than $202 million. . . . The number of planners, architects and engineers currently engaged on CLA projects totals 336, he said, another all-time high in the 10-year history of the company."

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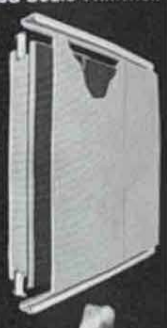
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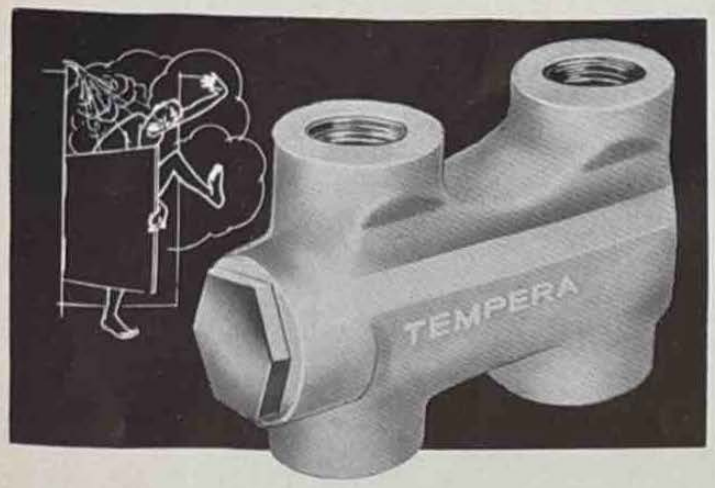
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COVER: Headquarters Building, Sacramento Municipal Utility District, Sacramento (p. 21)—Dreyfuss & Blackford, Architects; Phil Fein photo.

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Nine-month total shows 3% drop from '59

Dollar volume of building permits issued in the 13 western states for the first nine months of 1960 total $2,842,646,539, a 3% drop from the same period in 1959. At the end of the third quarter, seven states are trailing last year, while six show gains.

State totals ahead of last year with dollar volume of gain, are Hawaii, $144,930,106, up $42.9 million; Nevada, $50,679,569, up $12.4 million; Oregon, $141,583,447, up $11.8 million; Alaska, 22,053,354, up $8.9 million; Arizona, $185,653,748, up $6.6 million; and Wyoming, $16,708,613, up $1.5 million. State totals below last year for the nine months are California, $1,763,951,790, down $72.5 million; Washington, $260,264,011, down $48.6 million; Colorado, $106,223,922, down $18 million; New Mexico, $61,036,504, down $8.4 million; Idaho, $19,730,587, down $6.3 million; Utah, $38,220,923, down $5.1 million; and Montana, $31,-609,965, down $891,000.

Top 15 Agencies

Among the top 15 agencies for the nine months, eight are in California, two each in Arizona and Washington and one each in Hawaii, Colorado and Oregon.

	Jan.-Sept. 1960	Jan.-Sept. 1959
1. Los Angeles	$466,664,475	$510,086,068
2. Los Angeles County	217,372,918	202,545,674
3. Honolulu	135,937,226	94,395,565
4. San Diego	108,400,878	148,406,824
5. Sacramento County	84,452,755	102,935,196
6. San Diego County	84,145,200	105,616,200
7. San Francisco	82,452,681	76,884,561
8. San Jose	82,002,661	106,128,914
9. King County, Wash.	78,703,833	99,739,706
10. Phoenix	76,509,372	65,438,929
11. Denver	65,088,453	80,266,711
12. Seattle	64,108,551	93,198,833
13. Portland	62,358,300	42,934,795
14. Maricopa County	60,443,113	64,625,762
15. Long Beach	53,759,865	44,091,135

September volume

For the month of September, 155 key agencies report a dollar volume of $326,990,420, a drop of $24 million from September 1959. Only three states have higher totals for the month; Utah, by $3.2 million; Nevada, $1.5 million; and Colorado, $1.2 million. States with decreases for the month are Washington, down $11.1 million; California, $7.2 million; Alaska, $2.2 million; Wyoming, $1.9 million; Montana, $1.1 million; Oregon, $1.1 million; New Mexico, $1 million; Hawaii, $762,000; and Idaho, $209,000.

Among top cities for September in terms of dollar volume are Los Angeles, $41,178,180; Los Angeles County, $23,123,022; San Diego, $19,553,463; Oakland, $17,135,079.

Analysis of selected areas—September

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$15,446,848	$4,022,891	*$2,096,300
Orange County	3,781,429	395,100	107,500
Sacramento County	4,824,250	3,244,603	749,946
Las Vegas	3,106,458	188,825	7,550
Denver	4,585,801	7,513,167	35,000
Portland	888,210	2,978,895	166,500
Seattle	1,890,357	2,098,099	1,460,000
King County	5,230,880	470,065	54,000
Honolulu	7,290,513	6,954,488	1,758,245

*Does not include $876,157 for tax-supported school construction.

Building Permit Totals for 155 Western Agencies for September

CALIFORNIA	Sept. 1960	Sept. 1959
Alameda County	$ 3,507,150	$ 706,450
Anaheim	2,825,189	4,910,964
Bakersfield	865,675	1,349,951
Burbank	1,573,561	674,097
Contra Costa County	3,495,713	2,792,350
Fresno	2,573,701	941,179
Fullerton	2,223,442	1,670,518
Glendale	1,782,618	1,531,050
Inglewood	1,799,650	620,483
Long Beach	7,675,625	3,443,330
Los Angeles	41,178,180	75,987,718
Los Angeles County	23,123,022	17,948,073
Oakland	17,135,079	3,052,111
Ontario	243,471	1,006,866
Orange County	4,457,165	3,942,900
Palo Alto	588,226	1,627,761
Pasadena	917,890	902,608
Pomona	920,691	1,296,447
Richmond	1,854,360	605,691
Riverside	1,764,831	794,546
Sacramento	4,896,850	4,238,598
Sacramento County	8,953,953	10,135,620
San Bernardino	919,888	1,729,434
San Bernardino County	7,650,666	5,033,056
San Diego	19,553,463	17,099,241
San Diego County	8,167,900	12,199,700
San Francisco	6,821,445	9,133,723
San Jose	10,286,520	10,250,827
San Mateo	1,285,317	5,141,782
San Mateo County	1,005,657	2,010,672
Santa Ana	4,240,692	1,875,418
Santa Monica	918,728	1,479,065
Stockton	2,925,325	827,287
Sunnyvale	3,157,772	934,050
Torrance	3,571,719	3,387,178
West Covina	382,990	1,223,082
TOTAL	$205,244,124	$212,503,826

OREGON	Sept. 1960	Sept. 1959
Albany	$ 247,368	$ 260,075
Astoria	37,519	11,949
Baker	108,385	98,920
Bend	101,400	109,740
Coos Bay	154,617	95,484
Corvallis	645,048	735,325
Eugene	638,255	1,196,778
Grants Pass	145,000	99,225
Gresham	99,900	149,450
Hillsboro	131,912	245,905
Klamath Falls	46,700	190,440
LaGrande	59,414	95,159
Lane County	1,093,519	1,113,997
Medford	354,520	290,568
Multnomah County	2,116,031	4,012,903
North Bend	71,020	74,540
Oregon City	194,660	46,175
Portland	5,504,205	3,341,960
Roseburg	120,490	352,695
Salem	267,734	567,584
Springfield	314,046	545,571
The Dalles	74,450	58,244
TOTAL	$ 12,526,193	$ 13,692,687

WASHINGTON	Sept. 1960	Sept. 1959
Aberdeen	$ 95,285	$ 135,936
Anacortes	56,693	49,135
Auburn	59,735	159,060
Bellingham	205,649	248,129
Bremerton	231,820	504,850
Centralia	82,443	138,672
Chehalis	57,168	33,179
Ellensburg	191,923	38,400
Ephrata	149,492	349,696
Everett	447,682	135,200
Kelso	93,687	375,600
Kennewick	91,795	435,525
King County	5,924,197	9,656,877
Kirkland	52,375	46,850
Longview	312,958	279,778
Moses Lake	28,385	60,250
Olympia	118,420	204,903
Pasco	65,440	180,181
Pierce County	2,092,668	1,785,375
Port Angeles	92,400	20,250
Puyallup	112,570	190,850
Seattle	5,545,254	11,002,574
Spokane	1,323,269	1,509,216
Spokane County	1,536,916	2,357,714
Tacoma	1,968,011	1,854,924
Vancouver	353,073	463,652
Walla Walla	154,872	170,426
Wenatchee	317,875	110,760
Yakima	859,750	1,227,020
TOTAL	$ 22,621,805	$ 33,744,987

ALASKA	Sept. 1960	Sept. 1959
Anchorage	$ 992,019	$ 1,790,054
Fairbanks		1,503,427
Juneau	20,100	3,350
Ketchikan	3,950	17,700
TOTAL	$ 1,016,069	$ 3,314,531

IDAHO	Sept. 1960	Sept. 1959
Boise	$ 619,133	$ 411,402
Caldwell	82,140	54,090
Coeur d'Alene	46,075	263,562
Idaho Falls	550,835	561,675
Jerome	11,400	45,000
Lewiston	42,885	188,514
Nampa	88,315	100,471
Payette	30,505	72,162
Pocatello	196,039	271,437
Sandpoint	148,125	101,300
St. Maries	15,800	6,500
Twin Falls	184,100	148,900
TOTAL	$ 2,015,352	$ 2,225,013

MONTANA	Sept. 1960	Sept. 1959
Billings	$ 938,000	$ 2,896,550
Bozeman	35,675	978,000
Butte	22,100	3,855
Glasgow	203,050	12,800
Glendive	1,700	19,300
Great Falls	763,300	351,478
Helena	1,243,335	156,459
Kalispell	89,500	50,600
Lewistown	43,150	63,300
Livingston	31,400	26,220
Miles City	143,495	103,209
Missoula	205,124	220,257
TOTAL	$ 3,719,829	$ 4,882,028

WYOMING	Sept. 1960	Sept. 1959
Casper	$ 379,862	$ 698,638
Cheyenne	597,644	2,198,948
Sheridan	72,431	111,229
TOTAL	$ 1,049,937	$ 3,008,815

COLORADO	Sept. 1960	Sept. 1959
Aurora	$ 712,154	$ 800,743
Boulder	666,033	650,852
Denver	15,998,478	12,536,729
Englewood	1,314,565	357,399
Fort Collins	548,875	1,086,381
Grand Junction	59,127	114,124
Greeley	277,740	711,192
Pueblo	699,853	2,809,183
Trinidad	9,720	17,800
TOTAL	$20,286,545	$ 19,084,403

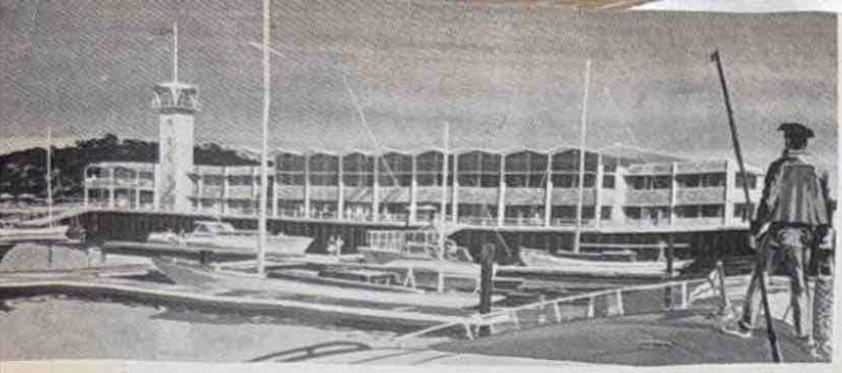
UTAH	Sept. 1960	Sept. 1959
Logan	$ 183,550	$ 212,450
Murray	197,850	201,675
Ogden	2,561,246	830,500
Provo	422,350	461,678
Salt Lake City	2,959,108	1,359,542
TOTAL	$ 6,324,104	$ 3,065,845

NEVADA	Sept. 1960	Sept. 1959
Elko	$ 52,170	$ 28,998
Las Vegas	3,307,933	2,485,988
Reno	1,391,465	1,574,346
Sparks	1,119,118	279,550
TOTAL	$ 5,870,686	$ 4,369,882

ARIZONA	Sept. 1960	Sept. 1959
Douglas	$ 30,192	$ 365,120
Flagstaff	101,168	1,169,553
Glendale	38,450	118,980
Maricopa County	9,739,453	8,310,657
Mesa	1,485,311	799,181
Phoenix	7,512,007	9,521,347
Tucson	2,708,459	4,918,871
Yuma	929,125	319,473
TOTAL	$ 22,544,165	$ 25,523,182

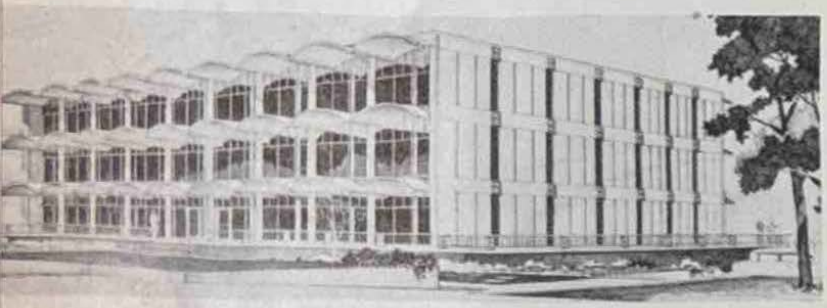
NEW MEXICO	Sept. 1960	Sept. 1959
Albuquerque	$ 4,164,154	$ 5,308,188
Carlsbad	522,785	106,310
Clovis	445,012	145,084
Gallup	270,402	148,224
Hobbs	268,350	198,775
Las Cruces	235,242	937,000
Roswell	477,429	917,850
Santa Fe	529,527	244,660
TOTAL	$ 6,912,901	$ 8,006,091

HAWAII	Sept. 1960	Sept. 1959
Hawaii County	$ 464,001	$ 1,408,548
Honolulu (city-county)	16,062,496	15,937,473
Maui County	332,213	275,610
TOTAL	$ 16,858,710	$ 17,621,631
GRAND TOTAL	$326,990,420	$351,042,921



MARINA BUILDING

planned for Seattle's new Shilshole Bay small boat moorage facility will provide space for administration offices and 125-seat coffee shop on first floor and 400-seat restaurant on second floor. Tower is part of administrative setup for policing boat moorage. Estimated cost of building is $1 million. Architects: Durham, Anderson & Freed.



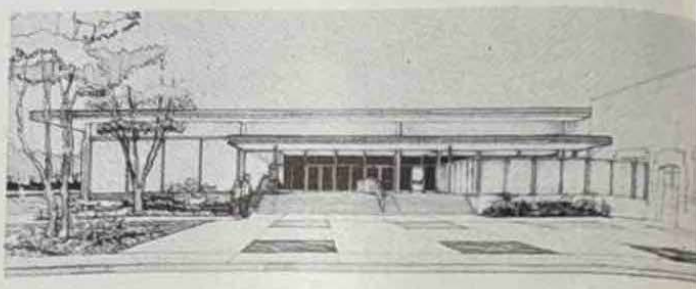
IBM BRANCH OFFICE

in Salt Lake City will be the first post-stressed concrete building in that area. Three-story, $900,000 structure encompassing 24,396 sq. ft. is under construction for AMCO-Utah, Inc., which will lease it to International Business Machines Corp. Structural system will consist of reinforced concrete foundations and columns with tensioned, vaulted beams and slabs. Architects: James M. Hunter & Associates; associate supervising architects: Donald H. Panushka & Associates.



COUNTRY CLUB

sited on 3,200-acre Lake Arrowhead tract is first stage in real estate development to include large homes along periphery of club grounds. Building will house bowling alley, locker room, steam room, pro shop, 200-seat dining room and two-story bar with sunken fireplace in 20,000 sq. ft. It will have redwood and native stone exterior. Architects: Richard L. Dorman & Associates; structural engineer: Woodward Tom.



LIBRARY ADDITION

at California's Modesto Junior College is designed to accommodate 600 students based on system of distributing books throughout reading room rather than separating them into closed stacks or stackrooms. Outside walls will be concrete tilt-up panels; roof structure of steel beams with steel decking, columns spaced at 32 ft. o.c. Costing $557,770, addition will be air conditioned with hung fiberglass type acoustical ceiling and flush fluorescent fixtures. Architects: Kaestner & Kaestner.



THE DALLES BRANCH

of Portland Trust Bank will feature roof system consisting of cross wood joist and glued laminated beam construction with wide flange steel exterior columns. Building will have an air-to-air heat pump air conditioning system, large glass areas and acoustical ceiling treatment. Architects: Skidmore, Owings & Merrill.

AGC nominates Californian for national vice president

Frank F. Burrows, president of Williams & Burrows, Inc., building construction firm in Belmont, Calif., has been nominated for vice president of the Associated General Contractors of America. M. Clare Miller, highway contractor of McPherson, Kan., and present vice president, has been picked to head the organization for 1961.



BURROWS

Nominees were named at the mid-year meeting of the governing and advisory board held at Phoenix early in October. Election will be conducted by mail ballot in December and installation of new officers will take place at the annual convention in Boston February 27.

Burrows has been an officer and director of his firm since 1925 and has been active in AGC affairs, both locally and nationally for many years. He has been president of the Central California Chapter, member of the national board and its executive committee, chairman of the national building contractors' division and his committee assignments have included service as a co-chairman of the joint cooperative committee with the AIA.

One of the highlights of the mid-year meeting was a report by executive director James D. Marshall on findings of a nationwide survey of prospects in the construction industry for the remainder of 1960. The survey, conducted by the AGC in late September, indicates normal activity for this time of year with expectations that total volume for 1960 will be close to the all-time high dollar value in 1959—$56.1 billion. Marshall said that the survey tends to support government expectations that 1960 should close out a total volume of $55.8 billion.

Questionnaires were sent out to governing and advisory board members of the AGC, numbering about 150, and to the managers of 125 AGC chapters. They were asked whether prospects in their areas for the rest of 1960 were above normal, normal or below normal.

For the country as a whole in all categories the returns were:

Normal	177
Below normal	157
Above normal	81

For building construction alone:

Below normal	62
Normal	54
Above normal	27

Outlook for the Far Wast was characterized at a tossup beween normal and below normal. The returns:

Normal	33
Below normal	33
Above normal	12

The survey also asked for expectations on material and labor costs in the next six months. The replies indicate a strong belief that material costs will remain stable—122—as compared to 46 who expected an increase. Labor costs were more equally divided, with 92 expecting an increase and 79 expecting labor costs to remain stable.

Many of the respondents, Marshall reported, commented on the extreme severity of competition in the industry. Typical comments, such as "worst competition in history" and "few profits," underscored the general view that there are too many contractors for the work available with the result that bid prices are being shaved too closely and some contractors are getting into financial trouble, he said.

Scheick to replace Purves in top post at Octagon

Edmund R. Purves, executive director of the American Institute of Architects since 1949 and a member of the staff since 1941, has resigned as staff chief effective December 31. He will be succeeded by William H. Scheick, vice president of Timber Engineering Co. and former executive director of the Building Research Institute, National Academy of Sciences.

The resignation and appointment occurred at a September 30 meeting of the AIA board of directors in Las Vegas.

Purves' contract as executive director expires at the end of 1960 and he had notified the board more than a year ago that he wished to leave the post no later than January 1962. A search for a successor was begun at that time. Between November 15, when he joins the Institute staff, and January 1, 1961, Scheick will hold the title of managing director.

AIA President Philip Will Jr. reported that, notwithstanding the resignation, "the board has prevailed upon Purves to accept a new contract for 1961 in which he will bear the title of consulting director and discharge an assignment which needs his demonstrated leadership, wisdom and great prestige."

During 1961 Purves has agreed to advise the new executive director on a continuing basis, to tour AIA regions to strengthen communication between the Octagon headquarters and the profession in the field and to represent the Institute abroad in international professional conferences, "an area of professional participation in which we have been embarrassingly weak."

In his 30 years' participation in AIA affairs, Purves "has created a record of service nad accomplishment which will stand alone in the history of the professional society," Will continued.



NEW EXECUTIVE DIRECTOR of AIA as of first of year will be William H. Scheick, succeeding Edmund R. Purves.

Scheick, 55, received his bachelor of architecture from Carnegie Institute of Technology in 1928 and his master of science in architecture from the University of Illinois in 1937. He served as assistant professor of architecture at Oklahoma A&M College from 1939-30. He then began teaching architectural design at Illinois and continued until 1944 as an associate.

Scheick acted as director of the Small Homes Council and professor at Illinois from 1944-49, when he became the first executive director of the Building Research Advisory Board. In 1951 he was named the first executive director of the BRI when it was formed as a membership society for research-minded organizations and individuals of the building industry. From 1958 until the present time, Scheick has held the post of vice president in charge of research and development for Timber Engineering Co., a research affiliate of the National Lumber Manufacturers Association.

Northwest architects at Sun Valley examine confused state of the profession

If the trend of thinking reflected at the ninth annual conference of the Northwest District, AIA, in Sun Valley early in October is any indication, the profession and its practitioners are indeed in a state of confusion.

James M. Hunter of Boulder, Colo., national second vice president, began the proceedings on an optimistic note when he said that "architects never had it so good" and satirist Richard Armour ended the affair on a delightfully humorous one. Even Idaho's Gov. Robert E. Smylie, whose brief but eloquent message had "sober words for a sober time," expressed a hope for "a world where all peoples, unmolested and unafraid, can live in freedom, in dignity, in justice and in peace."

But the two days of professional sessions in-between were marked by a myriad of conflicting ideologies and approaches to design and the overall practice of architecture. Yet in the midst of this uncertainty—and often downright pessimism—some program participants saw an encouraging sign: a sign that the profession is on the threshhold of a possibly more refined and more human architectural expression.

Perhaps the perplexing undercurrent was accentuated by the contrast of the autumn-time serenity of Sun Valley, which certainly lived up to its name, and by its own kind of seclusion, the result of a certain degree of inaccessibility — travel folders notwithstanding. Its charm as a small-convention center was matched by a well-executed conference, headed by Charles F. Hummel of Boise, and by a well-organized program, headed by Theodore J. Prichard of Moscow.

Hunter's remarks on "The Institute: Design for Tomorrow" presented at the opening dinner were particularly significant in that they seemed to indicate a new direction that the AIA is taking on the executive level. While he reviewed the work of the Octagon and its projected program, his talk did not fall into the customary what-the-AIA-does-for-you mold.



HUNTER

The second vice president asked for more frank and blunt talk about architects; for a reevaluation of the role of the architectural schools; and for a do-it-yourself public relations program, acknowledging at the same time that the latter has its share of sins. And he hit upon several controversial points in his discussion of the packaged deal (Delegates approved a resolution that would serve as a delaying action on this matter at the 1961 Philadelphia convention.), "the master builder" and the proposed non-voting status of AIA membership for allied professionals whom, he declared, "are entitled to a locker in the locker room."

Hunter's comments in a way served as a springboard for the public relations roundtable which was to follow the next morning. John E. Toohey of Worland, Wyo., chairman of the Northwest regional public relations committee, moderated the panel, with James K. Barnard of Spokane discussing activities at the chapter level; Robert K. Lund of Great Falls, the state level; and Robert R. Denny, public relations counsel for the Institute, the national level. Each did a clear and concise job of outlining his respective program. But the question period that followed indicated that, for the most part, fuzzy thinking on this subject prevails among architects.

Most discussed of all the conference speakers was O'Neil Ford, whose biting remarks were familiar to those who attended the national AIA convention in San Francisco. Speaking out sharply—with tongue in cheek on occasion — against design based on theory, the San Antonio architect stated again and again that the building tells the whole story and that conversational architecture is vague. "Philosophy has a lot of semantics behind it," Ford declared. "But men of talent have such lacy opinions of architecture."

Stephen W. Jacobs, associate professor of architecture at Cornell University, had the task of balancing the outspoken Ford on the other side of the seesaw and capably handled his assignment in presenting what amounted to a capsule review of the history of architecture. His point of view: history and philosophy "are important in an age when architects are nervous."

Percival Goodman of New York, architect, author and teacher, filling in for colleague Paul Schwikher of Pittsburgh, in his well-received address on "the Dilemma of Our Physical Environment," said that cities are bad because architects won't accept their responsibility. "If we resign from our society or simply accept it as it is, we are not architects; more important, we are not citizens." There is a basic insecurity as to what totali-



PUBLIC RELATIONS PANELISTS Robert K. Lund, Harry C. Weller (presiding), John E. Toohey, James K. Barnard, Robert R. Denny.



CHAPTER PRESIDENTS Glen E. Cline, Idaho; John M. Morse, Washington State; Clifford F. Young (vice president), Hawaii; John E. McGuire, Southwest Washington; Harry C. Weller (regional director); Will W. DeNeff, Spokane; Keith R. Maguire, Oregon; Richard L. Taylor, Montana; Kenneth L. Morin, Southwestern Oregon.

ty should be, he asserted. A building looks good by itself but against another, it is ugly; there is no unity. "An architect should ask the question: 'What is required of me?' If it cannot be answered, the result will only add to the confusion."

In her talk on "Esthetics or Anesthetics?" Elisabeth Kendall Thompson of Berkeley, senior editor of Architectural Record, deplored "inappropriate forms" and buildings designed by a "fashion push"—all adding up to what she called a "surface" architecture.

One of the most refreshing aspects of the Sun Valley conference was a panel of five young men who, with slide presentations and brief commentary presented "Proud Moments in Northwest Design." The participants: Lewis Crutcher, Portland; Alan C. Liddle, Tacoma; F. Wayne Gustafson, Billings; Bruce Walker, Spokane; and Saul Zaik, Portland. Simply and uninhibited, each architect outlined a "theory" of design with a minimum number of words.

Moderator of the seminar was Paul Hayden Kirk of Seattle. Participating in the final design roundtable which drew all the principal speakers together, he said he felt that the architects attending the conference expressed too much concern for their status in society, too much concern for their own prestige.

In retrospect, reviewing the skepticism and self-criticism which permeated the professional program, this writer, at least was grateful for the words of Governor Smylie and found they had made a considerable impact.

The governor set an optimistic tone for his remarks at the outset: "I believe in my way of life. I love freedom. I revere human dignity. I reject the idea that America and Americans are decadent. We are not a people hell-bent on material indulgence. We have a deep and vital concern for our spiritual values and our shining American traditions."

Drawing upon his own 21-day trip inside Russia ("I have looked Mr. Khrushchev in the face"), he declared: "We will compete successfully with these people in the market places of the world, but we are going to have to put away some of the tired gray flannel habits of the 50s and get back some of the spirit, vigor and courage that built American into a first-rank industrial power in the first place.

"In the Book of Ecclesiastes there is a somber passage about a 'time of little hope' which is there described as the day when the clouds return after the rain. In some ways this dark and hopeless description fits this time of trial and torment for Western civilization all too well.

"There is no apparent surcease from the tensions that tear at the stability of our world. There is more of despair and desperation in the attitudes of the world's leaders than there is of hope.

"The clouds return again and again. Instead of the sunshine of enduring peace, we live out our years and our children may well live out their years under a sort of gray overcast that is neither peace nor war; a time of little hope that is at once our nation's greatest danger and her most stirring challenge.

"It is a time of danger because we will be told that we are not tough enough or strong enough or daring enough to lead the world through this troubled time. For my part, I reject these counsels of desperation. The gloom singers are heard all too often through the land."

Governor Smylie went on to say that "America is at her greatest when the challenges are greatest. As a people, we are strong and self-reliant in our traditions of individual liberty. Americans will always display the resolution and courage that history expects of our great experiment in freedom.

"Whether the decade that is just ahead will be known as the soaring

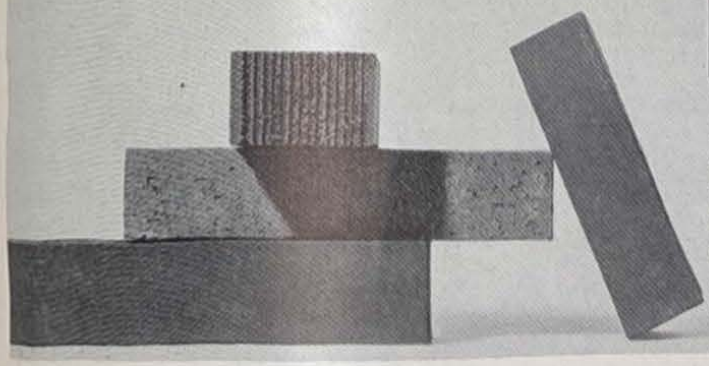


KEY SPEAKERS Paul Hayden Kirk, Stephen W. Jacobs, Elisabeth Kendall Thompson, O'Neil Ford, Percival Goodman.

60s, the fateful 60s or by some other quickly turned phrase is really unimportant. When the decade is over we will have made decisions that may well determine for all time whether our way or the way of the enemy will triumph."

The governor closed by expressing "one very simple hope: a hope that somehow in the grace of our maturity as a nation we are able to contrive the patient wisdom to keep our nation's banners bright with justice and economic freedom; that our trumpets are always heard loud and clear on the side of freedom and human dignity for all peoples; that we have the common sense to maintain a respectable posture of defense and retaliation that is respected by all the world; and that as a nation we will somehow be able to project into the minds and hearts of the uncommitted nations of the world an image of our America that is gallant and gracious, an America that is conscientious and confident in the strength and spirit of our institutions of liberty.

"In the prayerful expression of that simple hope we can find the dedication, the fortitude and purpose that will permit fulfillment of our great American dream: a world where all peoples, unmolested and unafraid, can live in freedom, in dignity, in justice and in peace." —R.E.K.



There's a quiet dignity, a quality of everlasting beauty in a church built of brick. Architects are enhancing this inherent charm by creative design, utilizing various of the colors and shapes produced by **builders brick co.** Seattle

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Northwest architects at Sun Valley examine confused state of the profession

If the trend of thinking reflected at the ninth annual conference of the Northwest District, AIA, in Sun Valley early in October is any indication, the profession and its practitioners are indeed in a state of confusion.

James M. Hunter of Boulder, Colo., national second vice president, began the proceedings on an optimistic note when he said that "architects never had it so good" and satirist Richard Armour ended the affair on a delightfully humorous one. Even Idaho's Gov. Robert E. Smylie, whose brief but eloquent message had "sober words for a sober time," expressed a hope for "a world where all peoples, unmolested and unafraid, can live in freedom, in dignity, in justice and in peace."

But the two days of professional sessions in-between were marked by a myriad of conflicting ideologies and approaches to design and the overall practice of architecture. Yet in the midst of this uncertainty—and often downright pessimism—some program participants saw an encouraging sign: a sign that the profession is on the threshhold of a possibly more refined and more human architectural expression.

Perhaps the perplexing undercurrent was accentuated by the contrast of the autumn-time serenity of Sun Valley, which certainly lived up to its name, and by its own kind of seclusion, the result of a certain degree of inaccessibility — travel folders notwithstanding. Its charm as a small-convention center was matched by a well-executed conference, headed by Charles F. Hummel of Boise, and by a well-organized program, headed by Theodore J. Prichard of Moscow.



HUNTER

Hunter's remarks on "The Institute: Design for Tomorrow" presented at the opening dinner were particularly significant in that they seemed to indicate a new direction that the AIA is taking on the executive level. While he reviewed the work of the Octagon and its projected program, his talk did not fall into the customary what-the-AIA-does-for-you mold.

The second vice president asked for more frank and blunt talk about architects; for a reevaluation of the role of the architectural schools; and for a do-it-yourself public relations program, acknowledging at the same time that the latter has its share of sins. And he hit upon several controversial points in his discussion of the packaged deal (Delegates approved a resolution that would serve as a delaying action on this matter at the 1961 Philadelphia convention.), "the master builder" and the proposed non-voting status of AIA membership for allied professionals whom, he declared, "are entitled to a locker in the locker room."

Hunter's comments in a way served as a springboard for the public relations roundtable which was to follow the next morning. John E. Toohey of Worland, Wyo., chairman of the Northwest regional public relations committee, moderated the panel, with James K. Barnard of Spokane discussing activities at the chapter level; Robert K. Lund of Great Falls, the state level; and Robert R. Denny, public relations counsel for the Institute, the national level. Each did a clear and concise job of outlining his respective program. But the question period that followed indicated that, for the most part, fuzzy thinking on this subject prevails among architects.

Most discussed of all the conference speakers was O'Neil Ford, whose biting remarks were familiar to those who attended the national AIA convention in San Francisco. Speaking out sharply—with tongue in cheek on occasion — against design based on theory, the San Antonio architect stated again and again that the building tells the whole story and that conversational architecture is vague. "Philosophy has a lot of semantics behind it," Ford declared. "But men of talent have such lacy opinions of architecture."

Stephen W. Jacobs, associate professor of architecture at Cornell University, had the task of balancing the outspoken Ford on the other side of the seesaw and capably handled his assignment in presenting what amounted to a capsule review of the history of architecture. His point of view: history and philosophy "are important in an age when architects are nervous."

Percival Goodman of New York, architect, author and teacher, filling in for colleague Paul Schwikher of Pittsburgh, in his well-received address on "the Dilemma of Our Physical Environment," said that cities are bad because architects won't accept their responsibility. "If we resign from our society or simply accept it as it is, we are not architects; more important, we are not citizens." There is a basic insecurity as to what totali-



PUBLIC RELATIONS PANELISTS Robert K. Lund, Harry C. Weller (presiding), John E. Toohey, James K. Barnard, Robert R. Denny.



CHAPTER PRESIDENTS Glen E. Cline, Idaho; John M. Morse, Washington State; Clifford F. Young (vice president), Hawaii; John E. McGuire, Southwest Washington; Harry C. Weller (regional director); Will W. DeNeff, Spokane; Keith R. Maguire, Oregon; Richard L. Taylor, Montana; Kenneth L. Morin, Southwestern Oregon.

ty should be, he asserted. A building looks good by itself but against another, it is ugly; there is no unity. "An architect should ask the question: 'What is required of me?' If it cannot be answered, the result will only add to the confusion."

In her talk on "Esthetics or Anesthetics?" Elisabeth Kendall Thompson of Berkeley, senior editor of Architectural Record, deplored "inappropriate forms" and buildings designed by a "fashion push"—all adding up to what she called a "surface" architecture.

One of the most refreshing aspects of the Sun Valley conference was a panel of five young men who, with slide presentations and brief commentary presented "Proud Moments in Northwest Design." The participants: Lewis Crutcher, Portland; Alan C. Liddle, Tacoma; F. Wayne Gustafson, Billings; Bruce Walker, Spokane; and Saul Zaik, Portland. Simply and uninhibited, each architect outlined a "theory" of design with a minimum number of words.

Moderator of the seminar was Paul Hayden Kirk of Seattle. Participating in the final design roundtable which drew all the principal speakers together, he said he felt that the architects attending the conference expressed too much concern for their status in society, too much concern for their own prestige.

In retrospect, reviewing the skepticism and self-criticism which permeated the professional program, this writer, at least was grateful for the words of Governor Smylie and found they had made a considerable impact.

The governor set an optimistic tone for his remarks at the outset: "I believe in my way of life. I love freedom. I revere human dignity. I reject the idea that America and Americans are decadent. We are not a people hell-bent on material indulgence. We have a deep and vital concern for our spiritual values and our shining American traditions."

Drawing upon his own 21-day trip inside Russia ("I have looked Mr. Khrushchev in the face"), he declared: "We will compete successfully with these people in the market places of the world, but we are going to have to put away some of the tired gray flannel habits of the 50s and get back some of the spirit, vigor and courage that built American into a first-rank industrial power in the first place.

"In the Book of Ecclesiastes there is a somber passage about a 'time of little hope' which is there described as the day when the clouds return after the rain. In some ways this dark and hopeless description fits this time of trial and torment for Western civilization all too well.

"There is no apparent surcease from the tensions that tear at the stability of our world. There is more of despair and desperation in the attitudes of the world's leaders than there is of hope.

"The clouds return again and again. Instead of the sunshine of enduring peace, we live out our years and our children may well live out their years under a sort of gray overcast that is neither peace nor war; a time of little hope that is at once our nation's greatest danger and her most stirring challenge.

"It is a time of danger because we will be told that we are not tough enough or strong enough or daring enough to lead the world through this troubled time. For my part, I reject these counsels of desperation. The gloom singers are heard all too often through the land."

Governor Smylie went on to say that "America is at her greatest when the challenges are greatest. As a people, we are strong and self-reliant in our traditions of individual liberty. Americans will always display the resolution and courage that history expects of our great experiment in freedom.

"Whether the decade that is just ahead will be known as the soaring

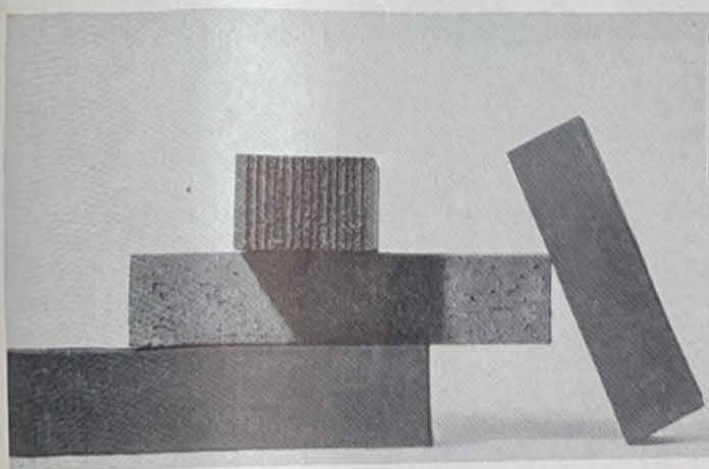


KEY SPEAKERS Paul Hayden Kirk, Stephen W. Jacobs, Elisabeth Kendall Thompson, O'Neil Ford, Percival Goodman.

60s, the fateful 60s or by some other quickly turned phrase is really unimportant. When the decade is over we will have made decisions that may well determine for all time whether our way or the way of the enemy will triumph."

The governor closed by expressing "one very simple hope: a hope that somehow in the grace of our maturity as a nation we are able to contrive the patient wisdom to keep our nation's banners bright with justice and economic freedom; that our trumpets are always heard loud and clear on the side of freedom and human dignity for all peoples; that we have the common sense to maintain a respectable posture of defense and retaliation that is respected by all the world; and that as a nation we will somehow be able to project into the minds and hearts of the uncommitted nations of the world an image of our America that is gallant and gracious, an America that is conscientious and confident in the strength and spirit of our institutions of liberty.

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Southern California AIA honors 20 buildings

In its 1960 Triennial Honor Awards program, the Southern California Chapter, AIA, cited 20 buildings as the most distinguished completed since January 1, 1955. The two office structures shown here were singled out for Honor Awards, while the other 18 received Merit Awards.

Architects, contractors and owners of the winning projects were recognized at a dinner in the Ambassador Hotel in Los Angeles October 10. Principal speaker was Philadelphia architect Louis I. Kahn, an exponent of the philosophy that "a building must express its function." Frederick E. Emmons served as awards chairman.

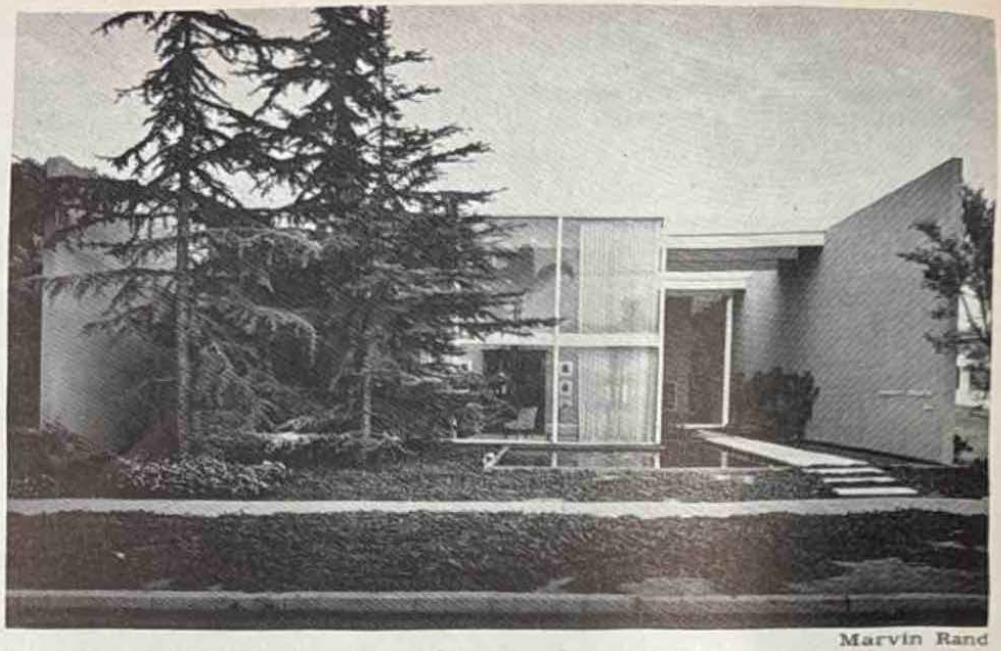
Inaugrated in 1920 in Los Angeles, this Honor Awards program preceded any similar national program and served as the prototype later when the AIA headquarters introduced the coast-to-coast competition.

Merit Awards went to these buildings:

- Administration Building, Home of Peace Cemetery, East Los Angeles. Architects: Sidney Eisenshtat & Associates; contractor: Feldman Construction Co.
- Research Laboratory for Magnavox Corp., Torrance. Architects: Risley & Gould; contractors: William Simpson Construction & Robert B. Coleman Jr.
- Civic Auditorium, Santa Monica. Architects: Welton Becket & Associates; contractors: C. L. Peck and Millie & Severson.
- Hof's Hut Restaurant, Long Beach. Killingsworth, Brady and Smith & Associates; contractor: John Halas.
- Robertson Residence, Laguna Beach. Architects: Killingsworth, Brady and Smith & Associates; contractor: John Halas.
- Ice Skating Rink, Tarzana. Architect: Carl Maston; contractors: Raines-McLellan.
- Ivory Tower Restaurant, Santa Monica. Architects: Richard L. Dorman & Associates; contractor: Jack McDonald Co.
- Skinner Residence, Beverly Hills. Architect: Robert H. Skinner; contractor: owner.
- Miramar Chapel, U. S. Naval Air Station, Miramar. Architects: Richard J. Neutra and Robert E. Alexander; contractor; Alan Rogers.
- Singleton Residence, Los Angeles. Architect: Richard J. Neutra; contractor: Fordyce Marsh.
- Recreation Pavilion for Mirman Residence, Arcadia. Architects: Buff, Straub & Hensman; contractor: owner.
- Van de Kamp Residence, Los Angeles. Architects Buff, Straub & Hensman; contractor: Hugh Gates.
- Art Building, Pomona College, Claremont. Architects: Smith, Powell & Morgridge; contractor: J. Putnam Henk.

Robinson's, Palm Springs. Architects: Pereira & Luckman; contractors: Robinson & Wilson, Inc.

- Union Oil Center, Los Angeles. Architects: Pereira & Luckman; contractor: Del E. Webb Construction Co.
- Computer Building, Newport Beach. Architects: Pereira & Luckman; contractor: Vinnell Co.
- Western Regional Headquarters Building, International Business Machines Corp. Architects: Pereira & Luckman; contractor: McNeil Construction Co.
- Science Lecture Hall, Cerritos Junior College, Norwalk. Architects: Kistner, Wright & Wright; contractor: Nyland Hurd Construction Co.



Marvin Rand

OFFICE BUILDING FOR CAMBRIDGE INVESTMENTS, INC., Long Beach. Architects: Killingsworth, Brady and Smith & Associates; contractor: John Halas.



Herbert Bruce Cross

OFFICE BUILDING FOR REILLY ENTERPRISES, Whittier. Architects: Albert C. Martin & Associates; contractors: Seacrest & Fish.

West takes three top honors in steel bridge competition

Eight steel bridges in the West, representing three top awards and five honorable mentions, are among 15 chosen as the most beautiful in the U.S. opened to traffic during 1959.

A jury of four architects, including national AIA president Philip Will Jr., and one engineer selected the winners in the 32nd annual competition sponsored by the American Institute of Steel Construction. "The jury's prime consideration in its choices was the relation of the bridge design to its setting," says M. G. Gaskin, chairman of the AISC committee on awards, adding that the number of entries received this year was the largest ever. "This seems to indicate a definite desire by designers to create steel bridges of great beauty. The American public is the beneficiary in terms of aesthetics, strength, durability and economics."

In special ceremonies to be arranged at the sites later this year, stainless steel plaques will be affixed to the three top winners and honorable mention certificates will be awarded to the designers, owners and structural steel fabricators of the other 12 bridges.

Honorable mention has gone to these five western bridges:

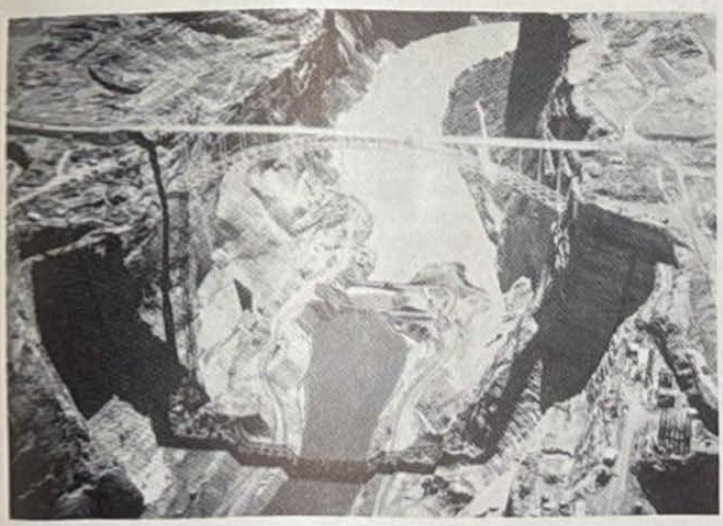
- Robert R. Shoemaker Bridge, Long Beach, Calif. Designer: Moffatt & Nichol; fabricator: Bethlehem Steel Co.
- Truckee River Bridge, 13 miles northeast of Truckee, Calif. Designer: Department of Public Works, State of California; fabricator: San Jose Steel Co., Inc.



CLASS 3 AWARD for bridges with spans under 400 ft., costing under $500,000: Modrow Bridge, Cowlitz County, Wash. Designer: Harry R. Powell & Associates; fabricator: Isaacson Iron Works. "This is the most imaginative and sensitive bridge in the competition. There is no waste of materials in the beautifully tailored hinged arch and light struts. Every part seems to be appropriate to its use. This bridge is a sheer delight!"

- Pecos River Bridge, Fort Sumner, N.M. Designer: Bridge Design Section, New Mexico State Highway Department; fabricator: American Bridge Division, United States Steel Corp.
- Kern Avenue Pedestrian Overcrossing, MacFarland, Calif. Designer: Department of Public Works, State of California; fabricator: Fresno Shop and Pittsburgh-Des Moines Steel Co.
- Grant Line Canal Bridge, between Stockton and Tracy, Calif. Designer: Department of Public Works, State of California; fabricator: Independent Iron Works.

The AISC this year also began a competition for buildings that best illustrate the aesthetic use of steel (PA&B, Sept. '60).



CLASS 1 AWARD for bridges with spans 400 ft. or more: Glen Canyon Bridge, Page, Ariz. Designer: U.S. Department of the Interior, Bureau of Reclamation; fabricator: Judson Pacific-Murphy Corp. "Elegant, airy arch design contrasts so beautifully with the grand brutality of the setting. The bridge is detailed with great deftness and grace and constructed with a minimum of disturbance to the landscape."

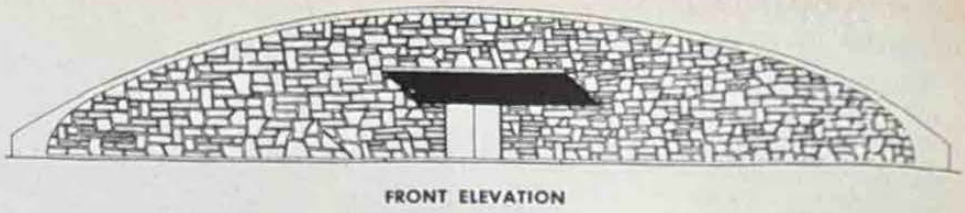


CLASS 2 AWARD for bridges with fixed spans under 400 ft. and costing more than $500,000: Huasna River Bridge, on Route 166 northeast of Santa Maria, Calif. Designer: Department of Public Works, State of California; fabricator: Vinnell Steel. "The bridge exemplifies a simple, direct statement of structure and design. Here the designer utilizes simple form to obtain an overall pleasing effect."

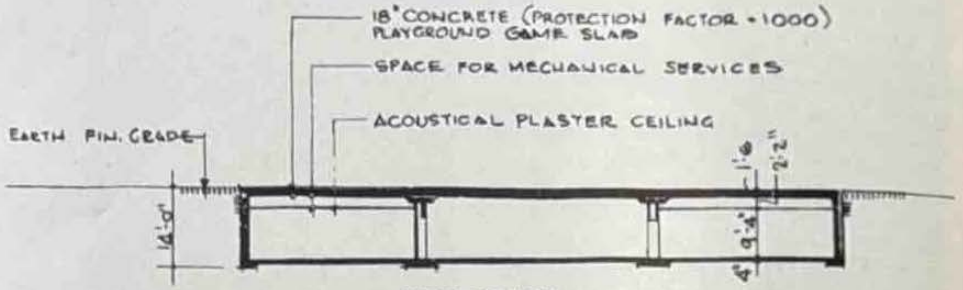
Community center in Idaho

First of its kind in the nation, a $99,000 structure to be built in the Highlands area of Boise will serve as both a fallout shelter accommodating 1,000 persons and a community center. It has been selected as a prototype by the Office of Civil and Defense Mobilization which will finance 85% of the cost. The remainder will come from residents who purchased a share in the shelter at $100 a family.

Designed by architect Edgar B. Jensen, the 80x80-ft. reinforced concrete shelter will have two floors, each with separate heating plants and an air conditioning system capable of filtering out all contamination. Lower floor will have storage space, medical facilities, etc.; second floor will be used mainly for sleeping quarters.

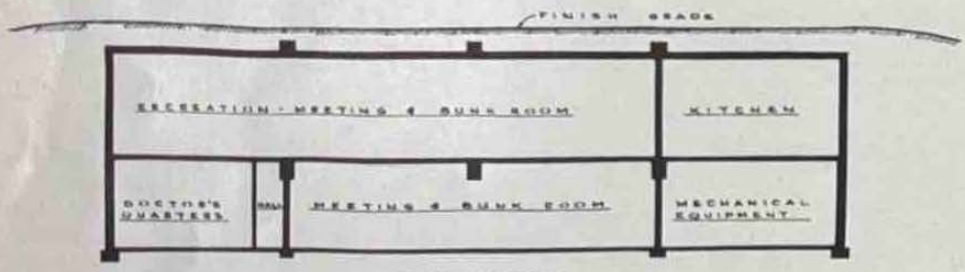


FRONT ELEVATION

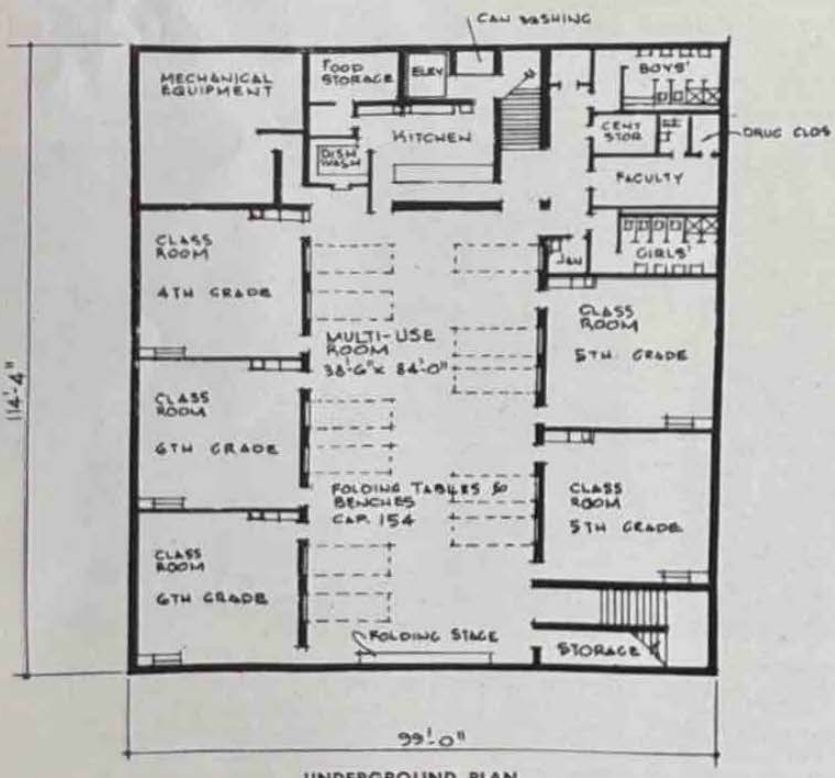


CROSS SECTION

Peacetime uses and fallout protection combined in three public structures



CROSS SECTION



UNDERGROUND PLAN

Two schools in New Mexico

Everything but the entrance and flagpole of Abo Elementary School in Artesia, N.M., will be built underground below an 18-in. thick concrete slab. During normal operations the 18 classrooms will house 540 pupils. Facilities are designed to accommodate 1,940 persons for 14 days during fallout conditions. OCDM has approved the project as a prototype shelter and will help toward construction.

A companion project, a five-classroom underground addition to the Yucca Elementary School (sketches at left), will afford protection for 750 more persons.

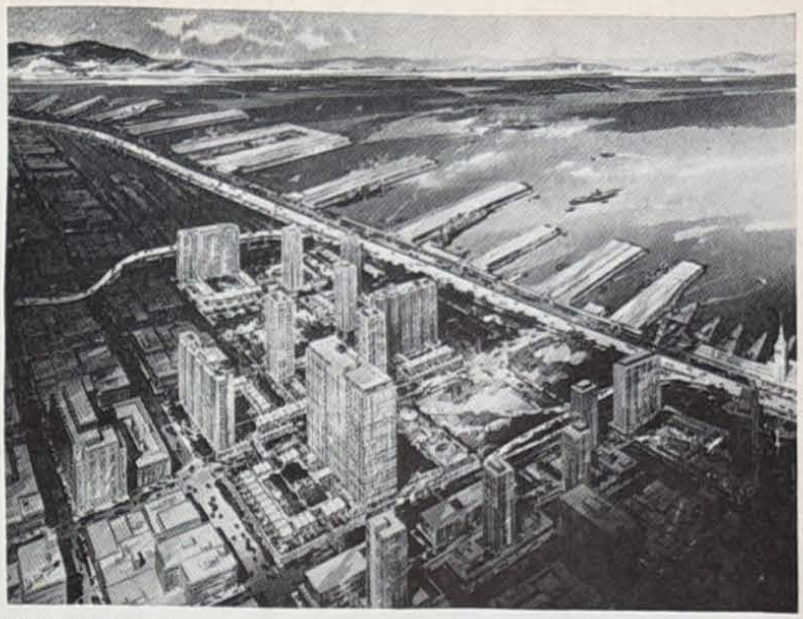
Architect Frank M. Standhardt has incorporated special survival features in both schools, such as instruments for measuring radiation levels, broadcast radio receiver and telephone land lines. Ground water during normal operations will be used to cool air conditioning equipment and then returned to the underground basin. During fallout this water will be used for drinking, cooking and sanitary purposes. Air conditioning equipment with filters will be powered by two gas engines arranged for emergency generation of electricity.

In addition to the 18 classrooms, Abo's 29,105 sq. ft. will include a multi-use room, kitchen and administrative offices; Yucca's 11,315 sq. ft. will include a multi-use room and kitchen. Both plans are an extension of semishelter type, windowless schools already tried out successfully in New Mexico.

Golden Gateway project awarded to Perini

A proposal which "generated great enthusiasm" among the members of the architectural advisory board for the Golden Gateway project has been given the green light by the San Francisco Redevelopment Agency.

Winner of what has turned out to be one of the building industry's most coveted plums is Perini Land & Development Co., along with eight co-sponsors, in association with architects Wurster, Bernardi & Emmons and DeMars & Reay. The decision was regarded as a surprise in some circles, at least, in that the Perini offer of $6 million, considered fair reuse value of the land, was almost $2 million less than that offered by Del E. Webb Construction Co. and Kern County Land Co. But the agency said it felt that the design aspects of the Perini proposal outweighed the $2 million difference.



WINNING PLAN will convert 20-acre tract in San Francisco's Produce District into 2,174 residential units, along with public garage and office building, at estimated $60 million.



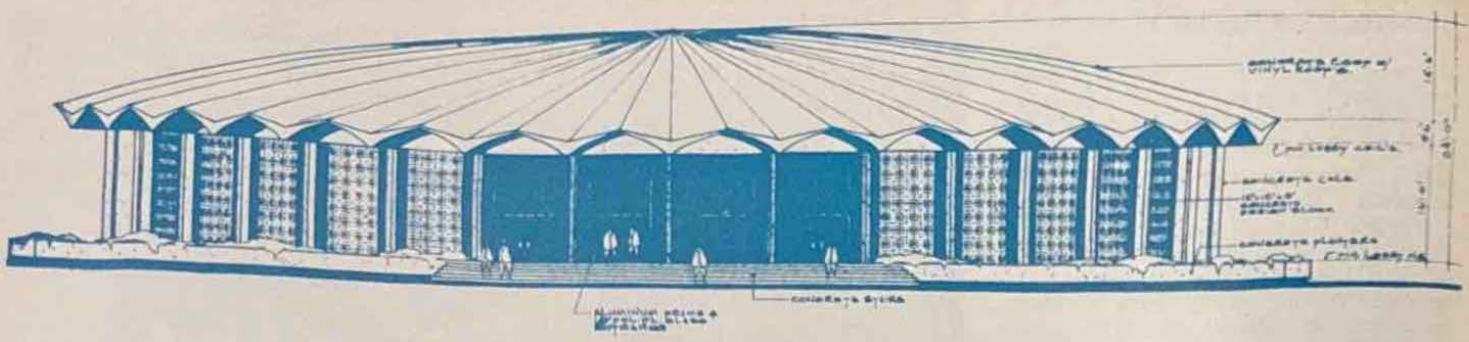
The winning plan will provide for 2,174 units in three types of buildings: maisonettes, five "point" towers and three slab towers.

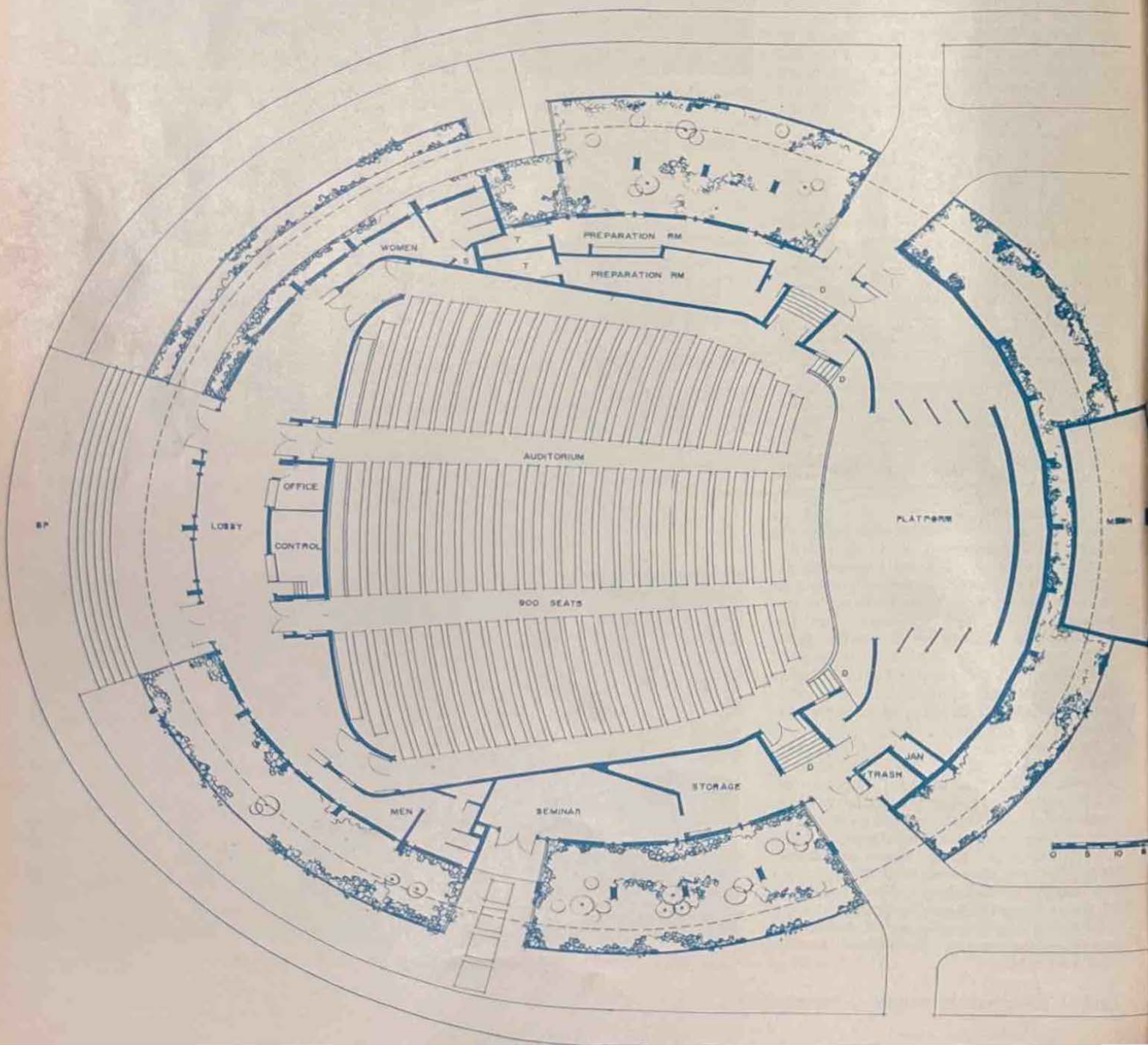
Rental schedule will range from $110 a month for studio units to $595 for the most luxurious four-bedroom apartments. More than 1,100 one-bedroom units will be available from $140 to $210.

In its high praise of the Perini proposal (PA&B, Sept. '60), the advisory panel said in summary: "The competence evidenced by its authors gives assurance of their ability to carry through to actual completion the eloquent concept they have presented. The pattern of relationships between buildings would be a fine extension of the city; and the warmth, intimate character and variety of form and space promise a delightful human environment."



VIEW FROM PARK with slab tower on left and "point" tower on right.




WOMEN
PREPARATION RM
PREPARATION RM
AUDITORIUM
OFFICE
CONTROL
LOBBY
900 SEATS
PLATFORM
STORAGE
MEN
SEMINAR
JAN
TRASH

Circular lecture hall to serve as community cultural center on California campus

Working drawings are underway and construction should start early next year on a circular, 900-seat lecture hall to replace present too-small facilities at the University of California's Santa Barbara campus.

Designed by Charles Luckman Associates, the one-story building will have a domed, folded plate thin shell concrete roof. Although an architectural departure from existing campus structures, continuity is provided through the exterior panels between the concrete columns which will be of concrete block similar to those utilized in the other buildings*

The round shape was selected as being the most practical means to satisfy space requirements, engineering considerations and the construction budget. Roof structural system further provides for maximum use of space by eliminating unusable cubage within the structure.

Sight lines have been planned for minimum obstruction. Each spectator sees between the heads of those directly in front and over the heads of those two rows in front.

Although the hall is designed primarily for lectures, flexibility in its use is provided with accommodations for audio-visual aids, music ensembles, dance recitals and small theatrical productions not requiring extensive stage equipment or a fly gallery. The 13,000-sq. ft. structure contains the lecture hall with its stage, two preparation rooms, a seminar room, motion picture projection booth and a glass enclosed foyer.

Mechanical equipment will be housed in a small structure adjoining the rear of the main building to remove any noise or vibration from the envelope of the lecture hall.

Building will be located near the main campus entry road, placed so that it can conveniently serve as a cultural center for the community, as well as the university.



CINNAMON CONCRETE BLOCK used on existing structures is repeated between concrete columns of lecture hall to give campus continuity.

*An article in PA&B, Jan. '58, discussing the Music Classroom Building, said this about the master plan as developed by Pereira & Luckman: "In adapting the indigenous Spanish architecture, the strict 'mission' style was rejected as too frigid, formal and lifeless for contemporary conception of space and travel. However, the simple masses, plain surfaces, colonnades, deep overhang of the roofs and patios were retained to preserve the Spanish character. Special emphasis too was given to the achievement of a residential quality as opposed to the institutional look . . ."



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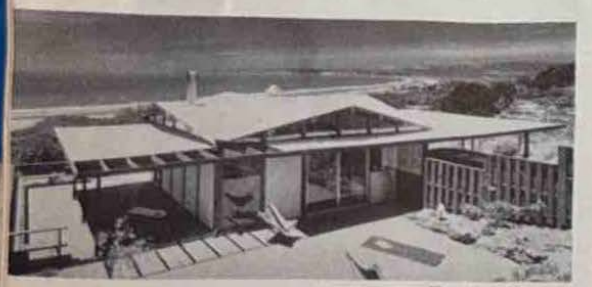
Art Frisch

STATON HOUSE, Belvedere: Marquis & Stoller, architects.



George Knight

LINDSAY HOUSE, Belvedere: George Quesada, architect.



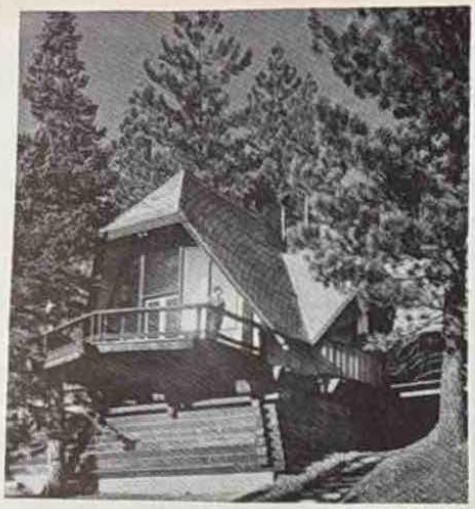
Ernest Braun

ANDREW HOUSE, Stinson Beach: Rex Allen, architect.



Roger Sturtevant

POPE HOUSE, Madera: Wurster, Bernardi & Emmons, architects.



Ernest Braun

DIAMOND HOUSE, Squaw Valley: Anshen & Allen, architects.

Monthly house competition underway in Bay area

Initial "House of the Month" competition co-sponsored by the Northern California Chapter, AIA, and the San Francisco Chronicle got underway last month, as far as the public is concerned, with the publication of the first of six winners in the newspaper's Bonanza section.

The five-man jury consisted of architects Roger Lee (chairman) of Berkeley, Roy Watanabe of El Cerrito and William Hempel of Palo Alto; San Francisco civic leader Cyril Magnin; and Bonanza editor Richard Johnston. It recommended in its report that the second group of six houses be selected by a new jury and that the two juries sit as one to determine which of the 12 will be named "House of the Year."

The San Francisco program was inspired, in part, by the success of the Washington State Chapter, AIA-Seattle Times competition which goes back to 1954. Each month a house, complete except for final paint and floor covering, is open for public inspection on a specified Sunday.

KLAUSSEN HOUSE (speculative), Belvedere: Henrik Bull, architect.

Stone & Steccati



Final stage near in Eugene's city hall design competition

Four finalists for Eugene's new city hall, to be selected via an AIA-approved competition open to all architects residing in Oregon and registered to practice in that state, will be announced December 1 and the winner, March 1.

Entries will be judged by architects Paul Hayden Kirk of Seattle, Robert B. Price of Tacoma and Francis J. McCarthy of San Francisco and by Edwin E. Cone, Eugene mayor, and Catherine Lauris, city councilwoman. Conducting the competition for the Eugene City Council is Walter Gordon, dean of the School of Architecture and Allied Arts at the University of Oregon.

First stage for the selection of the four finalists required submission of a small model and simple drawings. Final stage will require a larger model and more detailed and elaborate drawings.

Winner of the competition will receive a $2,500 prize and the contract for designing the building and supervising construction, 6% of the cost. Other three finalists each will receive $2,000.

Site for the building, in the Civic Center, was approved in last May's elections. (For a story on the first building in the complex see "An Auspicious Return to the Courthouse Square," PA&B, Apr. '60.) Bond issue for the estimated $1,725,000 structure still must be approved by the voters.

Building will have some 94,000 sq. ft., with parking provisions for 165 vehicles.

San Francisco, Honolulu firms to design Hawaiian Capitol

Two architectural firms—John Carl Warnecke & Associates of San Francisco in association with Belt, Lemmon & Lo—have been selected over 20 other applicants to design Hawaii's State Capitol, which will probably cost more than $10 million.

Governor Quinn followed the recommendation of his Capitol Architect Selection Advisory Committee, headed by Robert B. Midkiff, who commented that the two firms "have shown unusual imagination coupled with a businesslike approach to the problem of designing and building the proposed State Capitol."

First phase of design and planning will be the prime responsibility of Warnecke's firm. Cyril W. Lemmon, senior partner in the Honolulu firm, will be overall project coordinator.

new offices, partnerships

Kermit Dorius has opened an office for the practice of architecture at 3712 E. Coast Highway, Corona del Mar, Calif.

Stefan Novak, architect, has established his own office at 2111 West St., Berkeley, Calif.

Sydney Williams has opened an office at 1136 Clement St., San Francisco, for the practice of city and regional planning, urban design and urban renewal.

Lewis Keys has established his own architectural practice at 1212 First St. S., Nampa, Idaho.

Morris Arthur Stark, architect, has opened an office at 138 Anza St., Mission San Jose, Calif.

Howard G. Ding, architect, has opened an office at 1615 Polk St., San Francisco, for specializing in commercial and industrial work.

Marvin S. Knox has opened an office for the practice of architecture at 166 Saratoga Ave., Los Gatos, Calif.

Max R. Garcia has established an office for the practice of architecture at 2721 Jackson St., San Francisco.

Shuso Kagawa has opened an office for the practice of architecture at 2615 S. King St., Honolulu. Following his graduation from Columbia University, he was associated with two architectural firms in New York City.

Frank B. Wallace & Associates is the name of a firm formed recently for the general practice of architecture with offices at 2928 W. Highland Ave., Phoenix.

Seattle architects Bassetti & Morse have opened a branch office at 2130-A Kalakaua Ave., Honolulu, with John Tatom as resident associate. A University of Washington graduate, Tatom was employed by Bassetti & Morse and later by Vladmir Ossipoff before establishing his own practice in Honolulu.

Beardsworth & Stearns, Eugene architectural firm, has opened a branch office at 217 Oregon Ave., Bend, Ore. Robert Mention, associate architect, will head the Bend operation.

John S. Roel and W. Dean Davidson have formed a partnership for the practice of architecture under the name of Roel & Davidson at 7459½ La Jolla Blvd., La Jolla, Calif.

Wm. N. Ross and M. L. Pence have formed a partnership for the practice of architecture with offices at 607 W. Columbia St., Pasco, Wash.

Eugene L. Pierson, Phoenix architect, has formed a partnership with Don Miller who was recently licensed to practice architecture in Arizona. The firm will be known as Pierson & Miller, with offices at 400 W. Camelback Road.

A new partnership known as Samuel E. Lunden and Joseph L. Johnson, architects-planners, has been formed at 548 S. Spring St., Los Angeles. Lunden is a former national president of the AIA and chairman of its committee on architectural building information services. Johnson recently was appointed to the California State Board of Architectural Examiners.

new associates

Alfred Watts Grant & Associates, Denver architectural firm, has appointed M. Righton Swicegood as an associate and chief designer. Swicegood formerly was a member of a New York firm specializing in design of department stores and showrooms.

Ralph O. Butterfield has been named as associate in the San Francisco architectural firm of Wurster, Bernardi & Emmons, which he joined in 1955, shortly after obtaining his degree from the University of California.

The Los Angeles architectural firm of Victor Gruen Associates has named John R. Pointer as an associate and Samuel Tulchinsky as head of the electrical department.

Jose E. Sala has been named an associate of Charles O. Matcham, Stewart S. Granger & Associates, Los Angeles architects-engineers. A native of the Philippine Islands, he received his training at the University of Santo Tomas in Manila and took graduate work at UCLA upon coming to the U.S. in 1945.

Lee Miller has been made an associate in the firm of Daniel L. Dworsky, architect, Beverly Hills, Calif.

AIA HONOR AWARDS

Deadline for entry slips and fees in the 13th annual Honor Awards program of the AIA is November 21. Submissions in brochure form must be received at the Octagon no later than January 13. Awards will be made for any building in the U.S. or abroad designed by an American architect and completed since January 1, 1956. For more details write the AIA at 1735 New York Ave. N.W., Washington 6, D.C.

firm changes

Roger Lee Associates is the new name for a Berkeley architectural firm with offices at 2576 Shattuck Ave. Principals include Roger Lee, Ward Higgins and Lois Langhorst.

The Portland architectural firm of Annand, Boone & Lei has been succeeded by Annand & Boone, with offices at a new address, 3933 S.W. Kelly. Principals are J. D. Annand and Harold B. Boone. Wilbert P. Lei died March 2.

The architectural firm of Carlson & Middlebrook, Garden Grove, Calif., has become Carlson-Middlebrook-Rose, with LeRoy Rose as the new partner. The firm has moved to a new location at 12765 Brookhurst St.

The office of Haluk Akol, consulting engineer, has acquired a new firm name and a new location: Akol Engineering Co., 507 Howard St., San Francisco.

H. Everett Drugge, structural engineer, has joined the Seattle firm of Harstad & Associates, engineers-architects-planners. He holds degrees from the U.S. Military Academy and Cornell University and most recently was with Hardesty & Hanover in New York City.

deaths

Edwin C. Anderson, 69, a retired Seattle structural engineer, died August 31 after a long illness. A graduate of the University of Washington, he had been associated with several Seattle firms, including M. O. Sylliaasen and John Graham & Co.

Manley W. Sahlberg, structural engineer, for many years associated with the California State Division of Architecture, died August 4. His most recent capacity with the division was as head of the San Francisco "school checking" office.

new addresses

Paul E. Graves, architect, to 2524 Deming Blvd., Cheyenne, Wyo.

Tom A. Thliveris, architect, to 5131 Kiwana Drive, South Ogden, Utah.

Harold W. Brewer, architect, to 6160 W. 38th, Wheatridge, Colo.

Palmer & Krisel, architects-engi-

neers, to 10954 Santa Monica Blvd., Los Angeles.

Smith & Needham, architects, to 1057 E. 900 South St., Salt Lake City.

W. Earl Wear, architect, to 19980 Sischo Drive, Topanga, Calif.

Donald L. Johnson, architect, to 1942 Harvard Ave. N., Seattle.

John E. Stephens & Associates, architects-engineers, to Suite 308 Mayer Central Bldg., Phoenix.

Seth McCallen Fulcher, architect, to 700 W. 100th St., Seattle (a new office building in the same general area).

Walter Rein, architect, to 4253 Ampudia St., San Diego, Calif.

Van Slyck-Callison, architects, to 268 Colman Bldg., Seattle.

Ramberg & Lowrey, architects, to 2127 N. Main St., Santa Ana, Calif.

Gordon A. Phillips, architect, to 24 H St., San Rafael, Calif.

M. DeWitt Grow, architect, to 248 S. Sierra St., Reno, Nev.

Raymond Lee Eggers, architect, to Suite 3, 8415 La Mesa Blvd., La Mesa, Calif.

Robert Jun Lee, architect, to 7451 Melrose Ave., Los Angeles.

Hayslip & Tuft, architects, to 4100 S.W. Barbur Blvd., Portland.

J. C. Hupfer, Jr., architect, to Continental Terrace Building, 2785 N. Speer Blvd., Denver.

Philip D. Tomasello, architect, to Room 231, 3030 Bridgeway, Sausalito, Calif.

R. Lindsey Lamberson, architect, to 1158 Harriet Ave., Campbell, Calif.

elections, appointments

Robert F. Fisher, architect, has been elected chairman of the Grants Pass (Ore.) Planning Commission. He has served as a planning commissioner and as chairman of the rezoning committee since 1954.

Northern California Chapter, AIA, has appointed Mrs. Ethel G. Smith as executive secretary and Mrs. Marie Farrell as her assistant. Mrs. Smith replaces Don Curlee who has joined Association Service Co. as an account executive. For the past eight years she served on the staff of Mount Zion Hospital in San Francisco as executive secretary to the board of directors and administrative assistant to the director.

Los Angeles architect Charles Luckman has been appointed as member of the newly created Board of Trustees of the State Colleges, with jurisdiction over what is reported to be the largest group of colleges in the world.

John S. Detlie has left Seattle to become director of architecture for Daniel, Mann, Johnson & Mendenhall, Los Angeles architectural-engineering firm. He most recently was a partner in the firm of Detlie & Peck and earlier of Young, Richardson, Carleton & Detlie. He was the founder and first president of Allied Arts of Seattle and the initial chairman of the Governor's Council on the Arts.

Leonard R. Sundell has been elected president of the Billings (Mont.) Architectural Association, succeeding Charles D. Hall. Other officers include Willard D. Johnson, vice president, and W. J. Ottem Jr., secretary-treasurer.

Architect Charles O. Matcham has been appointed to a third term on the Board of Governors of the Los Angeles County Museum.

James E. Hussey, architect, has been appointed to Seattle's Municipal Art Commission.

John C. Monning has been named general manager of the Los Angeles City Building and Safety Department. Monning has been with the department 24 years and succeeds Gilbert E. Morris who has retired.

Prof. T. Y. Lin has been appointed chairman of the Structural Engineering and Mechanics Division and director of the Structural Engineering Laboratory at the University of California, Berkeley.

A. John Brenner, Phoenix architect, who has served on the Arizona Board of Technical Registration since 1954, has been reappointed to a three-year term.

Lynn M. F. Harris has been appointed executive director of the American Society of Landscape Architects, which has moved its headquarters from Boston to 2000 K St. N.W., Washington, D.C. Formerly assistant superintendent of Oakland parks and executive secretary of the California Council of Landscape Architects, Harris went east in January to become field secretary.

speakers

Two California architects will be among 61 speakers scheduled to address the first Industrial Building Exposition & Congress at the New York Coliseum December 12-13. Albert C. Martin Jr. of Los Angeles will be chairman of the session devoted to "New Dimensions in Plant Design," while John S. Bolles of San Francisco will be a panelist.

travelers

Philip W. Faulconer, project architect at the University of California Lawrence Radiation Laboratory in Berkeley and Livermore for the past seven years, left in October for a year's travel in Japan, India and Europe. He will observe research facilities at universities, nuclear power establishments and industrial laboratories.

honors

Charles and Ray Eames of Venice, Calif., have been selected to receive the first $20,000 Kaufmann International Design Award from a panel of candidates submitted by consultants from all parts of the world. Eames has conceived and carried out most of his projects in partnership with wife, specializing in furniture, films and toys. The award defines design, for its purposes, as "the forming of useful, meaningful and expressive products, delightful beyond the satisfaction of needs or the provision solely of entertainment."

The team of Edward H. Fickett, Los Angeles architect, and Severin Construction Co., San Diego, has won both the 1960 National Merit Award and Regional Merit Award in the Parents' Magazine 11th annual builders' competition. Both citations were given for the Dr. David M. Stenzil residence, La Mesa, Calif.

exhibitions

The Building Center in Los Angeles is featuring the 1960 Triennial Honor Awards of the Southern California Chapter, AIA, in its clubroom during the month of November. The architectural gallery is showing the work of Jay Dewey Harnish through November 15 and of Welton Becket & Associates November 16-30.

ARCHITECTURAL ILLUSTRATIONS
Offers instruction in monochrome, colored pencil and water color rendering with ten separate lessons augmented with 52 color slides. For further information write to ARCHITECTURAL ILLUSTRATIONS, 213 West Canon Perdido, Santa Barbara, California.

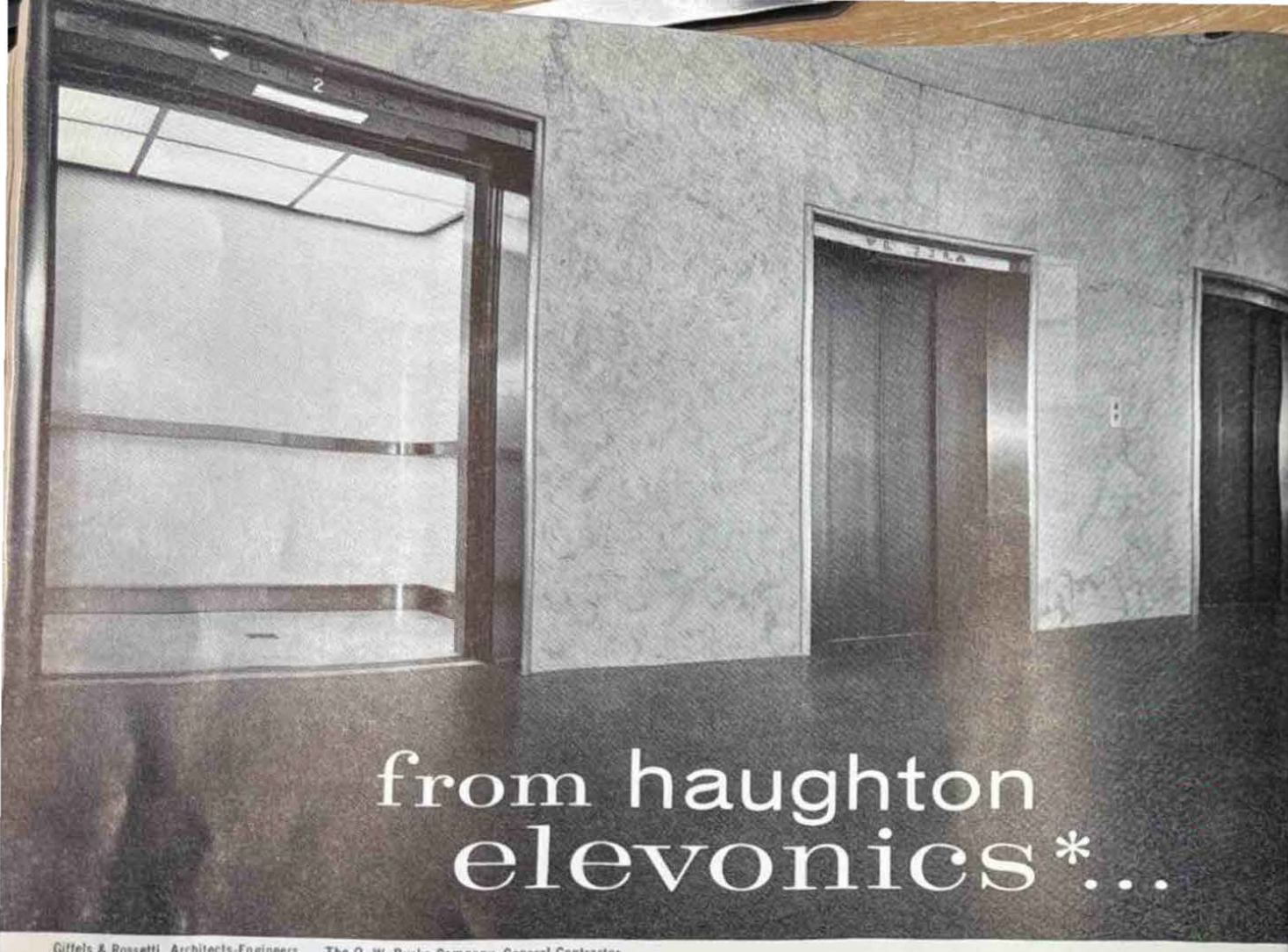


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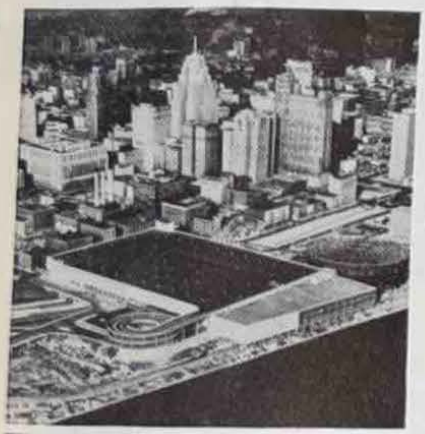
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Giffels & Rossetti, Architects-Engineers The O. W. Burke Company, General Contractor

a new concept of convention center elevatoring for magnificent COBO HALL



Convention hall elevatoring has its own special problems. And for Detroit's vast new Cobo Hall, where it is said no foreseen convention is too large to handle, there were some special *special* problems.

Here's how they were solved by a specialized system of Haughton electronically controlled elevators.

Designers knew that before and after scheduled events, building traffic would mean a heavy demand for elevator service between parking areas (basement, first and roof floors) and second floor. At other times, comparatively light traffic could be expected between all floors.

Five Haughton automatic units were installed. Cars are big—six feet deep and eight feet wide. A bank of three serves basement, first, second and roof levels. Two cars serve first, second and third floors for lesser traffic needs. All units are motivated by an amazing "electronic brain" that anticipates service needs and dispatches cars at proper time and in proper sequence.

The complete reliability of Haughton vertical transportation is thoroughly recognized by building professionals and owners. We will be glad to provide you with complete information on Haughton design, modernization and maintenance capabilities.

EMBLEM OF EXCELLENCE IN VERTICAL TRANSPORTATION

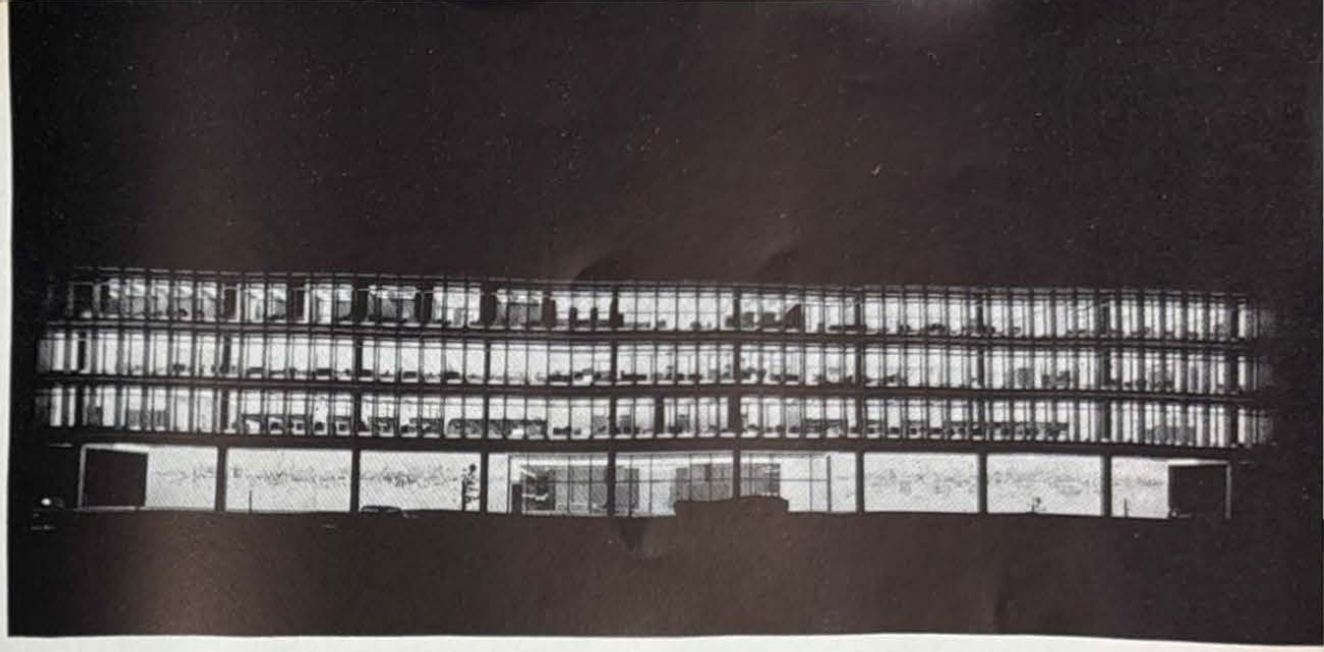
**Haughton's advanced program in elevator systems research and engineering, with specific emphasis on the creative application of electronic devices and instrumentation for betterment of systems design and performance.*

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An exciting interplay of light, shadow and detail





Phil Fein photos

Headquarters Building
Sacramento Municipal Utility District
Sacramento, California

•

DREYFUSS & BLACKFORD
Architects

CONTINENTAL-LAWRENCE CONSTRUCTION COMPANIES
General Contractors

BEHIND the handsome facade of dark aluminum and white quartz is a highly functional headquarters with all the offices and department necessary for a large public utility, plus expandable features for projected needs. The almost monumental appearance of the exterior with its massive mural sets the stage for equally striking interiors marked by clear span spaces over the office area.

Exterior aluminum mullions, spandrels and louvers are dark, changing in shading according to the point of view or range of sunlight from dark bronze or black to almost golden. White quartz end panels and towers in the shade are off-white to gray. In the sunlight they reflect a sparkling white, framed by the dark bronze patterns of the aluminum. In sharp contrast are the brilliant colors of the mural and the rolling green lawns.

At night the mural becomes the focal point, appearing almost luminous with a strong flood of light reflecting from the bright glass tesserae. From a distance, it gives the impression of a city reflected in water. Reds, yellows, blues and black form the design, exceuted by Wayne Thiebaud, against an off-white background.

Basic elements in the building include a cafeteria designed to provide for the ultimate size of the building; auditorium for 190 persons; demonstration room for display and teaching purposes related to electric equipment; home economist area dircetly related to the demonstration room; main lobby to receive the public and provide location for paying bills, receiving complaints and applications for new service, etc.; office areas for sales, commercial, personnel, accounting and engineering departments, executive personnel and other related facilities, including telephone operators' room, mail



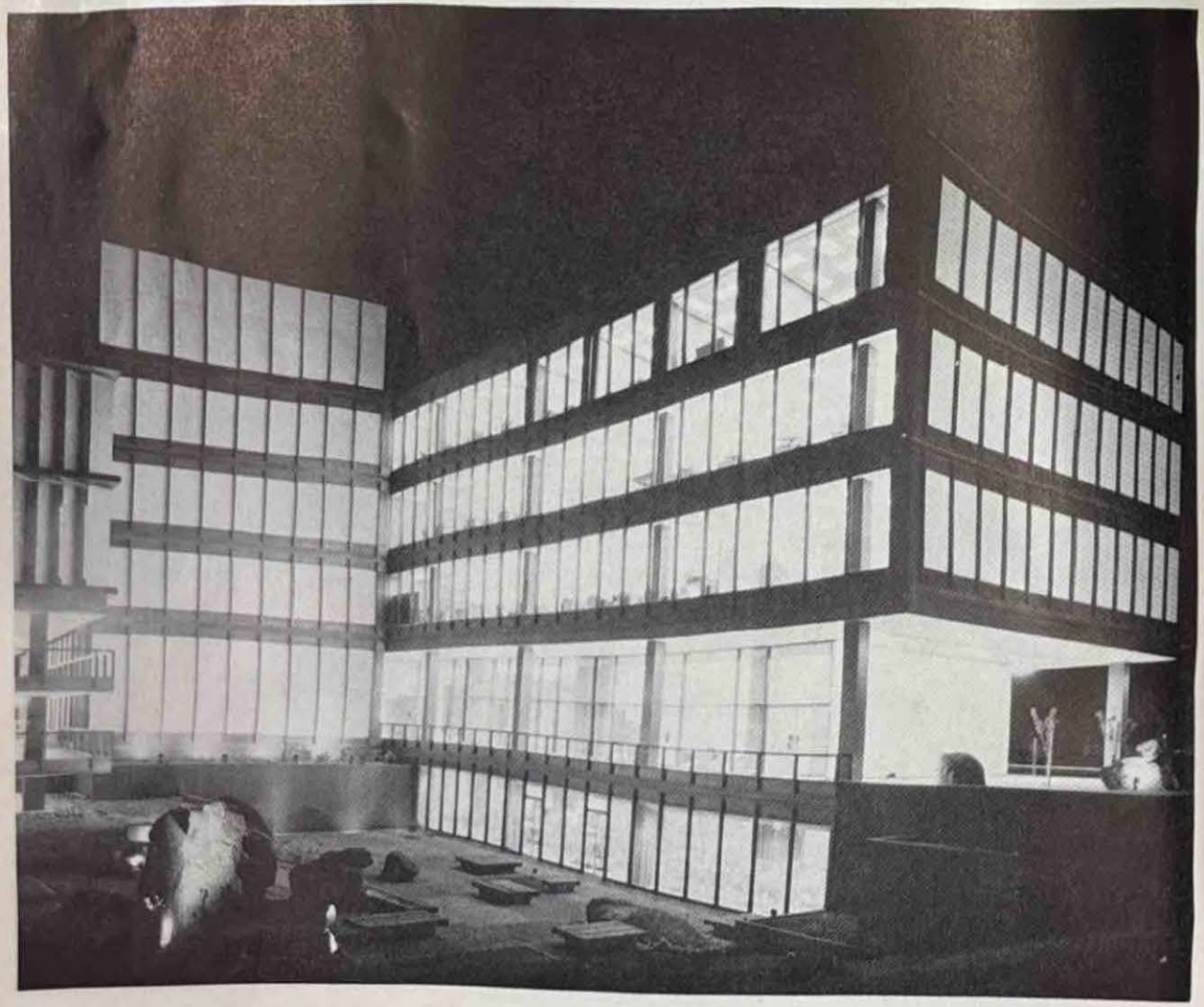
NORTH WING, seen from arcade above, is planned around electronic accounting equipment used by district. Ramps to parking decks are located outside structure. Two levels are up, one is down. Top level ramp serves as bridge. Note delicate detailing of windows.





THREE DISTINCT SHAPES which make up building—south wing general office area, central mechanical core and north wing accounting with parking below—are sharply defined in this view from northeast. Shapes were determined by requirements of facilities to be housed.

CAFETERIA opens onto outdoor patio area at lower level on right. Mechanical core is at left. Exterior "is both firmly attached to its site and soaring into air," as one observer put it.

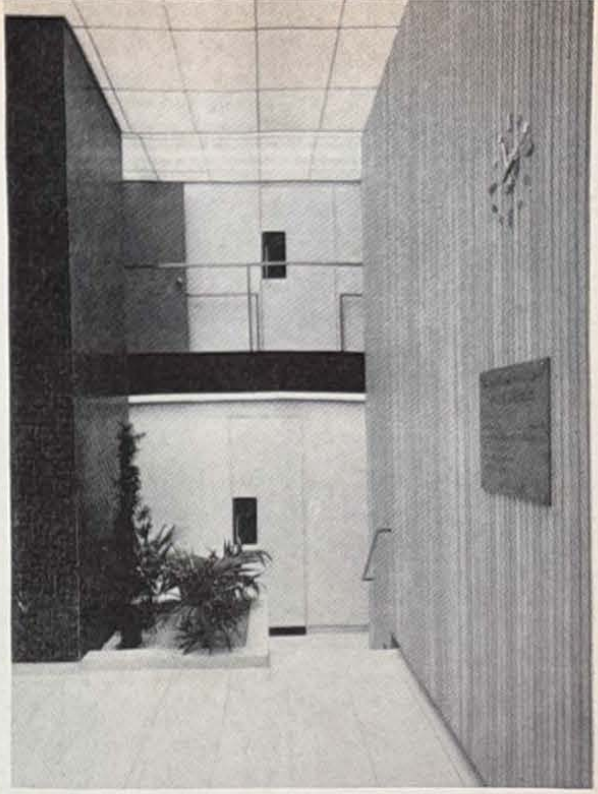


and mimeograph rooms, conference rooms and storage. Parking is provided for 450 employees, expandable to 600, with 120 staff cars under cover, a service station, washing and greasing facilities and public parking for 50 cars, all arranged in a manner harmonious to the general tone of the building.

Structure is completely air conditioned. Heating is with an all-electric heat pump and high pressure air distribution. Lighting specifications required a level of 150 footcandles in the general office space, free of glare, provided primarily by luminous ceilings and specially designed fluorescent fixtures. Aluminum louvers protect the glass so that at no time does sun reach a desk top.

Site covers 14 acres about six miles east of downtown Sacramento, in the center of SMUD's service area and near the utility's warehouse and service facililties.

An interesting sidelight to the building design is the fact that it was the first major multistory structure undertaken by the comparatively young architectural firm. Assisting with the interiors was Bob Pedigo of Knoll Associates. Mechanical engineer: Lester A. O'Meara; electrical engineer: Alvin Norberg: landscape architect: Ralph Jones.



BALCONY leads from stair tower on left to top level of parking, steps down to middle level. Stair tower is covered in glass mosaic.



OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete spread footings; farme: structural steel columns, steel trusses with clear span over office area; concrete parking decks, office floors and roof: concrete fill over cellular steel decking—H. H. Robertson Co.

Exterior Finish: exterior walls—(Mo-Sai) P. Grassi Co.; Venetian glass mosaic—Casavan-Saivo Glazing; gray plate glass—Pittsburgh Plate Glass Co.; aluminum mullions and spandrels—Ador Co.; aluminum louvers—Brown Manufacturing Co.

Roof Surfacing: built-up over concrete fill with selected colored rock.

Floor Surfacing: vinyl tile—Robbins Tile Co.; terrazzo—Oakland Terrazzo Co.

Interior Finish: vinyl wall finish—Vicretex Co.; special wall finishes—Weber Showcase Co.; interior partitions—Weber Showcase Co.

Lighting Fixtures: luminous ceiling and specially designed fluorescent light fixtures—Columbia Electric & Manufacturing Co.

Plumbing Fixtures: Crane Co.

Air Conditioning: controls—Johnson Service Co.; mixing boxes—Tuttle & Bailey.

Total Cost: $4,300,000.

Cost Per Square Foot: $24

Date of Completion: April 1960.



MAIN LOBBY (above) looking through public entrance with receptionist at left, waiting area at right. Employees' entrance (below) from lobby, looking along arcade.

Form Givers

Introduction
by Pietro Belluschi, Dean
School of Architecture
and Planning
Massachusetts Institute
of Technology

THIS ARCHITECTURAL EXHIBIT is more than a proclamation of excellence; it presents the work of men who have been in large measure responsible for the New Architecture of our age. The full meaning and importance of their ideas are just now beginning to be widely understood. In looking at the photographs and models of their work, one is struck by the great variety of these ideas, which reveal the many and, at times, contradictory aspect of a vital esthetic growth.

The intellectual theories which have served as springboards of creative action in this century can be observed here in their formal expressions; among them, forms born of the neo-humanistic philosophies in their many romantic variations, crisp and naked structures built on rational-functionalist beliefs and those erected in the faith that our technological era needs poetic transfiguration. Rather than assess creativity by narrow labels, it may be proper and more important to say that these men all have in common a deep commitment to express the reality of our time. Their forms are less the obvious signs of renewal than the efforts to express the symbols of our contemporary life, which is demanding in its awareness and is of infinite richness and variety.

These gifted men have searched for truth and have given it form. But truth is enormously complex and elusive; it is more than function or structure or emotional fulfillment. It is all of them, plus the imaginative spark of artistic conception. Architecture is many things, but above all it is an art, and only as such will it produce significant forms. Modern forms are born through the experience of our own time — a fleeting moment in human history, a coming together, so to speak, of certain elements to form a crystal.

From the very dawn of civilization the search for symbolic expression has been an instinctive and universal urge of mankind; thus architecture has expressed the circumstances of its culture and the social events of its time, a true mirror of human evolution. Our own century has witnessed deeper changes than in any previous age. The search for meaningful forms has been in a context of swift scientific advances, of wars and social upheavals. Thus we have needed greater understanding and perhaps greater courage.

It has been a very difficult task to restore that subtle relationship between form and matter which the spirit of poetry requires; architecture, like poetry, continually needs fresh new language to express itself. Thus the creative struggle never comes to an end, because the human mind is nourished not only by what it sees but more so by what it understands; and as understanding grows, so does the scope of its creative powers.

Perhaps this response of architecture to life is the great unifying attitude of these men as well as of all creative men in all the arts. It is an attitude which automatically excludes the inferior, the cheap and the bizarre, while it exalts the subtle, the significant and the appropriate. We may even believe that only by such a philosophy will order emerge from the chaos of our urban complexes, that esthetic guidance may be given to our technological efforts and salvation wrought from the dangers of our materialistic age.

It must be clear then that the mere invention of forms is not the whole of architecture; even as an art it must satisfy many restrictive conditions. Above all, it must submit to an underlying discipline of logic and order; arbitrary or merely

fashionable forms would only add to the visual chaos which already tends to engulf us everywhere. We find that in nature itself what is created can be of infinite variety and still obey certain universal laws of life as well as more limited laws dictated by climate, function and adaptability; chaos does not exist in nature, only in the man-made world.

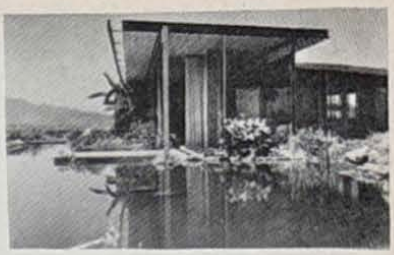
The truly creative man then, the great Form Giver, searches instinctively for this sense of logic and order and even restraint (not to be confused with the concern for the merely practical or the common-sensical), which is a condition of "Beauty" in all the arts. Many believe that the artist alone possesses the intuitive feeling for this condition and the self-discipline to submit to it. But in our age, artists have had a hard time. They too have been separated from the roots of life. Also there are too few of them; and more importantly, there is no way to bestow the laurel wreath nor to prevent the mediocre man from assuming the role of Form Giver.

Therefore, while this exhibition emphasizes the enormous contribution of these artists as Form Givers, it would be wise to be aware of the dangers of the purely formalistic approach to architecture. The profession is not always as alert as it should be to the fact that life never stands still, that its very freedom brings constantly new elements to the framework of our intellectual theories, and that only the understanding of life will keep architecture rich and vital and able to express what has validity in relation to time, mood and function.

Some critics may not accept as definitive this list of architects as "Form Givers," which was prepared by Time for the American Federation of Arts, and it is true that some great foreign names have not been included nor have the names of many younger men. But no one will deny that the list contains the names of the great originators, the philosophers of the revolution, as well as the names of younger men who consolidated the gains and brought widespread public recognition and acceptance of the New Forms.

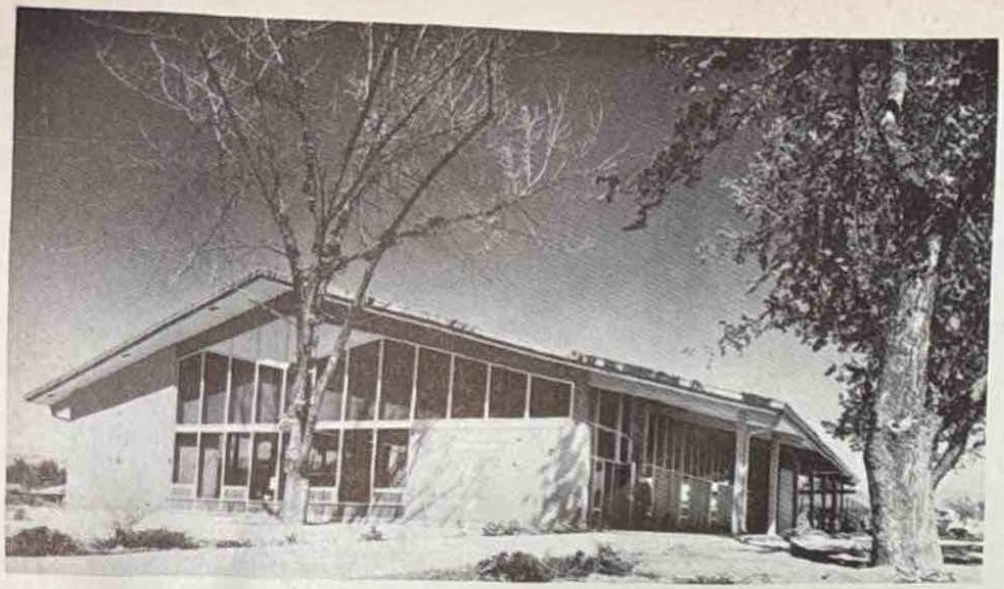
If this group is predominantly American, it is because the opportunity for architectural advancement has been greater in America than in other countries because of our greater industrial expansion and the freedom and vitality of our institutions. Yet we may be reminded that about half of these men are not American born. It is also fair to say that there were other great men before, who prepared the ground for the enactment of this century's architectural drama.

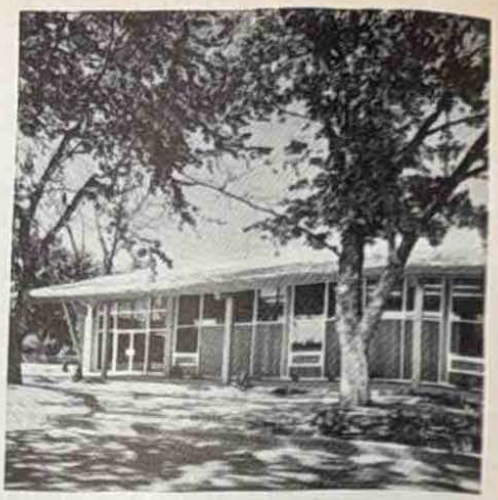
Architecture is a complex of art and science. To flower in our modern climate, it needs many minds and many talents working together. In our day, the artist-architect is learning to accept technology as a great liberating tool to enhance and enrich rather than to demean man's way of life; he recognizes the importance of man as a measure and inspiration for his Form Giving. He realizes that even as our society is undergoing enormous changes, particularly in the enlarged scale of space and time within which mankind must operate, he never forgets that the individual remains physiologically unchanged, that his basic emotions cannot be denied, that love of color and texture and play of light have a real meaning to him, and that merely intellectual rationalizations will not satisfy him for long. We may feel that ornament and richness of space may again return as a part of man's long heritage. The architect is in effect the humanizer of society, the artist with the will to make the earth a fitting place on which to live.



JAMES MOORE HOUSE, Ojai, Calif. Architect: Richard J. Neutra.

FRANK LLOYD WRIGHT
LUDWIG MIES VAN DER ROHE
LE CORBUSIER
WALTER GROPIUS
RICHARD J. NEUTRA
ALVAR ALTO
MARCEL BREUER
WALLACE K. HARRISON
PHILIP C. JOHNSON
SKIDMORE, OWINGS & MERRILL
EERO SAARINEN
EDWARD D. STONE
R. BUCKMINSTER FULLER





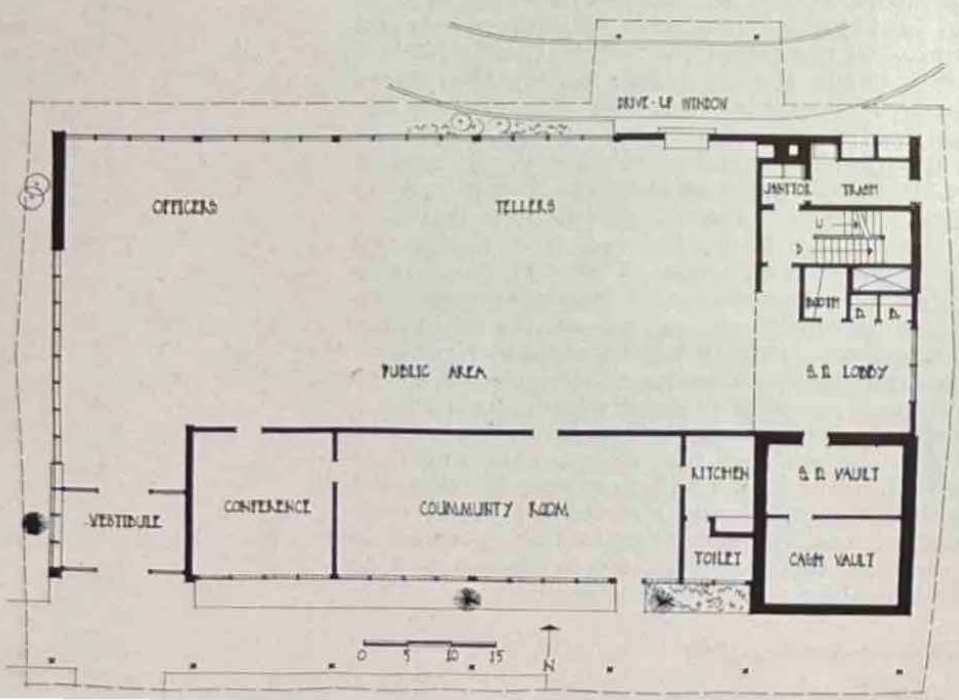
DESIGN PROGRAM as developed by President James Byers reflects motto, "Bank of friendly service." It is largest suburban bank in state.

A good neighbor among suburban homes

RESIDENTIAL STYLE DESIGN sets the tone for branch banking operations in a suburban district already built up with fine homes and a shopping center just one block away. Exposed peaked and cembered glued laminated beams spaced at 16 ft., provide unobstructed space in the main banking area and, with paneling of wormy chestnut, add a note of informality to the interior. Cedar siding combined with brick carries out this theme on the exterior.

Air conditioning ducts are borne by the beams at the peak, concealed by a furred-down acoustical tile ceiling section. Beams extend beyond the building to protect a drive-in teller window on one side and the main entrance and walkway on the other. Covered walkway leads from the rear of the parking space to the front overhang. Roof extension also shades windows. Additional protection is offered by tinted glass and drapes.

Main floor, part basement and part mezzanine provide the safe deposit vaults and lobby, conference room, utility room and employees' lounge. The Vista Avenue Branch also has a community room, a suburban banking feature that seems to be growing rapidly in popularity. This one seats 75 people, has kitchen facilities, coat wardrobe, lavatory and its own outside entrance. The room is available to civic groups and community clubs without charge. Mechanical engineer: : Donald D. Wisdom; electrical engineer: T. O'Rouark.



Vista Avenue Branch
Bank of Idaho
Boise, Idaho

•

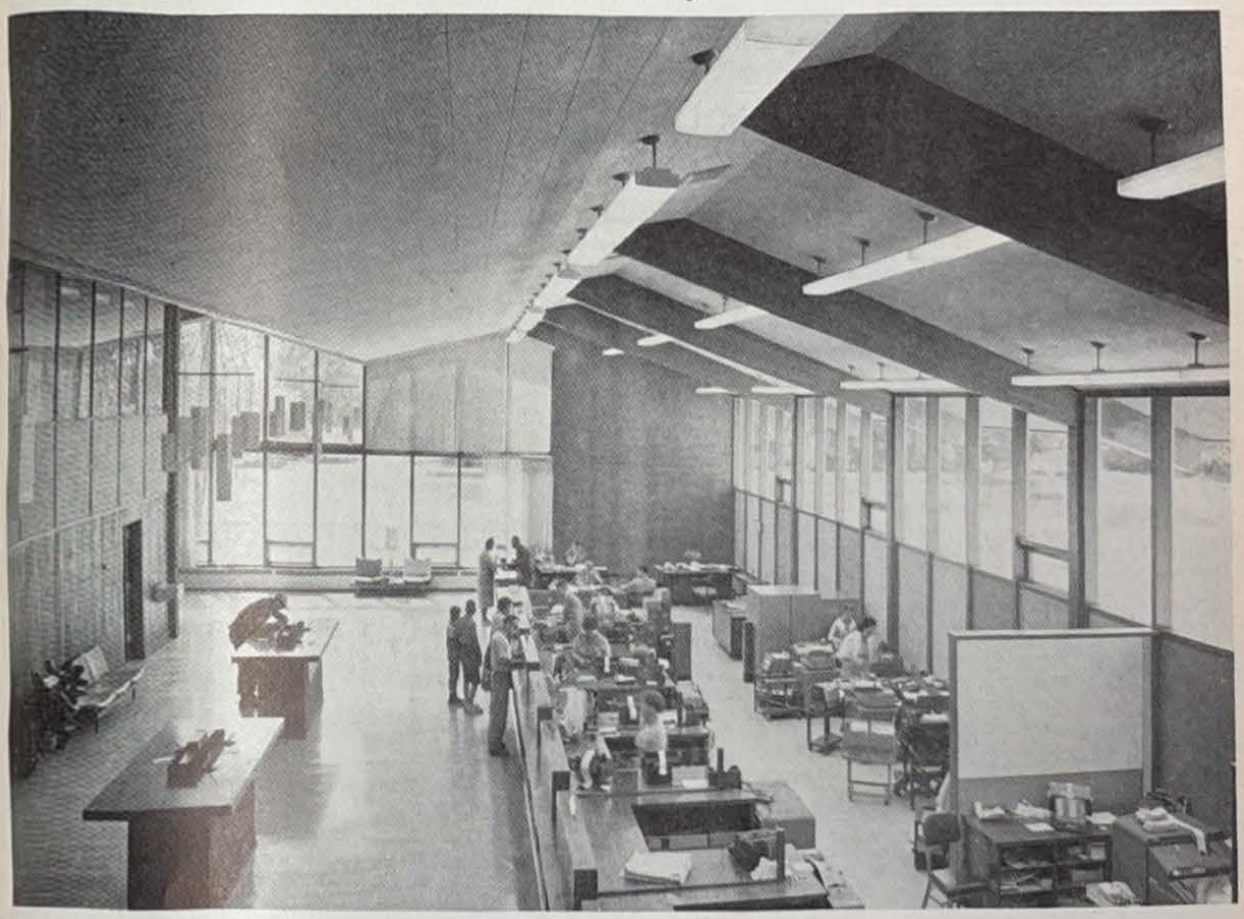
WAYLAND & CLINE
Architects

WELSH BROTHERS CONSTRUCTION CO., INC.
General Contractor



Art Hupy photos

ALTERNATING PANELS of chartreuse, sage green and rust serve as backdrop for work area; opposite wall is wormy chestnut; end corner is face brick; rubber tile floor is beige.



OUTLINE SPECIFICATIONS

Structure: footings and foundation: concrete; frame: glued laminated arched beams and posts—Timber Structures, Inc.; roof: wood sheathing on wood joists; floors: cement at basement and main floor, wood on mezzanine.

Exterior Finish: exposed face brick; cedar t&g siding.

Roof Surfacing: asbestos shingles—Johns-Manville Corp.

Windows: aluminum sash—Tecler Aluminum Co.; tinted glass—(Lustragray) American-Saint Gobain Corp.

Doors: aluminum entrance; steel service; solid core oak elsewhere.

Floor Surfacing: rubber tile; ceramic tile in toilet rooms.

Insulation: blanket type between roof joists.

Interior Finish: natural finish wormy chestnut paneling in public area; painted plaster; exposed red tapestry face brick.

Ceilings: acoustical tile—(Travertine) Armstrong Cork Co.

Heating System: gas fired hot water boiler connected to baseboard radiation combined with summer-winter air conditioning system.

Plumbing: Crane Co.

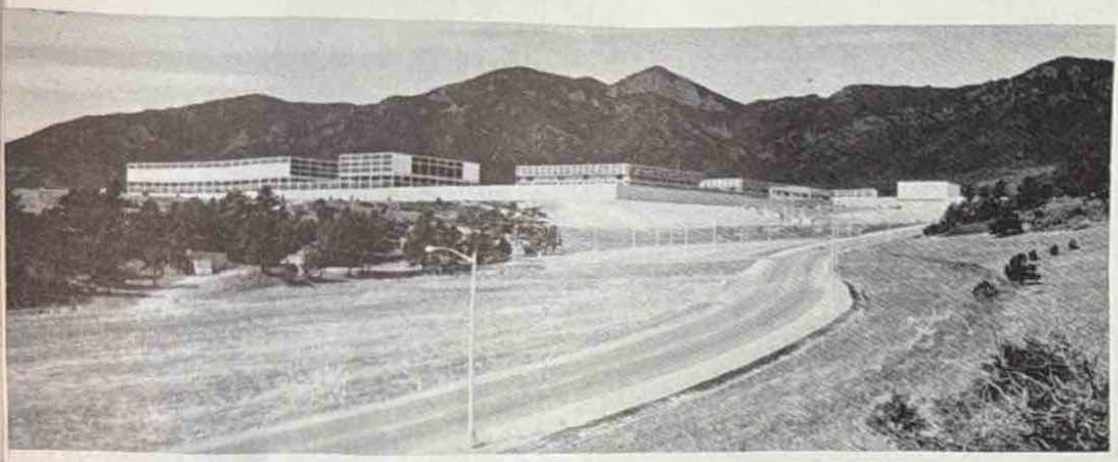
Total Area: 9,104 sq. ft. (exclusive of covered walkways).

Total Cost: $181,303.

Cost per Square Foot: $19.34

Date of Completion: December 1959.

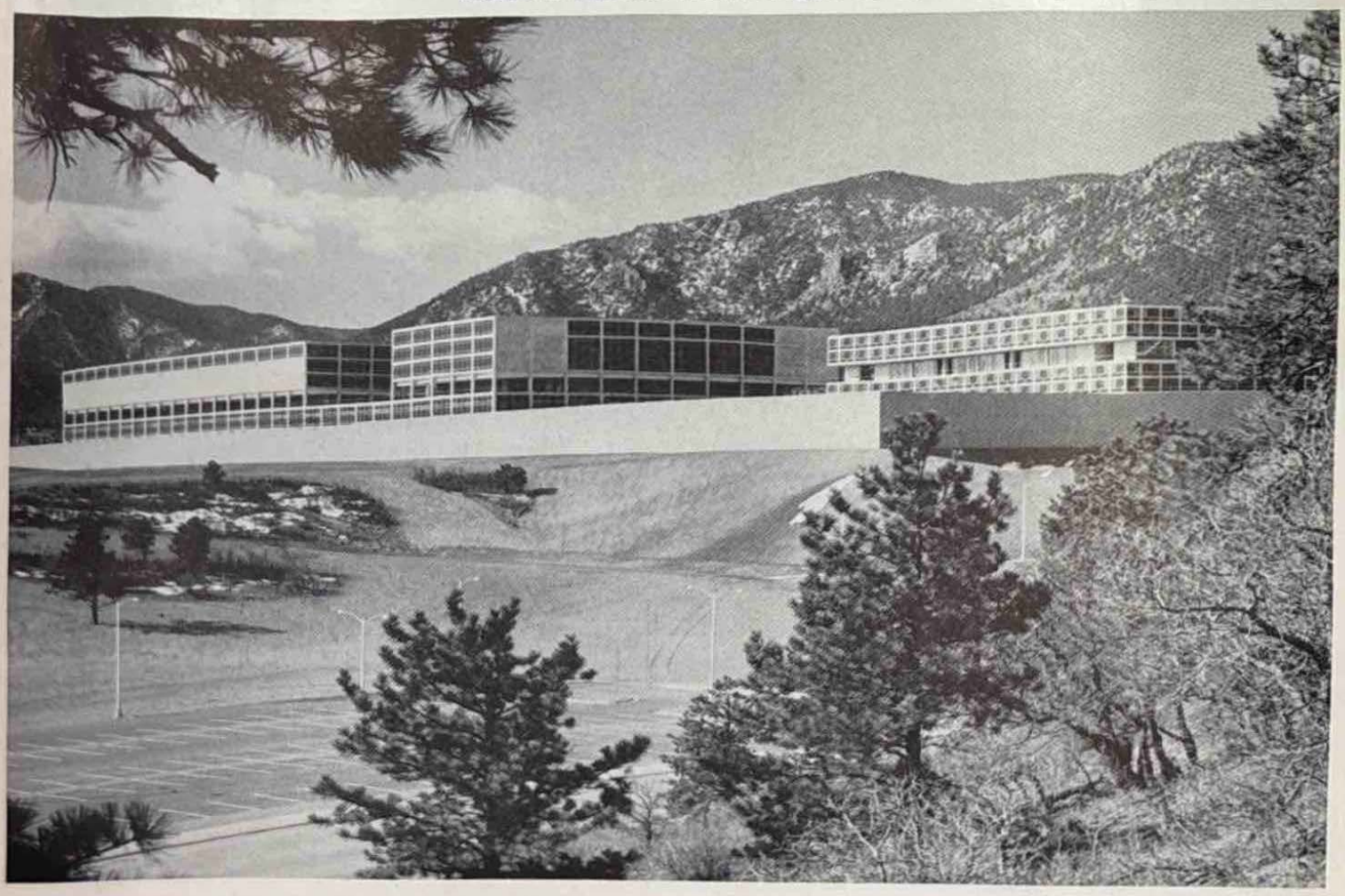
The Academy and the mountains

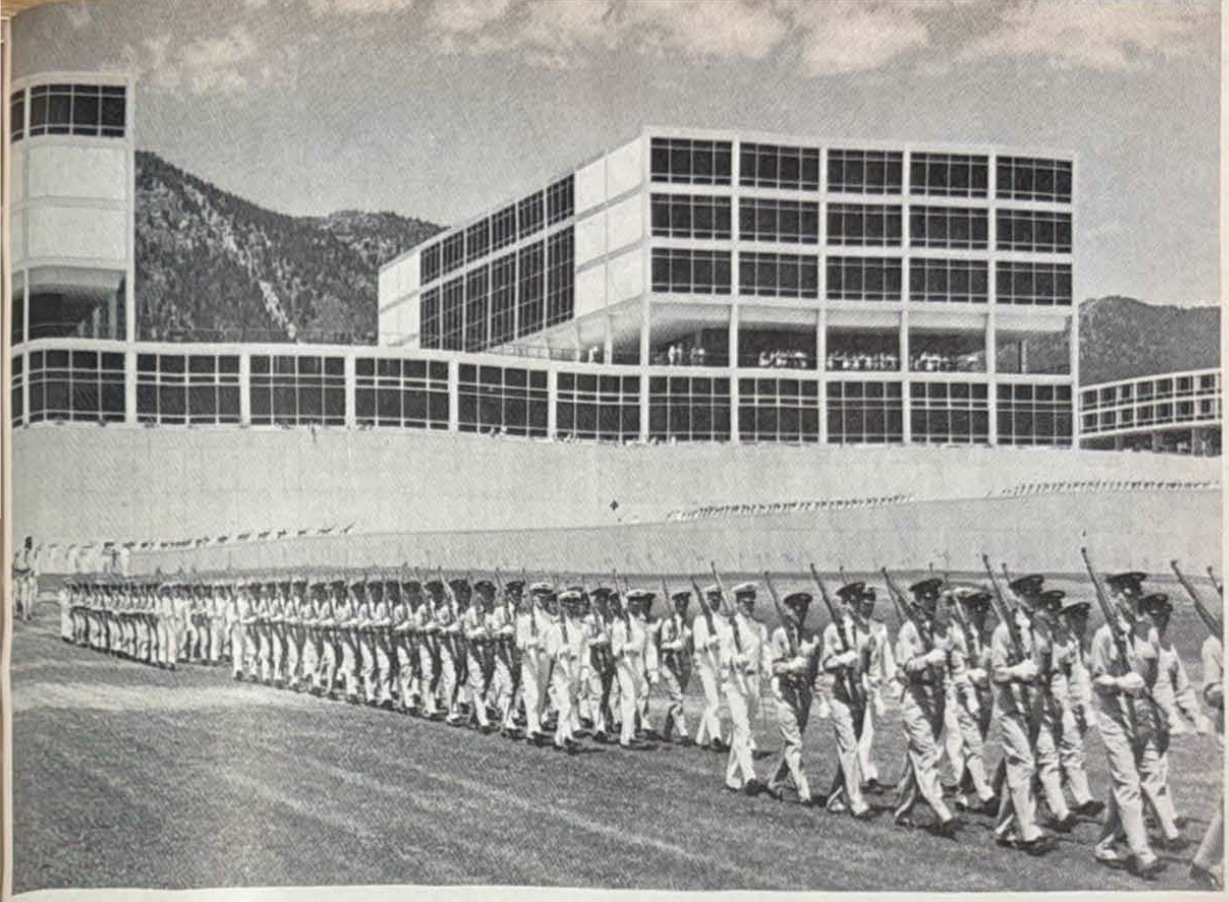


NORTHEAST VIEW shows road leading to Cadet-Academic Area with Rampart Range behind.

Photos by Stewart's

ACADEMIC AREA CLOSEUP: at left is Fairchild Hall, Academic Building, which houses classrooms, laboratories and Cadet Library; at right is east end of Vandenberg Hall, Cadet Dormitory.

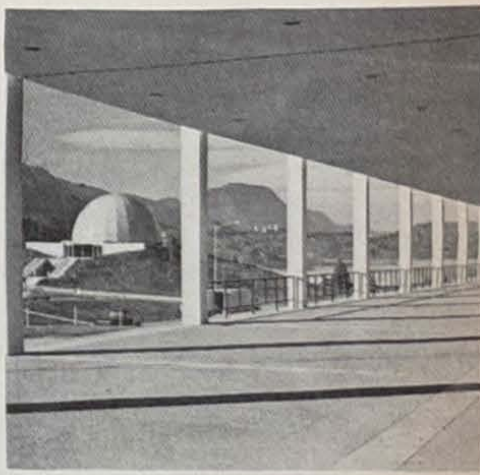




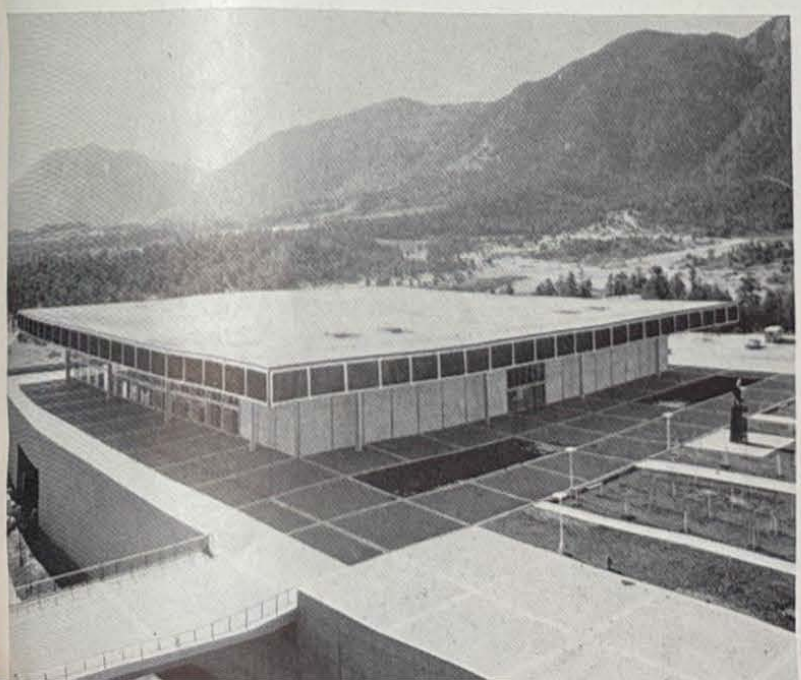
CADET WING proceeds down ramp for formal review as spectators watch from balcony of Cadet Library. Upperclass instructors are in white, cadets undergoing initial training in khaki.

A STATEMENT BY EDWARD A. MERRILL, ASSOCIATE IN THE FIRM OF SKIDMORE, OWINGS & MERRILL, ARCHITECTS-ENGINEERS FOR AIR FORCE ACADEMY.

"The site selected by the U.S. Air Force for its Academy provides not only the superb backdrop of the Rampart Range—visually a permanent part of the whole since the Pike National Forest lies on the western boundary of the reservation—but



PLANETARIUM is framed in columns of Harmon Hall, Administration Building. In far background is Cathedral Rock, Academy landmark.



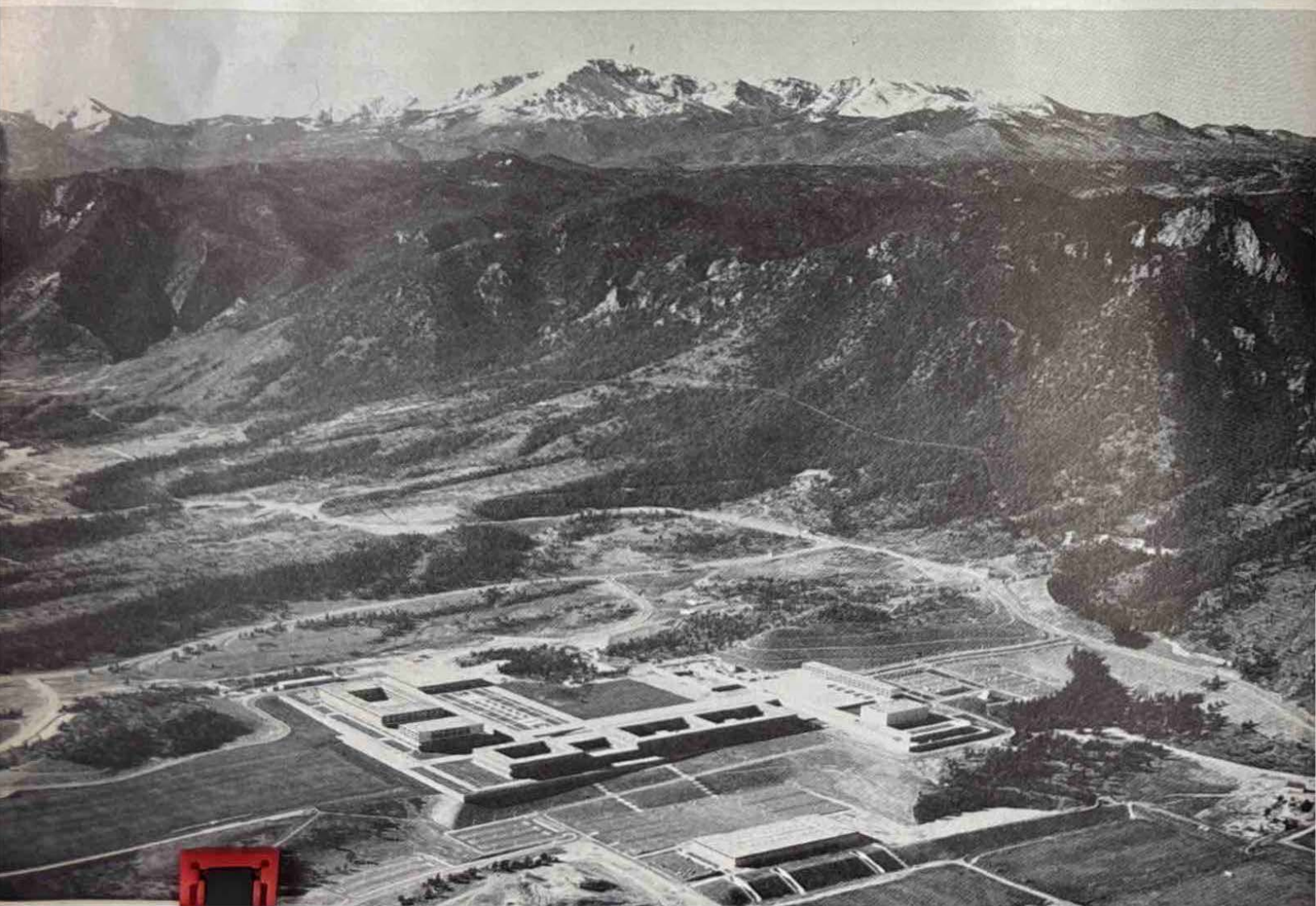
MITCHELL HALL, Cadet Dining Hall, as seen from Academic Building. Seating capacity is 3,000 persons in one giant room.

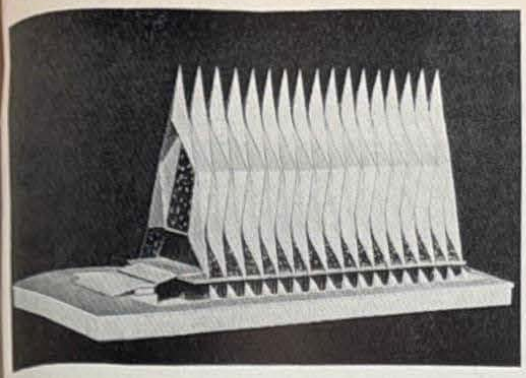
an unusual opportunity for relation of the master site plan to the terrain.

"On the east, the relatively level land adjacent to the interstate highway and Monument Creek is occupied by the service facilities and is reserved for the future airfield and stadium. On the west, a series of mesas, fingering out from the base of the mountains, forms a succession of parallel valleys in which are located the maneuver area and small arms range, the recreational areas and the two housing areas. The mesas afford both a natural and desirable separation between these diverse land uses and commanding sites for the Community Area, the Hospital and the Staff Club and Bachelor Quarters. On the highest of the mesas, adjacent to a broad open valley in which the athletic fields are located, is the core of the Academy: the Cadet Area. With its Chapel soaring 150 ft. above the surrounding structures, it is the focal point from all avenues of approach.

"In this area the original slopes have been terraced to form building levels about 25 ft. apart in elevation. The principal entrance from the perimeter road at the west, close to a deep mountain lake created by the road fill across a water course, leads to the Court of Honor level with the superintendent's headquarters, the Chapel and the Planetarium, all open to the public, and the Social Center, open to the cadets' guests.

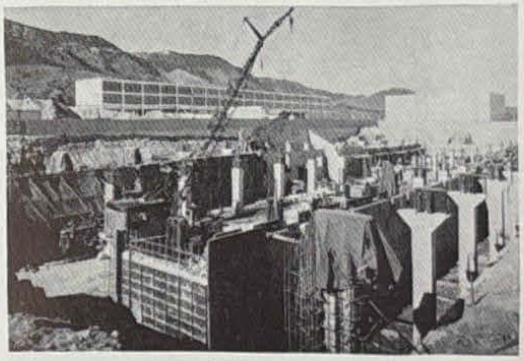
"The Court of Honor overlooks the quadrangle reserved for the cadet himself, enclosed on the other three sides by his quarters, his Academic Building and Library and his Dining Hall—enclosed and yet open to the horizon in all directions through the open floors. Each of these buildings extends three stories lower to the next level, to the cadet gardens and a service road which eliminates vehicular traffic in the Cadet Area above. Finally, at the lowest level are the athletic fields and parade ground reached by ramps from the buildings and again accessible to the public from the interior road net."







CONCRETE ABUTMENTS rise from excavation for Academy Chapel (model above), 17-spired structure which will be completed in June 1961—and Rampart Range still standing guard.



'Chapel of the future for an Air Force of the future'

THE ACADEMY CHAPEL with its 17 aluminum tetrahedrons (four-sided pyramids) will rise to 150 ft., making it the commanding structure of the entire campus. It has been designed to provide separate chapels for the Protestant, Catholic and Jewish faiths within one building.

Called "a chapel of the future for an Air Force of the Future" by the architects-engineers, the 59,950-sq. ft. building is being erected around a structural frame of steel pipes. Its outer skin is of ⅛-in. striated aluminum panels. And the aluminum will be repeated in most of the accessories: doorknobs, handrails and grillwork.

The Protestant nave will be above the terrace level. A broad flight of stairs will lead to the vestibule. Flanking each side of the enclosure will be 36 pews with a seating capacity of 900 cadets during one service. Stained glass panels will suffuse the worship area with multicolored light.

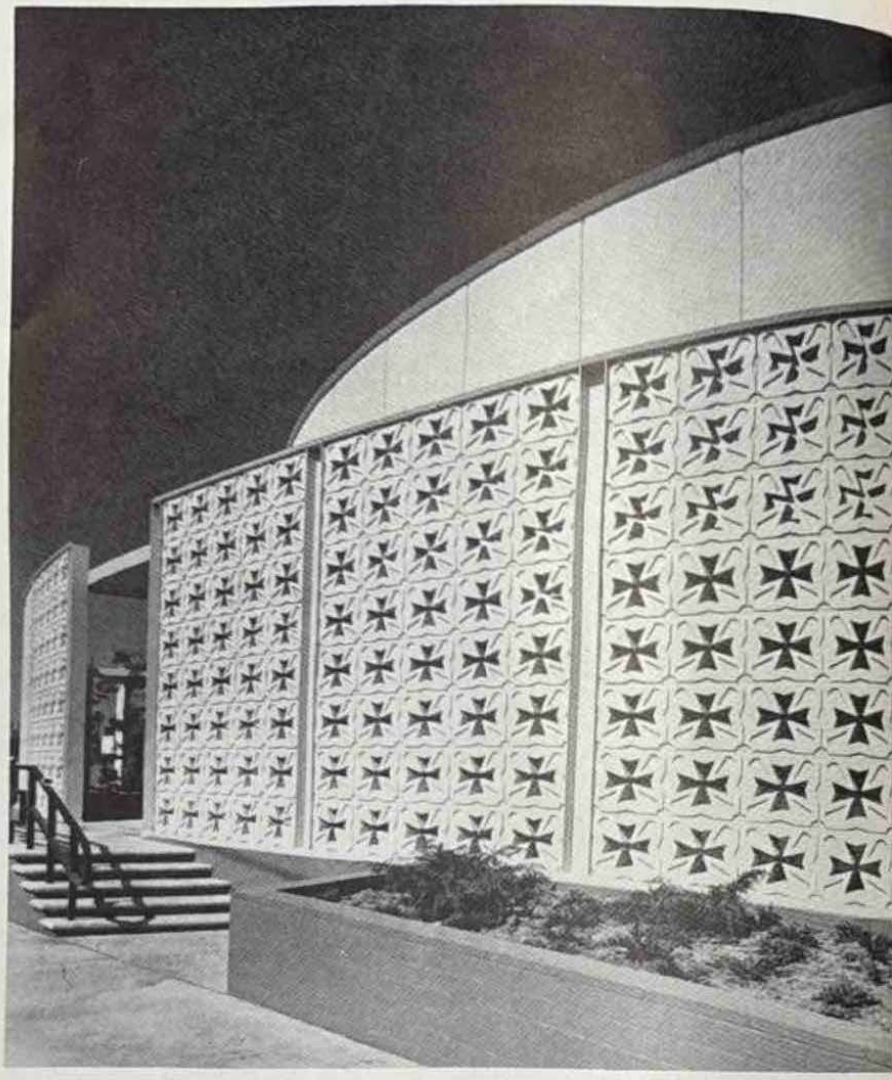
The Catholic Chapel area, located on the terrace level, will be essentially rectangular in character. Its exterior walls will be precast concrete panels with stained glass inserts similar to those in the Protestant worship area. Twenty-one pews will flank each side to seat 500 cadets at one service. The sacristy, vestry and altar will be located on the north end. Dual sets of steps will lead to the Catholic Chapel.

The circular Jewish worship center will be located on the same level as the Catholic Chapel, directly north of it. It will be enclosed by vertical wooden uprights with inserts of white opalescent glass opening into four separate vestibules. Three groups of pews facing the east will seat 100 cadets.

Denominational services are provided in addition to the general Protestant service. Attendance is mandatory for cadets of the Fourth and Third Classes (freshmen and sophomores respectively). Those in the upper two classes have the option of attending services at the Academy or at churches of their own choice in Colorado Springs.

Scheduled for completion in June 1961, Robert E. McKee, General Contractor, Inc., began construction in September 1959. Total contract of $3,385,136 includes $3,237,298 for the Chapel, $94,201 for associated utilities and $53,637 for paving. The Chapel is the last major building in the present Academy construction program, launched just five years ago. The Hospital, with 135 beds, will open soon.

Five religious buildings



FOUNDER'S CHURCH OF RELIGIOUS SCIENCE, LOS ANGELES: Distinguishing feature of this large project is the 14-ft. high open grill wall of cast stone which serves as a buffer from the noise and other distractions of busy Wilshire Boulevard. Access to the main auditorium is through a formal plaza off Sixth Street to the glass lobby which connects the various entrances and looks out upon a garden with its plantings and sculpture.

Elliptical shape of the reinforced concrete structure, sited on a small, square lot, answers the requirement for 1,500 seats, all with full visibility of the altar or rostrum. The plan places 1,000 seats on the main floor and 500 on a balcony level.

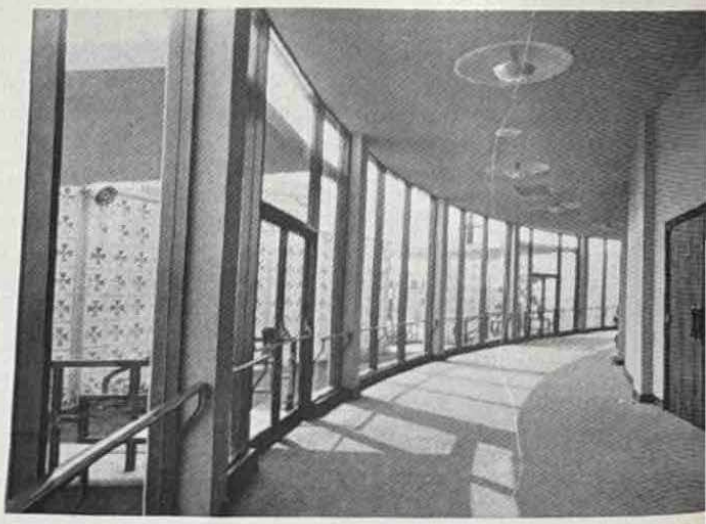
Dome over the auditorium reaches a height of about 50 ft. and spans 110 ft. in its longest dimension. Other facilities on the main floor consist of the pastor's study with its private garden, the church office, glassed-in crying room and a reception room for social affairs.

Balcony floor reached by three open staircases, provides space for choir rooms and a music library.

Total development will consist of about 41,500 sq. ft. When the basement chapel and banquet rooms are completed, another 1,000 persons will be able to listen and view the services by closed circuit television. *Architect:* Paul R. Williams; *structural engineer:* Morris Goldsmith; *general contractor:* Carter Co.

Jack Laxer photos







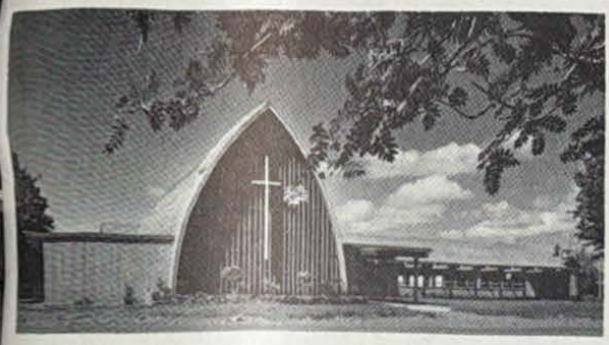
Erwin Lang photos

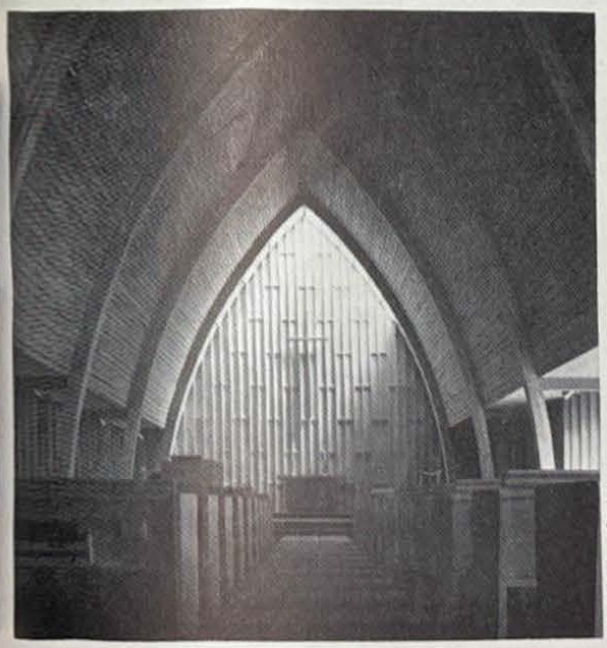


ST. MARTHA'S EPISCOPAL CHURCH, WEST COVINA, CALIF.: Initial unit was designed as a dual purpose building, as is the case with so many church projects, but with one important difference: it was the main structure itself that was constructed first. A temporary wall allows half of the building to be used for worship services and the other half for social programs.

The architects comment: "Such an arrangement meant that no permanent kitchen could be included, but it was decided that this was less important than other considerations. Temporary kitchen facilities were placed in one of the offices of the second smaller unit, which necessitates carrying food outdoors, but it has not proved to be a serious problem. This approach has the distinct advantage of placing the most important building on the property from the every start, giving a direction to all future design."

The social hall will be added this year. *Architects:* Carleton Winslow and Warren Waltz; *engineers:* Eugene Birnbaum Associates; *general contractor:* Dilworth Construction Co.





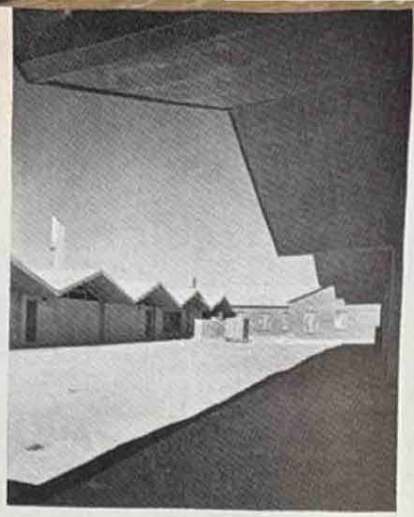
Art Hupy photos

FORKS CONGREGATIONAL CHURCH, FORKS, WASH.: With a membership of 158 persons, the existing congregation in a small logging community secured $60,000 plus a donation of 60,000 board feet of lumber. Such a modest budget forced the architects to employ the most simple structural materials and being in a wood country, they utilized fir and cedar to the maximum.

Sanctuary is formed by curving laminated arches which support a curved roof of plank resting directly on the arches. The latter come down at the ends of the pews to form side aisles which are lighted with continuous baffled window walls, letting in a soft, controlled light. Plastic skylight illuminates a decorated cedar wall, supporting a wooden cross, which motif is repeated on the exterior facade.

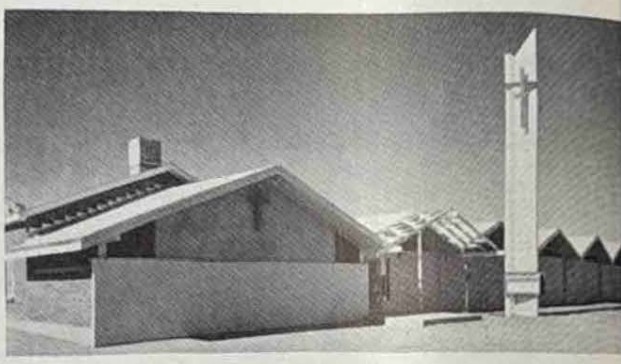
Climatic conditions – gray skies and 110 in. of rain a year – were taken into account in the covered passage which leads from the street to the narthex. From here it is possible to go to all portions of the building. Pastor's study is adjacent to the entrance door, with lavatory facilities and coat storage nearby. At the rear of the sanctuary, which seats 150, a small church parlor provides emergency seating for 50 more, and a youth room is constructed on the balcony level. Two departmental rooms for Sunday school sessions are adjacent to the narthex for the younger children, while a large fellowship hall, seating 175 for dinner, also is used for this purpose. A stage doubles as a classroom. There is provision on the lot for expansion of the religious education department.

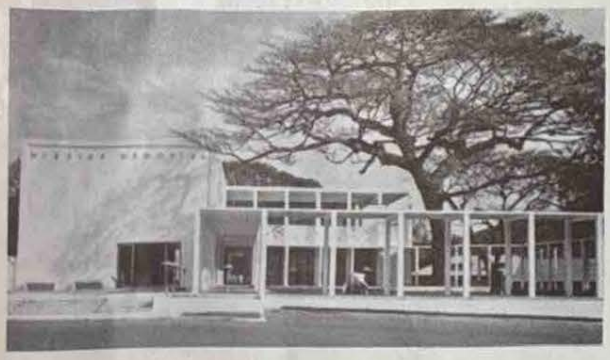
Constructed entirely with volunteer labor, the 9,240-sq. ft. structure is heated and ventilated by forced air from a central furnace. *Architects:* Durham, Anderson & Freed.



TWENTY-SECOND STREET BAPTIST CHURCH, TUCSON: Fir plywood stressed skin folded plates cover virtually all of the $100,686 new addition, two education wings and a foyer, in front of the old brick structure. Plates, with 1/2-in. top and bottom skins, span 40 ft. in the clear. Chords are doubled 2x6s. Walls are concrete block. Use of the folded plate roofs kept cost of the 12,883-sq. ft. addition to $7.86 per square foot.

New wings will be used for night and Sunday classes. South wing contains five classrooms, two nurseries, storage, office, entry and lavatories. North wing has one big room and nine other smaller rooms with accordion type movable partitions. Concrete pylon with wooden cross rises 39 ft. 4 in. from grade to point. *Architect:* Edward M. Dunham Jr.; *general contractor:* Craven-Hague Construction Co.



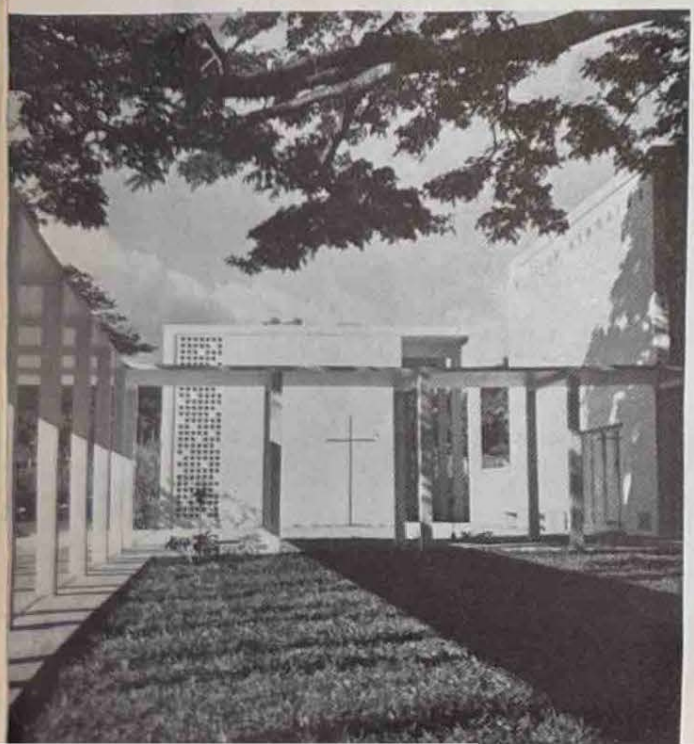


MISSION MEMORIAL, HONOLULU: Simple, vertical lines achieve a feeling of serenity and quiet strength in keeping with the building's purpose—a memorial to the original missionaries who settled the islands and as a headquarters building for the Hawaiian Evangelical Association of Congregational Christian Churches. Designed around the monkey pod tree in the patio, plans were developed on an 8-ft. grid and broken down to a 2-ft. 8-in. unit. Inner verticals are annodized, bronze finished aluminum tubes to contrast with the wall divisions covered with insulating cork. Sliding glass panels are used in place of windows and doors.

Structurally, the arcade is supported by precast, prestressed concrete beams. Main roof beams are also of this material. Exterior walls are painted with a multicolored off-white with flecks of beige.

Deck on second floor, which is exposed to the weather, is terrazo with vinyl. Paving is concrete with a high percentage of white cement in the aggregate.

Memorial houses offices, meeting rooms, a library and book store. Chapel, which was dedicated to the Rev. Theodore Richards and his wife, Mary, religious and civic leaders, will be used for special ceremonies. Irregularly spaced square holes in the solid concrete building serve as an unusual and attractive ventilation system. The holes form a pattern at the exterme ends of the building from ceiling to floor, door width. Similar openings are used throughout the main structure to provide light and ventilation, achieving at the same time a starry, light effect on the white concrete. *Architects:* Potter & Potter; *general contractor:* Pacific Construction Co.



Photos: top—courtesy Douglas Fir Plywood Association; top left—Bob Johnson; bottom left—Beatrice M. Howell.

No elbowroom for the cranes

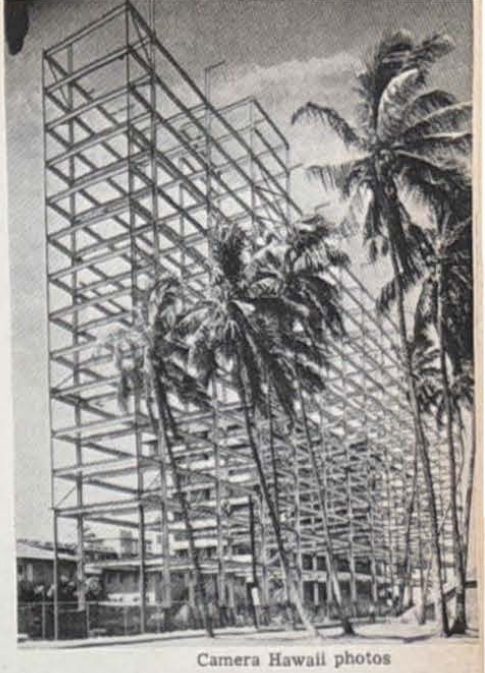
Extremely narrow lot and restrictions against using side lots as a base of operations presented an unusual challenge to the steel subcontractor for the Waikiki Shore Cooperative Apartment in Honolulu. The 15-story apartment is sited on a lot at Waikiki Beach 50 ft. wide and 525 ft. deep with a hotel close on the left and Fort De Russy, a U.S. Armed Forces Recreational Center, on the right.

When the building was in early stages of development, permission was requested of the government to use a fringe of the Fort De Russy area for working space. Government regulations prohibited such use. What's more, "We were not allowed to swing our boom over Fort De Russy," comments Ray Ortiz, president of Terminal Steel Co., Ltd. And there was no room for storage of equipment or materials on the narrow lot.

Terminal Steel and Hood-Thompson Construction Co., general contractor, solved the problem by working the cranes from the inside of the building. A gravel road was constructed from Kalia Road, the beginning of the lot, to Waikiki Beach. Material was fed into the growing interior of the building over this road and cranes used it for access to working areas.

Structural steel sections produced by Bethlehem Steel Co. were fabricated locally by Terminal. The wide flange column sizes ranged up to 14 in. between flanges and weighed 228 lb. per foot. Beams used were 16 in. deep.

Construction was started in mid-November. Piles were driven to refusal at a depth of 110 ft. The steel columns were then anchor bolted to reinforced prestressed concrete pile caps over five-pile clusters. Two shear walls will be created by four solid concrete walls, X-braced by structural steel beams. These shear walls will house the two elevators and join the steel to provide earthquake resistance. Exterior walls will consist of painted plaster with extensive use of glass for each apartment. Each floor will be a 6½-in. clear span concrete slab.

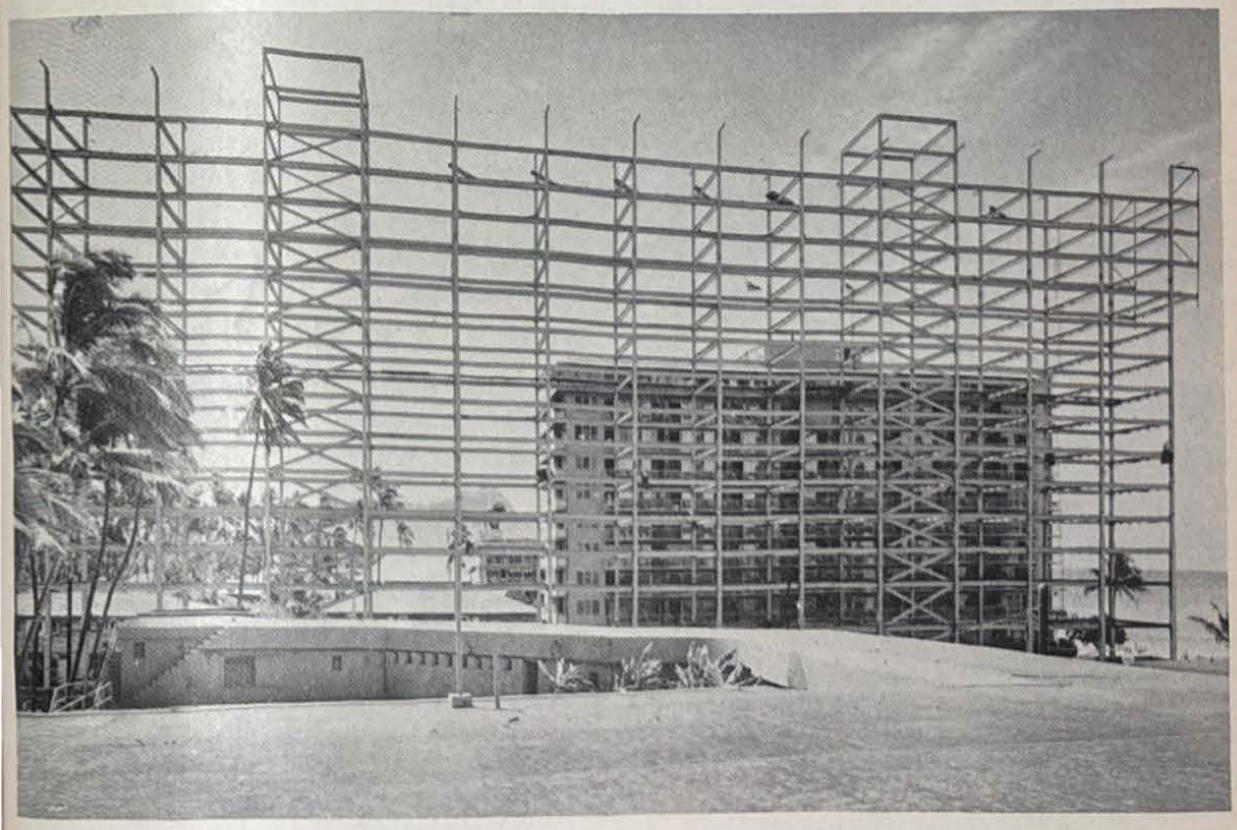


Camera Hawaii photos

First two floors of the building will house the YWCA Beach Club. Remaining 13 floors will contain 148 studio units, one- and two-bedroom apartments and penthouses. Each unit will have a 5-ft. wide balcony and end apartments will have an additional lanai.

Richard R. Iwanaga is architect for the project; Kenneth K. Sato, engineer; and Walter Lum & Associates, Shannon & Wilson and Frank Neuman, consulting engineers.

STEEL IS ERECTED working entirely within limits of 50-ft. wide lot facing ocean at Waikiki.



exposed aggregate finishes

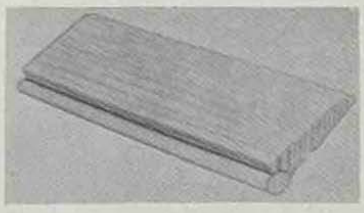
To ensure predictable results in the use of exposed aggregate, A. C. Horn is producing Aggretex. Use of exposed aggregate has been gaining in popularity because of the variations that can be obtained by combining colored aggregate with mineral oxide colors. Texture effects thus created add interesting contrast to smooth architectural concrete and in patios, walkways and decks. Up until now results have been greatly dependent on the proper timing and skill of the finishers. With Aggretex, proper timing is said to be relatively unimportant.—A. C. Horn Companies. **(No. 1)**

prefinished laminated doors

Two California firms have joined forces to produce quality, prefinished grained doors on a mass production basis. Door surfaces of High-Pressure Laminex, a high density composition material formed under great pressure, manufactured by Bellwood Co., will be grained and Poly-Clad finished at the Plywall Products Co. plant. English walnut and rock maple doors are being offered as standard with other grains available to order. With matching Plywall prefinished wood moldings and wall paneling, the architect can specify a complete prefinished installation. The Poly-Clad process, which involves 15 steps in surface preparation, finish application and heat treatment, protects against scuffs, scatches and stains.—The Bellwood Co. and Plywall Products Co. **(No. 2)**

foam door stop

Designed to cushion the door closing of interior and exterior doors, Foam-Stop provides low cost acoustical and thermal insulations for homes, offices and commercial installations. It eliminates door noise, drafts and dust



movement between rooms and improves efficiency of zone heating. Wood molding is of Ponderosa pine, $\frac{7}{16}$x1$\frac{7}{8}$ in.; edging is polyurethane foam, covered with a vinyl fabric in tan color. Other wood species and vinyl colors are available upon request.—Craftwood Corp. **(No. 3)**

movable wall system

Fibreboard has adapted its Pabcowall to a movable partition system featuring a minimum of component parts for quick and easy installation. The 2¼-in. thick interior partitions consist of $\frac{5}{8}$-in. thick beveled edge wallboard face panels 2 ft. wide with 1x6-in. gypsum ribs laminated to the back. Panels are held in place by 18-gage steel floor and ceiling runners and tempered steel movable clips. System has passed one-hour fire rating tests conducted under ASTM standards. — Fibreboard Paper Products Corp. **(No. 4)**

plastic fencing

A saran plastic material impervious to weather and requiring no maintenance is being marketed for standard fencing, around swimming pools, for unusual patio roofing effects and other decorative uses. Wethr-Web is the result of a development project by three firms — Firestone Tire & Rubber, Dow Chemical and Weblite. Chemical composition of the material is said to be so strong that it will outlast the fence posts. Laboratory



and field tests indicate colors will not fade and material will not corrode, crack or peel. Installation requires only a pair of scissors and a stapler. Narrow-gage version is being produced as a stripping for chain link fencing.—Weblite, Inc. **(No. 5)**

sill and threshold

A one-piece combination extruded aluminum sill and threshold offers savings in construction costs, as well as simplifying upkeep considerably. Product eliminates need for a sleeper in concrete or terrazzo floors. Notching wood floors or chipping concrete slabs also is no longer necessary. Unit is completely waterproof.—Combo Manufacturing Co. **(No. 6)**

expansion joint-waterstop

Combination expansion joint and waterstop designed for vertical, as well as horizontal, expansion joints is being introduced by Electrovert. Called Durajoint PVC Type 18, it comes in 50-ft. flexible lengths requiring no crimping, shaping, welding or brazing and is easy to install between the walls of concrete block and brick masonry. Longitudinal ridges ensure a tight bond and equal distribution of critical pressures and virtually eliminates water percolation. Product can be spliced by simple sealing.—Electrovert, Inc. **(No. 7)**

office, lobby furniture

Attractively designed, but built for rugged use, are a series of chairs, sofas, curve and corner sectional arrangements, first in a projected comprehensive contract seating program planned by a California manufacturer. The pieces were designed by Jules Heumann especially for offices, private clubs, hotel lobbies, hospitals and the like. Fabrics are nylon or plastic, trim is solid aluminum bar with a satin etch anodized finish. A special fastening holds sectional pieces firmly together, eliminating a common complaint in commercial installations. —Metropolitan Furniture Manufacturing Co. **(No. 8)**

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colored asbestos-cement

Asbestos-cement sheets in ribbed, corrugated and most flat styles produced by Keasbey & Mattison are now available in prefinished, permanently colored form. Decorative finish in 15 colors, especially formulated for use with asbestos-cement materials, produces a hard, smooth coating that is washable and resistant to water, ink, crayon, grease and the like. It is scratch- and abrasion-resistant, making it possible to power drill and saw the sheets without cracking or chipping the colored surface. Company says coatings are self-extinguishing and do not effect the noncombustible character of the asbestos-cement.—Keasbey & Mattison Co. **(No. 9)**

two-way level

To save time and labor by bricklayers, carpenters and other construction workers, Lok Products has developed a two-way builders' level that plumbs two surfaces at once. Level also will act as a facing straight edge when used in the leveling position, as in brick work. Made of extruded aluminum with braces of brass bridging, the unit is light in weight and well balanced for ease in handling. — Lok Products Co. **(No. 10)**

prime coated hardboard

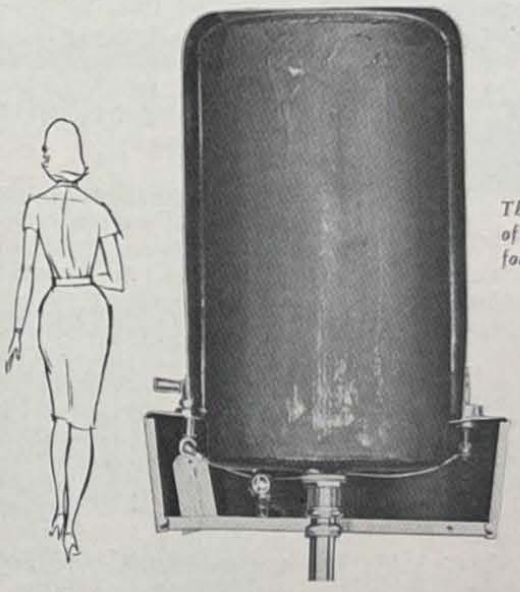
A tempered hardboard for exterior applications prime coated with an extra-thick (1.5 mil) resin base material is being marketed by Weyerhaeuser under the trade name Prime-Coat Weytex. Product is the culmination of a three-year development program which included extensive tests of top-grade exterior prime coat materials. The light gray coating selected provides a hard, durable surface of uniform thickness and coverage ready for any shade exterior finish. All varieties of the company's hardboard, smooth surface, U-grooved, V-grooved and striated, are now available with the factory-applied coating.—Silvatek Division, Weyerhaeuser Co. **(No. 11)**

studless partition system

A gypsum drywall partition system which eliminates wooden studs in construction of nonbearing walls has been developed by Kaiser Gypsum and is being marketed in the West under the trade name Kaiserwall. System consists of solid gypsum ribs, laminated between sheets of Quilt-Lok wallboard, providing a rigid incombustible partition. It is especially suited for use with trussed roof construction where there is no need for interior framing to help bear the roof load. Standard 2x2 lumber is used for floor, ceiling and sidewall tracks, eliminating need for special milling of those units. Both walls and ceilings take the same board thickness of Kaiserwall. In addition to simplifying and speeding construction, the company estimates that reduced width of the partitions adds approximately 18 sq. ft. more living space in the average-sized house.—Kaiser Gypsum Co. **(No. 12)**

anchoring compound

A pourable cement anchoring compound called Evr-tite which will not shrink while setting has been developed by Monroe. Product contains expansion controlling, water-erosion resistant additives. It bonds readily to existing materials and is capable of withstanding maximum impact, compression, tensile and sheer strengths. Setting to a hard, tough base in a few hours, Evr-tite is recommended for fastening handrails, partitions, etc.—The Monroe Co., Inc. **(No. 13)**



This is the back of Haws drinking fountain model 73

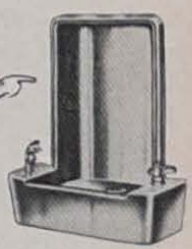
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Even our competitors' fountains look good from the front, but *Haws* models back up their good looks! This semi-recessed Model 73, for instance, is a beauty in 18 gauge, 304 stainless steel — and the craftsmanship goes *all the way around!* Careful quality is the standard at Haws — even on features you can't see. This fountain gives you automatic stream control; even has its head *locked* to the bowl for vandal-proof service.

And let's face it

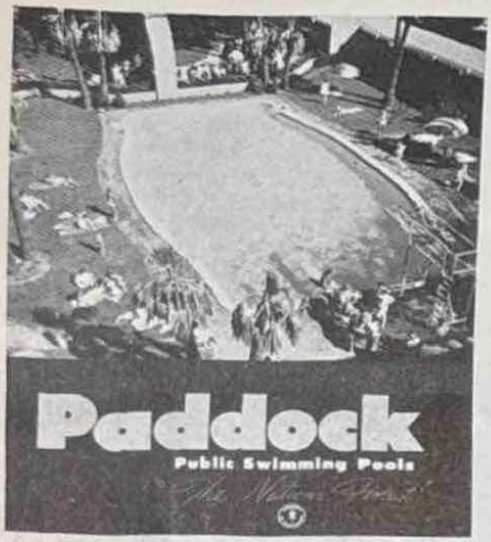


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pa&b pick of the month

All the factors that must be considered in designing and building a public swimming pool are outlined in a well-illustrated 12-page brochure published by Paddock of California. Revised from an earlier publication to include up-to-date designs and technical data, "Public Swimming Pools" discusses location, shape, elevation, size, depth, design, mechanical equipment and other features. Selection chart shows suggested size in relation to population use. — Paddock of California, 14600 Arminta, Van Nuys, Calif.

Hydrocide Colorcoat: describes water-repellent masonry coating with textured finish, with application instruction; 8 pp.—Building Products Division, Sonneborn Chemical and Refining Corp., 404 Park Ave. S., New York, N. Y.

All-Air High Velocity Air Conditioning Systems (AIA 30-J): gives comprehensive information on new acoustic terminal control units for these systems with sound performance rating charts and other engineering data; 36 pp.—Carnes Corp., Verona, Wis.

High Strength Bolt: introduces new bolt design for joining structural steel with larger head and shorter thread said to save time and cost; 4 pp.—Russell, Burdsall & Ward Bolt and Nut Co., 100 Midland Ave., Port Chester, N. Y.

Wedge-Lock Clay Pipe: describes interlocking, double-sealing factory-made joints and depicts typical installations; 12 pp.—Wedge-Lock Clay Pipe Manufacturers, 161 Ash St., Akron 8, Ohio.

Weyerhaeuser Hardboard (AIA 23-L and 19-D-2): presents entire line of exterior and interior types with specifications and color photos; 16 pp.—Silvatek Division, Weyerhaeuser Co., Tacoma Bldg., Tacoma 2, Wash.

Church Furniture: presents data on pews, altar rails, etc., in portfolio-style catalog with cutaway drawings to show special construction features. —Victor Industries of California, Chico, Calif.

Spectator Seating: illustrates folding bleachers and other seating, with dimension charts; 4 pp.—Berlin Chapman Co., Berlin, Wis.

Specifications for Painting Steel: prepared with cooperation of the Steel Structures Painting Council, it duplicates the most commonly used information published by that group which pertains to the Northwest; appropriate specifications are completely set down; 12 pp.—Pacific Northwest Steel Fabricators Association, 1108 Tower Bldg., Seattle 1, Wash.

Air Control Registers, Grilles, Diffusers: catalogs with extensive information—selection charts, installation diagrams, etc.—a complete line for heating and air conditioning fields; 72 pp.—Leigh Building Products Division, Air Control Products, Inc., Coopersville, Mich.

Silicone Masonry Water Repellents: discusses common types of masonry damage and illustrates prevention measures using silicones; 8 pp.—General Electric Co., Waterford, N. Y.

Storm Water Drainage Systems: outlines features of Transite pipe for industrial buildings, manufacturing plants and the like, with typical installation details; 10 pp.—Johns-Manville Corp., 22 E. 40th St., New York 16, N.Y.

Hollow Partitions with Channel Studs (AIA 20-B-1): outlines advantages in solving partition problems with specifications and detail drawings in bulletin No. 15; benefits of furred metal lath ceilings are described in No. 16; 4 pp. each. — Metal Lath Manufacturers Association, Engineers Bldg., Cleveland 14, Ohio.

Patterned Glass in Business Interiors: reviews a number of imaginative applications, including the new Union Oil Co. Building in Los Angeles in quarterly publication, "Creative Ideas in Glass"; 8 pp.—American-Saint Gobain Corp., 625 Madison Ave., New York 22, N.Y.

Webster Unit Ventilator: describes system for schools with matching cabinets; 14 pp.—Warren Webster & Co., Inc., 17th and Federal St., Camden 5, N. J.

Stronghold Nails (AIA 27-A): catalogs complete line of threaded fastenings with recommended nailing schedule; 24 pp.—Independent Nail & Packing Co., Bridgewater, Mass.

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Southern California pact to improve bidding practices

Contractors, subcontractors and building material suppliers who annually handle nearly $1 billion of construction in 11 southern California counties have agreed to join in a voluntary pact designed to improve bidding practices on private and public projects where a predetermined time for bidding has been established.

Under the new agreement which becomes effective November 1, all subcontractor bids must be turned in to the general contractor at least four hours before the general bid is submitted to the awarding authority. The four-hour moratorium will permit the general contractor to check the credit, integrity, experience and responsibility of all subbidders; at the same time it will give the subbidder added confidence as there will be no opportunity for his bid to be revealed to competitors.

The program was initiated by the Southern California Chapter, AGC, some months ago. Three other general contracting groups—Building Contractors Association, Home Builders Association and Engineering and Grading Contractors Association — and 35 subbidding trade associations subsequently joined in the formulation of the plan finally adopted.

Warren Driver, president of the Southern California Chapter, AGC, and J. W. Bernard, immediate past president and chairman of the committee which drafted the agreement, point out that the new bidding procedure will promote materially the interests of the public and the construction industry.

'Atmosphere of confidence'

"This move will create an atmosphere of confidence and mutual respect among general contractors, subcontractors and material men and will encourage fair and equitable dealings within the industry in keeping with the principles of competitive free enterprise," they explain. "It will benefit the public in general as well as the industry through making possible greater efficiency and economy for both private and public works construction projects."

It was made clear that it is not necessary to be a member of any association to join in the program. Any individual firm or operator may join in simply by signing a pledge to abide by the agreement.

The program will be operated by the Construction Bidding Practices Conference of Southern California. This organization will not act as a bid depository but simply will hold all subbids. These will remain sealed except in any case where a dispute might arise.

Covered under the terms of the agreement are these 11 southern counties: Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara and Ventura. The program is expected to become fully effective in Los Angeles, San Bernardino, Riverside and Orange counties on November 1. Its full operation is expected to spread rapidly into the other seven counties.

The problem within the construction industry pertaining to bidding is one which has been developing nationally over a period of years. In an effort to remedy the situation, programs similar to the one adopted in southern California already are functioning successfully in North and South Carolina and in the St. Louis area.



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WEST COAST AIRLINES

• **Kaiser Steel Corp.** has purchased the North Hollywood Concrete Tile Co., southern California's largest producer of concrete building blocks, and will operate it as the North Hollywood Block Division. This purchase is the first step in a program to make productive use of the large quantities of blast furnace slag generated during production of steel at the Fontana plant, company officials comment. Equipment will be installed at Fontana to expand the slag into a lightweight aggregate so it can be formed into concrete blocks at the North Hollywood plant. Mel H. Howard, by-products sales manager, will take over as general manager of the new division. Raymond W. Clanton, one of the founders of the tile company, will remain as assistant general manager.

• **Formica Corp.** has named Cascade Sales Co. of Seattle as distributor for all building products manufactured by the firm and has added Kenneth G. Hubbart to its San Francisco sales office.

• **W. P. Fuller & Co.** has appointed Donald E. Cluck to fill the newly created post of general sales manager, trade paint division. Cluck will be in direct charge of all paint sales to dealers, painting contractors and government agencies and also will direct sales activities for wallpaper and other related products. He previously was director of sales development for the Simoniz Co.

• **Apextro Products Co.** has added a 2,000-sq. ft. plant to house expanding needs of warehousing and shipping operations. The new facility is near the company's main office and plant in industrial Los Angeles.

• **Filon Plastics Corp.** has appointed Rene' Merlander as public relations director and assistant national advertising director. He formerly was an account executive with Harshe-Rotman, Inc.

• **McQuay, Inc.,** will build a branch factory in Visalia, Calif., for the manufacture of air conditioning, heating and refrigeration units to be marketed in the West. This is the first West Coast installation for the Minneapolis firm. Donald R. Warren Co. is architect-engineer for the project. Completion is expected by next spring.

• **Soule' Steel Co.** officials and district sales managers from all parts of the West met in San Francisco early in October to launch the firm's golden anniversary celebration. The company began distributing reinforcing steel from one tiny warehouse. Now its products include modular steel structures, metal windows and other building specialties produced in seven plants and distributed throughout the western part of the country.

• **Symons Clamp & Mfg. Co.** has appointed Robert P. Tross as sales engineer in the Bay area, working out of the Oakland office.

• **Pomona Tile Manufacturing Co.** has named Ralph Atkinson as architectural representative for northern California.

• **Knoll Associates, Inc.,** has named William C. Young Jr. to its sales staff in the Los Angeles area. Previously Young was with a Knoll retail dealer in Los Angeles.

• **Fibreboard Paper Products Corp.** reports that William L. Keady is relinquishing his duties as president and chief executive officer. He will be succeeded by E. W. Carey, formerly vice president for marketing. Keady

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will continue as a director and manage the company's foreign operations.

• **Lehigh Fan and Blower Division,** Fuller Co., has appointed Landes, Zachary & Peterson Co., Denver, as representative in the Rocky Mountain states to handle both sales engineering and customer service.

ASSOCIATIONS

• **Southern California Chapter,** Producers' Council, recently installed Al Schuppner as president. He is architectural representative for Pomona Tile Manufacturing Co.

• **Gypsum Drywall Contractors of California** reelected Edward J. Fliegle of Stanton as president at a recent three-day convention in Berkeley. Other officers: Joseph Marshall, San Fernando, vice president; Joe Thayer, Santa Clara, secretary; and E. C. Larson, San Francisco, treasurer.

• **Gypsum Association** has appointed Marvin C. Smith (September item was in error) as western manager with headquarters in Hollywood, Calif. A professional engineer, he received his degree from the University of Cincinnati and has more than 12 years of sales engineering experience in the gypsum and construction industry.

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For the first time since Henry J. Kaiser started in business about a half century ago, all 60 companies of his industrial complex are headquartered under one roof. Today, 2,500 employees are "at home" in the Kaiser Center on the shore of Oakland's Lake Merritt and there is built-in expansion for about 4,000. We'll take a tour of the largest office building west of Chicago in December. It is this kind of gigantic project that is closely identified with the designers, Welton Becket & Associates, and so we'll show two other buildings planned by the same firm to illustrate that a large architectural office on occasion turns its attention to much smaller structures.

An organization of growing stature is the Construction Specifications Institute. The Puget Sound Chapter has made a major contribution in its "Standard Specifications Index," a guide which has won considerable acceptance in the Northwest. A summary of the index, tailored, of course, to a specific region, will be presented next month for the perusal of those readers in other areas who would like to learn more about its development.

signs of the times

Just as we were preparing articles on three public buildings—a community center and two elementary schools—that will double as fallout shelters, we received an invitation to a workshop devoted to design and construction considerations of that very topic. Directed toward architects and engineers, the two-day sessions (underway as we go to press) are co-sponsored by the Washington State Chapter, AIA, the Puget Sound Engineering Council and the Office of Civil and Defense Mobilization.

arty milltown

Bothered by the pressure of modern living? Take an art course instead of a tranquilizer. That recommendation is made by Dean Philip N. Youtz of the University of Michigan College of Architecture and Design. "Art disciplines and refines the emotions and converts them into a source of serenity and confidence instead of conflict and confusion," the dean says. "Possibly the arts offer us better national protection than our vast expenditures on defense. Our various foreign tours of drama and theater and musical groups have met with enthusiastic acclaim in all countries abroad." To which we simply say amen. R.E.K.

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Stanford University Medical Center, Palo Alto, Calif. Architect: Edward D. Stone, New York. Structural Engineers: Pregnoff & Matheu, San Francisco, Calif.

Decorative patterns in concrete give unity and beauty to new medical center!

Hospital, clinic, school, research laboratory—the many activities of the new Stanford Medical Center require 7 separate buildings. To bring this complex into one harmonious whole, ingenious use has been made of modern concrete. Precast grilles provide a strong light-and-shadow pattern over large areas. They also set a design theme which is repeated in bold relief on other concrete surfaces throughout the Center. The elegant beauty achieved gives dramatic evidence of concrete's esthetic versatility and its structural advantages. Today, more than one architect is acquiring a reputation through the creative uses of modern concrete.

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Full circulation and busines data and advertisers' index on page 41

COVER: Kaiser Center, Oakland (p. 15)—Welton Becket & Associates, Architects-Engineers; Karl Riek photo.

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October volume drops $21 million in West

Dollar volume of building permits in the 13 western states for October total $279,941,099, a drop of $21.5 million from the same period in 1959. Pacific Architect & Builder's survey shows a slowdown in building starts in eight states, a slight increase in five.

States reporting an increase for October are Hawaii, up $3.4 million over October 1959; Colorado, $1.5 million; Utah, $1.4 million; Wyoming, $727,000; and Montana, $203,000. Biggest decrease is in California, down $19.8 million for the period. Other states with decreases are Arizona, down $3 million; Washington, $3 million; New Mexico, $2.2 million; Alaska, $373,000; Nevada, $235,000; Oregon, $168,000; and Idaho, $95,000.

Top 15 agencies

Among the top 15 agencies for October, 10 are in California, two in Arizona and one each in Hawaii, Washington and Colorado.

		October 1960	October 1959
1.	Los Angeles	$53,182,905	$48,167,529
2.	Los Angeles County	18,816,381	17,845,490
3.	Honolulu	10,543,754	8,461,764
4.	San Jose	9,627,200	10,463,454
5.	San Francisco	8,929,033	10,627,332
6.	King County, Wash.	7,204,391	7,685,327
7.	Sacramento County	7,160,717	11,920,878
8.	San Diego County	6,974,900	16,690,300
9.	Denver	6,786,310	5,610,063
10.	San Diego	6,629,222	13,530,313
11.	Maricopa County, Ariz.	6,575,776	6,504,946
12.	Phoenix	5,185,439	6,826,243
13.	Orange County	4,902,854	3,085,147
14.	Anaheim	4,861,244	5,154,393
15.	Oakland	4,666,225	2,917,194

January-October volume

By the end of October the 155 reporting agencies have recorded $3,122,587,638 in dollar volume, some $107 million below the 10-month total for last year. However, building in six states is running ahead of last year. Leading the way is Hawaii, up $46.4 million for the 10 months. Nevada is running $12.1 million ahead; Oregon, $11.6 million; Alaska, $8.5 million; Arizona, $3.6 million; and Wyoming $2.2 million. Biggest drops are in California, down $102.3 million for the 10 months; Washington, $51.6 million; Colorado, $16.5 million; and New Mexico, $10.6 million. Others trailing last year are Idaho, by $6.4 million; Utah, by $3.7 million; and Montana, by $686,000.

Analysis of selected areas—October

	Dwelling	Commercial & Industrial	Public
Los Angeles County	$17,181,436	$5,421,493	*$ 313,780
Orange County	4,563,166	98,282	25,000
Sacramento County	4,843,512	1,628,493	532,919
Las Vegas	1,996,804	858,750	560
Denver	1,730,755	1,107,615	
Portland			
Seattle	1,854,745	1,819,959	238,000
King County	5,370,011	213,690	1,468,580
Honolulu	6,819,323	2,556,072	1,066,309

*Does not include $409,750 for tax-supported school construction.

155 Building Permit Totals for 155 Western Agencies for October

CALIFORNIA	Oct. 1960	Oct. 1959
Alameda County	$ 2,343,150	$ 993,600
Anaheim	4,861,244	5,154,393
Bakersfield	1,772,587	510,475
Burbank	822,091	458,468
Contra Costa County	2,852,837	8,723,282
Fresno	1,171,600	1,236,387
Fullerton	1,095,874	1,146,199
Glendale	1,613,410	1,673,444
Inglewood	959,589	644,822
Long Beach	9,127,065	2,957,355
Los Angeles	53,182,905	48,167,529
Los Angeles County	18,816,381	17,845,490
Oakland	4,666,225	2,917,194
Ontario	520,190	380,575
Orange County	4,902,854	3,085,147
Palo Alto	2,323,283	2,653,691
Pasadena	2,033,058	3,795,716
Pomona	903,014	986,097
Richmond	710,384	1,354,491
Riverside	797,513	1,870,781
Sacramento	1,702,640	5,095,690
Sacramento County	7,160,717	11,920,878
San Bernardino	1,011,633	1,183,167
San Bernardino County	5,491,895	4,615,307
San Diego	6,629,222	13,530,313
San Diego County	6,974,900	16,690,300
San Francisco	8,929,033	10,627,332
San Jose	9,627,200	10,463,454
San Mateo	1,684,085	982,764
San Mateo County	1,445,272	2,041,865
Santa Ana	3,896,182	4,461,769
Santa Monica	1,954,996	832,091
Stockton	722,041	2,623,754
Sunnyvale	2,132,193	2,266,325
Torrance	1,470,192	1,233,350
West Covina		920,735
TOTAL	**$176,307,455**	**$196,117,225**

OREGON	Oct. 1960	Oct. 1959
Albany	$ 106,925	$ 76,800
Astoria	21,225	25,300
Baker	62,670	127,540
Bend	58,250	121,305
Coos Bay	70,696	272,341
Corvallis	358,317	271,600
Eugene	812,590	672,467
Grants Pass	162,850	101,400
Gresham	40,850	23,800
Hillsboro	643,270	255,660
Klamath Falls	91,000	146,770
LaGrande	47,625	554,362
Lane County	1,760,941	1,921,223
Medford	457,504	293,126
Multnomah County	2,046,747	3,579,467
North Bend	159,287	18,457
Oregon City	24,866	36,910
Portland	3,358,070	2,410,965
Roseburg	38,972	393,569
Salem	1,139,100	519,824
Springfield	216,495	44,551
The Dalles	53,200	32,675
TOTAL	**$ 11,731,450**	**$ 11,900,112**

WASHINGTON	Oct. 1960	Oct. 1959
Aberdeen	$ 71,694	$ 59,459
Anacortes	4,367	79,955
Auburn	27,585	88,800
Bellingham	664,383	302,879
Bremerton	131,175	543,590
Centralia	31,989	52,648
Chehalis	8,375	35,902
Ellensburg	39,120	76,026
Ephrata	140,223	3,400
Everett	1,647,710	339,604
Kelso	13,573	47,250
Kennewick	103,850	172,510
King County	7,204,391	7,685,327
Kirkland	100,400	94,050
Longview	171,722	120,082
Moses Lake	260,470	275,550
Olympia	110,602	164,956
Pasco	97,255	54,817
Pierce County	2,017,486	1,601,656
Port Angeles	29,480	59,600
Puyallup	112,736	9,300
Seattle	4,032,234	8,971,595
Spokane	1,657,456	1,788,964
Spokane County	1,237,307	1,555,215
Tacoma	3,848,042	1,947,398
Vancouver	319,585	269,076
Walla Walla	81,503	352,177
Wenatchee	155,615	585,228
Yakima	533,070	509,205
TOTAL	**$ 24,853,398**	**$ 27,846,219**

ALASKA	Oct. 1960	Oct. 1959
Anchorage	$ 4,003,089	$ 3,546,221
Fairbanks		984,770
Juneau	3,900	23,800
Ketchikan	134,170	50,150
TOTAL	**$ 4,141,159**	**$ 4,514,941**

IDAHO	Oct. 1960	Oct. 1959
Boise	$ 248,248	$ 431,744
Caldwell	19,245	153,800
Coeur d'Alene	93,000	75,860
Idaho Falls	1,513,502	647,450
Jerome	22,650	39,500
Lewiston	210,284	102,219
Nampa	94,350	568,031
Payette	41,000	36,900
Pocatello	100,850	213,920
Sandpoint	14,200	10,250
St. Maries	3,000	
Twin Falls	127,600	304,000
TOTAL	**$ 2,487,929**	**$ 2,583,674**

MONTANA	Oct. 1960	Oct. 1959
Billings	$ 1,369,826	$ 648,000
Bozeman	120,200	440,883
Butte	150,113	206,480
Glasgow	277,500	103,700
Glendive	76,100	
Great Falls	1,082,482	1,067,076
Helena	176,979	270,655
Kalispell	48,800	128,689
Lewistown	60,900	211,950
Livingston	6,200	38,485
Miles City	88,816	164,074
Missoula	158,536	132,474
TOTAL	**$ 3,616,452**	**$ 3,412,466**

WYOMING	Oct. 1960	Oct. 1959
Casper	$ 1,154,971	$ 368,930
Cheyenne	809,700	874,290
Sheridan	80,565	74,289
TOTAL	**$ 2,045,236**	**$ 1,317,509**

COLORADO	Oct. 1960	Oct. 1959
Aurora	$ 1,211,493	$ 539,656
Boulder	1,040,111	772,866
Denver	6,786,310	5,610,065
Englewood	328,935	301,634
Fort Collins	554,948	1,068,303
Grand Junction	269,370	713,315
Greeley	495,132	407,125
Pueblo	964,205	692,610
Trinidad	62,242	17,451
TOTAL	**$ 11,712,746**	**$ 10,123,025**

UTAH	Oct. 1960	Oct. 1959
Logan	$ 274,200	$ 196,280
Murray	83,650	128,400
Ogden	1,663,014	965,400
Provo	115,000	232,050
Salt Lake City	2,744,055	1,912,315
TOTAL	**$ 4,879,919**	**$ 3,434,445**

NEVADA	Oct. 1960	Oct. 1959
Elko	$ 42,125	$ 62,183
Las Vegas	2,885,285	2,551,250
Reno	798,484	1,462,499
Sparks	243,081	128,984
TOTAL	**$ 3,968,975**	**$ 4,204,916**

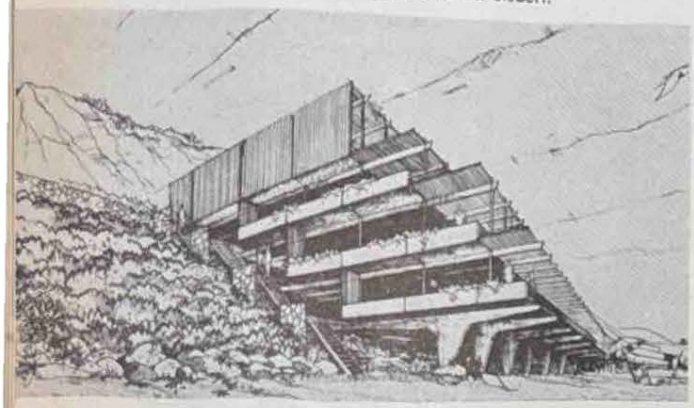
ARIZONA	Oct. 1960	Oct. 1959
Douglas	$ 62,407	$ 39,725
Flagstaff	137,709	230,820
Glendale	111,655	876,845
Maricopa County	6,575,776	6,504,946
Mesa	1,444,756	1,337,717
Phoenix	5,185,439	6,829,243
Tucson	3,482,317	4,416,211
Yuma	230,015	53,157
TOTAL	**$ 17,230,074**	**$ 20,288,664**

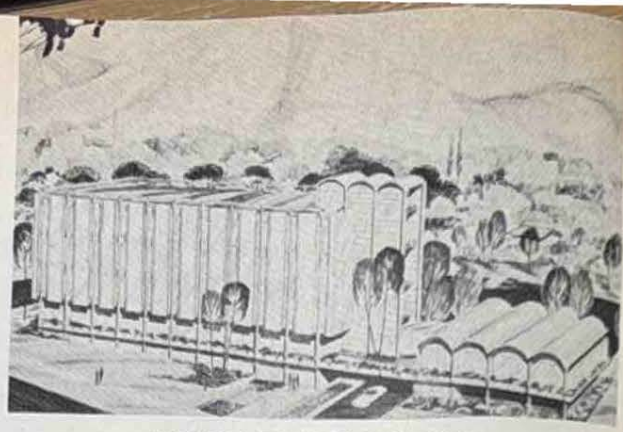
NEW MEXICO	Oct. 1960	Oct. 1959
Abuquerque	$ 2,342,984	$ 4,392,944
Carlsbad	161,450	171,325
Clovis	382,198	452,458
Gallup	70,296	98,909
Hobbs	175,350	199,850
Las Cruces	184,400	502,000
Roswell	894,975	734,990
Santa Fe	329,533	236,658
TOTAL	**$ 4,541,186**	**$ 6,789,134**

HAWAII	Oct. 1960	Oct. 1959
Hawaii County	$ 1,424,034	$ 404,863
Honolulu (city-county)	10,543,754	8,461,764
Maui County	457,332	81,922
TOTAL	**$ 12,425,120**	**$ 8,948,549**
GRAND TOTAL	**$279,941,099**	**$301,480,879**

MODERN CLIFF DWELLERS

will have unobstructed view of La Selva Beach from this $2 million cooperative apartment building just south of Santa Cruz, Calif. Structure will be wood frame carved into the cliff to rest on reinforced concrete pilings and reinforced concrete foundations. Each level is to be recessed 12 ft. back over lower level. Front of each apartment will consist of sliding glass doors leading to individual deck areas. Initial development of 24 units (project will have 75 two- and three-bedroom suites in all) is set for completion by next June. Architects: Johnson-Hawley & Associates; structural engineers: Warren & Siebert.





MEDICAL TOWERS BUILDING

across street from Holy Cross Hospital in Salt Lake City will have suites for 35 doctors, coffee shop, laboratory and pharmacy. Three towers will house automatic elevators, stairways, main plumbing, air conditioning and heating ducts. Four-story structure, faced with cast concrete and stone, will cost about $1 million. Architect: John N. Clawson.

PROJECT PREVIEW



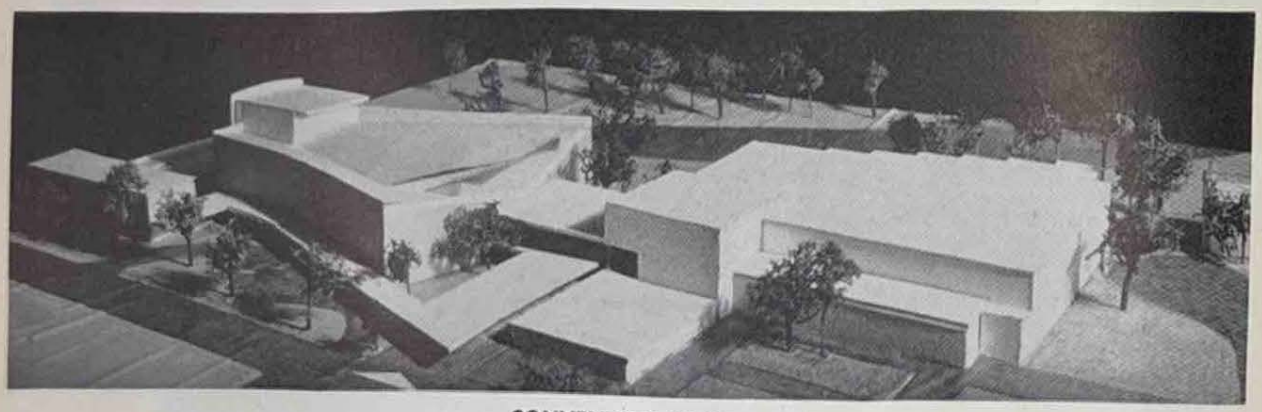
PHOENIX RESTAURANT

now under construction will feature reinforced burnt adobe construction with exposed timber roof framing. Roof deck will be of bonded wood fiber plank. Main dining room will have one wall of glass providing view of terrace garden. Seating capacity of $500,000 structure, to be known as Beefeaters Restaurant, will be 250. It will be air conditioned throughout. Architects: Busby Associates.



HILLAIRE ELEMENTARY SCHOOL

to serve Lake Hills area of Bellevue, Wash., will be roofed with factory-built stressed skin plywood panel system. Twenty-classroom structure will contain 38,200 sq. ft. Project also will include two play sheds and, in line with Bellevue School District's new program, outdoor classroom in amphitheater and another for use in conservation study. Total cost: $509,000. Architects: Jones, Lovegren, Helms & Jones.



CONVENTION HALL

to be located beside the Truckee River in downtown Reno will have 2,000-seat auditorium joined to 4,500 seat arena-meeting hall by a banquet or social area. Banks of river will be utilized to extend activities outdoors and serve as public park. Preliminary plans also call for drive-in ticket window, electronically controlled acoustical balance in auditorium and layout that channels participants past exhibit areas to meetings. Architect: Richard J. Neutra; associate architects: Lockard, Casazza & Parsons.



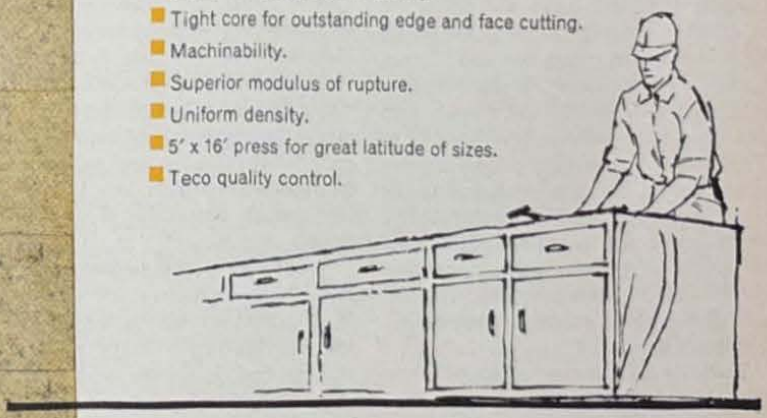
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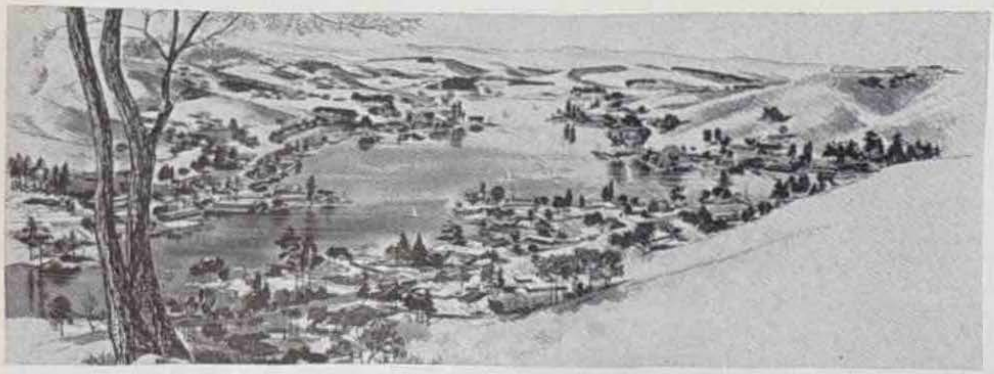
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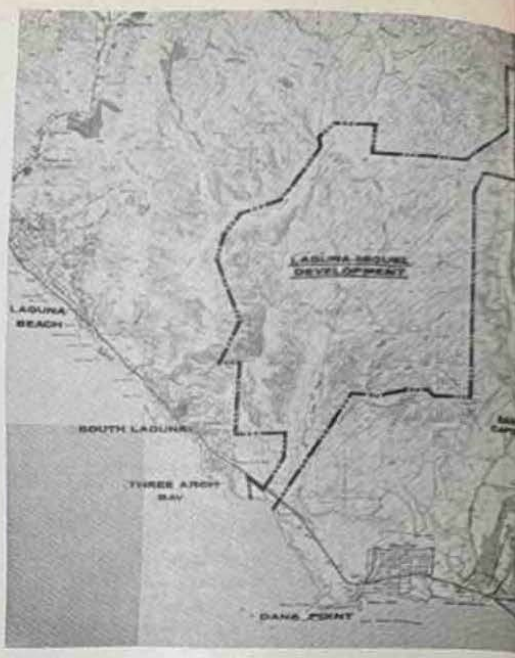
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LAGUNA-NIGUEL DEVELOPMENT, outlined on map at right, includes three lakes.



Gruen master plans new city in Southern California

A new city, expected to attract 30,000 persons by 1980, is being developed in the Southern California coastal region. Its 7,000-acre site, owned by Laguna-Niguel Corp. founded in February 1959 and master planned by Victor Gruen Associates, is located between Los Angeles and San Diego about five miles south of Laguna Beach.

The San Diego Freeway will serve the yet unnamed city at the southern boundary of the site and rail and sea transportation also will be readily available.

Taking full advantage of the natural beauty, the city's plan will integrate all of the necessary services for a center of industry, commerce and recreation. It will grow in the orderly sequence outlined by the master plan until the entire site is developed.

Because of the particularly favorable climate, many recreational facilities will be provided: two golf courses, three lakes for boating and fishing, 15 miles of riding trails, a private club located on a beach 1,000 ft. long and three parks offering a variety of landscaping.

The city will contain eight primary schools, a high school, eight churches, a hospital and two motels. Five outlying neighborhoods each will have a civic, social, cultural and administrative center.

A 150-acre industrial park served by highway and railroad and by a 400-acre research center located on one of the lakes will provide employment to help make the new city self-sufficient.

The hills, the sea, the lakes and the periphery of the golf courses will furnish settings for 8,000 private homes in the project. Multistory and garden apartments also will be available.

Streets will vary in size from superhighways to almost private roads.

Since the site has few direct water sources, fresh water will be diverted from the Colorado River. The Southeast Orange County Water Committee, in affiliation with the Metropolitan Water District of Los Angeles, is now making definite plans for the river water at the Laguna-Niguel development.

Newport Beach architect Knowlton Fernald Jr. has joined the Santa Ana staff of Cabot, Cabot & Forbes, Inc., as coordinator of architcture for the project. The Boston-headquartered firm is the principal investor in Laguna-Niguel Corp.

Master builder concept advocated by construction executive

Chaos resulting from separation of building and architecture has raised U.S. construction costs, contributed to inflation and unreasonably heightened competition for architects and builders, a prominent Southern California contractor said in an address to a campus audience in San Luis Obispo last month (complete text begins on p. 26).

Speaking on "Single Responsibility: Key to the Architect's Future," Phil W. Roulac told the student AIA chapter at California State Polytechnic College that the chaos can be resolved and the architect restored to his professional dignity only by a return to the master builder concept and to negotiated contracts.

Roulac, president of Roulac Construction Co., Pasadena, and past president of the Southern California Harvard Business School Alumni Association is widely known for his own "master builder" approach to home, business and industrial construction.

He said divided responsibility has helped send an estimated 80% of all construction over the budget, beyond the allowable 5% often by as much as 30% in Southern California alone, and materially contributed to the inflation picture.

"We waste $1 million of capital, an essential free enterprise commodity, every time we take $6 million to build an industrial plant that could turn out the same product for $5 million," Roulac declared.

Excessive competition in bidding has hurt the traditional architect's personal relationship with the owner and prevents him from giving adequate time to construction supervision.

The builder on the other hand is trusted so little by the owner that he is placed under a surety bond to insure compliance with plans and specifications, the speaker continued.

Roulac took issue with one widely advocated solution to make architects and builders equal partners in construction. It would be almost certain to result in equal professional status for the builder which, he said, he's not at all sure the builder wants.

Roulac urged instead a return to the negotiated contract as a means of restoring budget balance and the master concept of architect and builder responsibility as a means of restoring mutual faith with the owner.

The master builder concept, under which the Great Wall of China, the Greek Parthenon, St. Paul's and other

great cathedrals of England were built, is still successfully employed in Europe and South America, he pointed out, adding that only in the U.S. due to a policy instituted by the AIA in the middle of the last century, does a separation exist between architecture and construction.

Meanwhile, the AIA and the AGC have reaffirmed their traditional views regarding the respective roles of architects and the general contractors in the construction industry.

"Architects and general contractors must work closely together and continue their traditional relationship to meet growing demands for more comprehensive service to the building owner," top officials from the two associations said in a joint statement resulting from a session in Las Vegas in connection with the annual fall meeting of the AIA's board of directors.

The AIA's current efforts to explore means by which its members can increase the scope of their service will not affect—and are not intended to affect—the role of the general contractor or the present system of building contract administration, the statement said.

This was the first meeting between these officials since the AIA reorganized many of its administrative procedures to enable the Institute to act more effectively for the architectural profession.

In the reorganization program the AIA recommended the establishment of a new committee known as the AIA-AGC liaison committee, replacing the AIA-AGC joint cooperative committee.

The AIA stated that the new name more truly reflected the scope and responsibility of the joint committee, but that the work and activities would continue as in the past.

Coupled with the AIA internal reorganization, a special committee of the AIA is reevaluating the architect's professional role in the industry with special attention to package deals and similar problems.

For the past two years a special AIA committee on the profession has been considering the problems in the light of technical advances, industrial growth, changes in contract procedures, and economic developments. The committee published "A Report on Your Profession" in the June issue of the AIA Journal and AIA and AGC officials at the Las Vegas meeting agreed that parts of the report, including the description of architects as "master builders," was subject to misinterpretation.

In a clarifying statement the AIA stated that it neither recommends that architects replace general contractors nor endorse separate contracts.

Californians view 'changing practice of architecture'

More than 800 registrants, including wives, exhibitors and other guests, attended the 15th annual convention of the California Council, AIA, in Yosemite National Park October 19-23 to hear a number of top-notch designers explore "The Changing Practice of Architecture."

Spanish architect-engineer Eduardo Torroja, one of the world's leading figures in the development and design of concrete structures, illustrated his address on "The Contemporary Evolution of Architectural Forms" with slides of his own free form work. The process, he said, permits new shapes, new possibilities that architects did not have before.

Torroja, whose most famous work is the Zarzuela Hippodrome in Madrid, explained that this type of building fulfills the human need for variety. "Architects need to try something new and I know this structural form will grow and develop within the next 10 years," he concluded.

Referring to Torroja's appearance at Yosemite, CCAIA President Wayne S. Hertzka had this to say: "A note of special gratitude belongs to the California Producers' Council. Its support in bringing Eduardo Torroja from Spain to speak at our convention was a most significant contribution and reflects the PC's desire to provide a real service to the architectural profession."



TORROJA: "need for variety."

First major seminar found architect John S. Detlie, formerly of Seattle and now of Los Angeles, as moderator with four of his colleagues as panelists.

"Variation is an important part of aesthetics," said Dean William W. Wurster of the University of California's College of Environmental Design. The educator told of his recent

WHAT IT TAKES TO BE AN ARCHITECT

During a panel discussion at the Yosemite convention, Charles Luckman outlined 20 professonal and 28 administrative services necessary for an architect to perform in operating his own firm.

PROFESSIONAL SERVICES

1. Design
2. Engineering
3. Schematic, preliminary, working drawings
4. Approval of shop drawings
5. Construction supervision
6. Selection of materials
7. Selection of colors
8. Selection of engineering and other consultants
9. Building code checks
10. Local and national government building reputations
11. City ordinance considerations
12. Project personnel detailing
13. Consultant contacts
14. General contractor liaison
15. Client contacts
16. Client relationships
17. Staff supervision
18. Cost estimating and control
19. Specification writing
20. Material samples cataloging and storage.

ADMINISTRATIVE SERVICES

1. Recruiting
2. Interviewing
3. Hiring
4. Salary reviews
5. Morale functions
6. Terminations
7. Personnel practices
8. Business practices
9. Legal matters
10. Accounting
11. General correspondence
12. Tax computations
13. Deductions
14. Reports
15. Filing
16. General housekeeping
17. Production budget financing
18. Overhead control
19. Maintenance
20. Public Relations
21. Exhibits
22. Publication preparation
23. Contract preparation
24. Client invoice preparation
25. Bid preparation
26. Client contract maintenance
27. Job meetings
28. Technical library maintenance



ARCHITECTURAL PRACTICE PANELISTS Charles Luckman, A. Quincy Jones, George T. Rockrise (moderator), Philip Will Jr., Harwell Harris.

world tour and of the outstanding buildings, both large and small in scope, he regards as brilliant architectural statements. He concluded with the thought that architecture is basically regional and should be considered "a frame for life and not life itself."

Philip Johnson of New Canaan, Conn., talked of the International Style which, at one point, he explained, many architects thought was the key to design. This seemed to be true for a time but they became bored and lost interest in the movement. "Architects want to feel free to build in any way they want to build; all they ask for is an opportunity for freedom and variety in their design."

New York's Ulrich Franzen, speaking on behalf of the younger architect, acknowledged there is a greater audience participation in architecture today, but he disagreed with Johnson that freedom is the only requisite. He maintained that the young architect wants an "authority image" and that there is a need for a formula for getting "into the lifestream of our time."

Franzen protested against false values in architecture and said that space, structure and function are the most important factors in design, in that order, but that "function" should be restated to "form."

Architecture is a very human issue and should not consist of lasting abstractions, Richard Neutra of Los Angeles declared. Changes, he pointed out, have been overplayed. "Things have not changed but our knowledge about them has. There is no point where good architecture starts or stops and what will be good for human beings is the most important problem in design." He went on to say that he is "tired of things that are blueprinted into disorder," adding that architects cannot exempt aesthetics from other satisfactions.

"Architectural Practice in a Changing World" found four panelists representing basically different philosophies as expressed in small, medium, large and corporate offices.

The small office, according to Harwell Harris of Dallas, has fewer collaborators, designers and public relations advisors; is free from design by office committee; and enables an "architect solution" rather than a "mechanical solution." The large office cannot afford convictions as well as its smaller counterpart. The Texas architect explained that he was not censoring the former but that he feels a great building calls for an independent mind, perception and compassion. These things, he declared, could come from the smaller organization more readily than a large one.

A. Quincy Jones of Los Angeles, who represented the medium-sized office, said he was not sure what determined "size" of an office: number of employees, net profit or work load. He did stress, however, that it is important for every office to reflect good on the entire profession.

Jones said he believes that the project architect in a large office functions much as an architect in his own small office does. He called on all architects, regardless of size, "to practice only to produce the healthiest community we can produce."

National AIA President Philip Will Jr., a partner in the firm of Perkins & Will, pointed out that this is a big country which can absorb and use many kinds of architectural practices. His own firm employs 200 in two offices in Chicago and New York, with 14 partners and departmentalization to handle all facets from engineering to landscaping and interiors. "This enables us to control every service for which an architect is responsible," he explained.

Heading a firm which now has more than $200 million of work under construction, Charles Luckman of Los Angeles pleaded the cause of not the small or large firm but of a corporation practicing throughout the world. He advocated cost control systems for all offices. "The issue today is not small vs. large architectural firms, but how architects can combine talents, energies and efforts to combat the package dealers," he declared. "Architects, no matter what size of their offices, get a very small percentage of the billions every year spent in construction and this is the problem we should solve."

Among the speakers on the third panel devoted to "Encroachments upon the Practice of Architecture" was State Assemblyman Gordon H. Winton Jr. of Merced, one of the leaders of the recent legislative movement to provide the opportunity for state colleges to be designed by private architectural firms. He was joined by three CCAIA representatives: Gordon Fluery, legislative director; Melton Ferris, executive director; and President Hertzka.

Addressing the regional conference luncheon, President Will reported on the Pan-American Congress of Architects, held in Buenos Aires, from which he had just returned. He reported that the Cuban delegation tried unsuccessfully to use the sessions as a tool and for anti-American oratory.

The council awarded its highest honor, the Distinguished Service Citation, to two architects and two redevelopment officials:

- Ulysses Floyd Rible, Los Angeles, director of the California District, AIA, from 1957 through April, 1960.
- Lee B. Kline, Los Angeles, 1959 president of CCAIA.
- M. Justin Herman, executive director of the San Francisco Redevelopment Agency.
- William T. Sesnon Jr., chairman of the board of the Community Redevelopment Agency of the City of Los Angeles.

The 1961 convention will be held October 18-22 in Coronado and the following year in Monterey. Feasibility of holding the 1963 convention in Mexico City is being pursued.

—William G. Quinn



ENCROACHMENT PANELISTS Melton Ferris, Wayne Hertzka, Gordon H. Winton Jr., Gordon Fluery.

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Western Mountain AIA hears Feiss, presents seven awards

During the four days of their ninth annual conference in Tucson, architects of the Western Mountain District, AIA, took a hard look at the changes which are reshaping American cities and the American countryside. The October 26-29 sessions drew registrants from Wyoming, Colorado, Nevada, Utah, New Mexico and Arizona.

Carl Feiss, planning and urban renewal consultant of Washington, D.C., told his banquet audience that the West has not kept faith with Coronado's dream of finding a "golden city." He pleaded for a new effort to build golden cities to satisfy the dreams of men.

The West, Feiss declared, "contains a growing record of destruction of resources, overbearing modern materialism, destruction of irreplaceable beauty of the landscape and the wanton desecration of the priceless heritage of desert, prairie and mountain glories."

Feiss, who is a fellow of the Institute, then asked this question: "Is Los Angeles the prototype of our future?" Today, he added, the city dweller wants to see a tree again and find some breathing room.

"Perhaps the greatest disappointment in our western cities is that with minor variations they could be any place. Perhaps it takes centuries to develop a distinguishing characteristic in a particular place, but it does not have to be this way," he said.

Feiss decried the destruction of topography and careless sitting of buildings which he has observed in the West. "Not only our natural surfaces are destroyed and natural textures eradicated—textures much more beautiful than anything man creates but the very soul of the place is destroyed."

Among the other principal speakers were two national AIA officers: President Philip Will Jr. of Chicago and Second Vice President James M. Hunter of Boulder, Colo. Both called upon their fellow architects to find solutions for the mounting problems of urban sprawl, traffic congestion and the montony of endless, unplanned growth.

The present emphasis on obtaining college degrees as a prerequisite of the architect was scored heavily by Will. He said perhaps the "oddest consequence" of abandoning academic degrees would be "a shift of emphasis from education for the sake of degrees to education for the sake of learning."

In place of present college programs which train "architectural technicians," Will proposed establishing an Academy of the Environmental Arts. He described this as a "comprehensive university open to all the related design professions and dedicated to the study of and research in all the facets which make up the environment we must build and rebuild."

Six architectural firms were singled out for awards as part of the conference program. Design Awards went to:

- W. C. Muchow of Denver for a church remodeling.
- Ferguson, Stevens, Mallory & Pearl of Albuquerque for a school.
- Edward & Daniels of Price, Utah, for a school.
- Langdon Morris of Denver for a residence.
- George R. Allan Jr. and Hugo A. Olsson Jr. of Phoenix for a residence.

Honorable Mentions went to:

- Robert Wehrli of Casper, Wyo., for a bank building.
- Ferguson, Stevens, Mallory & Pearl for a cement plant.

During the Tucson meeting the Arizona Chapter of the Producers' Council came into being with an installation by Don Proudfoot of Seattle, an official representative.

Host for the conference was the Southern Arizona Chapter, of which Gerald I. Cain is president. Emerson C. Scholer was general chairman and Dean Sidney W. Little of the University of Arizona was co-chairman.

Following the sessions a party of 15 made a trip to Mexico City to tour places of architectural interest.

Six Californians take part in home design conference

A project which may produce some new important concepts for the American home got underway as the result of a recent two-day conference held in New York City. Six of the 38 participants were from the West Coast.

The sessions brought together representatives in five fields: architecture, industrial design, interior design, home building and home furnishings.

Julian Zimmerman, FHA commissioner, stressed the importance of the conference by saying: "I think the real strength of the housing market, for the next few years at least, is going to be an accomplishment of what will come out of this meeting. The need today is no longer a need for just shelter. We're going to have to create a desire that has a motivation for something other than just shelter. To me this is the purpose of this gathering."

Norman Ginsberg, president of the National Design Center, has accepted the chairmanship for the development of the project.

Representing the West were these Californians: architects Robert Anshen of San Francisco and Edward Fickett of Los Angeles, builder Joseph Eichler of Palo Alto, designer Cliff May of Los Angeles and interior designer C. Tony Pereira of Los Angeles.

Kump warns Utah architects about 'greatest challenge'

Ernest J. Kump, Palo Alto architect, told a meeting of the Utah Chapter, AIA, in Salt Lake City last month that during the next 40 years there will be more building in the U.S. than during its entire previous history.

In the face of it, the too-slim ranks of architects will face their greatest challenge: the retention of human values and individual expression in a technological age that will rely more and more on standardization of building materials and techniques.

Kump suggested that a new regionalism be found and expressed in architecture. The International Style, born in a foreign continent and of the austerity of post-World War I, has no valid claim today.

A supposedly enlightened society now finds itself gripped by a new superstition, Kump continued. Confronted by a vast array of new but unassimilable information born of the technological explosion, the society seeks its answers from the high priest-scientist, from the university-temple.

But intellectualism has been found wanting. "Perhaps what we need are laboratories in ethics and human relations."

Metropolitan Anchorage maps plans for 20-year growth

Based on population projections that range from 200,000 all the way up to 800,000 for its metropolitan area by 1980, Anchorage is preparing a 20-year plan to guide its growth.

Under a contract for completion next spring, the engineering-planning firm of Wilsey, Ham & Blair, headquartered in Millbrae, Calif., will provide a general plan for Alaska's largest city and its environs and specific plans for a civic center, central business district and all public utilities.

Present population of Anchorage is estimated at 43,760, up 288% from the 11,254 recorded in 1950. Population of the metropolitan area, including the city proper, is 82,325. Area of the present city and environs included in the study is about 100 sq. mi.

new offices, partnerships

Kermit P. Dorius has opened his own architectural office at 2712 East Coast Highway, Corona del Mar, Calif. He formerly was a partner in the firm of Brownell & Dorius in Newport Beach.

Richard A. Carothers, landscape architect who practices in Eugene, has opened a second office in Coos Bay, Ore., at 175 N. Second St.

Raymond M. Knowles has opened an office for the practice of architecture at 953 Eighth Ave., San Diego.

Clifford C. Jay, formerly senior architect on the Davis campus of the University of California, has returned to private practice with the opening of his own office at 2328 K St., Sacramento. At Davis he was primarily engaged in programming and planning specialized laboratory facilities for the university's research programs.

Frank N. Hitchcock and James W. Keefe, architects, have entered into a partnership known as Hitchcock & Keefe at 601 E. Broadway, Eugene.

George T. Rockrise and William J. Watson, architects, have organized a new firm under the name of Rockrise & Watson at 405 Sansome St., San Francisco. Associates are Robert C. Mountjoy, architect, and J. Matthew Myers.

The firm of Schoell & Geritz has been established at 606 Zuni Drive, Del Mar, Calif., by Donald Schoell, architect, and Eugene Geritz. Schoell is a graduate of Syracuse University and Geritz of the University of California at Berkeley.

firm changes

Donald E. Ransom and P. Edwin Hester have formed a partnership for the practice of architecture at 5810 W. 38th Ave., Denver, under the name of Ramson-Hester & Associates. The principals formerly were partners in the firm of Hiester-Ransom-Hester.

Schachtman & Velikonia of Vallejo, Calif., have expanded their partnership to include John M. Hogg, architect, and are now practicing under the name of Schachtman, Velikonia & Hogg.

The Spokane architectural firm of Walker, McGough & Trogdon has been succeeded by Walker & McGough, the practice remaining at N. 9 Post St. William H. Trogdon has established his own office in the Sherwood Building.

new addresses

Donald R. Roark, architect, to 101 S. Madison St., Denver.

Charles W. Lovett, architect, to 220 Governor Bldg., Portland.

Harold B. Zook, architect, to 2515 East Coast Highway, Corona del Mar, Calif.

Harold T. Johnson & Associates, architects, to 1203 Minnesota Ave., San Jose, Calif.

Charles W. Maxey, architect, to 207 Park Plaza Bldg., Longview, Wash.

Thomas J. Russell, architect, to 2292 Long Beach Blvd., Long Beach, Calif.

Ralph Berger, architect, to 325 West St., Reno, Nev.

competitions

Four architectural firms—Wilmsen & Endicott, Stafford & Morin and Balzhiser, Seder & Rhodes, all of Eugene, and Stewart & Richardson of Portland—are in contention to design Eugene's new city hall. Their entries were selected from 25 entered by Oregon architects in the AIA-approved competition (see PA&B, Nov. '60). Final winner will be announced in March after the four firms have worked out refinements to their preliminary designs.

elections, appointments

Robert Berne, formerly a principal in the Denver architectural firm of Berne, Muchow, Baume & Polivnick, has gone to Washington, D.C., to head the AIA's architectural information services. A member of the national public relations committee for some years, he was elected president of the Colorado Chapter last year. He was graduated from Columbia University in 1940 and has been practicing in Colorado for the past 20 years.

Seattle architect Paul Thiry has been named chairman of the AIA's committee on the National Capital, which will work with such groups as the National Capital Planning Commission in directing the development of Washington, D.C. Thiry also has been selected as a juror for the R. S. Reynolds Memorial Award (see box).

Idaho Chapter, AIA, has picked Theodore J. Pritchard of Moscow as its new president, Completing the slate are these officers, all of Boise: H. Curtis Finch, vice president; C. Ed Trout, secretry-treasurer; and Charles Hummel and Glen E. Cline, directors.

Robert J. Brown, former Everett, Wash., architect and member of the Snohomish County Planning Commission, has joined the Pueblo (Colo.) Regional Planning Commission as assistant director.

1961 REYNOLDS AWARDS

Nominations for the fifth annual $25,000 R. S. Reynolds Memorial Award, largest in architecture, will be accepted until December 12 by the AIA at 1735 New York Ave. N.W., Washington 6, D.C.

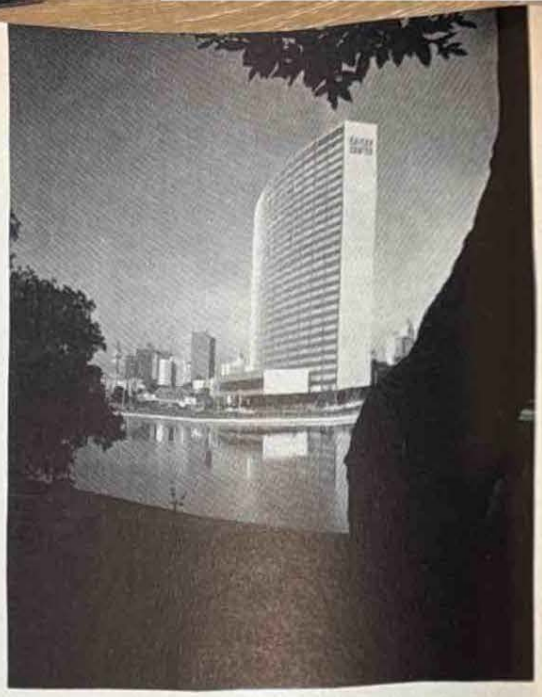
To be eligible the buildings should have been completed between January 1, 1958, and January 1, 1961, although the jury may consider earlier work if it desires. Prime consideration is given the creative value of the architect's contribution to the use of aluminum and its potential value on the architecture of our times.

No American has yet won the award, which includes an original piece of sculpture in addition to the $25,000 honorary payment. Formal presentation to the winner will be made at the annual AIA convention in Philadelphia.

Reynolds Metals Co. also has created a prize for architectural students, with a top award of $5,000 to be divided equally between the winning student and his school.

Under the program a $200 prize will be awarded to the student in each participating school of architecture who submits the best original design for any type of building component in aluminum. Each school will handle its own judging in any way it chooses. Participants must be third- or fourth-year or graduate students.

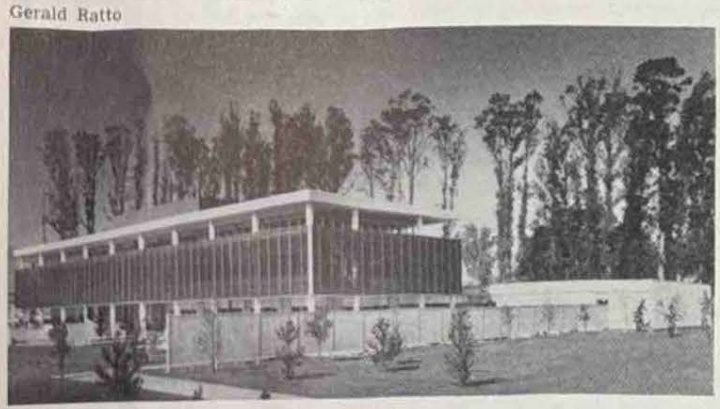
Winning design from each school of architecture will be judged by three arcihtects chosen by the AIA. For the initial year's program, each school must complete its judging by February 1, 1961.



1. *Oakland: Kaiser Center.*

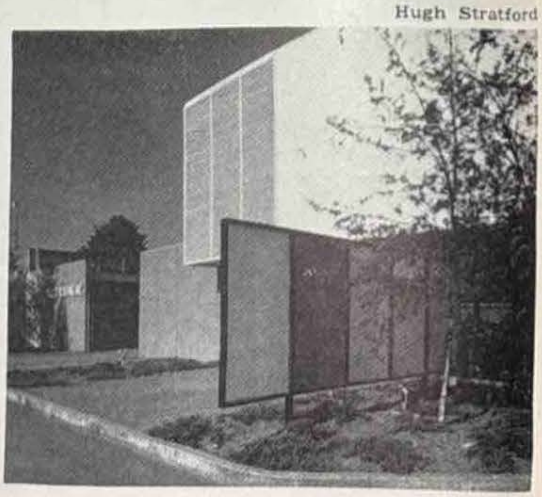
Three office buildings by Welton Becket & Associates

Gerald Ratto



2. *Burlingame: California Teachers Association*

Hugh Stratford



3. *Seattle: Hart Plumbing and Heating, Inc.*

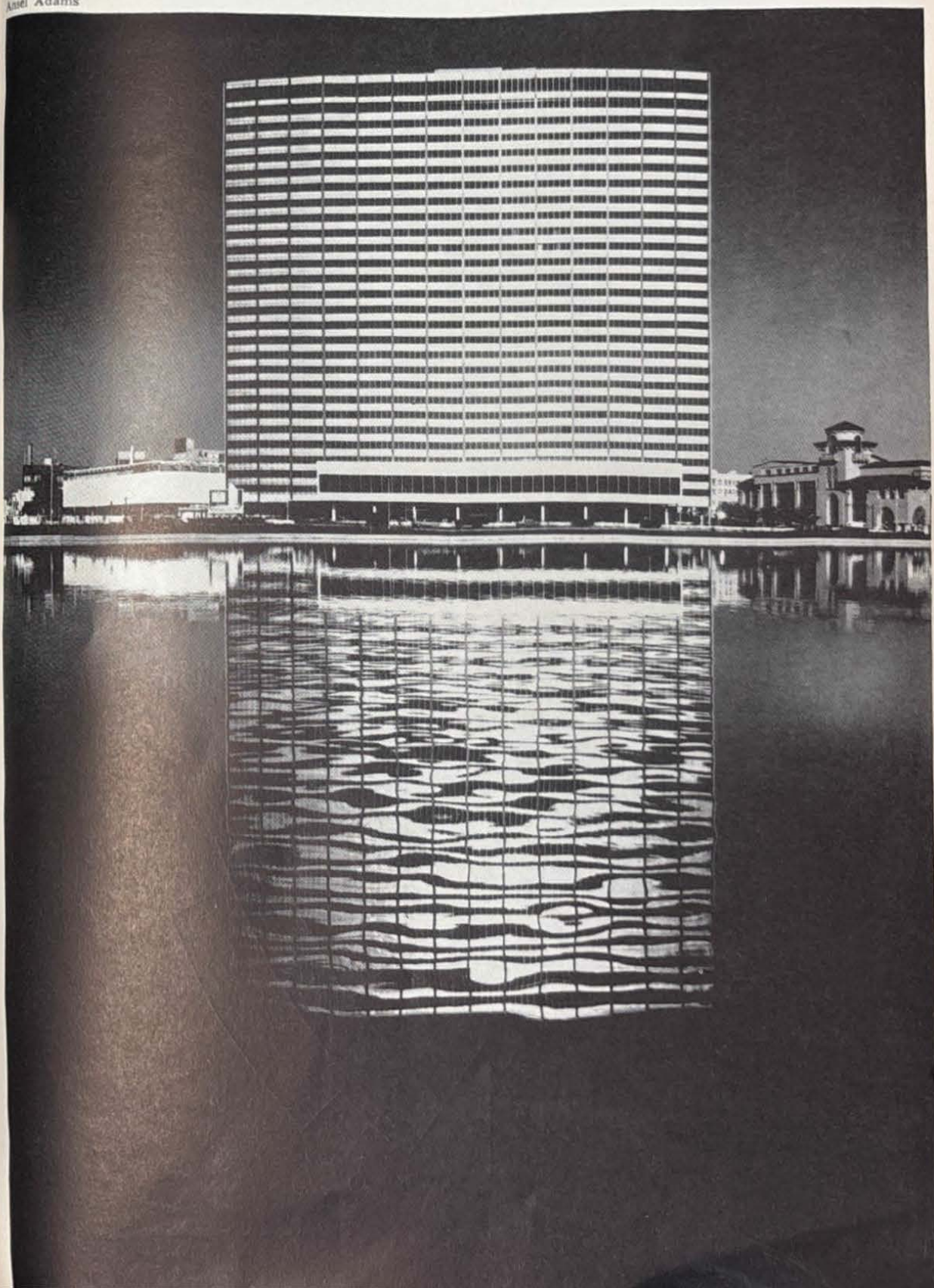
1. Kaiser Center
Oakland, California

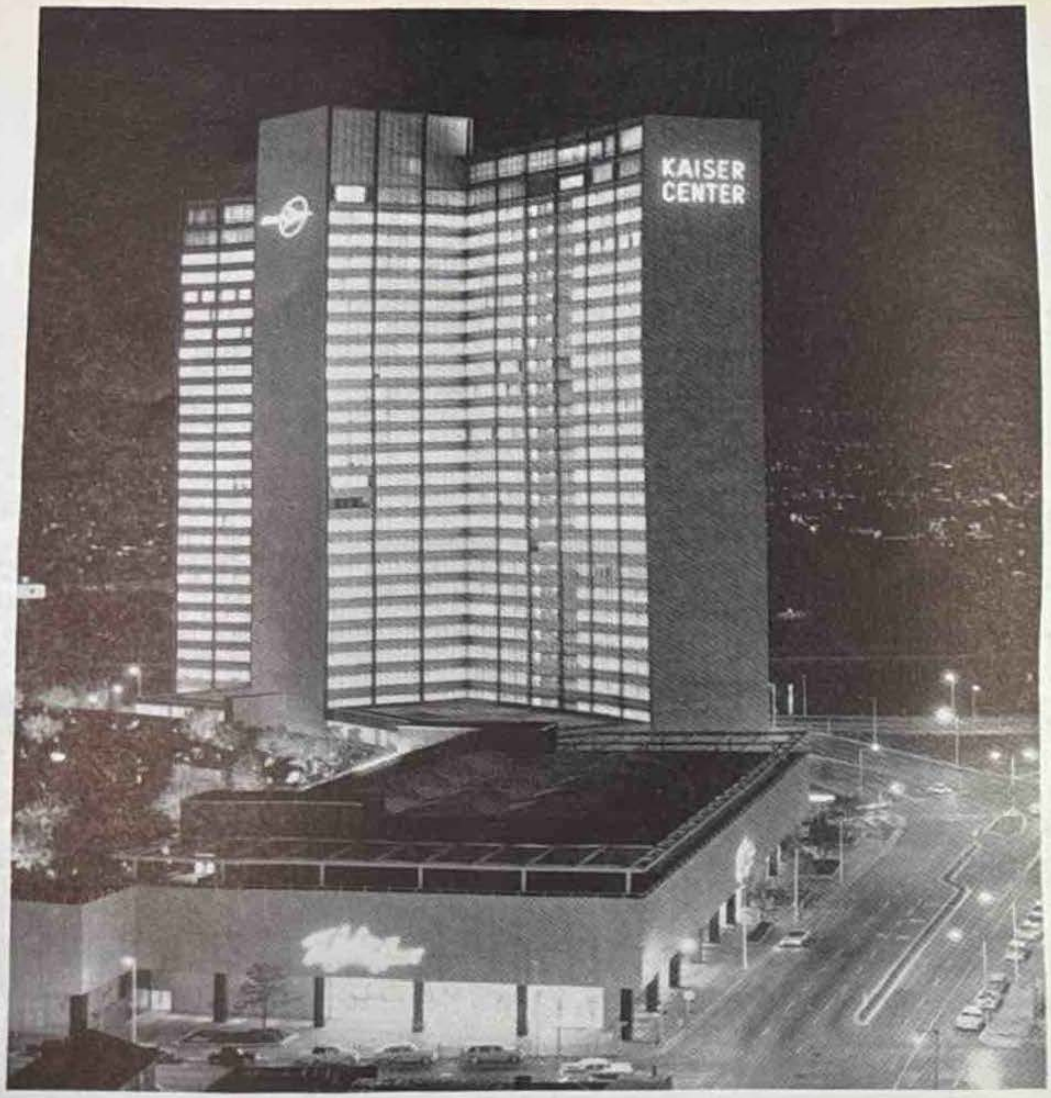
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MURRAY ERICK ASSOCIATES
Structural Engineers

ROBERT E. McKEE, INC.
General Contractor

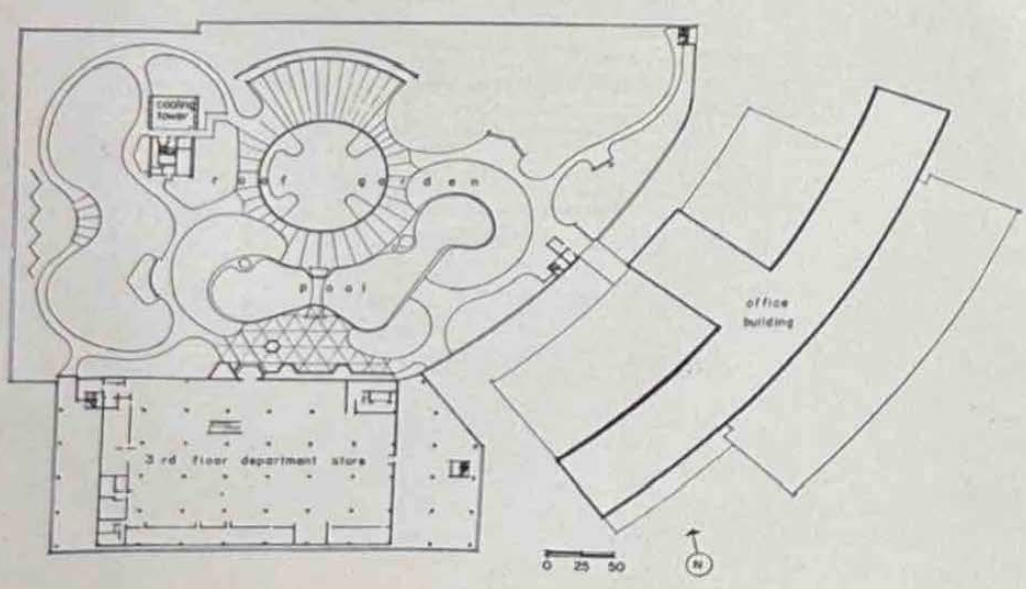
Ansel Adams





Karl Riek

New landmark in Oakland matches the client





Karl Riek

1. OAKLAND: KAISER CENTER

ALUMINUM CURTAIN WALL is formed by combining six frames in bay, with 14 bays requirde for each floor along front. Because of curvature of building, aluminum used in spandrel facing is rolled in arc. Precast concrete panels imbedded with domolite are used on shear end walls of a 28-story structure.

IF EVER a building reflected its client's personality, the Kaiser Center does, from its gold aluminum-clad sheath rising 28 stories high, down through a myriad of statistics like largest office building west of Chicago, to the eminently practical automatic conveyor mail distribution system.

While the primary purpose of this building was to gather all the activities of the various Kaiser companies, 60 in all, under a single roof and allow for expansion needs, the client also wanted "an outstanding piece of architecture" and a showcase for his products. Commenting on the design problem, the architects explain: "With a building shaped in a graceful curve, we have tried to symbolize the strength, growth and scope of Kaiser aesthetically.

"An office building poses a problem peculiar to no other building type. There is no other structure which offers so indefinable a program—constantly changing in layout and function, not only during planning and construction but after the building is occupied.

"To prolong the useful life of the building, our first consideration was to provide flexible space," the architects continue. "Now populated by some 2,500 persons, it can be adapted to take care of 4,000. Flexibility includes more than just movable partitions. It means the framing of space which can be adapted to virtually any use as the need develops. This includes the radiant aluminum ceiling pan air conditioning system, the recessed fluorescent lighting system, location of elevators, a portion of the vertical mechanical shaft and exit stairs in a wing outside the main bulk of the office space and the combination of the remaining mechanical services and restroom facilities into two vertical



shafts at the quarter points of the floors."

While this is a modular building, the usual rectangular module was impractical because of the arc shape. Instead, modular lines were developed as radii of the curve at approximately 5-ft. centers.

The complete building complex, which includes a department store and a parking structure, totals 1,700,000 sq. ft., sited on seven acres overlooking Lake Merritt in downtown Oakland. The office building itself totals 980,000 sq. ft. Each floor is designed to meet the requirements of the companies it houses. Private offices are along window walls, with secretarial and clerical space adjacent in the gently curving corridors. One of four basic colors —blue, green, gold and beige—is used on each floor in various shades on ceilings and walls. Aluminum is used extensively: for doors, base, ceiling and wall trim and in many cases for custom-designed desks and other furniture. Lighting is by continuous strip flourescent fixtures recessed in aluminum ceilings each 5 ft. to provide even illumination.

At the main entrance a two-story open wall connects ground and second floor lobbies. Terrazzo floors, long extruded aluminum fins suspended from the luminous ceiling, off-white dolomite-decorated columns and walls create an impressive first look.

On the second floor are the auditorium, cafeteria, central personnel office, medical department for employees and service type shops. The cafeteria-dining room overlooks Lake Merritt through floor-to-ceiling glass. It can accommodate 750 persons or be used as a 1,200-seat banquet room. Walls have the precast polished dolomite stone panels. Dark and light gold ceiling is lowered in certain areas to form interesting geometric designs. There is also an executive dining room seating 150 on the 28th floor.

The auditorium seats 400, has a movie projection booth, facilities for closed circuit telecasts, dressing rooms and a large, glass-enclosed foyer fronting on Lake Merritt. Ceiling in the auditorium is bright red. Side walls are white fins composed of baffles which conceal fluorescent tubes for side lighting. Highlighting the foyer are matched wood and the precast stone paneling, an interior planting area and decorative aluminum chandeliers.

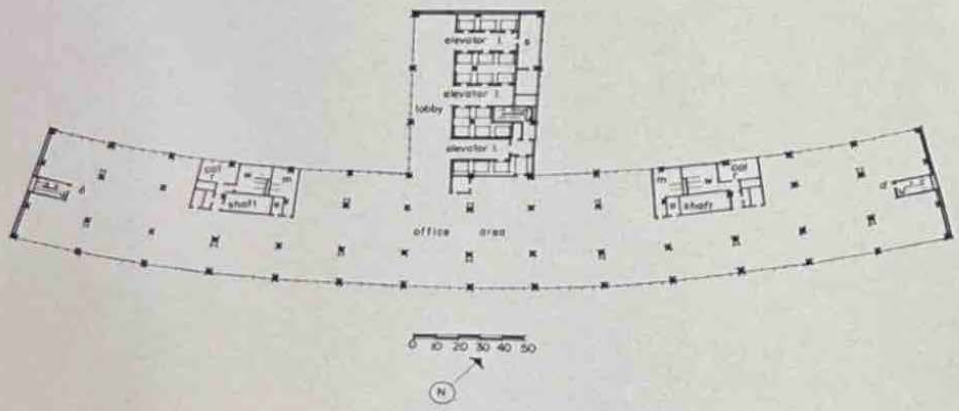
Rising 390 ft. above street level, the steel framed building floats on a 5-ft. thick concrete slab foundation. Then come three full basements housing mechanical equipment, workshops and storage areas. Concrete slabs for each of the basement levels are supported by reinforced concrete beams. Between them are telescopic lightweight steel beams used to support the plywood sheets upon which concrete was poured to form the floor slabs. Heaviest piece of steel in the structure is a first-tier vertical column located almost exactly in the center of the building, weighing 19 tons.

Three central cores rise through the building providing shafts for air ducts, the boiler stack and other utilities. Radiant ceiling air conditioning system provides year-around control. It consists of perforated squares of aluminum, behind which is assembled the system of pipes carrying hot or cold water. Interior air is circulated through a system of aluminum ducts, also located in the ceiling. A 4-in. rockwool and aluminum foil blanket resting on top of the grids provides thermal, fireproof and sound insulation.

Windows, 5,000 all together, are gray tinted heat- and glare-resistant glass. Tracks are recessed in column covers for guiding a spider staging rig that travels up and down face of building carrying window washers.

The 17 elevators installed in banks serving separate areas have aluminum cabs in six different colors.

Along the entire 20th Street frontage is the White House, a complete three-story department store. On top of the five-level parking structure is a three-acre garden which includes a decorative pool in the shape of Lake Merritt. Other landscaping includes parklike plantings surrounding the office building. Landscape architects: Osmundson & Staley.



TYPICAL FLOOR PLAN



MAIN ENTRANCE on Lakeside Drive leads to two-story lobby with terrazzo floors, luminous ceiling, off-white dolomite-decorated columns and circular planting area and pool.

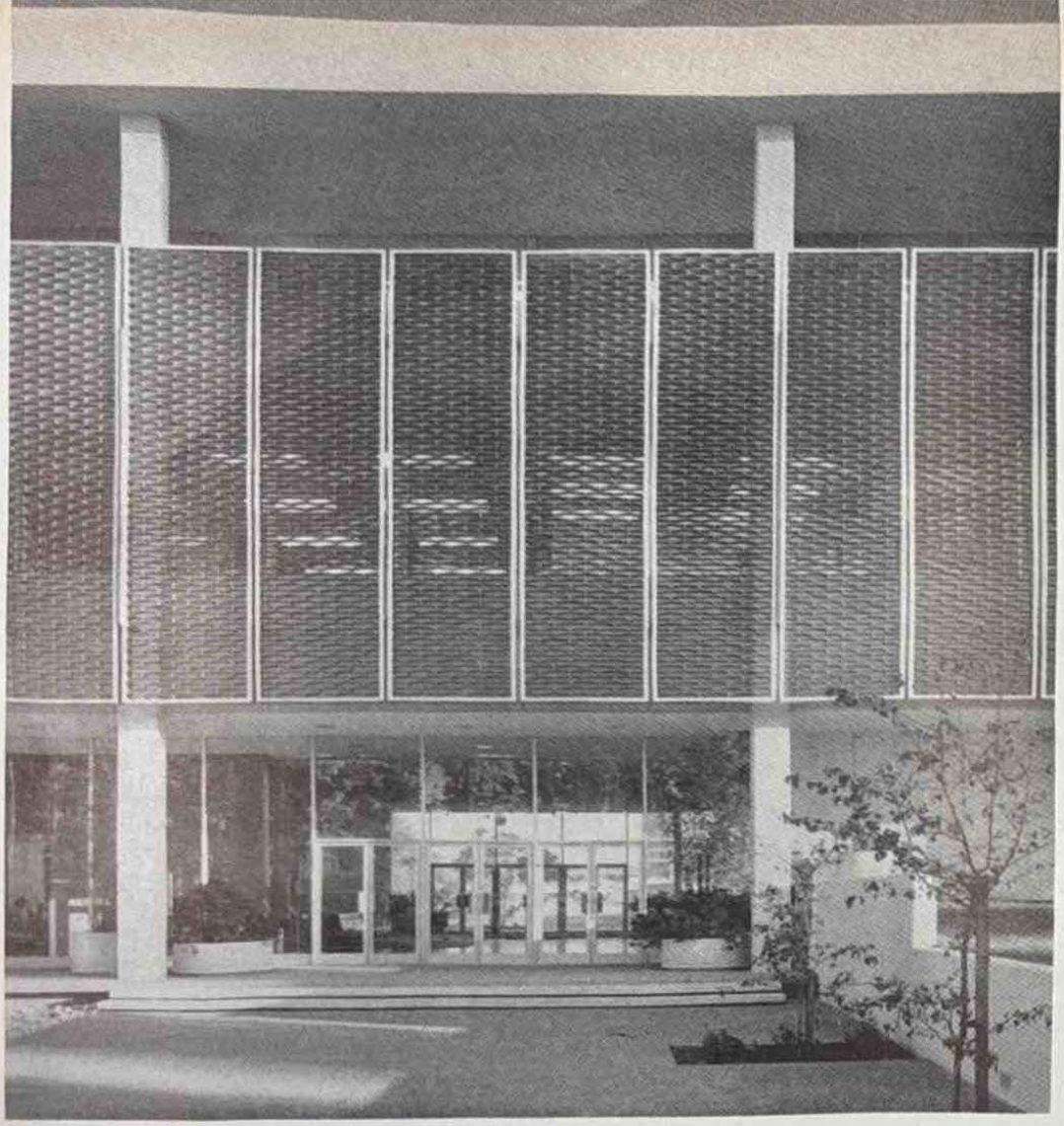


Morley Baer (above and below)

WAITING AREA just off elevator lobby on one of upper floors. Windows look out over Oakland and across bay to San Francisco.



ROWS OF DESKS stretch along gently curving arc of one wing of building. Light fixtures are recessed between aluminum ceiling panels, which also are part of heating and air conditioning system. Private offices on either side of corridor can be rearranged by shifting movable partitions.



Institutional package wrapped in gold



2. California Teachers Association
State Headquarters Building
Burlingame, California

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WELTON BECKET & ASSOCIATES
Architects

ROBINSON & GIDDINGS
Structural Engineers

SWINERTON & WALBERG
General Contractors

LARGE OPEN AREAS with plantings, generous setbacks and the gold aluminum sunscreen banding the second floor soften the institutional aspects of this building which houses the California Teachers Association and six affiliated organizations near the San Francisco International Airport.

In making the honeycomb patterned screen the dominant design feature, the architects played down the rest of the structure in order to achieve sharp contrast of the gold against white brick, concrete and clay. The screen is constructed of 5-ft. wide continuous panels 8 in. deep and is projected by outriggers 3 ft. from the building to eliminate glare from windows on the second floor. First and third floors are set back, protecting those windows from direct sun rays.

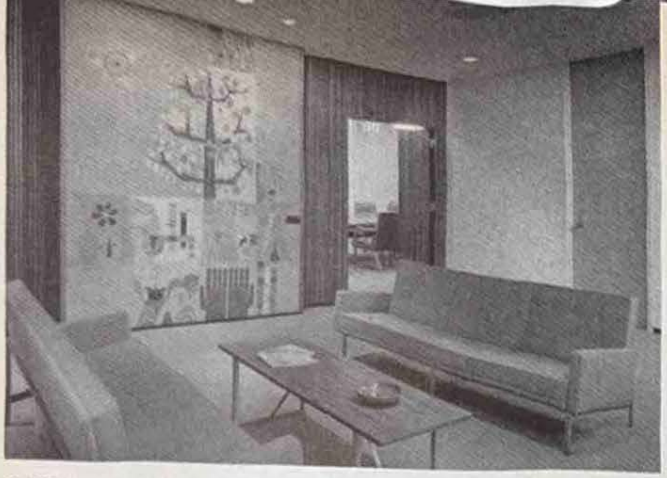
Main three-story building is set on a platform, compensating for a sloping site and providing walkways of exposed aggregate finish around its perimeter. Walkway is covered by the overhanging second floor. A gallery covered by the roof encircles the third floor. Exposed concrete structural columns extend from the roof to the platform in line with the second floor.

Three major functions of the building dictated both the design and the size of the floors. First floor contains the public contact areas, including large rooms for teacher interviewing and placement; top floor includes executive suites, related offices and a library. These two floors are equal in size. The larger second floor houses offices of the various teaching associations. All offices are based on the modular principle with movable partitions for maximum flexibility.

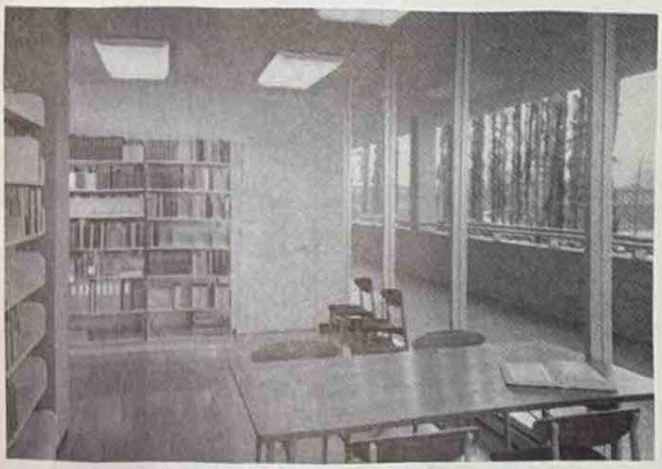
Exterior of the first floor is brick and glass, while second and third floors are plate glass with concrete. The one-story conference wing is faced with Arkansas clay. This unit can serve as an

Gerald Ratto photos





WOVEN TAPESTRY MURAL in center of administrative area offers modern interpretation of tree of knowledge, flanked by teak board and batten wall.



LIBRARY AND READING ROOM on third floor overlooks protected gallery.

OUTLINE SPECIFICATIONS

Structure: foundation, frame and floors: concrete.

Exterior Finish: painted concrete; brick veneer; Arkansas white clay; gold anodized aluminum sunscreen.

Roof Surfacing: composition—Pioneer-Flintkote.

Windows: aluminum sash with ¼-in. plate glass; aluminum storefronts—Metalco of Southern California.

Doors: entrance: aluminum — Metalco of Southern California; interior: wood; hollow metal.

Floor Surfacing: vinyl asbestos tile—Armstrong Cork Co.

Interior Finish: painted plaster; natural teak; natural oak.

Ceilings: acoustical tile—United States Gypsum Co.; luminous plastic—Insulite Division.

Lighting Fixtures: Sunbeam Lighting Co.

Heating System: boiler-Orr & Sembower, Inc.

Plumbing Fixtures: American Standard.

Total Area: 76,652 sq. ft.

Total Cost: $1,000,000.

Date of Completion: October 1959.

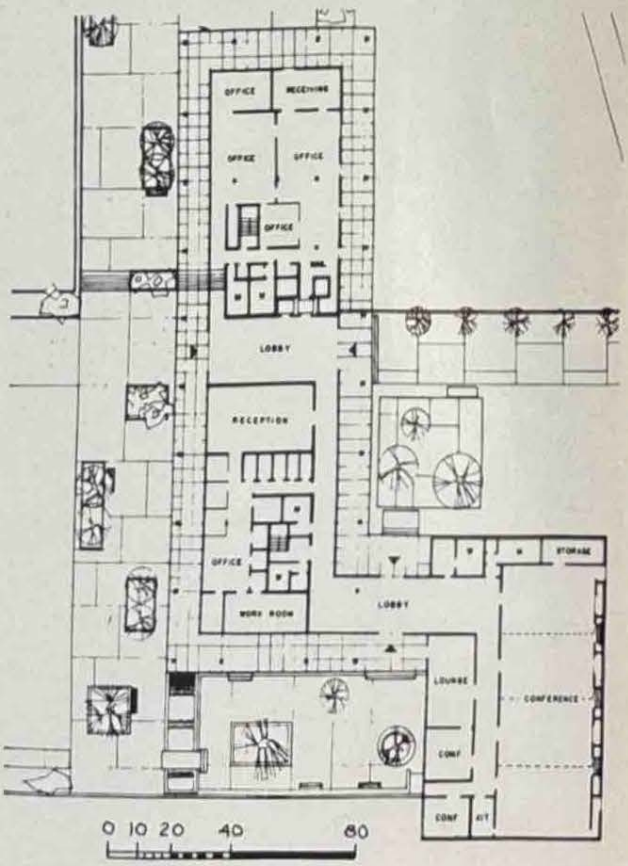
auditorium seating up to 550 or be divided into four conference rooms. Movable partitions walls are motor driven and fold back into storage areas concealed by walnut paneling. Conference wing also includes several small conference rooms and employee lounge with kitchen. Connecting it to the main building is a glass enclosed corridor which can be used in conjunction with the wing for receptions.

Both structures open onto a patio shielded by an open concrete block fence. Patio contains a reflecting pool in green mosaic tile with three fountains and a stone bridge and plantings.

Exterior colors of the sunscreen and landscaping have been carried inside by employing earth color accents in shades of gold, burnt orange and bronze-green against warm whites. Cool colors are employed in the conference room as a change of pace.

Teak and oak woods have been used extensively for interior finish. Among the more strictly functional items is a vertical conveyor, believed to be the first of its type installed in the West, which carries mail between floors. It is regulated by electronic relays and a memory system which automatically deposits packages at the proper floors.

The organization's publication and duplicating machines are located in the basement to eliminate noise on the upper levels. Mechanical engineers: Dudley Deane & Associates; landscape architects: Royston, Hanamoto & Mayes.



3. Hart Plumbing and Heating, Inc.
Office and Shop Building
Seattle, Washington

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WELTON BECKET & ASSOCIATES
Architects-Engineers

LIVERS BROTHERS
General Contractors

Fine detailing enhances small structure

DESIGN INTEREST for this small office and shop has been created by offsetting the square second story so that one side cantilevers 4 ft. over the rectangular main floor and recesses the same distance on the opposite side. To add emphasis and balance, a cedar louvered screen is wrapped around the overhanging corner on the front of the building, enclosing a rooftop planter and deck.

Painted pumice block on the first story contrasts with vertical cedar siding on the second, which also serves to relate the building to the Northwest. Approach to the office is over a wide brick walkway sheltered on one side by a plexiglass and plywood paneled screen and through an aluminum framed glass storefront.

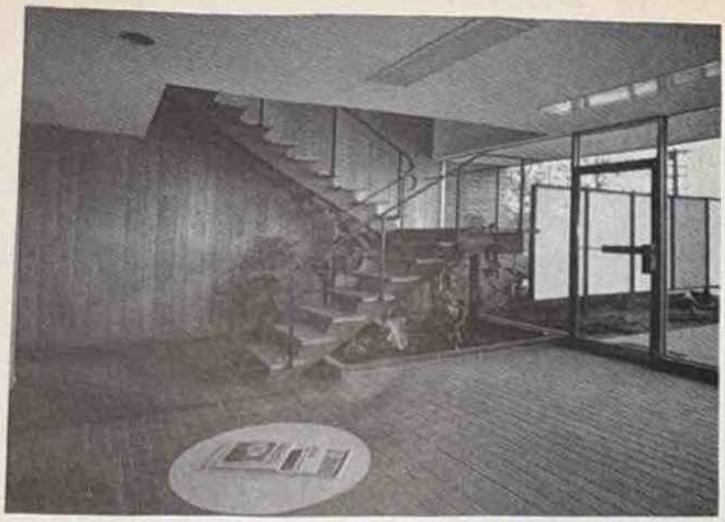
Reception room opens to a two-story high ceiling area featuring a floating staircase that rises over a planter and cantilevered out from a paneled wall in wormy chestnut. First floor interior includes estimating rooms with an area for plan racks, clerical room, small conference room, supervisor's office and large, open shop area.

Executive offices are located on the second floor. Each opens out onto a covered roof deck, provided by the second floor recess.

The 5,200-sq. ft. office and shop stands near the

Hugh Stratford photos

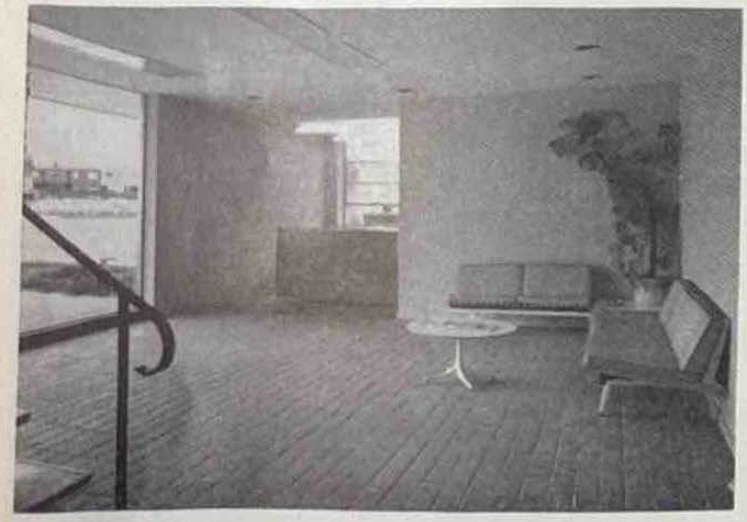


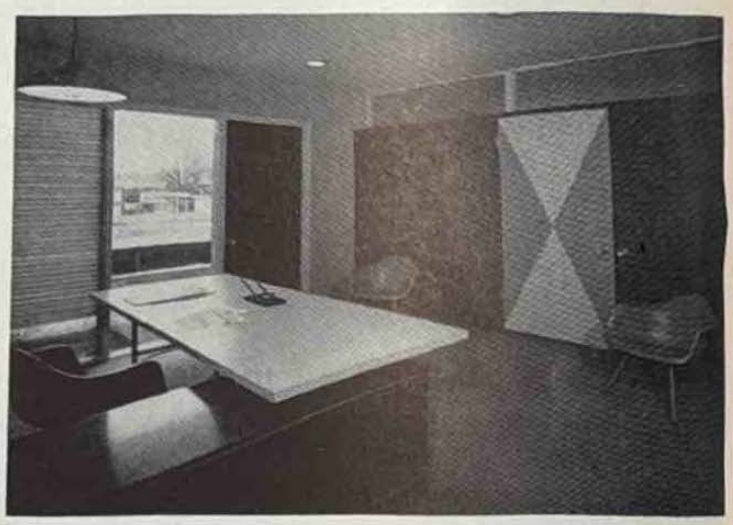


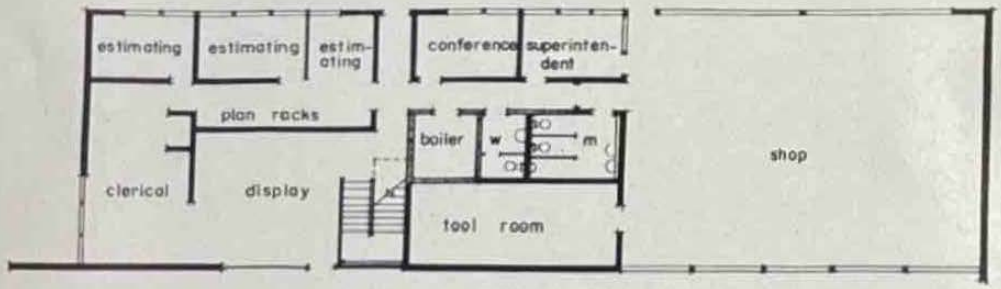
3. SEATTLE: HART OFFICES AND SHOP

front of the site with a long, 6,600-sq. ft. L-shaped one-story shop and warehouse structure behind it. This placement provides an asphalt paved vehicle yard which can be completely controlled by two double gates. The second building is of concrete block construction with the warehouse portion raised and fronted by a loading dock. It is laid out on a 16-ft. wide module so that each partitioned area is uniform. Construction cost of the entire project was $100,000.

FOYER has natural brick floor and wormy chestnut paneling, repeated in executive offices (below). Diamond pattern sets off storage wall. Colorful furnishings supply accents.







MAIN FLOOR OF OFFICE AND SHOP BUILDING

OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: wood and steel.

Exterior Finish: pumice block; vertical cedar siding; stucco.

Roof Surfacin: built-up with gravel topping.

Windows: aluminum sash—Built Rite Cabinet Shop; aluminum storefront—Kawneer Co.

Doors: aluminum; metal fire; wood.

Floor Surfacing: asphalt and vinyl tile; carpeting.

Interior Finish: painted plasterboard; wormy chestnut paneling.

Ceilings: painted plasterboard.

Heating System: hot water boiler—American Radiator & Standard Sanitary Corp. (with several different systems such as floor radiant, baseboard, conventional convector, etc., for demonstation purposes).

Lighting Fixtures: Litecraft Mfg. Corp., Gotham.

Plumbing: Briggs Mfg. Co.

Total Area: 5,200 sq. ft. (offices and shop); 6,600 sq. ft. (warehouse).

Total Cost: about $100,000 (entire project).

Date of Completion: February 1956.

Medical Office Building
La Jolla, California

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FREDERICK LIEBHARDT
Designer

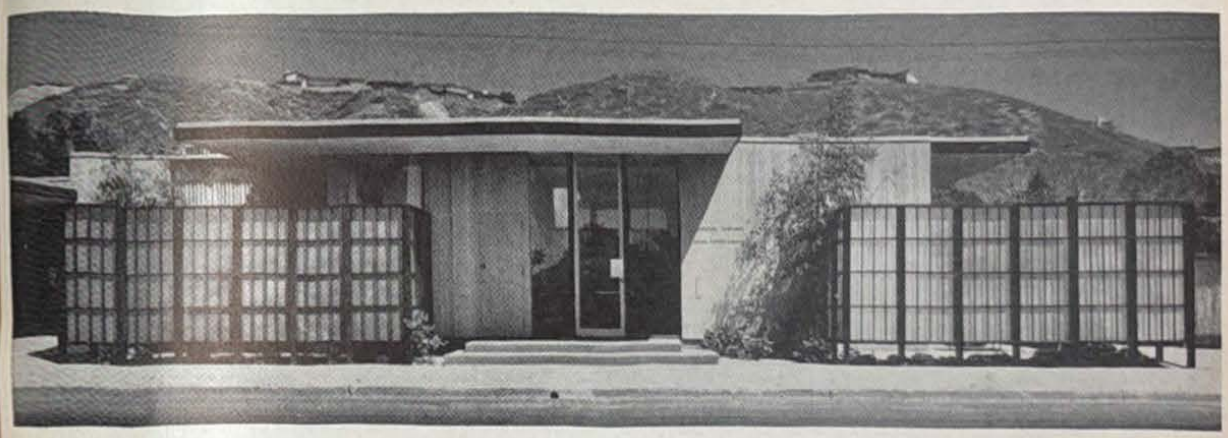
SCHENCK BUILDING CO.
General Contractor

Douglas Simmonds photos



ENTRY to designer's temporary office above and below.

Courts add dimension to small structure



DRAFTING ROOM as seen from court.



RESTRICTED BUDGET and restricted site in a primarily residential area have been turned into assets for this small professional building by the judicious use of garden courts. The problem was to create a pleasant and efficient environment to house two separate medical practices in ophthalmology and a retail optician, with provision for future expansion of one practice.

The solution was to relate public areas and consultation offices to intimate green courts. Offices were arranged to permit cooperation between tenants, while retaining identity of individual practices. Expansion area is at present occupied by the designer.

Method of construction and selection of materials represented a compromise between the dictates of aesthetics and initial ($14.50 per square foot) and maintenance costs. The air conditioned building incorporates redwood t&g siding, gravel roof, concrete slab floor with asphalt tile and carpeting, drywall and acoustical plaster ceilings. Landscape architects were Wimmer & Yamada.

In an address before the student AIA chapter at California State Polytechnic College last month, a Southern California builder dealt candidly and openly with the critical and likewise controversial question of single vs. joint responsibility. His opinions are not necessarily those of Pacific Architect & Builder.



SINGLE RESPONSIBILITY:
key to the architect's future

by PHIL W. ROULAC

The first thing I learned about modern building is its complexity. It's so complex, in fact, that in order to be able to build, I had to go back to school, learn more about economics and take a degree in business administration.

Next, being an inquisitive sort of a fellow who is discontented about many things in present-day living, I discovered that being a businessman wasn't enough. I had to learn something about design and architecture too.

Finally, I discovered that wasn't enough either. Knowing how buildings were designed and built now or in the past didn't cure my discontent. In fact, it served to aggravate it.

This brought me face to face with the necessity for some real analysis of what's wrong with the building system of which you and I are a part today.

I include you since you have already set your feet in the direction of design and architecture and the handicaps of the system will all too soon be yours.

There is, I discovered, a great deal wrong with us in the building industry. It wasn't a discovery I had to make on my own either. Others, I found, were as concerned as I was.

Among those concerned were journals like the Architectural Forum, and eminent architects like the dean emeritus of the Harvard School of Architecture, Walter Gropius.

The source of their concern seems to be that clients are losing and to a great extent have already lost faith in the architect and the builder as specialists who can furnish them with a total solution to their building problem.

The time-honored relationship of trust and confidence between owner and architect and owner and builder is disappearing and in many instances has disappeared althogether. Often ruinous competitive bidding has replaced, and is continuing to replace, the traditional and far more professional method of negotiation.

Owners, we have found, have so little confidence in your ability as architects to deliver a satisfactory negotiated building that they make you compete one against the other until they have almost made the sharp pencil another symbol of your profession.

They understand but little that it takes time to do a proper job of planning and design and that it hardly behooves them to choose an architect by the method of having him participate in competitive bidding. You might as well ask Leopold Stokowski, Pierre Monteux, Sir Thomas Beacham and Leonard Bernstein to bid for the privilege of giving the Sunday park concert. (The winner would probably treat you to a "Sonata in Contempt").

Owners can't even be expected to give a thought to the understandable reluctance of the architect, for the fee he obtains as the result of competitive building, to supervise the project continually.

Little do they know the results of this method: a contractor on the job building the structure; an architect, who is not receiving adequate compensation for his time, sitting in his office, wary of putting in more time to work on problems and changes that could have been eliminated or minimized if he had been given time enough for proper planning and design in the first place!

How can you begin to tell owners that the end result is disorganization and confusion at the top level, slowing the tempo of construction; that the pace and rhythm of efficient, planned construction is lost, if there is no effective liaison between the architect, contractor and owner.

How can you begin to tell him that in the end, it is he, the owner, who pays for this confusion.

You would almost have to send an owner to school to teach him that competitive bidding might have some advantage, but that in the main, it's a wasteful advantage; that when contractors submit bids, no two are alike. It would almost take a special course to convince the owner that there are exclusions, additions, allowances, all-or-none clauses or equal clauses which by their very nature leave the owner and architect to compare, figuratively, apples with oranges.

It would take a super-professor to convince the owner that despite all this, ruinous competitive bidding has replaced and is continuing to replace the traditional and far more professional method of negotition. But even this special course may not be able to convince the owner that nothing is ever built exactly according to plans and specifications; that plans and specifications are merely a guide and set a standard.

It may take a brick wall to fall on him—most likely the brick wall of a building that goes way over the budget and is weeks or months late getting done. It's likely that only such a brick wall accident will ever convince the owner that it's in his best interests to have a responsible builder interpret the plans—and not the low bidder, who frequently is able to get the contract because of what he has omitted from the plans.

There is another popular fallacy under which owners often labor. They think an iron-clad contract is the answer to every building problem. But you and I know that it isn't. In fact, there is no such thing as an iron-clad contract.

I have a friend who is an eminent attorney specializing in the construction industry. He made me shudder

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Phil W. Roulac founded Roulac Construction Co. in 1948, becoming its president when it was incorporated in 1956. His firm has built many houses in the Pasadena-San Marino area and currently is engaged in the construction of commercial buildings throughout the West. A 1939 graduate of the University of Southern California, he later attended the Harvard School of Business Administration.

a few years back when he told me there isn't a contract written in the construction industry that he couldn't break! If this is true, and I have the highest personal regard for the ability and integrity of this attorney, there may be a reason why the owner mistrusts the builder just as he lacks confidence in the architect.

Does mistrust of the builder exist? If it does not, if I'm wrong in my premise, and I wish I were, why is it that owners place us under surety bonds to insure themselves against failure on our part to perform in accordance with plans and specifications?

I'm afraid that surety bonds, a symbol of mistrust, have become as much a part of our building profession as the sharp pencil has become of yours as architects! The owners, of course, assume that if you have a set of plans and specifications and you have a contractor and that contractor posts a bond from a surety company, that such a combination will answer the problem and he will get what he bargained for.

That, my friends, is far from the truth: There is instance after instance where bonding companies, for one reason or another, deny the claim because of some difference they have found in their favor as against the owner. Or, after a lengthy investigation consuming days, weeks and sometimes months of time, the bonding company finally decides to actually complete the job according to plans and specifications, reserving whatever legal rights it has against the owner.

* * *

What has happened to the personal relationship, that bond of trust and implicit reliance between owner and architect, owner and builder and builder and architect?

A fairly recent survey of building construction in California showed that upward of 80% of all construction during the year was designed and directed by men with no architectural license. This has a striking if coincidental relationship to another figure I'll soon give you on construction within-the-budget.

More and more buildings all over the country are going to the so-called package builders, whom Dean Gropius, rightly or wrongly, identifies with the old master builders. This is especially true in heavy industry. It's becoming more and more prevalent in general industrial construction; in commercial buildings, especially in banks and savings and loan structures; in home construction; and to an increasing extent, in schools and public buildings.

Architectural Forum recently devoted a leading article to "Those Worrisome Package Builders." To what does it attribute the rise of this worrisome class? Interesting enough, to cleavage between design and construction. And Dean Gropius shares the same view.

"When a client is in a building mood," says Gropius, "he wants to buy a complete package for a fixed price and at a definite time of delivery. "He is not at all interested in the question of the division of labor between the architect, engineer or contractor . . ."

Once again, you'll note the emphasis on division or cleavage. If this cleavage or division is indeed at the core of our mutual problem, where did it begin? Was it always a part of the building game?

My ventures into architectural history taught me some interesting things. The great buildings of antiquity, I have found, were built not by divisive methods, but under a strict system of single responsibility. Let me review some of them briefly:

"More and more buildings all over the country are going to the so-called package builders, whom Dean Gropius, rightly or wrongly, identifies with the old master builders. This is especially true in heavy industry. It's becoming more and more prevalent in general industrial construction; in commercial buildings, especially in banks and savings and loan structures; in home construction; and to an increasing extent in schools and public buildings."

The Great Wall of China, or if you prefer, the Wall of Ten Thousand Li, was erected by an army general, Moung Tien.

The Greek Parthenon, which still stands as a reminder of the Golden Age of Greek architecture, was erected under supervision of Pheidias, a sculptor.

The first step pyramid of Egypt was the work of Imhotep, a priest.

The great highway systems of the ancient Incas, stretching for 10,000 miles through valley, swamp and jungle, and up to 17,000-foot plateaus, were designed and built in turn by men who bore the combined title of architect-engineer-builder. There was no name in the Inca laguage for a man who was an architect alone.

Going to more recent examples, when Pope Sixtus V wanted a great 300-ton obelisk moved from the Circus of Nero to the Plaza of St. Peter, he entrusted the job to one man: 42-year-old Domincus Fontana. There was competition, but on the overall plan, not the price.

Westminster Abbey was built by a master mason, Henry of Westminster.

Westminster Hall was designed and built by a master carpenter, Hugh Herland.

St. Paul's Cathedral in London was designed and executed by one of the greatest master builders of all time, creator of 30 cathedrals, Sir Christopher Wren, the architect.

We could go on and on with the list until we reach America in the 19th century. What happened then?

"The dividing line between design and construction," says Architectural Forum, "is relatively new. In Continental Europe, where the tradition of the master builder is still entrenched, some architects have always done building, and even in the U.S., early 19th-century designers showed no compunction about getting involved with brick and mortar (in Latin America they still show none).

"Not until 1857 when the AIA was founded did U.S. architects start getting up a separation between the two functions. And," the Forum concludes, "after that it took another 50 years or so—during which buildings became increasingly complex—for the division to become wholly accepted."

Our buildings, indeed, became increasingly complex!

Today, because of the refinements of specialization, civil engineeers, structural engineers, industrial engineers, mechanical engineers, industrial and interior designers, color consultants, lighting consultants, architects, master planners, economic analysts, landscape architects, contractors, subcontractors and sub-subcontractors.

The only ones who can afford this expensive luxury of intense specialization and distended overall link planning, are public governmental agencies, who, through almost incredible refinements, have caused public structures to be built for costs that would astound private enterprise.

Rising costs of construction, unfortunately, have not been restricted to public institutions alone. Private enterprise is having more than its share of building headaches and at a time when every excess in spending is adding further momentum to the forces of inflation that threaten our economy.

A prominent architect made the startling estimate in private recently that more than 80% of all buildings erected today, whether by competitive bidding or negotiation, finish over the budget by more than the allowable 5%—and by as much as 30%.

I promised you earlier I would furnish you with an interesting coinci-

dental figure relating to the fact that 80% of California construction was designed and supervised by nonprofessionals. I wouldn't wish to ascribe any significance to it, but it is interesting to note the similarity between this and the estimate of 80% over-the-budget construction.

There is not the slightest doubt in my mind that over-the-budget construction puts water in our real estate paper and accelerates inflation. A factory that can function effectively if built for $5 million is uneconomical by $1 million if it costs $6 million to build. The extra million under our free enterprise system should have been spent to perform some other useful function in our economy.

Certainly most of the over-the-budget construction today is created by the owner himself, by his lack of education as to what intelligent planning consists of. Owner afterthoughts, in construction, can often mean the difference between a completed and an uncompleted building.

The reason is that a construction loan obtained from a financial institution is generally predicated on certain plans and specifications and has as its collateral the unimproved land and the improvements depicted in the plans and specifications. Any added benefits placed in the structure do not result in increased loan funds, but rather in further depletion of the owner's capital.

This is often extremely harmful because the capital may be required for the financing of the owner's everyday business activities and should not be sacrificed by improper planning that makes expensive afterthoughts necessary.

The rising cost of building construction has had an unfortunate, and I should say inevitable, reaction for both the architect and the contractor.

When the owner found himself no longer able to turn to the architect for single construction responsibility, and since he didn't regard the building contractor as an adequate substitute for a master builder, he was left with only one alternative.

He turned to someone who represented himself to be a master builder or who appeared to be one and in many instances really was one—the package builder — to the detriment of both the architect and the builder.

As Dean Gropius says: "Since he (the owner) senses subconsciously that it is rather artificial to have design and building so wide apart, he usually concludes that the architect is the unknown X in his calculations, in terms of money as well as time."

As our industrial civilization increased in tempo to the orbital speed of today, time also entered the construction picture. "It's true," says Forum, "that for many clients time is the No. 1 reason for getting the job started immediately, without having to wait for detailed drawings and putting the job to bid."

The bidding alone, concedes Forum, can consume more than a month. It might well have added, such bidding can be a useless waste if 60 to 80% of all such "lowest bid" contracts wind up 'way over the top by 10 to 30% by the time the building is built.

Even assuming that competitive bids produce the best price, what is their value when compared with the loss of a month of time in a situation where time can mean money in sales, production or other considerations?

Let me cite one example:

In the savings and loan field, the most important times of the year are the so-called reinvestment periods when banks pay interest and depositors find it expedient to reinvest their principal in savings and loan associations because they pay a higher interest rate.

Sterling Savings & Loan Association of La Habra, Calif., a $17½-million institution operating in a region once made famous by Lucky Baldwin, on January 1 of this year acquired the old La Habra Valley Savings & Loan Association. After assimilating the new acquisition, the directors decided to have the old La Habra building remodeled and a new home office built adjacent to it in time for the July 1 to 10 reinvestment period.

Roulac Construction Co. was called in little more than four months before the deadline and assigned the responsibility — single responsibility — for getting the opening key in the front dor lock by July 1. Four months from concept to open house!

Consider that bidding alone could take a month and that design and blueprints could consume 30 days more, without even counting the time headaches of construction, and you have some idea of the problems which faced us. Fortunately, the board was willing to substitute negotiation for competitive bidding. Saving a whole month there, we accepted the challenge.

A young MIT architect whom we called in had a complete set of plans ready in two weeks. They were approved by the board in record time and we went to work. We put our engineering and construction planning specialists in high gear. Material orders literally sailed out, construction teams were organized and coor-

"When the owner found himself no longer able to turn to the architect for single construction responsibility and since he didn't regard the building contractor as an adequate substitute for a master builder, he was left with only one alternative."

dinated by our veteran superintendents. Every consultant associated with us went to work without a lost motion—or a lost minute.

On the morning of July 1, Sterling's new lobby was jammed with mothers with children on the arm or at the side—candy was free for all the kids—with men in work clothes, with clerks, with businessmen in white collars; in short, customers from every walk of life.

The result: Sterling gained $350,000 in hard cash new assets within the July 1 to 10 period, $750,000 throughout the month of July. Now this is not a big amount in these days of billion-dollar space budgets, but it's a significant one.

What is significant is that the gain might have been lost to this institution forever if the month had been dissipated in either excessive planning or in bidding. It's also significant that we did not exceed the total Sterling budget of $170,000! No wonder that Mr. Truman Johnson, Sterling's president, was moved to say that money indeed has a price, for you can buy it with time.

Experience like Sterling's, you'll find, is the real reason behind the ascendancy of the so-called package or master builders of today. They are the builders who offer the client a complete planning, financing and construction service from scientific site selection and development to creative architectural design and construction progress analysis.

There is also a reason why heavy industry is turning to such engineering-construction giants as C. F. Braun & Co., Kaiser Engineers, Bechtel Corp., Ralph M. Parsons, Stone & Webster, Brown & Root, to mention only a few.

There is a reason for the growth in size and prestige of such "one-responsibility" builders as Austin & Co., F. G. Ferguson Co. and Wigton-Abbott. Austin alone has been doing a gross annual business of $150 million for the past three years.

This trend is not restricted to building design or construction. It also extends to planning. For instance, some time ago we were called in by General Petroleum Corp. to take on a research assignment in connection with the design of a new Mobil service station.

We made a thorough study of the service station market in the general area before recommending a site. We also determined the optimum industrial design with the aid of every scientific tool available. We even made comparative color studies, and, it goes without saying, we studied renderings of competitive architects.

After tentative selections were made, we pilot-tested the results in a station across from Disneyland at Harbor and Katella boulevards. The architectural concept we chose was based on a group of canopies suspended from masts and offering shelter from the elements. The merchandising idea behind the design was to take advantage of the captive audience which patronizes filling stations. We redesigned the pumps so that around them the station could feature accessory displays. Foot traffic was carefully directed.

Working with two Claremont artists, Millard Sheets and Albert Stewart, we even came up with a new Mobil Pegasus, the flying horse that long has served as Mobil's trademark.

Was our pilot run a solid success? Well, you might have noticed that General Petroleum has been introducing our new canopies all over the western states.

But don't get us wrong. There are no clear-cut lines on which a master builder operates. An architect with a strong sense of organization and real leadership can function as a master builder with an effectiveness equal to an equally strong builder with a sense of design and a genius for business logistics.

What we are comparing is system with system, not man with man. When systems are compared, the concept of the master builder will show itself superior every time to the divided architect-builder responsibility. The division is artificial and resembles a pincer movement with the owner in the middle and often as the target.

There are too many skills to blend, too many problems of logistics and technology to solve, too many minutes and hours to lose in modern construction to permit waste and indecision that split responsibility breeds.

We must also remember that the modern businessman or industrialist is hard pressed by the competitive facts of life. He doesn't have time for leisurely planning or study; neither has his staff.

The complex nature of present-day construction and design requires a multitude of specialists; a dozen would not be too unusual. If the corporation president could find the outstanding men in each of these fields and hire them, their fees would be at least double the normal 10% architectural budget.

There still would be many areas where these services overlapped, many areas of omission where no service was provided. There would also be many personality clashes and the most effective salesman of the lot would throw the whole project out of balance in favor of his particular field.

I personally have met very few

"What we are comparing is system with system, not man with man. When systems are compared, the concept of the master builder will show itself superior every time to the divided architect-builder responsibility. The division is artificial and resembles a pincer movement with the owner in the middle and often as the target."

businessmen with the training or experience to qualify them for sound design decisions. Yet, in the course of the rapid expansion in Southern California, millions, yes hundreds of millions of dollars, are being committed to construction with little understanding of what has been designed.

Design and construction are not a do-it-yourself field. The do-it-yourself philosophy should be saved for the backyard barbecue and not employed in the construction of a multi-million dollar plant.

Let's listen to what Architectural Forum has to say of the architect's future: "Short of the architect becoming a package dealer, the joint venture is possibly the most direct answer possible to the package deal. It has been used frequently in recent years, despite the danger for the architect of 'losing his identity.'"

Concludes Forum: "In the end, the problem of the package deal seems to rest squarely on the line between design (creation) and building (execution) which was drawn so long ago."

This, I submit, is not a solution. The joint venture would, in effect, tend to give the builder a professional status equal to the architects, for equals in a joint venture usually prefer to deal only with equals. It's human nature.

Is this what the building industry wants, a professional status for the builder, with all that involves, including possibly another college discipline and another kind of degree?

It would be interesting to hear an expression on this from the builders themselves, as well as the architects. Also from college people, already concerned with fragmentation of knowledge. My personal guess is the answer would be a resounding "No!"

From the standpoint of either the architect or the builder, the joint venture is a compromise. In effect, you might call it an unsought victory for the builder, who is usually a businessman first, a designer second. The role with the architect is usually reversed. He is artist first, businessman second —and you and I know that the administrator will nearly always bring the artist to terms.

But, in reality, Forum's conclusion is a recognition for the "one-responsibility" concept of the master builder. For it is possible that neither the architect nor his joint venture friend, the builder, will have the final say on the matter.

As Walter Gropius so aptly put it, the client who wants a building couldn't care less whether the architect, engineer or the contractor bosses the job; he merely wants results. Of this we are certain.

The man who gets the jobs will be the man strong and able enough to assume single responsibility for a structure, from concept to key in the lock.

He will be the man who can assure the customer of these fundamentals:

1. Architectural and structural design in which creative originality is combined with practical good sense and technical know-how.
2. A structural design coordinated with the interior elements so they act as an effective whole.
3. A design with economy built in by working with designers in the planning stage in order to take advantage of effective structure systems, materials and methods, and not by sacrifice of quality or sales effectiveness.
4. Strict budget control so that design and construction fit precisely within budget figure set by the client.
5. Systematic, knowledgeable selection of site, financing alternatives, color and design.
6. Close and faithful vigil over designers, engineers, architects, contractors—everyone connected with the project in order to insure absolute compliance with their obligations.
7. Opportunity for the client to deal with one firm—one firm in whom he can repose full confidence, not in many who can only confuse him.

Underlying the seven foregoing items is something that one might call "spirit" or "heart." That is, a builder or a contractor who truly feels that every structure he constructs actually represents a part of his very life. Whenever you hear a man make the statement, pointing to an edifice, "That building represents one year (or more) of my life," then you have truly found the man who has the spirit and the heart required to put the binder into the brick and mortar for your structure.

Will this—the concept of the master builder in a 20th century framework —bring some improvement in construction? I think and hope so.

Most of us are familiar with the classic story of Sir Christopher Wren and his conversation with stonecutters working on St. Paul's Cathedral. It's worth repeating because it contains a lesson for us all. Sir Christopher, the story goes, was making an inspection round of the cathedral, then in process of construction, and engaged the stonecutters in conversation.

"What," he asked each of them in turn, "are you doing"?

"I'm working for 30 shillings a week," said one.

"I'm cutting stone," said another.

"I," said the third, "am building a great cathedral."

To each of us, architect or builder, each structure we plan, erect or supervise should be our own cathedral, a job worthy of all our effort and all our talent.

This is heart in our profession, to feel our responsibility so keenly that each building becomes for the moment the most important single task of our life. In this way we can regain the confidence of the owner.

And, in doing so, we will once again live in the tradition of the master builders of history. In this spirit, the separation between architect and builder will resolve itself for each of us according to our talent and ability to use it.

In closing, I would like to admonish you to dare to be creative and progessive, as I know you are now and are taught to be by your very able teachers.

Sometimes it takes courage to be different, once you have left the classroom and the chips are down, and sometimes you feel compromise is the only solution.

Each of us must find his remedy for discouragement, and I'd like to share with you mine.

When I feel like throwing in the professional towel of integrity, I take out of my desk a clipping of a story that ran three-quarters of a century ago in a Boston newspaper. On occasion I've even read it to a resisting client. Let me share it with you.

A man about 46 years of age, giving the name of Joshua Coppersmith, has been arrested in New York for attempting to extort funds from ignorant and superstitious people by exhibiting a device which he says will convey the human voice any distance over metallic wires so that he will be heard by the listener at the other end. He calls the instrument a "telephone" which is obviously intended to imitate the word "telegraph" and win the confidence of those who know the success of the latter instrument without understanding the principles on which it is based. Well-informed people know that it is impossible to transmit the human voice over wires as may be done with dots and dashes and signals of the Morse Code and that, were it possible to do so, the thing would be of no practical value. The authorities who apprehended this criminal are to be congratulated and it is hoped that his punishment will be prompt and fitting, that it may serve as an example to other avaricious schemers who enrich themselves at the expense of their fellow creatures.

"Is this what the building industry wants—a professional status for the builder, with all that involves, including possibly another college discipline and another kind of degree?"

Where architects hang their hats

HARMON, PRAY & DETRICH
Seattle, Washington



Art Hupy (below and right)



FOLDED PLATE RECEPTION COUNTER is made of thin plywood painted sheets. Doors are teak, flanked by silver patterned wallpaper.

Forde



FLUORESCENT TROFFERS give 100 footcandles of light at desk level.

A DRAFTING ROOM with some 30 staff members all occupied at their boards can become a distracting place to work, especially if there is any considerable amount of traffic in and out or at-the-board conferences. This problem was one of the primary considerations when the architectural-engineering firm planned new offices in a remodeled downtown building.

A solution was found in two small conference cubicles between the reception area and the drafting room itself, the loftlike atmosphere has been cut off public access and at the same time provide a quiet corner for small discussions. In the drafting room itself, the loft-like atmosphere has been eliminated by sectioning off architectural, mechanical and electrical divisions with low metal frame partitions, colorfully painted plasterboard fillers and attached plywood desk sections for each drafting board. These were designed by the architects, as were the drafting boards at sit-down level and the partially glassed-off areas for supervisory personnel.

The 4,800 sq. ft. of space includes three private offices for the principals of the firm. One doubles as a conference room with the usual large table.

Northwest takes giant step to standardize specs

The cause for better specification writing is being pursued on many building fronts today and a good indication of this is the growth—in size and in stature—of the Construction Specifications Institute. A national organization with 43 chapters, and new ones being added every year, its membership represents a cross section of the construction industry: architects, engineers, contractors, materials men.

Making a major contribution in this field is the Puget Sound Chapter, whose Standard Specification Index was first issued in December 1959. Approved by the Seattle Construction Council and local chapters of the AIA, AGC and Producers' Council, it has won considerable acceptance in Northwest architectural offices.

The index is divided into two parts: 1) Bid, Contract and General and 2) Technical Specifications, General Construction (see its 69 titles below). Mechanical and electrical divisions are being prepared by the Washington Society of Professional Engineers.

In its preface the index makes this explanation: "Ideally, the table of contents of each project would include all of the trade headings listed hereinafter. Those which do not apply to the particular job at hand would be followed by the words 'not included' or 'none.' If however, the job is small and needs only a small number of headings, those which do not apply can simply be omitted. The important thing is to retain the numbering of the headings as shown and NOT to renumber the divisions consecutively. For instance, Earthwork will always be Division 3, Concrete always Division 5, etc.

"It is equally important to put items of the specifications under the trade headings shown. By so doing, subcontractors and specialty dealers will be able to find what they want to bid on without reading through the whole volume. Further, it will enable general contractors to assemble subbids more readily and with less chance of error.

"Should the job have one or more, but not all, of the items listed in the heading, the heading can be revised to suit conditions. For instance, should the building have ceramic tile but not quarry or glass tile, the heading would read simply 'Ceramic Tile,' but the division number would still be 35."

The index committee met regularly over a period of nine months, spending more than 160 man-hours in preparing the document. Its members consisted of six architects, five materials men and a general contractor's representative. Chairman was architect Kenneth C. Helms, 1960 president of the Puget Sound Chapter.

DIVISION NUMBERS AND TITLES

1. Demolition
2. Clearing & Grubbing
3. Earthwork
4. Piling & Special Foundations
5. Concrete
6. Asphalt Paving
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9. Ceramic Veneer
10. Structural Steel
11. Steel Joists
12. Cellular Steel Subfloors
13. Steel Roof Decks
14. Special Structural Roof Systems
15. Industral Roofing & Siding
16. Hollow Metalwork
17. Special Doors
18. Entrances & Store Fronts
19. Curtain Walls & Metal Windows
20. Miscellaneous Steel & Iron
21. Architectural Metalwork
22. Sheet Metalwork—General
23. Built-up Roofing, Roof Insulation & Waterproofing
24. Dampproofing
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30. Gypsum Wallboard Finishes
31. Lathing & Plastering
32. Glass & Plastic Glazing
33. Calking
34. Weatherstripping
35. Ceramic, Glass & Quarry Tile
36. Interior Marble
37. Interior Slate
38. Portland Cement Terrazzo
39. Composition Terrazzo
40. Oxychloride Cement
41. Finish Wood Floors
42. Floor Covering
43. Wall Covering
44. Acoustical Treatment
45. Thermal Insulation
46. Toilet & Shower Compartments
47. Toilet & Bathroom Accessories
48. Finish Hardware
49. Chalkboard, Crayon Board, Tackboard & Pegboard
50. Painting & Decorating
51. Shades, Drapes & Blinds
52. Building Specialties & Miscellaneous Equipment
53. Elevators, Moving Stairways & Dumbwaiters
54. Metal Laboratory Equipment & Casework
55. Shop Equipment
56. Recreational Equipment
57. Food Service Equipment
58. Cold Storage Work
59. Laundry Equipment
60. Stage & Projection Equipment
61. Library Equipment
62. Store Fixtures & Equipment
63. Hospital Equipment
64. X-ray & Radium Protection
65. Prison Cells & Equipment
66. Seating & Related Equipment
67. Movable Partitions
68. Steel Wire Fencing
69. Landscaping

Building ideas tested in wood research house

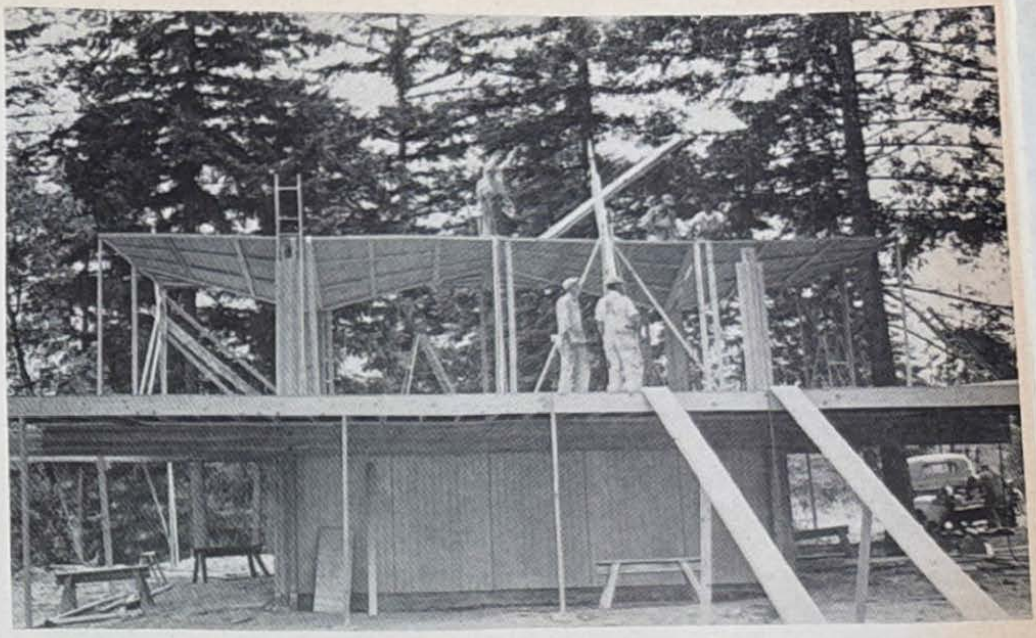
First residential application of the hyperbolic paraboloid roof is one of a number of structural innovations designed by Kirk, Wallace & McKinley for the Wood Research House built recently by Eric Pearson Associates in Bellevue, Wash. Structural engineer was Jack Christiansen, associate in the firm of Worthington, Skilling, Helle & Jackson.

The house was planned primarily to demonstrate methods for decreasing the cost of moderately priced homes, while still allowing for individual planning. It is supported by four vertical wood posts, supplied by Woodlam, Inc., which in turn support horizontal laminated wood beams. This skeleton is encased with curtain walls of a new construction panel called Nu-Loc and made-to-measure by Weyerhaeuser Co. Standard wood-framed windows, manufactured by Andersen Corp., are used in banks to create panels that alternate with the wood panels to become a design feature of the house.

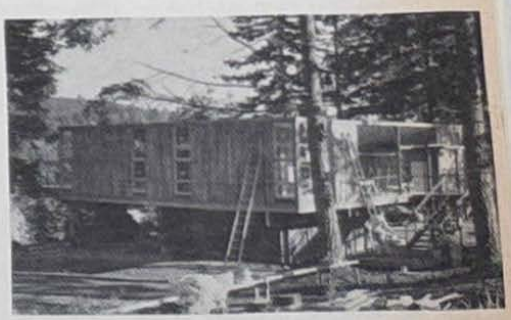
Set among tall firs, the house effectively demonstrates new ideas and methods possible with wood products. This version of the hyperbolic paraboloid resembles four inverted square-edged cones arranged in a square and with the low point of each resting on one of the columns. Each cone is made of four identically shaped sections, with plywood sheathing over lumber framing and hardboard below to form the ceiling surface. These curved sections, it has been pointed out, would lend themselves to combination in a number of different shapes.

Since the weight of the house is borne by the four columns on spot concrete footings, no conventional foundations were necessary. The horizontal laminated wood beams that support the floor are arranged in pairs, with one pair running along each east-west side of the house, 8 ft. above grade. Below this level and wrapped around the four vertical posts is a smaller square that encloses storage space and the heating unit. The carport is adjacent to it. A variation of the design does not require the enclosure.

Both exterior and interior walls are made of Nu-Loc. On the exterior, western red cedar vertical siding is used. Length is 10 ft. to fit the wall height exactly; width, 12 in. A translucent green-brown stain was applied to retain the natural woodsy appearance. Interior wall paneling is West Coast hemlock. Made-to-measure was particularly time saving here since the perimeter wall height is 10 ft. and partition height 7 ft., dictated by the roof contours. Hemlock was finished with clear lacquer, then waxed.







TWO OF FOUR hyperbolic paraboloid roof assemblies are completed in top photo taken during construction of Wood Products Research House. Remaining two will be mounted atop laminated structural columns shown in foreground. Also nearly completed is floor system composed of stressed skin panels canterlevering 10 ft. into space on all four sides of structure. Below left, roof panel is lifted into place. At right, siding is on but not yet stained.

Nu-Loc is manufactured by machining the lumber for precision-fit interlocking end joints and square edges. Pieces then are bonded together with glue to create specified lengths and widths.

Ceilings for the house are Weytex standard hardboard, random-drilled for ventilation and acoustical purposes. Large 4x12 panels were bent to the required curves to form the underside of the roof. The bridge-like approach on the west and the large deck on the east were floored with Weytex tempered hardboard, V-grooved on 4-in. centers to give a planked effect and perforated in the grooves for drainage.

Other wood products in the research house include fir plywood subflooring, floors tiled with compressed blocks of wood chips used in patterns for a parquet effect; fir plywood roof sheathing and Texture 1-11, a siding and sheathing with vertical parallel grooves on 4-in. centers used on the lower, smaller portion of the house.

Construction of the house followed two years of research into structural and design possibilities of wood. It was co-sponsored by the Weyerhaeuser and Andersen firms and Living for Young Homemakers magazine.

The Northwest project is the second of six houses to be built on a nationwide research and home building program undertaken by the publication. An asbestos-cement house was constructed in Oklahoma City last year. Other materials being researched include glass, structural clay, aluminum and Portland cement products. Architect Martin Engelbrecht heads the research committee.

insulated building panel

Rigid Bak-R-Foam, a combination aluminum siding, can be applied direct to the studding of new homes without sheathing, building paper or other intermediate agent. Siding consists of a factory-enameled aluminum panel, a layer of polystyrene insulating foam with a gold colored aluminum foil and kraft paper composition material bonded to the foam. Product also features a thermal break which prevents metal-to-metal contact between panels, a compression seal to prevent moisture penetration and a vent to dissipate moisture vapor from inside the house. It meets FHA requirements.—Alsco, Inc. **(No. 1)**

vinyl fabric wall covering

A vinyl fabric wall covering that the manufacturer says can withstand 25,000 scrubbings has been developed for restaurants, lounges, clubrooms and other high traffic areas. Endura-Cloth is produced by a process in which design patterns in multiple color pigments, along with vinyl resins, are integrated with the canvas cloth foundation. All the basic ingredients are formulated in the same vinyl chemical family and therefore are compatible and remain in perfect solution. The result is a new vinyl chemical entity. Stains, such as hot grease, crayon or indelible ink, can be removed with soap and water. Wall covering can be hung without special tools, equipment or adhesive. A wide variety of patterns and colors are being offered. — United Wallpaper Division, Desoto Chemical Coatings, Inc. **(No. 2)**

concrete form protection

Poly-Kote, a concentrated compound for waterproofing wooden concrete forms, preserves and strengthens the



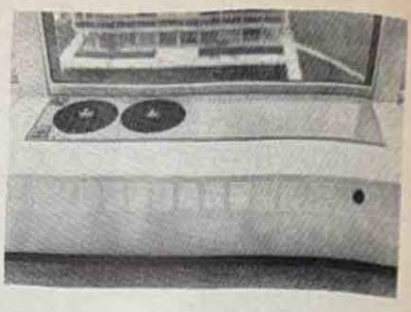
wood against rotting, thereby adding to the service life of the forms. Compound penetrates deep into the wood, coating each fiber with a flexible layer impervious to water or chemical action. Mixed with fuel oil, it is applied by brush, spray or mop on the job with forms already up if so desired. Poly-Kote will not stain finished concrete, strips fast and clean, has no noxious or toxic fumes and will not settle or freeze in the container.—Brad Chemical, Inc. **(No. 3)**

plywood panels

Five plywood specialty products have been added to the Evans line. Included is a series of hardwood-faced plywoods finished in birch, red oak, knotty pine, Philippine mahogany and madrona. Others are Evanite Texture 1-11 with 4- or 8-in. groove spacing; Evanite 2-4-1 interior type, a 1⅛-in. thick panel designed to serve as a combination subfloor and underlayment; Crezon overlaid plywood that provides a smooth painting surface for signs, cabinets, etc.; and a marine plywood.—Evans Products Co. **(No. 4)**

curtain wall air conditioner

To meet air conditioning needs in curtain wall construction, Amana has designed a self-contained unit which



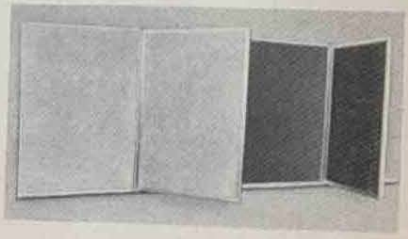
can be set into place inside insulated weatherproof ventilating and heating cabinets provided under each window as part of the building structure. These units make it possible to specify individual room air conditioners in curtain wall installations where in-the-window or through-the-wall installations cannot be used. Heat is exhausted to the outside through cast aluminum grills which serve as both the exterior of the cabinet and as an integral part of the outside curtain wall, presenting an unmarred facade. Grill also shields air conditioner from the sun, lowering operating costs. —Amana Refrigeration, Inc. **(No. 5)**

air-operated nail driver

A lightweight, 14-in. long nail driver that can reach into tight corners, eliminating hazards encountered in sledge hammer operations, is being marketed by Chicago Pneumatic. The air-operated tool, CP-5XBND, is capable of driving nails from 20- to 60-penny sizes. Nails are safely enclosed in a sleeve while being driven. Tool can be operated from a small industrial type air compressor.—Chicago Pneumatic Tool Co. **(No. 6)**

multiuse teaching panels

A wall mounted panel with several faces for display and teaching purposes could be a most practical answer to the problem in many schoolrooms, lecture halls or showrooms where variety is needed but space is limited. The 4-ft. high Multi-View panel has sections that pivot to form a chalkboard, a tackboard or a combination surface. Optional white porcelain enameled steel section serves as a projection screen. Any facing material in the regular Son-Nel line may be used. Frame, trim and chalk tray are anodized extruded aluminum. —Son-Nel Products Co. **(No. 7)**



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masonry ornamental wall

For new buildings, or face lifting old ones, a relatively low cost ornamental masonry wall called Aztec stone has been developed. A reconstituted stone, it is offered in three basic patterns, in colors and is waterproofed. Simple lines of the three-dimensional patterns can be combined in a variety of effects. Aztec stone can be used over frame, brick, stucco, shingles, building tile, cinder block and concrete block and is recommended for both exterior and interior applications. Cost is estimated at $1.50 per square foot.—Emco Cement Products, Inc. **(No. 8)**

curb wall form

To reduce labor costs in residential foundation construction, a fiberglass curb wall has been developed which simplifies handling with less manpower (fiberglass is 50% lighter than steel, 10% lighter than wood). One-piece construction provides fast, easy erection and stripping. Joint and adjusting devices eliminate special inside corner and outside forms and devices. In a test run, three men using the fiberglass form were able to erect a 26x50-ft. house foundation in less than an hour. — Engineered Concrete Form Corp. **(No. 9)**

asbestos-cement roof decking

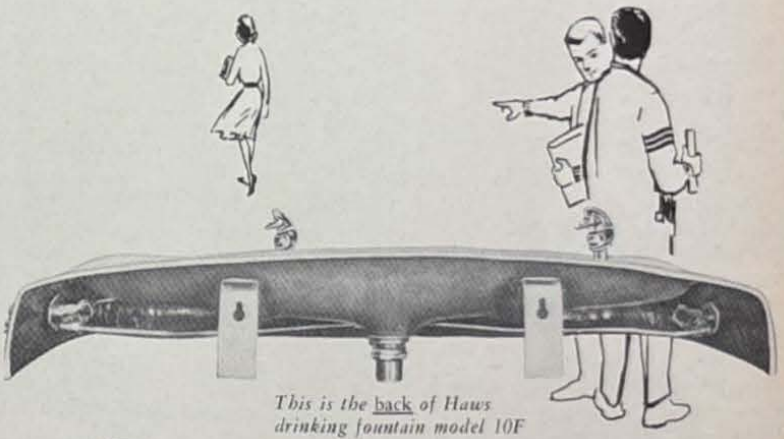
Cavity deck and T-Deck asbestos-cement roof decking are expected to be especially practical in wet processing plants since condensation and high humidity cannot damage the inorganic material. Products provide a structural deck for built-up roofing and a finished ceiling needing no painting or maintenance. Decks are lighter than precast concrete but provide high strength-weight ratios without metal reinforcing. Strength is gained through the deep corrugations of the sheets plus overlapping and interleaving of the units. Maximum span for the T-deck is 8 ft. and for the Cavity deck, 10 ft.—Keasbey & Mattison Co. **(No. 10)**

commercial lighting

For offices, schools, banks and like installations, Thomas Industries has developed a diffusing element for commercial fluorescent lighting fixtures featuring a three-in-one lens. Called the Coronado line, the unit has an L-120 prismatic diffusing lens on the bottom, a linear refracting lens on the sides directing light out of glare zone and a new refracting lens on top to eliminate ceiling "hot spot." It is offered in a clear polystyrene lens or with soft diffusing white Prisopal lens. Surface mounted Coronado has an apparent depth of only 2½ in. It also includes a finger-touch release mechanism which allows the diffusing element to swing down from either side or be completely removed without tools; built-in couples; snap-in wiring channels; and a pop-out ballast arrangement that does not require bolts or screws for attachment.—Benjamin Division, Thomas Industries, Inc. **(No. 11)**

primed siding

Palcote, a redwood siding manufactured with a factory-applied primer paint, is expected to considerably lower the builder's painting labor costs. The alkyd resin type paint prime requires only one top coat to finish in the field. The Palcote prime, a light shade of neutral gray, was formulated for use with a wide variety of exterior paints and colors. Siding comes packaged in heavy protective paper wrapping—The Pacific Lumber Co. **(No. 12)**



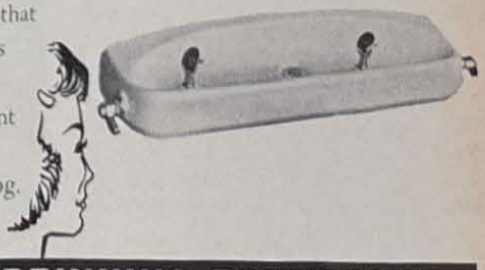
This is the back of Haws drinking fountain model 10F

Look at the Back for a change!

From the front Model 10F is a beauty in colorful fiberglass—but it is HAWS **unseen** quality that truly backs it up. Careful craftsmanship is from the inside out! This dual-bubbler model, heat and pressure laminated with reinforced fiberglass, has hidden features: exclusive flow controls, vandal proof accessories, easy-to-use wall hangers and overall strength.

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CV Durathin: introduces ⅜-in. thick ceramic facing material and gives setting instructions; 4 pp.—Federal Seaboard Terra Cotta Corp., 10 E. 40th St., New York 16, N.Y.

Stretch Education Dollars Further: presents case histories of seven schools in which plywood helped keep costs within budgets; including Tacoma's Hunt Junior High School designed by Robert Billsbrough Price and a Santa Clara, Calif., portable that does not look like a portable; 20 pp.—Douglas Fir Plywood Association, Tacoma 2, Wash.

Steel Sliding Glass Doors (AIA 16-E): announces line of doors and screens with detail drawings; 4 pp.—Carmel Steel Products, 9738 E. Firestone Blvd., Downey, Calif.

Sportslighting (AIA 31-F-30): presents some 100 suggested lighting layouts for all types of sports events; 68 pp.—Crouse-Hinds Co., Syracuse 1, New York.

Heat Computer: provides method for figuring heat loss and heat cost for elecrically heated home; 4 pp.—Arvin Industries, Inc., Columbus, Ind.

Walk-In Installation Drawings: includes reprints of 48 different cooler and freezer installations assembled from standard all-metal sections; 16 pp. — Bally Case and Cooler, Inc., Bally, Pa.

Concrete Floors and Roofs: describes system involving concrete poured over assembled joists and concrete blocks requiring no forms or special training to construct; 24 pp.—Omnia Industries, Inc., 51 E. 42nd St., New York 17, N.Y.

Wadsworth Guide (AIA 31-D): catalogs industrial safety switches, service equipment, distribution panels, wiring trough, etc.; 423 pp. — Wadsworth Electric Mfg. Co., Inc., Covington, Ky.

Vibration and Noise Control Products (AIA 39-D): gives performance data and engineering specifications for products to control and measure machinery vibration, shock and noise; 8 pp.—The Korfund Co., Inc., Cantiague Road, Westbury, L. I., N.Y.

Spray Nozzels for Decorative Water Fountains (AIA 38-G): describes complete line with detailed drawings of the spray effect achieved by various types of nozzles; 13 pp.—Schutte & Koerting Co., Cornwells Heights, Bucks County, Pa.

Design Techniques for Controlling Moisture and Condensation in Building Structures: explains cause and effect of destructive moisture, outlines the need for a true vapor seal and describes advantages of the company's Premoulded Membrane; 32 pp.—W. R. Meadows, Inc., 5 Kimball St., Elgin, Ill.

Lightning Facts and Figures: points up need for protection for all types of buildings; material is directed primarily at the consumer; 20 pp.—Lightning Protection Institute, 53 W. Jackson Blvd., Chicago 4, Ill.

pa&b pick of the month

To introduce a complete line of entrance packages, Kawneer has prepared an excellent catalog, light on claims and heavy on design ideas and detail drawings. Not surprising, the 28-page booklet was given a Certificate of Merit in the 1960 building products literature competition by the Producers' Council on the basis of its usefulness to architects. Inserted into the booklet is a fold out section easily removed for wall chart use which illustrates the variety of design possibilities available with the line. Title, "The Second New Idea in Entrances," refers to the fact that a single entrance package encompassing door, frame and closer, was introduced last year. The idea has now been expanded to include five basic styles. — Kawneer Co., Architectural Products Division, 1105 N. Front St., Niles, Mich.



DESIGN WINNERS

Winners in the first annual design competition, "Better Living for the Middle Income Family," sponsored by the Mastic Tile Division, The Ruberoid Co., have been published in a 48-page brochure. Loose-leaf type of binding encloses the 14x10-in. pages, many of which are folded over so that the entire design is reproduced in larger detail. Included are a number of entries selected by the jury "for publishing"—design deemed of unusual interest and worthy of note for a particular theme or detail of presentation. Copies are available by writing the company at Box 128, Vails Gate, N.Y.

Water Hammer Arrestors: presents method for determining sizes for multiple fixtures; 8 pp.—Zurn Industries, Inc., Eighth and Pittsburg Ave., Erie, Pa.

Office Planning Models: lists 148 items, including to scale desks, chairs, file cabinets and business machines, illustrated; 4 pp.—Visual Plant Layouts, Inc., 50 Pennsylvania Ave., Oakmont, Pa.

Concrete Accessories (AIA 4-H): catalogs inserts, lifting anchors and other accessories for precast concrete; 8 pp. —Superior Concrete Accessories, Inc., 2100 Williams St., San Leandro, Calif.

Safty Zone Within Your Home: offers detail drawings for construction of a reinforced brick masonry "safty zone" in the home designed to serve as a regular room during normal times; 8 pp.—Structural Clay Products Institute, 1520 18th St. N.W., Washington, D.C.

Store Fixtures: catalogs garment racks, island displays and other items, including new color anodized aluminum fixtures; 36 pp.—Morris Kurtzon, Inc., 1420 S. Talman, Chicago 8, Ill.

Revolving Doors: covers complete line of revolving and swing door entrances with installation detail drawings; 20 pp.—International Steel Co., 1460 Edgar St., Evansville, Ind.

Standard for Heavy Timber Construction (AIA 19-D-3): represents a compilation of the best information available within the industry, covering species, sizes, patterns, length, moisture content, application, etc.; 28 pp.—American Institute of Timber Construction.

FILMS

Planning Hot Water Systems for Commercial Use. Permaglas Division, A. O. Smith Corp., Kankakee, Ill. Sound, color, 16mm, 30 min.

Provides instructional data on the latest trends in hot water system design, heater specifications and other aspects which will help the viewer do a better job of application and installation.

Guardians of Communications. Johns-Manville Corp., 22 E. 40th St., New York 16, N.Y. Sound, color, 16mm, 20 min.

Illustrates the advantages of employing asbestos-cement telephone duct, including installation economies and the quick, easy methods of trenching, laying and joining through the use of the flexible J-M coupling.

The Code of the West. Gypsum Association, 20 N. Wacker Drive, Chicago 6, Ill. Sound, color, slide, 10 min.

Explains improper installation techniques that have caused building code disapproval of wallboard under bathroom tile in Southern California and then emphasizes the correct method.

Eliminating the Guesswork. National Mineral Wool Association, 1270 Sixth Ave., New York 20, N.Y. Sound, slide, 25 min. $20.

Serves as a guide for equipment makers, utility personnel and insulation contractors in calculating and installing insulation for efficient, economical electric heating and explains how to figure insulation on the basis of the NMWA's new R-standard (for resistance to heat loss).

Concrete Curtain Walls. Portland Cement Association, 33 W. Grand Ave., Chicago 10, Ill. Sound, color, 16mm, 18 min.

Illustrates nationwide use of concrete walls in structures ranging from single-story commercial and industrial buildings in skyscrapers, showing the wide latitude offered architects in choice of color, decorative designs, textures and panel shapes.

Copper Tube in Building Construction. Revere Copper and Brass, Inc., 230 Park Ave., New York 17, N.Y. Sound, color, 16mm, 30 min.

Covers the entire subject of good copper piping practice and is designed to interest architects and engineers as well as contractors and mechanics.

Curtain Time. United States Steel Corp., 525 William Penn Place, Pittsburgh, Pa. Sound, color, 16mm, 20 min.

Portrays technical details of the design, fabrication and erection of steel curtain walls in all types of buildings in a humorous vein.



Seaman Products Factory, Burbank, California. Constructed with 26 Rilco laminated wood beams up to 49' 7¼" in length.

"Definitely Superior for Economy, Erection and Final Appearance"

"The selection of Rilco laminated wood beams was the result of careful study and comparison with other materials," states Jack L. Randall, Randall Engineering, Woodland Hills, California, concerning the Seaman Products Factory, Burbank, California. "We found them to be definitely superior for economy, erection and final appearance."

Rilco laminated wood structural members offer many construction advantages. Their initial cost is low, erection fast and easy, maintenance practically nil. Each member has a high strength to weight ratio plus offering the superior fire resistance qualities of glued laminated wood.

And Rilco structural members arrive at job site on time. Comments Mr. Randall: "Dealing with Rilco greatly minimized field schedule problems due to their excellent cooperation and service." Rilco service engineers will be happy to consult with you, without obligation.



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• **Soule' Steel Co.** has named Alan F. Kelsey as assistant to the president at its San Francisco headquarters. Kelsey had been director of manufacturing for the Marchant Division of Smith-Corona Marchant, Inc., Berkeley, since 1958.

• **Reynolds Metals Co.** has added two to its Pacific regional staff in Los Angeles: Dale R. Cree as application engineer for residential building products and George W. Minds Jr. as architectural representative.

• **Pittsburgh Plate Glass** has named Universal Molding Co., Lynwood, Calif., as distributor for the company's fiberglass screening material in the 13 western states, Australia and New Zealand.

• **Gladding, McBean & Co.**, Los Angeles, has appointed David L. Chamorro to the newly created position of sales promotion manager for ceramic architectural products. He has been with the firm as a sales representative since 1958.

• **American-International Aluminum Corp.** has begun production at its new western headquarters plant in San Jose, Calif.

• **I-T-E Circuit Breaker Co.** has established two new district sales offices on the West Coast. Heading the Portland operation will be George Geiger, formerly a field application engineer in Philadelphia. The Seattle office will be headed by William V. Knowles, former field application engineer in San Francisco. Portland and Seattle areas previously were served by Garland-Affolter Engineering Co.

• **Kaiser Gypsum Co.** has appointed Wroyce Starnes as architectural representative for the northern California sales division. He previously was a staff sales engineer for Kaiser Aluminum.

• **Capri Sales, Inc.**, Burbank, Calif., has formed a special glazed division aimed at helping the firm's dealers complete with factory contract sales methods. The division will offer completed glazed sliding glass door units ready for installation.

• **Goodyear Tire & Rubber Co.** has appointed Dealers Wholesale Supply, Denver, as distributor for the firm's flooring products in Colorado, northern New Mexico, western Nebraska and southern Wyoming.

• **Robertshaw - Fulton Controls Co.** will start construction in late spring of a headquarters office building in Richmond, Calif. Architects for the structure are Baskervill & Son. The firm moved its corporate headquarters to Richmond from the east in 1957.

• **Products Research Co.** and **Owens-Illinois Glass Co.** have signed a licensing agreement under which the former firm will manufacture and distribute prefabricated Toplite roof panels formerly made by Kimball Glass Co., a subsidiary of Owens. Products Research Co. maintains corporate offices in Burbank, Calif., and has an eastern sales and manufacturing facility in New Jersey.

• **Sierra Switchboard Co.** has begun construction of a 16,000-sq. ft. factory in Menlo Park, Calif.

• **Kaiser Industries Corp.**, Oakland, has named George B. McMeans to the vice presidency of that firm and Henry J. Kaiser Co., with duties primarily relating to the steel industry. He will continue as vice president of Kaiser Steel Corp., but will no longer be in charge of operations.

• **John C. Virden Co.** has appointed Paul La Vigne as general manager of Lighting Dynamics, a division headquartered in El Monte, Calif. He formerly was acoustical engineering manager of Fiberglas Engineering and Supply, a division of Owens-Corning Fiberglas Corp.

• **Atlas Valve Co.** has named Thompson Instrument Service, Portland, as sales agent in Oregon.

• **Owens Corning Fiberglas Corp.** has made four appointments to its Pacific Coast division executive staff. Fred L. Purtill, formerly sales manager of home building products in Santa Clara, has been named marketing manager; Robert M. Meechan, formerly branch manager of Fiberglas Engineering and Supply Division, is now manager of engineering and industrial sales; Richard L. Warfield, formerly industrial salesman in the San Francisco office, has been named manager of roofing materials sales; and Edward H. McKee, formerly advertising supervisor of home building products in Toledo, Ohio, will be merchandising manager.

• **Carmel Steel Products Co.**, Downey, Calif., has named Robert P. Reed as sales manager. He will coordinate a national sales program for the firm's steel sliding glass door and window wall line recently purchased from Arcadia Metal Products. Reed formerly was a sales representative for Arcadia.

• **Ideal Cement Co.** has awarded the contract for construction of its new cement storage and distribution terminal in Seattle to Hoffman Construction Co. on a low basic bid of $2.1 million.

• **Vancouver Plywood Co.** has acquired half interest in Hub City Plywood Corp. and Three Sisters Plywood, Inc., both of Albany, Ore. Frost Snyder, president of Vancouver Plywood, has assumed the presidency of both and Elton Disher, one of the founders of the two Oregon mills, remains as general manager and executive vice president.

• **Westinghouse Electric Corp.** has appointed Wiley-Bayley, Inc., of Seattle as Pacific Northwest distributor for Micarta wall paneling.

• **Rex-Spanall, Inc.**, has appointed J. L. Crowl as western district sales manager with headquarters in Berkeley, Calif. Territory includes, Washington, Oregon, California, Nevada and Arizona.

• **Sperti Faraday, Inc.**, has named National Electric Supply of Oakland as distributor in that area for the firm's electric signaling equipment.

• **American Pecco Corp.** has appointed Kenneth L. Hazelton to manage the West Coast headquarters in South San Francisco and direct sales activities in the 13 western states. He formerly was vice president and general manager for Beatty Scaffold, Inc.

• **United States Steel Corp.** has promoted Howard M. Wiley to the post of manager of construction for the Consolidated Western Steel Division at Los Angeles. He succeeds Barclay C. Knerr, who has retired after 38 years in the construction field. Succeeding Wiley as superintendent of the northern construction area from Berkeley offices is Stanley R. Farwell, formerly assistant superintendent.

• **Kilsby-Tubesupply** has appointed William R. Bergstrom to the Southern California division sales department. He formerly was on the Western Nipple Manufacturing Co. sales force.

Plus services with manufactured forms for concrete

by D. M. DeCANIO, Vice President, Engineering, Universal Form Clamp Co.

Contractors and engineers who have never really analyzed or compared contractor-built wood forms for concrete forming with the several manufactured forms now on the market may be amazed at what the latter have to offer in the way of reducing forming costs.

Free engineering service, both office and field, as offered by the manufacturers is not a come-on, a gimmick or a wild claim. Going on the premise that a product is successfully sold only when it's successfully used has been responsible for the growth of many of the prefabricated form manufacturers.

Actually the manufactured forming system is simple to use; however, employing it for the first time may create a few problems and here is when the need for field service as offered by the manufacturer should be requested.

Although form manufacturers do sell their forms, they also are available on a rental basis with the same engineering services offered.

One producer boasts that its field servicemen have traveled over the years from three to five million miles servicing jobs in every state in the U.S. The shortest journey was 50 ft. when a job was being built next door and the longest trip over 12,000 miles away in India.

Usually, when the contractor or engineer becomes familiar with a manufactured system, the request for field service is very seldom. Engineering services, other than field, are more complex. Working from a set of plans supplied by the contractor, the form manufacturer will analyze the forming requirements. Basic information supplied will include:

1. Total form contact area in square feet.
2. Total square feet of forms required and the sizes of the forms.
3. Specific area in which forms are to be used.
4. Rental period within which form work can be completed.
5. Number of times forms can be reused.
6. Number of ties required.
7. Amount of lumber required for alignment and bracing.

In addition, the contractor or engineer is furnished with a total material cost based on what the manufacturer would furnish, together with any recommendations he feels would be of help in reducing costs or speeding up the forming operation.

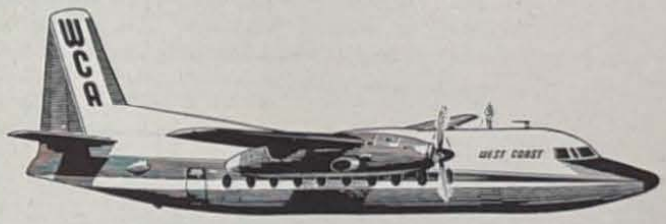
Those who are reluctant to avail themselves of information that is offered without charge or obligation may be surprised that a brief discussion or exchange of correspondence might prove extremely valuable. And whether the job calls for forming 9,000,000 sq. ft. or 900, the form manufacturer is ready to be of help.

BRIEFS

• **Roulac Construction Co.** of Pasadena, Calif., has added C. Dean Miller to its staff as a management associate. For the past two years he served as project engineer for J. H. Hedrick Co. and earlier spent 10 years in the construction field in the San Diego area.

• **Intermountain Branch, AGC,** with headquarters in Salt Lake City, has a new executive manager, Horace J. Gunn, succeeding W. D. (Bill) Eldredge who served in that post since 1954.

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A glimpse of Honolulu: 'increasingly depressing' Waikiki

In a series of articles in the Honolulu Advertiser, Desmond Muirhead, international planning consultant, expressed his views on the planning needs of the city. This is one of the five which ran last summer.

Since downtown Honolulu will get official treatment in the city's forthcoming new master plan, it would not be fair to make suggestions for this area. But much of its character is worth preserving because it is full of vitality and interest. There is a very strong sense of neighborhood, especially in the Chinese section. And there is a high density of population; obviously many people live there by preference.

Let's have a look at other sections of Honolulu.

Waikiki, the most densely populated and important area of Honolulu, provides a most interesting, if increasingly depressing, neighborhood. Waikiki is still not really crowded. The beach is beautiful and romantic and Kalawaua Avenue is still a fascinating shopping street (its fascination lies in its interesting curve which unfolds the street before you). Its limited length doesn't make you tired and there is also a certain homogeneity of architecture seldom found in American Streets.

But in Waikiki, crude, ill-designed buildings are springing up everywhere. The gorgeous gardens of the Royal Hawaiian, once an anchor and pedestal for the whole area, are all but gone.

Perhaps changes are inevitable in our society, but this is not progress. The old houses with their Hawaiian roofs are going fast. What is to replace their quiet dignity which seemed to have tears, love and laughter in the 2x4s. Rents and real estate values can and will drop as soon as overbuilding catches up with demand. And tourists may go elsewhere if Waikiki doesn't watch its step.

The most durable and merchantable qualities of Hawaii—if we must look at it that way—are that wonderful sense of aloha that hits you as soon as you leave a plane at Honolulu International Airport and the foliage of the Islands. These things must be preserved, not only for the sake of tourism but for the well-being and way of life of people who live here. Tourism is a means to help pay taxes, not an end in itself.

Pacific Heights and Pauoa Valley are two older neighborhoods, both attractive and useful in their ways, whereas some of the most recent neighborhoods for all their newness, cleanness and modern devices are not. Pacific Heights is defined by a central, subtly winding road which proliferates into pleasant little "micro-neighborhoods" and numerous cul-de-sacs. Each of these has several houses well related to the land forms with pleasant, well-maintained gardens. The trees are large and old and the gardens are large enough to support these big trees.

An area reflects the kinds of people who live there—the gentle aristocracy of Nuuanu, the confident wealth of Makiki, the patrician remoteness of Noela Drive, right down to the happy couldn't-care-less attitude of some poorer areas (nothing is expected of them) and the insecurity of the tracts where everything is on monthly payments and the expense



5025 ARCHITECTS

3452 CONTRACTORS

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is beginning to tell. The people in Pacific Heights give the impression of having their affairs in good order. Their payments appear to be in balance with their incomes.

Pauoa Valley is much less wealthy but every bit as attractive. It has the security of being built in a valley with an interesting view of the mountain watershed—green and unbuilt sides—and a children's play area, the upper end, forming a natural limit to the neighborhood.

The road into Pauoa is narrow and winds gently into the valley. People are more neighborly here and you see all signs of happiness and satisfaction. Here gardens are lovingly tended because the owner likes plants—not just to show off.

Architecture: a definition from Gruen's office

In its newly released brochure explaining its architectural, engineering and planning objectives, the Los Angeles firm of Victor Gruen Associates offers its definition of architecture.

On the foregoing pages we have outlined the workings of our organization and its responses to challenges posed by a variety of projects.

We have discussed functions, operations, research and analysis. We have briefly dealt with our approaches in the fields of economics and engineering. We have defined and illustrated some of our design and planning principles.

The purpose of this book is to give factual information; we therefore have restricted its contents to the measurable, practical aspects of our activities.

Avoiding intangibles, we have sparingly used words such as "art," "aesthetics," "creativeness," "inspiration." We believe, however, that these are the words that point toward the main springs from which flow the devotion to our profession and the enthusiasm for each individual project.

In our regard of architecture as the all-encompassing activity toward the creation of a man-made environment of dignity, utility and beauty, we believe that:

• ARCHITECTURE IS AN ART, but if its creations represent solely three-dimensional self-expression, then they are not architecture but sculpture.

• ARCHITECTURE IS A TECHNICAL SCIENCE, but if its structures are solely expressions of technical virtuosity, then they are not architecture but machinery.

• ARCHITECTURE IS A SOCIAL SCIENCE, but if it only attempts to meet efficiently the purely physical needs of society, the outcome is not architecture but drab, utilitarian and materialistic environment.

Thus, ARCHITECTURE to us means complete and intimate fusion of art, technology and science in the discharge of the profession's great social and spiritual responsibility to a free, democratic society.

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We'll begin the new year with a most pleasant assignment: that of presenting our own headquarters building. Yet we find it a difficult and challenging task because we are so close to the project and are, quite understandably, a bit prejudiced in our evaluation of the result. Consequently, we'll use a somewhat different slant in this particular case. A. O. Bumgardner will spell out his design approach as the architect; Roscoe E. Laing will review the building—and with a client's critical eye—as vice president and general manager of the publishing firm. And when it's all over, we'll welcome reader response.

laissez faire

The following editorial comment is reprinted from our companion publication, Pacific Builder & Engineer.

"Western chapters of the Associated General Contractors of America have gone on record as opposing the set-aside program of the Small Business Administration so far as the construction industry is concerned. This might seem surprising in view of the fact that 80% of the contractor members of the AGC qualify as small businesses.

"The underlying reason is the distrust which contractors — and most businessmen — have for increasing governmental interference in business. Since most of their dealings are with governmental agencies, contractors know too well how much red tape is involved when a federal agency comes into the picture. Also, they know that there are jobs of all sizes and the big firms seldom bid on small jobs and vice versa.

"The AGC views the SBA with a jaundiced eye, anyway, because of the very nature of its operations. Bill Dunn, assistant executive director of the AGC, summed up the organization's views when he termed the SBA a 'Republican WPA.'"

preservation and profits

Last March we featured an article on restoration in the Mother Lode country by John Carden Campbell, a partner in the architectural firm of Campbell & Wong and president of Leger, Ltd., a San Francisco organization which is revitalizing historic Mokelumne Hill. It was with much satisfaction that we learned Leger, Ltd., has received a national design award from Institutions magazine for its period restoration of the 109-year-old Hotel Leger. R.E.K.

pacific architect & builder

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will continue as a director and manage the company's foreign operations.

• **Lehigh Fan and Blower Division,** Fuller Co., has appointed Landes, Zachary & Peterson Co., Denver, as representative in the Rocky Mountain states to handle both sales engineering and customer service.

ASSOCIATIONS

• **Southern California Chapter,** Producers' Council, recently installed Al Schuppner as president. He is architectural representative for Pomona Tile Manufacturing Co.

• **Gypsum Drywall Contractors of California** reelected Edward J. Fliegle of Stanton as president at a recent three-day convention in Berkeley. Other officers: Joseph Marshall, San Fernando, vice president; Joe Thayer, Santa Clara, secretary; and E. C. Larson, San Francisco, treasurer.

• **Gypsum Association** has appointed Marvin C. Smith (September item was in error) as western manager with headquarters in Hollywood, Calif. A professional engineer, he received his degree from the University of Cincinnati and has more than 12 years of sales engineering experience in the gypsum and construction industry.

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