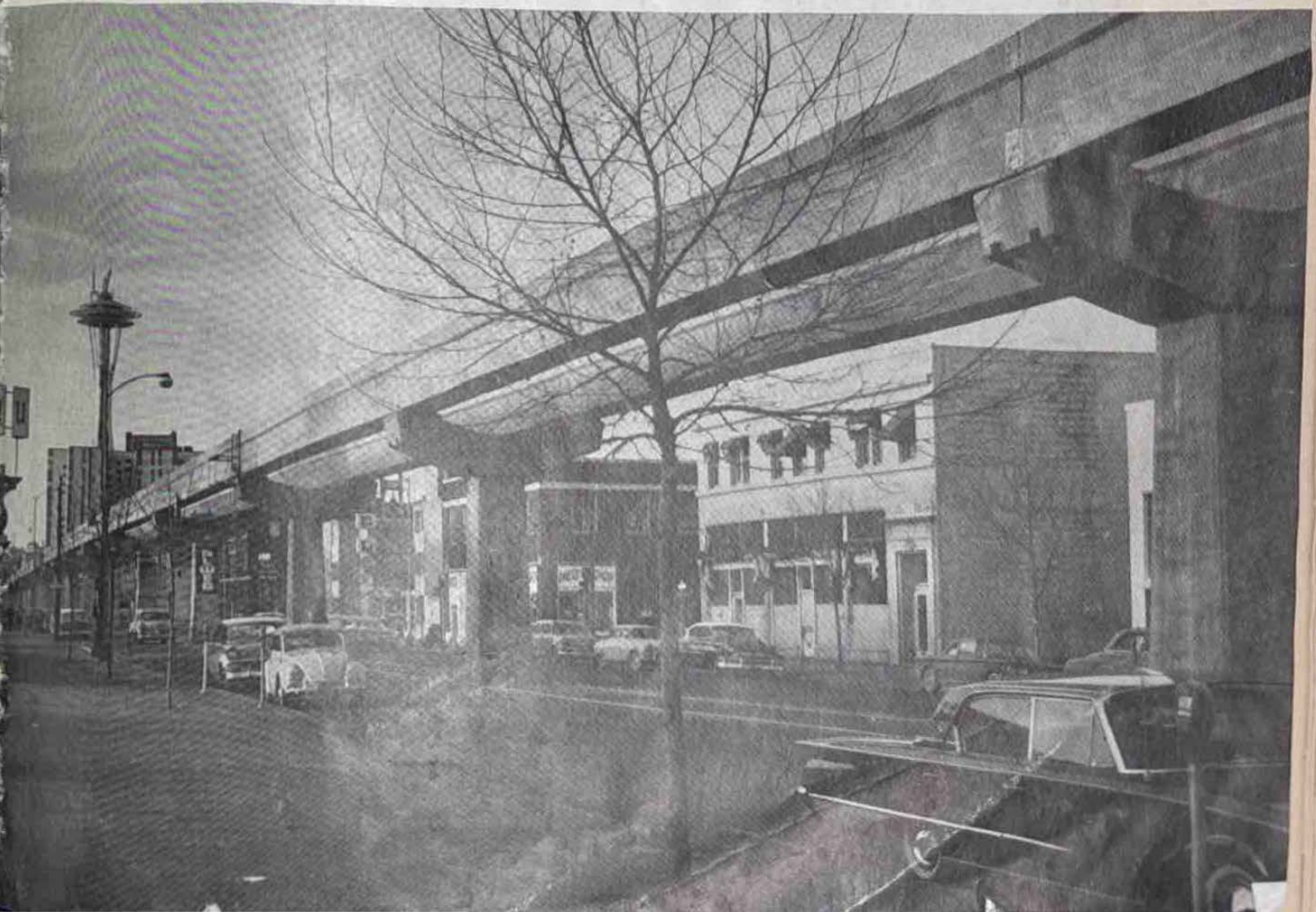
Pacific Architect & Builder

[architecture/West]

UNIVERSITY OF OREGON
JAN 22 1962

THE MAGAZINE OF WESTERN ARCHITECTURE ◆ JANUARY 1962



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Pacific Architect & Builder

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Pacific Architect & Builder

January 1962

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COVER: Alweg Monorail leading to Seattle World's Fair, with Space Needle in background (p. 27); PA&B staff photo.

Building Permit Totals fo

First Column Figures in Parentheses are Number of Residential Units • Second Column is Dollar

CALIFORNIA	# Res.	$ Value	Total $
Alameda	(115)	$ 888,320	$ 1,077,401
Alameda Co.	(73)	810,600	1,103,620
Albany	( )	Nil	68,403
Alhambra	(16)	126,700	284,060
Anaheim	(362)	2,032,500	3,300,625
Antioch	(8)	109,565	349,092
Arcadia	(26)	383,082	536,525
Arroyo Grnde	(22)	258,500	260,830
Artesia	(15)	203,200	205,800
Atherton	(2)	80,400	177,636
Atwater	( )	Nil	10,152
Auburn	(1)	8,500	141,840
Avalon	( )	Nil	Nil
Azusa	(43)	790,670	836,310
Bakersfield	(27)	344,900	650,690
Baldwin Park	(69)	779,800	825,615
Banning	(13)	153,192	166,888
Barstow	(21)	167,200	228,546
Bell	(30)	196,980	230,825
Bellflower	(30)	226,800	436,165
Bell Gardens	(45)	321,000	382,890
Belmont	(15)	282,000	523,330
Benicia	(1)	17,000	95,526
Berkeley	(9)	144,000	721,940
Beverly Hills	(288)	6,187,000	6,566,694
Bradbury	( )	Nil	3,000
Brawley	(8)	72,000	132,000
Brea	(6)	138,183	156,393
Buena Park	(5)	88,448	641,930
Burbank	(56)	682,500	1,383,918
Burlingame	(8)	174,500	1,141,185
Butte Co.	( )	Nil	55,300
Calexico	(33)	345,000	365,100
Campbell	(47)	465,500	469,250
Carlsbad	(1)	26,472	36,603
Carmel	( )	No Reply	No Reply
Chico	(12)	179,024	229,393
Chino	(5)	65,216	125,362
Chula Vista	(10)	107,000	439,687
Claremont	(2)	44,500	359,465
Coalinga	(2)	27,950	29,785
Colton	(5)	33,744	117,483
Commerce	(7)	63,970	529,029
Compton	(2)	19,410	291,088
Concord	(64)	761,214	1,645,514
Cntra Csta Co.	(244)	5,992,041	6,605,213
Corona	(18)	123,378	158,339
Coronado	(1)	75,000	157,445
Corte Madera	(4)	78,266	96,116
Costa Mesa	(130)	1,171,968	1,511,019
Covina	(14)	161,400	265,274
Cudahy	(7)	68,200	81,700
Culver City	(4)	40,000	111,980
Dairy Valley	(1)	23,000	59,300
Daly City	(90)	1,297,263	1,347,197
Davis	(12)	168,000	218,450
Delano	(5)	35,824	45,400
Downey	(10)	99,260	834,680
Duarte	(1)	21,000	43,795
El Cajon	(10)	183,436	467,413
El Centro	(5)	59,000	321,048
El Cerrito	(25)	247,595	299,183
El Dorado Co.	(84)	1,184,147	1,735,819
El Monte	(78)	674,732	796,687
El Segundo	(2)	39,000	2,039,460
Emeryville	( )	Nil	25,700
Escondido	(2)	20,814	94,980
Eureka	(7)	100,300	172,756
Fairfield	(31)	353,080	376,727
Fillmore	(18)	88,008	124,296
Fontana	(3)	49,914	68,247
Fremont	(170)	2,136,585	3,134,683
Fresno	(71)	737,929	1,565,358
Fresno Co.	(49)	574,704	5,595,763
Fullerton	(18)	346,079	1,519,915
Glendale	(191)	1,707,420	2,561,795
Glendora	(17)	278,800	366,660
Half Moon By	(1)	12,000	18,100
Hanford	(109)	994,430	1,048,113
Hawthorne	(11)	220,450	1,968,182
Hayward	(149)	1,101,200	1,169,540
Hemet	(2)	22,000	477,596
Hermosa Bech	(18)	210,061	367,989
Hidden Hills	( )	Nil	3,100
Hillsborough	(4)	173,000	173,000
Holtville	( )	Nil	2,825
Humboldt Co.*	( )		47,616
Huntngtn Bch	(211)	2,906,035	3,428,546
Huntingtn Prk	(40)	334,795	376,445
Imperial Co.	( )	Nil	46,500
Indio	(69)	733,845	1,118,450
Industry	( )	Nil	370,551
Inglewood	(172)	1,746,040	2,351,636
Irwindale	( )	Nil	17,000
Kern Co.	(138)	1,620,013	1,952,073
Laguna Beach	(10)	161,500	307,510
La Habra	(28)	293,614	500,579
Lakewood	(7)	173,000	342,850
La Mesa	(63)	261,852	261,852
La Mirada	(59)	1,081,000	1,198,860
La Puente	(4)	44,700	88,210
La Verne	(2)	45,000	59,890
Lawndale	(24)	222,300	376,351
Lindsay	( )	Nil	5,828
Livermore	(29)	299,015	313,245
Lodi	(19)	231,480	272,175
Lompoc	(36)	601,920	662,207
Long Beach	(130)	772,140	3,478,345
Los Altos	(11)	236,700	330,875
Los Angeles	(1,822)	22,697,225	63,568,932
Ls Angels Co.	(842)	10,454,500	20,025,348
Los Gatos	(37)	557,000	1,762,500
Lynwood	(64)	401,500	580,170
Madera	( )	No Reply	No Reply
Madera Co.	(19)	173,500	213,750
Manhattn Bch	(24)	301,684	430,890
Manteca	(10)	98,200	295,846
Marin Co.	(39)	716,450	882,476
Martinez	(9)	91,220	137,872
Marysville	(22)	275,000	301,850
Maywood	( )	Nil	6,743
Menlo Park	(5)	131,500	484,360
Merced	(43)	605,260	692,110
Merced Co.	(14)	102,500	216,945
Millbrae	(9)	136,500	182,245
Mill Valley	(6)	120,000	150,500
Modesto	(28)	359,500	553,981
Monrovia	(10)	114,060	410,196
Montclair	(84)	1,116,190	1,179,300
Montebello	(34)	327,908	455,940
Monterey	(1)	15,500	328,968
Monterey Co.	(219)	2,307,300	2,398,035
Monterey Prk	(45)	399,800	552,468
Mountin View	(32)	318,180	461,265
Napa	(10)	138,174	161,918
Napa Co.	(14)	200,380	259,376
National City	(22)	203,286	282,000
Newport Bech	(42)	954,891	1,112,336
N. Sacramento	(2)	18,446	51,199
Norwalk	(11)	203,300	431,300
Novato	(27)	437,000	463,100
Oakdale	(2)	28,213	39,379
Oakland	(179)	1,701,800	3,584,557
Oceanside	(20)	204,000	434,807
Ojai	(38)	436,880	446,580
Ontario	(48)	594,069	834,450
Orange	(70)	905,770	972,493
Orange Co.	(440)	7,371,934	8,153,162
Oroville	(9)	98,716	263,506
Oxnard	(152)	1,314,500	1,591,755
Pacifica	(23)	271,200	599,446
Pacific Grove	( )	Nil	14,775
Palm Springs	(18)	354,000	719,661
Palo Alto	(301)	5,823,227	7,879,160
Pls Vrds Estts	(12)	484,550	532,838
Paramount	(18)	128,600	416,850
Pasadena	(31)	409,610	1,057,541
Paso Robles	(1)	16,820	58,980
Pico Rivera	(33)	147,250	427,900
Piedmont	(2)	55,000	100,631
Pinole	(23)	299,585	338,358
Pittsburg	(6)	79,994	101,109
Placentia	(7)	51,550	54,340
Placer Co.	(35)	461,084	653,768
Pleasanton	(8)	115,150	227,516
Pomona	(19)	723,910	2,285,017
Porterville	(5)	52,500	81,595
Port Hueneme	(1)	6,000	9,500
Red Bluff	( )	Nil	3,100
Redding	(3)	42,000	95,300
Redlands	(29)	246,300	747,266
Redondo Bech	(36)	295,468	524,143
Redwood City	(35)	287,700	473,227
Richmond	(29)	219,600	852,647
Riverside	(14)	233,800	1,733,116
Riverside Co.	(162)	1,895,723	6,172,257
Rolling Hills	(2)	59,800	73,450
Rllng Hils Estts	(3)	80,400	190,600
Rosemead	(1)	12,000	43,142
Roseville	(8)	87,896	150,574
Sacramento	(187)	1,676,200	2,442,800
Sacramnto Co.	(423)	4,694,992	6,913,449
St. Helena	(2)	26,562	26,562
Salinas	(16)	237,800	1,282,956
San Bernrdno	(46)	567,175	1,295,049
Sn Brnrdn Co.	(359)	3,109,728	8,423,057
San Bruno	(17)	238,000	286,771
San Carlos	(16)	319,903	473,174
San Clemente	(16)	238,429	318,627
San Diego	(654)	9,175,462	13,633,693
San Diego Co.	(206)	3,658,000	5,316,136
San Dimas	(2)	33,750	93,466
San Fernando	(3)	23,000	68,270
San Francisco	(189)	2,805,850	9,839,885
San Gabriel	(47)	430,600	490,784
Sanger	(2)	25,815	86,622
San Jacinto	(4)	50,900	79,800
Sn Joaqin Co.	(85)	565,838	949,619
San Jose	(418)	5,794,460	7,468,513
San Leandro	(43)	368,000	1,073,222
Sn Lus Obispo	(40)	620,679	821,107
S. Ls Obsp Co.	(26)	303,004	471,036
San Marino	(2)	79,000	102,041
San Mateo	(138)	1,058,865	1,480,843
San Mateo Co.	(93)	2,540,484	4,241,716
San Pablo	(34)	255,292	307,836
San Rafael	(108)	2,086,231	2,492,102
Santa Ana	(21)	136,670	1,169,478
Santa Barbara	(117)	1,004,880	1,094,880
Snt Brbra Co.	(255)	3,599,500	7,478,800
Santa Clara	(149)	1,364,500	1,370,433
Snta Clara Co.	(32)	681,700	1,360,395
Santa Cruz	(12)	153,172	204,797
Snta Cruz Co.	(123)	1,366,757	1,665,730
Snt Fe Sprngs	(1)	12,500	360,559
Santa Maria	(200)	2,012,341	3,272,403
Santa Monica	(55)	524,251	1,021,571
Santa Paula	(6)	55,284	76,080
Santa Rosa	(47)	457,200	802,854
Sausalito*	( )	86,850	119,225
Seal Beach	(856)	5,752,470	5,773,273
Seaside	(32)	389,600	405,700
Selma	(3)	30,334	68,156
Shasta Co.	(18)	234,255	300,219
Sierra Madre	(7)	65,500	103,914
Solano Co.	(8)	93,317	202,750
Sonoma Co.	(83)	920,898	1,270,468
South Gate	(4)	45,515	223,202
So. El Monte	( )	Nil	99,800
So. Pasadena	( )	Nil	117,470
S. Sn Frncisco	(5)	76,750	262,673
Stanislaus Co.	(22)	239,650	1,043,100
Stockton	(17)	1,013,900	1,203,461
Sunnyvale	(101)	1,964,092	2,334,289
Temple City	(19)	200,260	276,130
Torrance	(147)	1,832,060	2,202,902
Tracy	(12)	110,240	135,790
Tulare	( )	Nil	76,442
Tulare Co.	(42)	184,050	321,394
Turlock	(2)	10,200	46,392
Ukiah	(1)	16,500	40,222
Upland	(9)	155,950	173,060
Vacaville	(18)	221,050	230,250
Vallejo	(33)	283,750	645,075
Ventura	(84)	468,799	1,714,804
Ventura Co.	(335)	3,911,820	7,508,773
Visalia	(10)	164,418	234,857
Walnut	(1)	17,500	20,100
Walnut Creek	(16)	253,612	341,643
Wasco	(8)	80,000	97,580
Watsonville	(1)	22,000	40,720
West Covina	(11)	179,850	298,207
Whittier	(29)	344,750	849,675
Woodland	(30)	378,070	449,825
Woodside	( )	No Reply	No Reply
Yolo Co.	(41)	371,100	2,634,972
Yreka	(3)	36,700	83,800
Yuba City	(54)	601,600	652,732
Yuba Co.	(17)	126,050	140,350
Total	**(15,811)**	**$193,231,560**	**$348,734,852**

OREGON			
Albany	(3)	$ 34,000	$ 106,149
Ashland	(3)	24,500	231,750
Astoria	(2)	110,000	126,650
Baker	(2)	28,500	35,060
Beaverton	(6)	91,727	100,587
Bend	( )	Nil	6,200
Central Point	(2)	10,150	22,000
Clackamas Co.	(41)	516,000	541,290
Coos Bay	(2)	40,700	69,695
Corvallis	(16)	193,000	422,017
Dallas	(2)	21,000	30,995
Douglas Co.	(8)	98,400	109,600
Eugene	(23)	202,585	721,820
Forest Grove	(5)	69,000	86,690
Grants Pass	(6)	76,000	89,600
Gresham	(3)	30,700	47,900
Hermiston	(2)	17,250	39,391
Hillsboro	(10)	164,700	170,673

* Breakdown not available

Western States for November

Residential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hood River	( )	Nil	5,665
Klamath Falls	(3)	34,000	128,060
La Grande	(1)	13,000	16,900
Lane Co.	(65)	737,561	2,026,397
Lebanon	( )	Nil	10,910
Marion Co.	(39)	473,500	580,550
McMinnville	( )	Nil	8,600
Medford	(14)	148,500	413,130
Milltn-Frwater	( )	Nil	6,020
Multnomh Co.	(90)	1,673,079	2,704,749
Newberg	(2)	9,000	10,650
Newport	(3)	31,000	45,500
North Bend	(3)	33,418	50,032
Ontario	(4)	45,000	59,100
Oregon City	(1)	17,500	1,422,800
Oswego	(4)	100,500	234,950
Pendleton	(1)	14,000	99,596
Portland	(85)	999,875	2,548,020
Prineville	( )	No Reply	No Reply
Roseburg	(2)	24,218	111,702
St. Helens	( )	Nil	1,137
Salem	(17)	195,550	278,075
Seaside	( )	Nil	549,491
Springfield	(11)	89,225	128,423
The Dalles	(5)	70,000	91,820
Washingtn Co.	(105)	1,923,525	2,062,215
Total	**(591)**	**$ 8,450,663**	**$ 16,522,568**

WASHINGTON

Aberdeen	(1)	$ 24,583	$ 37,248
Anacortes	( )	Nil	36,780
Auburn	(2)	38,000	61,425
Bellevue	(2)	60,000	93,205
Bellingham	(6)	78,000	603,340
Bremerton	(3)	41,500	123,815
Camas	(1)	16,000	20,300
Centralia	( )	Nil	95,993
Chehalis	(1)	9,000	17,500
Clark Co.	(47)	494,900	1,024,975
Clarkston	( )	Nil	6,475
Ellensburg	( )	Nil	75,878
Enumclaw	(1)	20,000	21,600
Ephrata	(8)	112,000	148,650
Everett	(11)	206,752	265,985
Grys Hrbr Co.	(2)	29,500	36,975
Hoquiam	( )	Nil	32,690
Island Co.	(9)	49,000	57,000
Kelso	( )	Nil	52,277
Kennewick	(1)	16,000	64,000
Kent	(15)	209,200	226,678
King Co.	(395)	5,212,560	5,787,330
Kirkland	(6)	67,400	68,300
Longview	(6)	68,000	123,057
Mercer Island	(13)	340,993	378,815
Moses Lake	(1)	11,800	70,657
Olympia	(4)	72,000	141,879
Pasco	(2)	28,000	73,740
Pierce Co.	(138)	1,552,650	1,764,201
Port Angeles	( )	Nil	5,900
Port Orchard	( )	No Reply	No Reply
Pullman	(1)	12,320	199,670
Puyallup	(4)	49,500	84,970
Renton	(11)	123,325	204,858
Richland	(15)	268,900	375,300
Seattle	(217)	2,615,530	9,855,740
Shelton	( )	Nil	135,465
Spokane	(64)	667,400	2,149,976
Spokane Co.	(33)	604,790	1,431,237
Sunnyside	( )	Nil	11,000
Tacoma	(63	726,575	2,638,939
Vancouver	(10)	121,000	747,482
Walla Walla	(2)	29,000	127,533
Wlla Wlla Co.	(6)	57,400	191,850
Wenatchee	(1)	21,000	885,530
Yakima	(7)	91,900	183,116
Total	**(1,109)**	**$ 14,146,478**	**$ 30,738,434**

ALASKA

Anchorage	(10)	$ 250,690	$ 617,700
Fairbanks	( )	No Reply	No Reply
Juneau	(2)	22,000	49,000
Ketchikan	( )	Nil	30,200
Total	**(12)**	**$ 272,690**	**$ 696,900**

IDAHO

Alameda	(16)	$ 190,000	$ 211,425
Blackfoot	(5)	83,000	101,850
Boise	(23)	219,250	379,251
Caldwell	(6)	79,200	79,200
Coeur d'Alene	(2)	26,735	65,889
Idaho Falls	(13)	158,569	338,196
Jerome	( )	Nil	62,000
Lewiston	( )	Nil	9,825
Moscow	(6)	132,000	177,661
Nampa	(4)	52,500	244,626
Payette	( )	Nil	62,201
Pocatello	(2)	23,500	48,430
Sandpoint	( )	Nil	3,100
St. Maries	( )	Nil	Nil
Twin Falls	(4)	35,000	204,335
Total	**(81)**	**$ 999,754**	**$ 1,987,989**

MONTANA

Anaconda	( )	$ Nil	$ Nil
Billings	(26)	404,400	895,394
Bozeman	(5)	81,000	274,650
Butte	( )	Nil	16,048
Cut Bank	( )	Nil	2,500
Glasgow	(2)	34,000	34,000
Glendive	(1)	16,000	22,800
Great Falls	(20)	203,286	317,712
Havre	(6)	68,554	82,704
Helena	(4)	64,000	501,373
Kalispell	(1)	12,000	12,000
Lewistown	(2)	19,000	58,760
Livingston	(1)	8,000	15,000
Malta	( )	Nil	Nil
Miles City	(1)	14,000	23,819
Missoula	(1)	16,000	47,040
Total	**(70)**	**$ 940,240**	**$ 2,303,800**

WYOMING

Casper	(14)	$ 162,000	$ 256,934
Cheyenne	(27)	420,500	471,519
Cody	(1)	23,000	66,300
Laramie	(3)	40,500	200,668
Rawlins	( )	Nil	1,200
Riverton	(8)	83,000	95,500
Rock Springs	( )	Nil	Nil
Sheridan	(1)	8,000	21,861
Total	**(54)**	**$ 737,000**	**$ 1,113,982**

COLORADO

Adams Co.	( )	$ 1,394,000	$ 1,608,713
Alamosa	(1)	13,000	274,000
Arapahoe Co.	(86)	1,671,800	1,671,800
Arvada	(92)	1,198,000	1,534,633
Aspen	( )	Nil	16,750
Aurora	(58)	529,628	579,872
Boulder	(71)	1,651,200	118,979
Boulder Co.	(28)	286,100	771,600
Colrdo Sprngs	(62)	773,534	950,302
Cortez	(1)	8,000	10,650
Denver	(520)	4,279,611	13,869,057
Durango	(3)	85,420	140,489
El Paso Co.	(26)	383,600	1,932,971
Englewood	(2)	16,600	166,305
Estes Park	(1)	15,000	42,250
Fort Collins	(12)	197,144	241,621
Fort Morgan	(7)	74,994	88,178
Golden	(8)	83,250	141,750
Grand Jnction	(1)	10,500	68,415
Greeley	(16)	142,000	296,268
Jefferson Co.	(328)	2,954,376	7,093,260
La Junta	(4)	54,500	67,007
Lamar	( )	Nil	104,000
Littleton	(12)	109,750	216,620
Longmont	(38)	357,100	462,377
Loveland	(11)	136,500	277,750
Monte Vista	(6)	12,000	67,000
Montrose	(3)	40,844	108,911
Pitkin Co.	(1)	8,000	8,000
Pueblo	(19)	199,749	327,039
Pueblo Co.	(5)	45,200	109,104
Sterling	( )	Nil	5,550
Trinidad	( )	Nil	10,910
Walsenburg	( )	Nil	140
Westminster	(15)	379,200	485,996
Total	**(1,437)**	**$ 17,110,600**	**$ 33,868,267**

UTAH

American Frk	(2)	$ 19,000	$ 21,975
Bountiful	(15)	237,000	246,435
Brigham City	(32)	352,000	502,750
Cedar City	(1)	18,000	24,900
Clearfield	(1)	11,000	32,100
Davis Co.	(4)	66,172	80,218
Kaysville	(5)	35,375	35,425
Layton	(2)	28,000	37,720
Logan	(16)	181,238	209,001
Murray	(11)	124,000	232,100
Ogden	(22)	395,780	1,205,380
Orem	(7)	75,215	81,237
Price	(1)	14,000	19,000
Provo	(13)	149,800	3,784,035
Salt Lake City	(111)	1,219,700	2,349,378
Salt Lake Co.	( )	No Reply	No Reply
S. Salt Lke Cty	(3)	57,900	138,632
Spanish Fork	( )	Nil	500
Tooele	(10)	106,525	125,805
Utah Co.	(6)	58,720	66,570
Weber Co	(6)	72,000	75,500
Total	**(268)**	**$ 3,222,025**	**$ 9,268,661**

NEVADA

Boulder City	( )	$ Nil	$ 6,882
Clark Co.	(34)	386,406	2,653,104
Elko	( )	No Reply	No Reply
Las Vegas	(234)	2,769,617	3,443,725
No. Las Vegas	(51)	395,490	517,895
Reno	(161)	1,901,380	2,730,892
Sparks	(10)	147,500	666,660
Washoe Co.	(26)	468,200	539,830
Total	**(516)**	**$ 6,069,193**	**$ 10,548,988**

ARIZONA

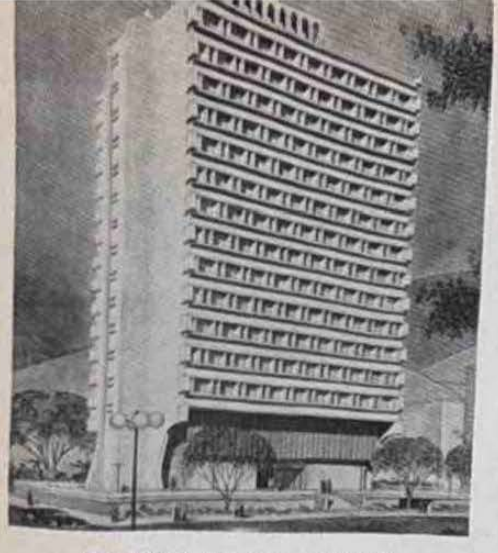
Buckeye	( )	$ Nil	$ 13,900
Casa Grande	( )	Nil	4,200
Chandler	(12)	106,394	136,892
Douglas	(5)	50,600	88,915
Flagstaff	(11)	83,114	614,996
Florence	(1)	9,300	9,300
Glendale	(12)	125,000	324,802
Maricopa Co.	(444)	4,217,533	5,329,336
Mesa	(61)	591,641	941,960
Phoenix	(765)	5,725,792	13,206,344
Pima Co.	(120)	1,205,468	1,546,705
Prescott	(3)	42,000	89,802
Scottsdale	(12)	153,950	359,805
Tempe	(98)	783,230	937,805
Tucson	(392)	2,949,443	4,236,350
Wickenburg	( )	Nil	6,400
Winslow	( )	No Reply	No Reply
Yuma	(7)	46,000	60,220
Total	**(1,943)**	**$ 16,089,465**	**$ 27,907,732**

NEW MEXICO

Alamogordo	(1)	$ 3,000	$ 174,820
Albuquerque	(75)	1,128,389	2,994,576
Artesia	(8)	88,000	96,490
Carlsbad	(6)	90,500	155,297
Clovis	(29)	328,714	1,236,518
Deming	(7)	82,000	98,775
Farmington	(1)	7,500	88,469
Gallup	(5)	81,112	172,252
Hobbs	(10)	141,683	192,174
Las Cruces	(7)	52,000	166,750
Las Vegas	( )	Nil	Nil
Lovington	(5)	51,500	51,500
Raton	( )	Nil	400
Roswell	(72)	674,500	738,350
Santa Fe	(16)	160,915	582,108
Silver City	( )	No Reply	No Reply
Truth Or Consequences	( )	No Reply	No Reply
Tucumcari	(1)	6,000	28,570
Tularosa	( )	Nil	Nil
Total	**(243)**	**$ 2,895,813**	**$ 6,777,049**

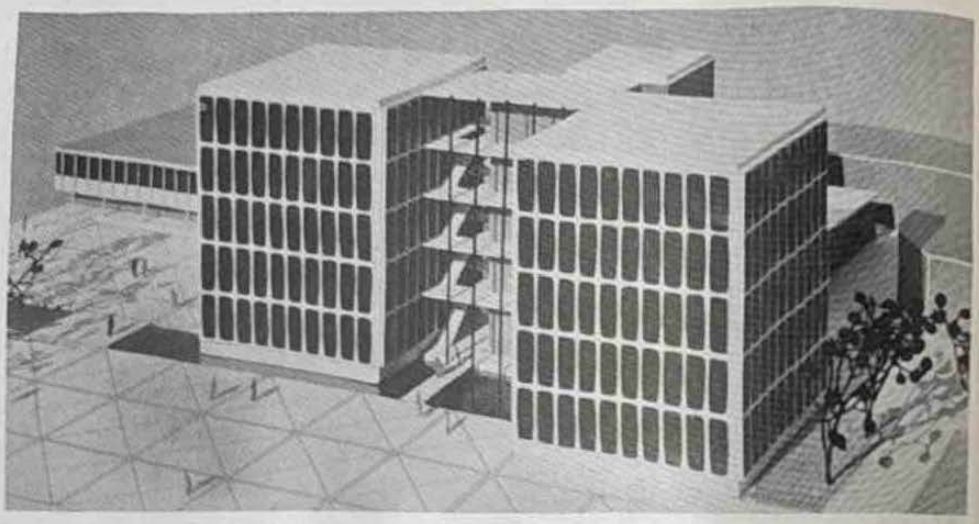
HAWAII

Hawaii Co.	(38)	$ 798,924	$ 1,452,442
Honolulu	(598)	5,050,049	10,052,562
Maui Co.	(10)	161,111	2,314,998
Total	**(646)**	**$ 6,010,084**	**$ 13,820,002**
GRAND TOTAL	**(22,727)**	**$270,175,565**	**$504,289,224**



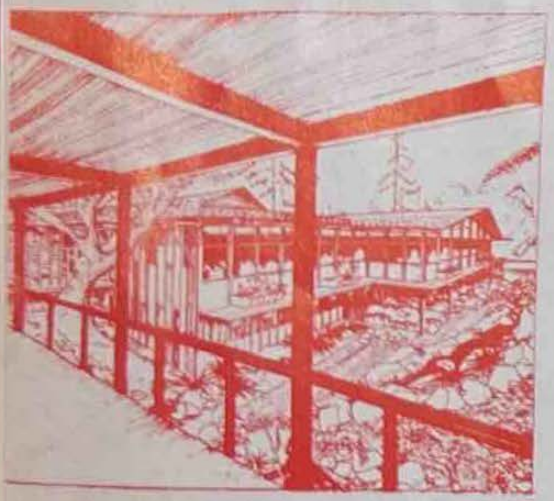
HAWAII: KING'S GRANT

17-story office building will be another in series of high-rise structures in Honolulu which employ new concepts in reinforced concrete. Post-tensioned girders spanning 108 ft. will be supported by two end walls cantilevered out from stair shafts. Girders will be stacked horizontally with 6-ft. precast vertical struts set between to equalize live load and prevent deflection of girders. Struts also aid in sun control. First two floors will house merchant seamen, thereby honoring old grant made by King Kalakaua from which building takes its name. Plans call for sunken plaza and roof-top restaurant-lounge. Architect: Leo S. Wou.



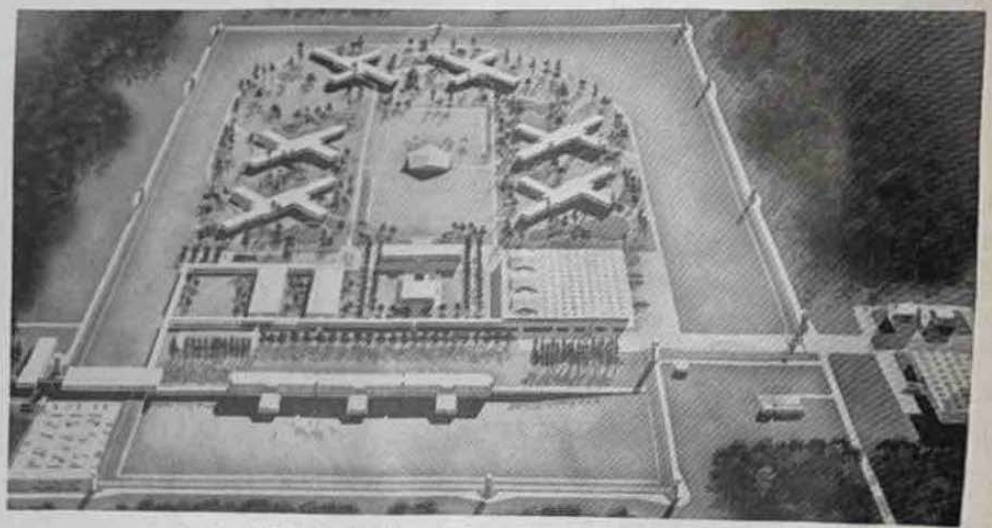
CALIFORNIA: BIOSCIENCES RESEARCH CENTER

for air pollution studies and housing departments of psychology, bacteriology, biochemistry and School of Pharmacy at University of Southern California will become part of science quad. White concrete structure will set pace for Los Angeles campus master plan (by same firm) which calls for grouping of buildings according to related functions. Architects: William L. Pereira & Associates.



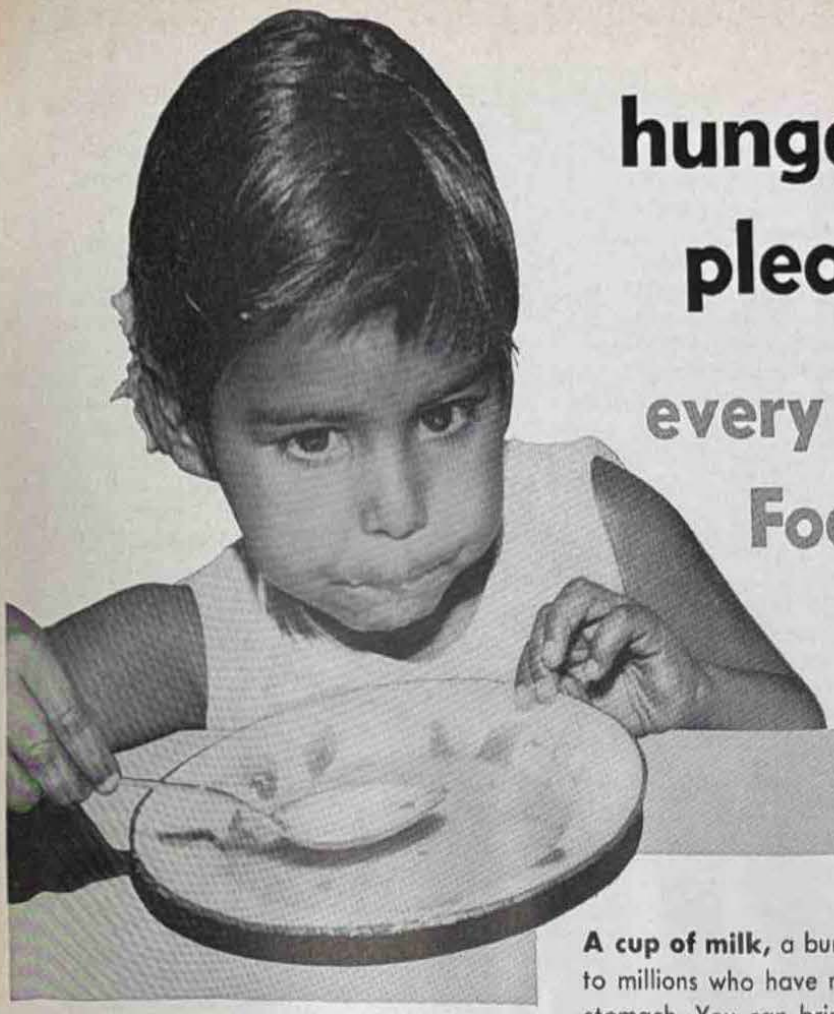
CALIFORNIA: RESTAURANT

with Oriental flavor takes advantage of wooded creek setting overlooking waterfall designed for Carlmont Shopping Center in Belmont. In order to preserve grove of trees, 4,000-sq. ft. addition is planned around 100-ft. Monterey pine, enclosed by atrium in center of structure. Architect: Victor G. Wandmayer.



WASHINGTON: CORRECTIONS CENTER

near Shelton, in planning stage for more than two years, resembles college campus at first glance and holds promise of becoming one of best-designed facilities of its kind in entire U.S. Estimated to cost $11 million, reinforced concrete complex will include administration and control buildings (lower left); maximum security units (lower center); warehouse and boiler plant (lower right); and reception-treatment building, hospital, chapel, school and combination gymnasium-food service-shop building (all grouped behind maximum security building). Associated architects: Bassetti & Morse, Walker & McGough and Curtis & Davis.



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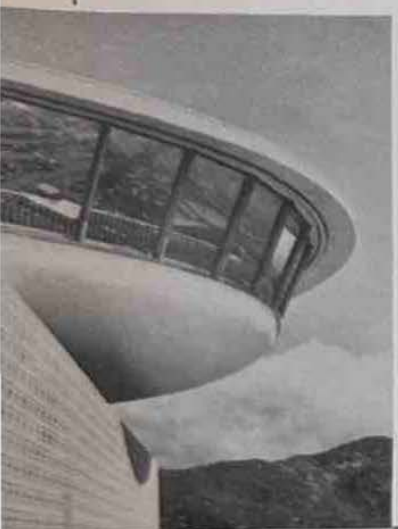
Building Briefs . . . *Highlights & Sidelights*

THE BUILDING WEST—Permits totaling $504,289,224 were issued during November by the nearly 500 cities and counties in 13 western states surveyed by Pacific Architect & Builder. This is a substantial and unseasonal increase of $135.5 million (36%) over November of 1960. Residential building accounted for more than half the total dollar volume at $270,175,565, while industrial-public-commercial building reached $234,113,659 for the month. As the graph on the opposite page shows, the overall building picture for 1961 carried a much higher dollar volume over a year ago.

TOP TWENTY-FIVE—Hottest spots in the West for November (in millions): **1.** Los Angeles, $63.5; **2.** Los Angeles County, $20; **3.** Denver, $13.8; **4.** San Diego, $13.6; **5.** Phoenix, $13.2; **6.** Honolulu, $10; **7.** Seattle, $9.8; **8.** San Francisco, $9.8; **9.** San Bernardino County, $8.4; **10.** Orange County, $8.1; **11.** Ventura County, Calif., $7.9; **12.** Palo Alto, $7.8; **13.** Santa Barbara County, $7.4; **14.** San Jose, $7.4; **15.** Jefferson County, Colo., $7; **16.** Sacramento County, $6.9; **17.** Contra Costa County, Calif., $6.6; **18.** Beverly Hills, $6.5; **19.** Riverside County, Calif., $6.1; **20.** King County, Wash., $5.7; **21.** Seal Beach, Calif., $5.7; **22.** Fresno County, $5.5; **23.** Maricopa County, Ariz., $5.3; **24.** San Diego County, $5.3; **25.** San Mateo County, $4.2.

CONCERNING CODES—State-enabling legislation to allow Arizona counties to adopt building codes has been urged by Don Hummel, former mayor of Tucson and immediate past president of the American Municipal Association. In an address before the Arizona Planning and Zoning Association, he also suggested a state agency or a governor's liaison officer to assist those communities which do not have their own planning organizations . . . Despite last-minute objections, the Denver City Council has approved amendments to update the building code.

DINING IN ORBIT—A revolving restaurant called La Ronde has been opened atop the 23rd floor of Honolulu's Ala Moana Building, tallest office building in Hawaii. Designed by John Graham & Co., architects-engineers, whose Space Needle with a similar dinery is nearing completion for the Seattle World's Fair, the restaurant makes one complete revolution every hour, providing a panoramic vista of Honolulu's skyline. The saucer shaped structure seats 162 diners on a 16-ft. wide turntable floor ring and is cantilevered from a 38-ft. diameter concrete core which houses stairwells, elevators, kitchen and service facilities.



SHORT-LIVED CONSTRUCTION CONFERENCE—Lack of sufficient support of the industry and the general contractors in particular has led to a suspension of the Construction Building Practices Conference in Southern California for "an indefinite period of time." Director Walter A. Smith says that when that aspect of the membership can be built up to a higher level, the conference will be reinstated. Last September when the organization opened its offices, it was believed there was a need for such a system because general contractors receive prices within a few minutes of bid closing time, making it impossible to reconcile the many subcontract and material bids. But the closing came as no surprise to many observers who felt from the beginning that cooperation of the construction industry would be lacking.

ALLOWING FOR LEISURE—Reflecting the growing interest in the second or vacation home and utility structures for sports, rural and mountain usage, the San Francisco National Sports & Boat Show has set aside a display area to encompass this portion of the building industry during its February 2-11 run at the Cow Palace.

FLASH, BLAST AND FALLOUT—"Architects are putting our people into buildings that will kill them in case of nuclear attack." Speaking to a Miami Beach, Fla., audience of architects, builders and engineers on an industrial development panel, John S. Bolles, designer of San Francisco's controversial baseball stadium at Candlestick Point, declared: "The lives of literally millions will be sacrificed to the current vogue for glass walls." He pointed out that many people may have to face any disaster in the place where they work. "In spite of all efforts to obtain warnings," the architect added, "it is probable that the first indication the average person will have of an attack is the flash. In a glass building this flash itself might well be fatal." . . . A PTA civil defense group in Bellevue, Wash., has proposed the construction of a $680,000 blast and fallout shelter for 2,000 persons under the Phantom Lake Elementary School playground in the Lake Hills area. Cost per family: about $1,077.

CONSULTING THE CALENDAR—The Los Angeles-based American Institute of Building Design, which reports it has been luring architects into membership, will hold its second annual seminar in Palm Springs January 13-14. Writing in the November AIBD publication, President Robert Van Roekel comments: "Maybe the long history of rivalry between architects and designers is finally breaking down. Designers have maintained friendly relations with engineers for many years and we certainly welcome architects." . . . Panel session devoted to bidding procedures for contractors and subcontractors will be featured during a symposium held in conjunction with the 12th National Exposition of the Air Conditioning, Heating and Refrigeration Industry February 12-15 in Los Angeles.

California to seek chief for giant architectural division

The mid-December announcement from California that a nationwide search may be made for a successor to State Architect Anson Boyd, who has retired, helped to focus attention on a related news event.

The latter is concerned with assembly interim committee hearings which got underway in November on a proposed measure requiring architectural competitions for design of state buildings costing $1 million or more.

Because of this and other developments, which tend to reflect the mounting criticism being aimed toward the Division of Architecture's operations, the appointment of Boyd's successor takes on added significance. Furthermore, the organization he directs has grown to more than 1,000 persons engaged in administration, architecture, engineering and supervision of construction at an annual outlay of about $100 million.

State architect for 21 years, Boyd will officially leave his post next year but has accumulated terminal leave which permits him to surrender his job at once. Boyd said he is retiring on the advice of his physician due to ill health.

Robert Bradford, whose Department of Public Works employs the state architect, has indicated he may request the state personnel board to conduct "a nationwide examination in order to give us a choice of the best available talent in the country for this increasingly important job."

That the public likewise feels the importance of the job is indicated in an editorial which appeared in the San Francisco Chronicle. Under the title "The Choice of State Architect," it said in part:

"It is no reflection on the professional competence of Boyd to observe that the $1 billion worth of state buildings he has designed or supervised have not been universally successful. Some have attracted violent criticism—for example, the Motor Vehicle Department's San Francisco headquarters—and many have been flat, stale and without distinction in the pattern of what has become known as 'taxpayer Gothic.'

"Architects employed on state projects have reported that they were warned to design nothing that even looked expensive, lest some legislator or other public official allege extravagance and call for an investigation.

"An official attitude such as is thus indicated is fatal to architectural excellence. It is a benighted attitude and also a costly one, for public buildings, no matter how utilitarian, serve but a fraction of their purpose when they say nothing of the majesty or dignity of government.

"Certainly, this is a job that cannot be casually conferred for reasons of mere seniority or political patronage. Just as certainly, it is one that needs to be freed from penny-pinching restrictions and blighting political pressures. Until the climate of Sacramento has changed to one that not only tolerates but also demands good architecture, 'the best available talent in the country' will be unable to give California the kind of public buildings it needs and deserves."

Meanwhile, the hearings, which centered around Assemblyman Thomas Rees' proposal for architectural competitions, launched an inquiry into design practices of the state. The assembly interim committee toured San Jose State College, designed by the Division of Architecture, and moved the next day to Berkeley, where Dean William Wurster described the role of private architects in developing the University of California campus.

In still another move, the California Council, AIA, which has been spearheading a campaign to divert more and more public buildings from the boards of the Division of Architecture, presented a recommended method for selection of private architects to design state projects to Bradford. The recommendations would apply to all state projects except state college jobs, which are administered by a board of trustees.

CORRECTION

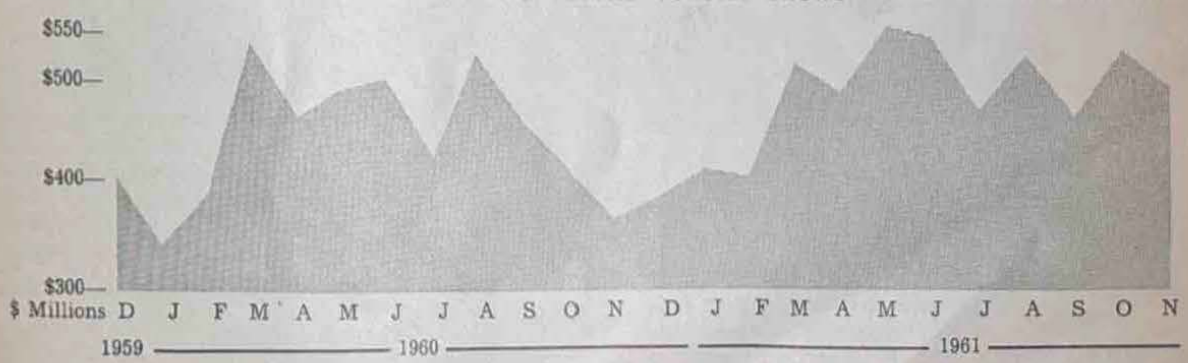
In its October issue, Pacific Architect & Builder published as a news item an article entitled "California Decisions Cover Copyrighted Plans," based upon information supplied by a public relations firm. The latter half of the article concerned one man's interpretation of court findings and as such is open to question.

Edgar Paul Boyko, attorney for one of the defendants in the suits involved, has informed Pacific Architect & Builder that the article contained four inaccuracies. He points out that:

1. The cases referred to were never decided by the court on the basis of contested issues.
2. The cases did not involve any "doctrine of indirect copying" and the courts do not recognize such a doctrine.
3. Ross Cortese, builder of the houses in question, was not the plaintiff in any of the actions.
4. The law on the subject of home plans copyright is still "fairly unsettled."

Pacific Architect & Builder is an impartial party in this matter of the legal arguments that were at issue and that are still argued in professional circles, but it does wish to correct possible misinterpretations that the original article may have caused.

24-MONTH COMPARISON OF TOTAL BUILDING PERMIT VOLUME SHOWS 1961 GREATER THAN 1960



Seattle AIA competition premiates eight current projects

In its 11th annual Honor Awards program in December, the Seattle Chapter, AIA, gave equal citations to eight buildings completed within the last three years and for the third time recognized an older structure of "enduring quality."

Continuing still another practice, the architects, their wives and winning clients were joined by related professionals and civic leaders for the awards presentation in the Seattle Art Museum, where all 33 entries were displayed.

The preservation of historic buildings committee in selecting the Loveless Studio Building for this year's Citation Award said it "has a sense of warmth of humanity that is too often lacking in our contemporary commercial structures. Here is a building composed of the simplest of materials, joined together economically to produce an urban environment worthy of study. The grouping of the shops and apartments about an interior court solves the problems of light and air without destroying their city character."

The all-architect jury—Bruce Walker of Spokane, Dean Walter Gordon, School of Architecture and Allied Arts, University of Oregon, and John Robert Sproule of Seattle—made these comments about the eight other buildings:

- Alderwood Ward L.D.S. Chapel—"A church, rare in these days of architectural exhibitionism, having qualities of dignity and simplicity. Fine massing of church and school volumes, with generous, graceful roofs."
- Southwest Branch Library—"Appropriate modest scale and quiet character for a public library in a residential setting. . . . Simple open plan which apparently works well. . . . Good color, detail and handling of light."
- Kirkland Fire Station—"Carefully detailed and generally well-studied addition to existing city hall, where restricted and difficult form of the site is capitalized for plan advantage. Pleasant transition between city hall and fire station."
- Kirk Office Building—"A subtle and unified example of design in wood, set down in an industrial site and elevating the entire neighborhood. The scheme is simple and direct, with interesting wood detail, good color, pleasant spaces."
- Library, CWSC—"A fresh and stimulating solution to the problem of a college library. The architects' approach to the procedure for integrating art in the architecture is an important contribution to design."
- Bethlehem Steel Office Building—"A handsome industrial office building, restrained and simple in concept, set off in adequate space on the site for good landscaping and easy parking."
- McCarty Women's Residence Hall—"Successful handling of difficult site, with private rooms well separated from the public spaces. The jury especially admired the interiors which have the appropriate residential character coupled with sophistication and freshness."
- Lovett Residence—"A compact scheme, efficiently planned and otherwise very suitable for the clients, articulately detailed throughout with elegance and ingenuity."



LOVELESS STUDIO BUILDING (completed 1932), Seattle: Arthur L. Loveless, architect.



ALDERWOOD WARD L.D.S. CHAPEL, Mountlake Terrace: Ibsen A. Nelsen & Russell B. Sabin, architects; Gordon B. Varey, associate.



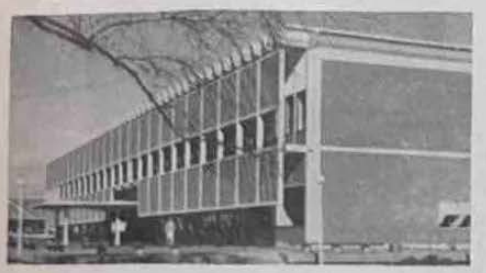
SOUTHWEST BRANCH LIBRARY, Seattle: Durham, Anderson & Freed, Architects.



KIRKLAND FIRE STATION, Kirkland: Cummings & Martenson, architects.



KIRK OFFICE BUILDING, Seattle: Kirk, Wallace, McKinley & Associates, architects.



LIBRARY, CENTRAL WASHINGTON STATE COLLEGE, Ellensburg: Bassetti & Morse, architects.



BETHLEHEM STEEL OFFICE BUILDING, Seattle: Bindon & Wright, architects.



McCARTY WOMEN'S RESIDENCE HALL, UNIVERSITY OF WASHINGTON, Seattle: Young, Richardson & Carleton, architects-engineers.



LOVETT RESIDENCE, Seattle: Wendell H. Lovett, architect.

Photos: Art Hupy (3), Hugh Stratford (2), Dearborn-Massar (2), Charles R. Pearson.

Competition for mansion design narrowed to 10 finalists

From among 197 entrants in a statewide competition for the design of a new governor's mansion in Sacramento, 10 architects or firms have been admitted to the second stage. The finalists, one of whom will be named the winner in February:

Louis Angelikis and Paul Bailly of the firm of Angelikis & Bailly, Los Angeles; J. U. Clowdsley and Jack F. Whipple of Clowdsley & Whipple, Stockton; Martin Del Campo and Donald J. Clark of Del Campo & Clark and John K. Miller, San Francisco; William Guy Garwood, Palo Alto; Donald Goodhue and Addison Gordon Hall of Hall & Goodhue, Monterey; William K. Goodwin Jr., San Francisco; Raymond Kappe, Los Angeles; Herbert D. Kosovitz of Kosovitz & Knox, San Francisco; Pierre Lafond, San Francisco; and Worley K. Wong, Allen Don Fong, H. W. Namitz and Terry Tong of Campbell & Wong, San Francisco.

The jury consisted of architects Pietro Belluschi, dean of the School of Architecture and Planning, Massachusetts Institute of Technology, who acvted as chairman; Gardner Dailey, San Francisco; Lutah Maria Riggs, Santa Barbara; and Frank W. Kent, director, Crocker Art Gallery, Sacramento; and Stephen C. Pepper, professor of philosophy, emeritus, University of California. Dean William Wurster of the University of California is professional advisor to the Capitol Building and Planning Commission, competition sponsor.

In its report the jurors said "both the quantity and quality of the entries made this competition one of the most successful ever held. Many parts of the state were represented and new talent was brought forth." They assessed the merits of each submission against these criteria:

- A sense of appropriateness and dignity expressed without pompousness.
- Avoidance of the bizarre.
- Serenity without dullness.
- An understanding of good architectural composition and of the role of space as an element of architectural excellence.
- A sensible recognition of the special climatic conditions of Sacramento without exhibitionism.
- A clear understanding of structural discipline which yields both economy and clarity.
- A concern for proportions and for scale which must be domestic without relinquishing order and dignity which are necessary in a building striving to become the visible symbol of government.
- Intelligence in interpreting the various roles of the political head of state and the need for privacy for himself and his family.
- A respect for the California tradition without the slavish copying of its more obvious externals.
- The quality of movement in space as it visually unfolds upon the visitor.
- Finally, and essentially, the orderly imaginative, yet economical relationship of all parts and functions which were the mandatory requirements of the program.

The report concluded: "While the probable cost of each scheme did not affect the decision of the jury at this first stage, it is nevertheless very important to remember that the cost will be a factor in the final judgment and in the ability of the winning project to be executed.

Other points worth mentioning are the functions related to the everyday workings of the mansion, such as the adequacy of the family kitchen, and need of mechanical services, which should be given more attention in the second stage of this competition.



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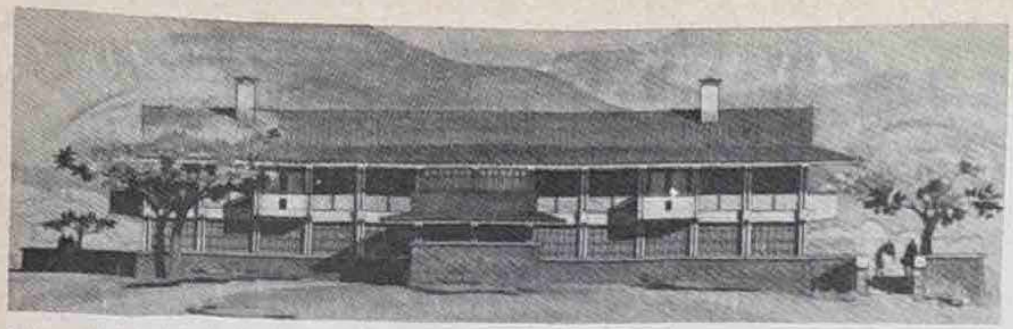
Name_____

Company_____

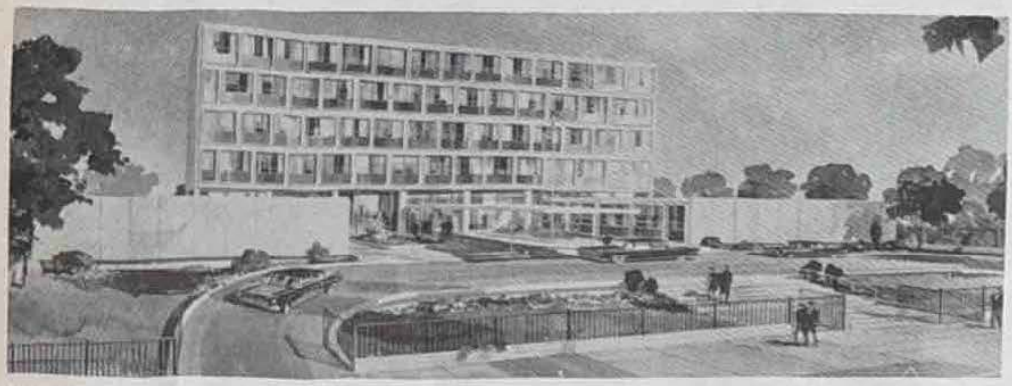
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855 Cahuenga Boulevard, Los Angeles 38, California



U.S. AMBASSADOR'S RESIDENCE IN SEOUL will harmonize with design and materials used in other recently constructed U. S. Embassy buildings. Other structures—housing for servants' families and garage—are included in same contract.



U.S. EMBASSY IN WARSAW is located on five-acre, L-shaped site between Bulgarian and Swiss Embassies, across from beautiful park and looking over Vestula River Basin. Ground floor contains consular wing and administrative offices; top floor has ambassador's suite.

Embassy projects designed by West Coast architects

Joining the growing list of U.S. Embassy buildings designed by western architects are projects in Seoul, Korea, and Warsaw, Poland.

Kump Associates of Palo Alto are architects for the U.S. Ambassador's Residence in Seoul; Welton Becket & Associates for the U.S. Embassy in Warsaw, which is under construction.

The Seoul two-story residence has a concrete frame, resting on a base of indigenous stone. Stucco spandrel panels and wood screens will be used on the exterior and local blue Korean tile for the roof.

The 10,800-sq. ft. building will house the formal state salon and its reception and entertainment functions, residential spaces for the ambassador and his family and kitchen, service and servants' spaces which will support both of the main functions.

Initial construction of the Warsaw project consists of a five-story office building. Apartments for staff housing may be erected in the future.

The U-shaped office building is designed around a landscaped courtyard with a four-story tower resting on top of the first floor. It is built of reinforced concrete.

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new offices, partnerships

Conrad H. Stieber has opened an office for the general practice of architecture at 1947 Adele Place, San Jose. Since his graduation from the University of California in 1956, he has been associated with architects in the area.

Bertram A. Bruton has opened an architectural office in the Capitol Hill Finance Building, 2239 E. Colfax Ave., Denver.

Douglas C. Durkoop and Keith T. Boyington, who previously maintained their own architectural offices, have formed a partnership under the name of Durkoop & Boyington in the Great Western Building, W. 905 Riverside Ave., Spokane. Durkoop is a graduate of the University of Oregon and Boyington of the University of Idaho.

L. A. Ferris, Graham Erskine and John Hale Calef have organized the new architectural firm of Ferris, Erskine & Calef at 458 California Ave., Reno.

new partners, associates

Charles P. Clayton, Frederic M. Robinson and Jack Wood have been made partners in the Honolulu-based firm of Harland Bartholomew & Associates, city planners-civil engineers-landscape architects. New associate partners are Arthur B. Gallion, Malcolm C. Drummond, Joseph M. Ross, Thomas A. Campbell, Robert A. Fosnaugh and Ronald D. Schmied.

Dean L. Gustavson Associates, Salt Lake City architects, have appointed L. Spencer Smith as an associate.

firm changes

After 15 years of architectural practice as a partnership, the San Francisco firm of Campbell & Wong is now known as Campbell & Wong & Associates. Original partners Worley K. Wong and John Carden Campbell are associated with architects Allen Don Fong, Harry W. Namitz and Terry Tong.

new addresses

Alan A. Dailey, Architect & Associates, to Suite 310, 222 W. Osborn Road, Phoenix.

Farnham & Peck, architects, to 124 S.W. Yamhill St., Portland.

Clinton Marr, architect, to Suite 321 Standard Insurance Bldg., 3380 14th St., Riverside, Calif.

John W. Scully, architect, to 3821 N. Third St., Phoenix.

Russell E. Collins, architect, to 2403 Moray Ave., San Pedro, Calif.

appointments

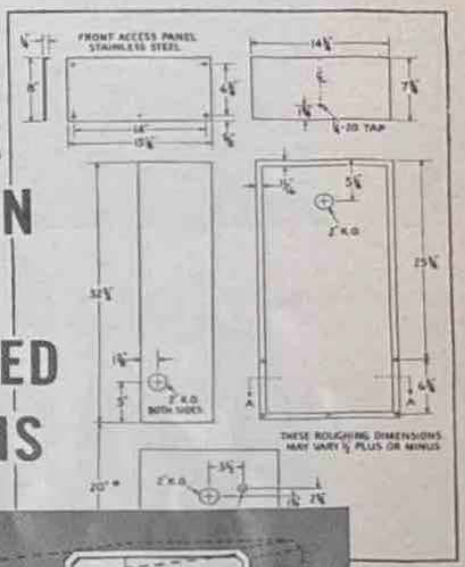
Robert C. Wing has been named manager of land development for Puget Western Inc., developers of Andover Industrial Park, with offices in Seattle's Washington Building. For the present he will continue his relationship with the Tacoma firm of Worthen, Wing, Seifert & Forbes, architects-engineers, with whom he has been a partner for 14 years.

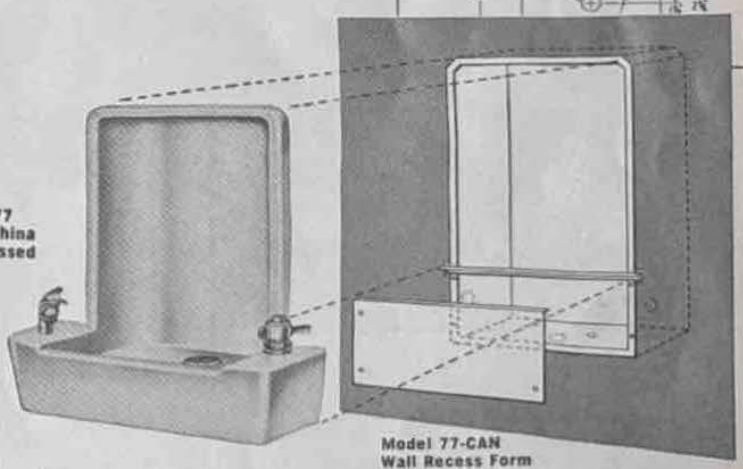
George W. Sprinkle, formerly with Welton Becket & Associates for 7½ years as project architect, has joined the architectural firm of Guirey, Srnka & Arnold as an associate and manager of its Flagstaff, Ariz., office.

honors

Killingsworth, Brady, Smith & Associates of Long Beach, Calif., received a first prize for an office building in that city at the Sao Paulo (Brazil) Biennial.

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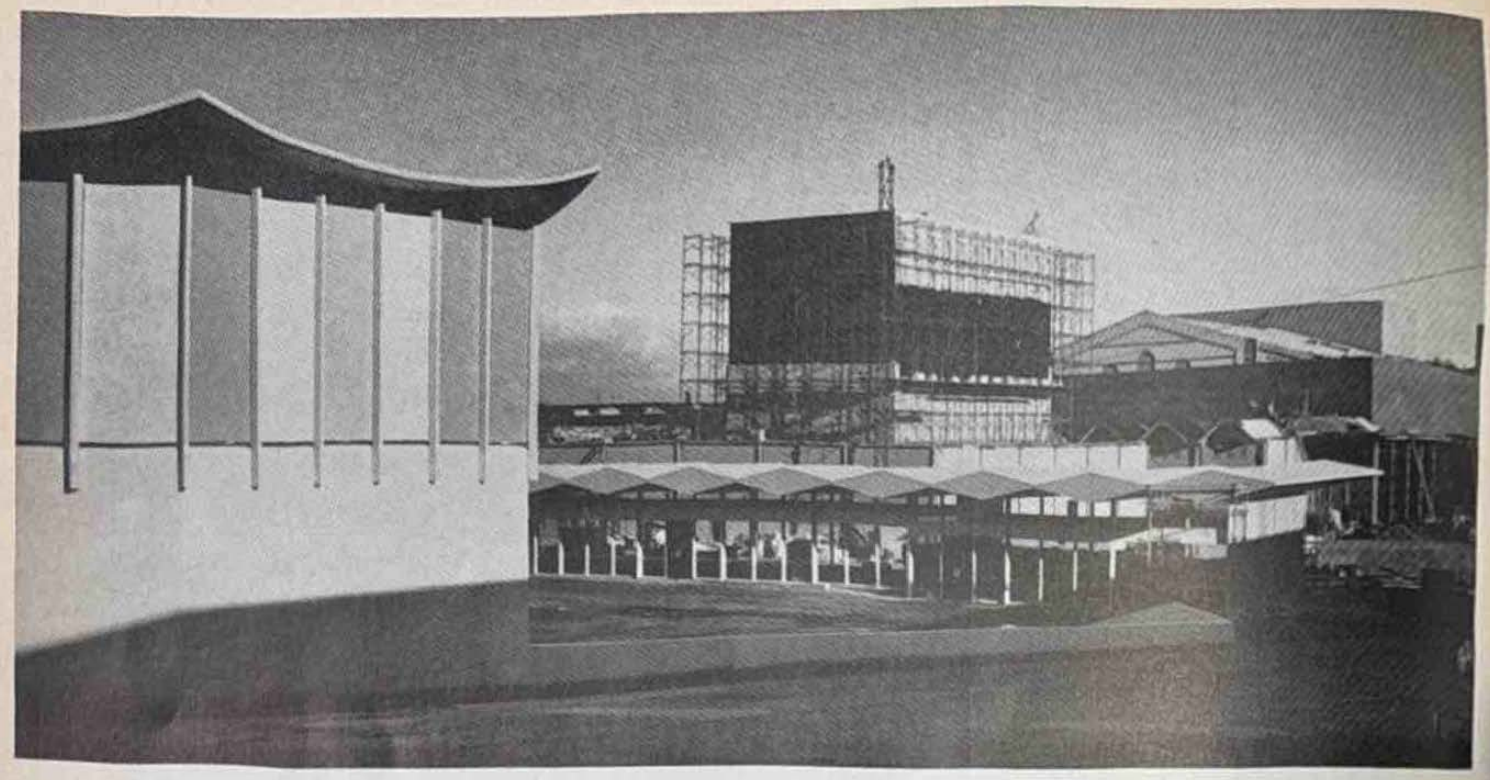
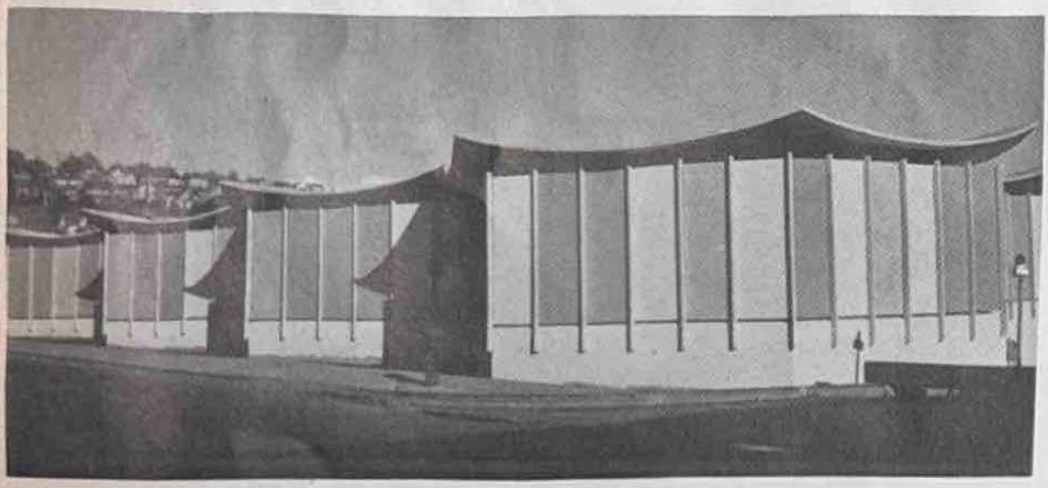


EXHIBIT BUILDINGS No. 1, 2, 3 • Walker & McGough, architects; Worthington, Skilling, Helle & Jackson, structural engineers; Sound Construction & Engineering Co., contractor.



With the advent of 1962, all elements of the construction industry and exhibitors participating in the Seattle World's Fair were reminded of the urgency to speed up their efforts lest April 21 catch them unprepared. Paradoxically, while many buildings were nearing the completion stage, others were continuing to spring up monthly. Some examples:

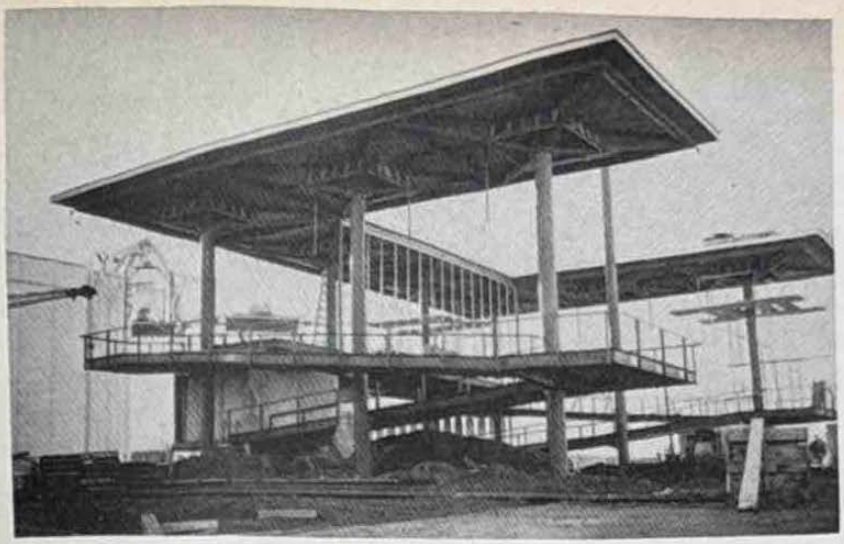
EXHIBIT BUILDINGS NO. 1, 2, 3 • The thin-shell concrete hyperbolic paraboloids now are surrounded by colored fiberglass panels, while the other segment of this display group—the box beam structure—stands open in the rear. Beyond is the Civic Center complex, dominated by the Playhouse from this vantage point.

GENERAL ELECTRIC PAVILION • The boomerangs of this wood frame building seem to be flying in front of the towering Space Needle. Actually, they will serve as an entrance to a 10,032-sq. ft. house which will feature push-button conveniences for nearly all household duties except changing the baby. The theme: "Living Electrically," of course.

STANDARD OIL PAVILION • The structure, which by the nature of its design and use of materials will become an integral part of the exhibit statement, is composed of eight steel columns. These in turn support a space frame from which is suspended a plastic skin in tension. Within this U-shaped space is a simple floor system comprised of three major deck areas and connecting ramps.

BELL TELEPHONE EXHIBIT BUILDING • The glued laminated Douglas fir structure now is sheathed with cedar siding and a marble aggregate facing.

ALWEG MONORAIL EXPOSITION STATION • Serving as one of the entrances to the fair site, this terminal has concrete block walls up to platform height and steel bents supporting a metal roof. Repair and maintenance shops will be housed at the basement level. (Far a methods article on the almost completed monorail installation, see p. 27.)

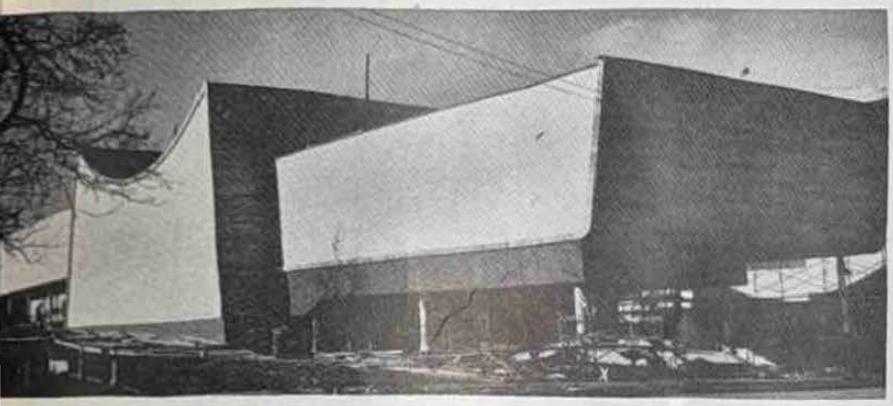


STANDARD OIL PAVILION • Piero Patri, architect, in association with Gene Tepper Division of Michael Saphier Associates, Inc., designer; Eric Elsesser, structural engineer; Conderback, Inc., general contractor.

PA&B staff photos



GENERAL ELECTRIC PAVILION • John Graham & Co., architects-engineers; John H. Sellen Construction Co., general contractor.



BELL TELEPHONE EXHIBIT BUILDING • Raymond Loewy/William Snaith, Inc., designers, in association with John Graham & Co., architects-engineers; Jentoft & Forbes, general contractors.

Progress report No. 4: Seattle World's Fair

ALWEG MONORAIL EXPOSITION STATION • Adrian Wilson & Associates, architects-engineers; Howard S. Wright Construction Co., general contractor.

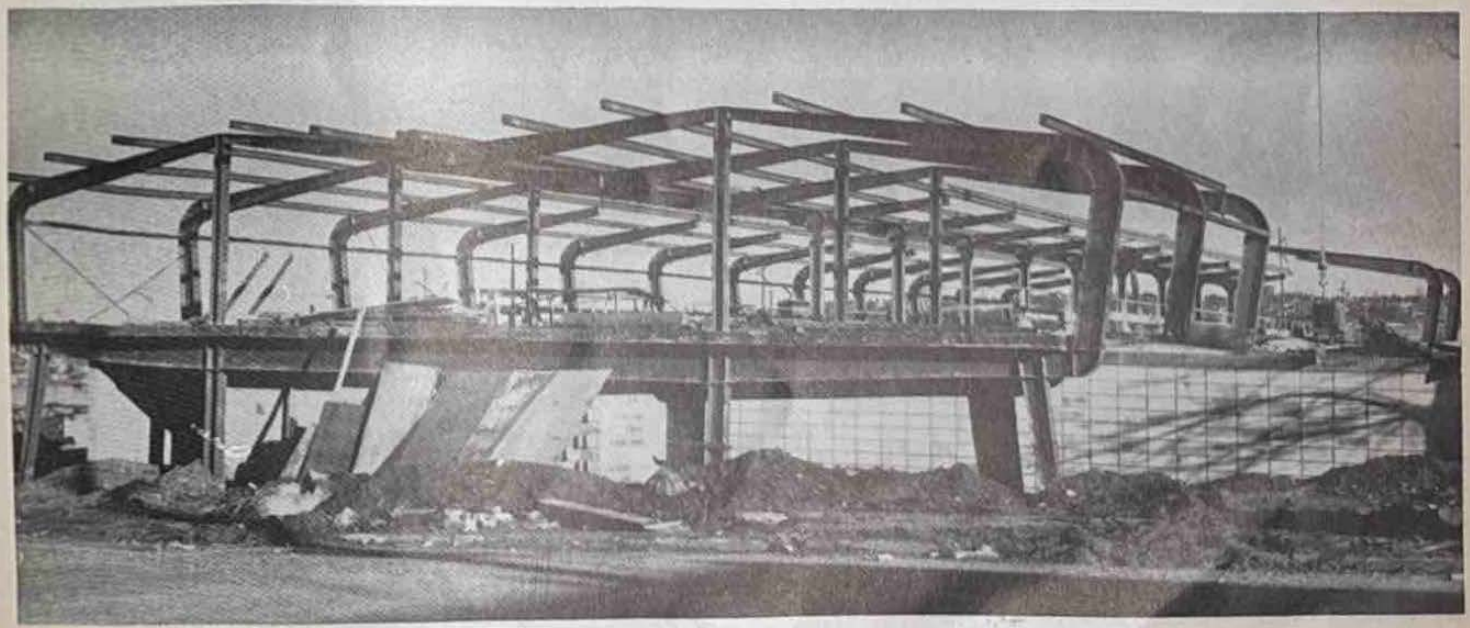


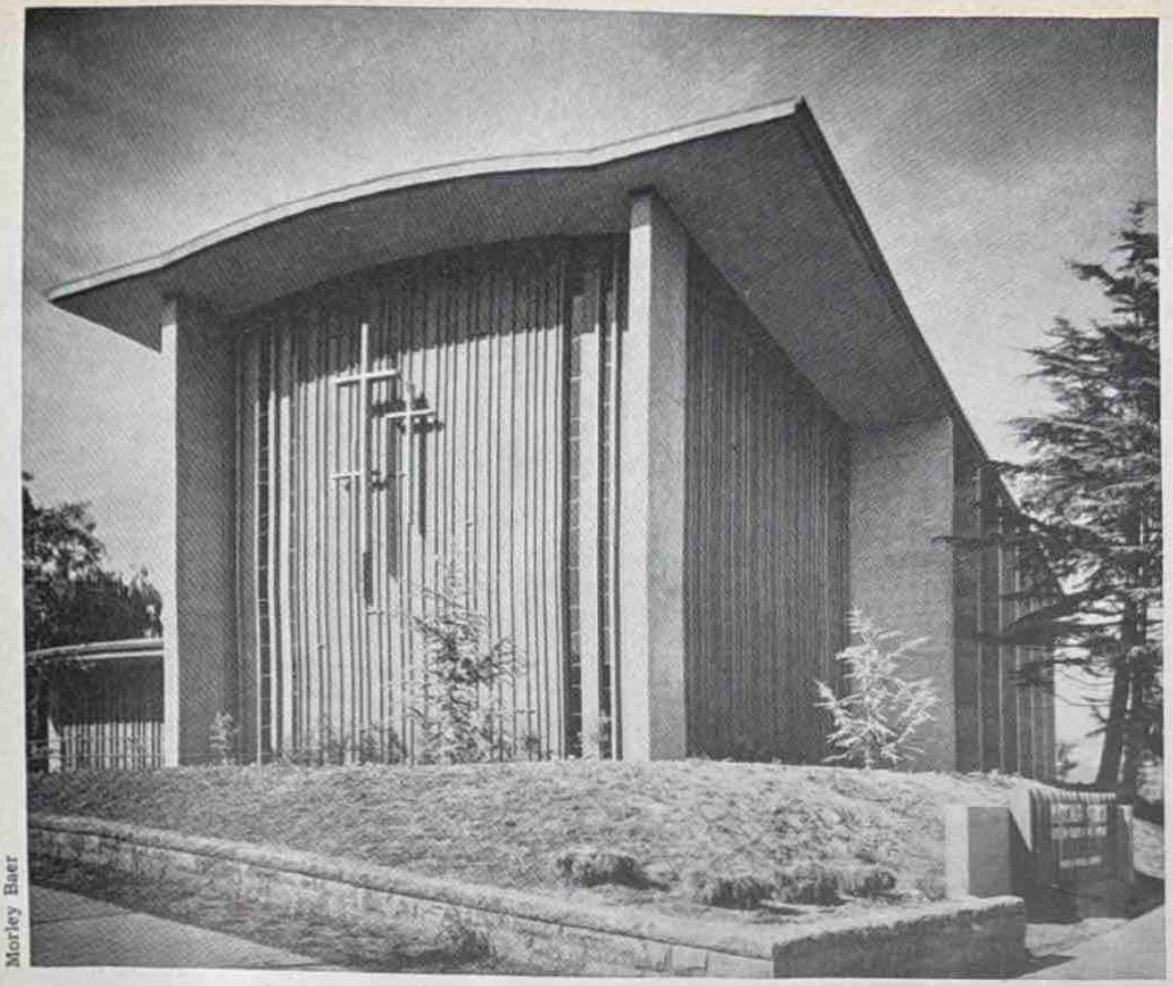
Photo editorial

FAREWELL TO 3.5 MILES OF WIRES: THANK YOU SEATTLE CITY LIGHT

Along with the power poles, transformers and overhead wires, the Federal Science Pavilion (Minoru Yamasaki & Associates-Naramore, Bain, Brady & Johanson, associated architects-engineers) borders the Denny Way approach to the Seattle World's Fair while one of its five 100-ft. precast concrete arches takes shape beyond. But fortunately for Seattle and her 1962 visitors, the clutter—occupational hazard of photographers as well as architects—will be removed prior to the April 21 opening as part of a $537,000 project by Seattle City Light involving 3.5 miles of overhead wires in and around the exposition site. And this is only the first, albeit a giant, step in the public utility's program to improve Seattle's downtown environment.

PA&B staff photo



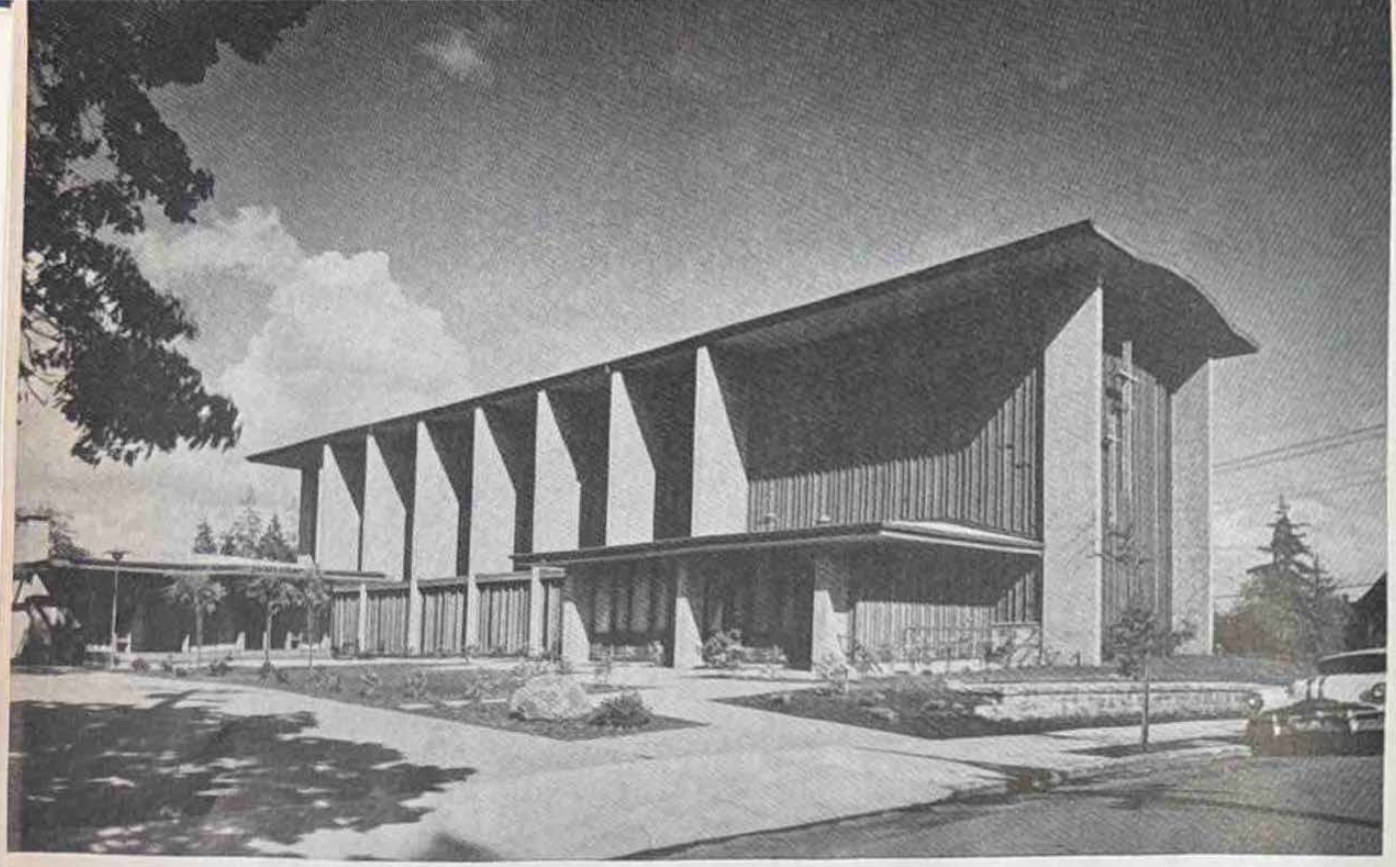


Morley Baer

OAKLAND'S PLYMOUTH CONGREGATIONAL CHURCH

Four unpretentious religious buildings

Assembled in this issue are three houses of worship and a fellowship hall addition, each a straightforward answer to the program as spelled out by the particular congregation. Each transmits its spiritual quality in a contemporary idiom that is, in the final analysis, a down-to-earth expression — and hence a welcome relief from today's exhibitionism. For if the West is producing some of the nation's most exciting and compelling church architecture, it also must take credit for some of the most undisciplined and bizarre.



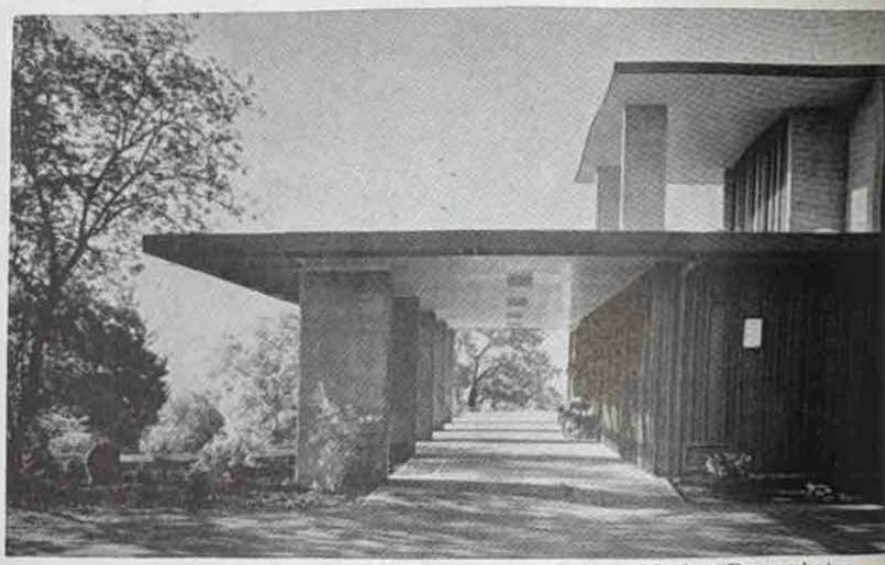
Transitional church: in locale, design

EXCELLENT EXAMPLE of the church building in transition is this first unit —sanctuary and reception hall—of a master plan which will eventually include a fellowship hall, classroom wing and parking lot. It is transitional in its location, occupying a hilly site in an area between city and suburb; and it is likewise transitional in design, bridging traditional and contemporary, formality and informality.

The church itself commands the uppermost part of the corner lot, while the future structures will be arranged in a multilevel plan. The cadence of the marching concrete piers is heightened by the vertical board and batten redwood siding, yet softened by the vaulted roof and the stained glass panels inset in random-width redwood mullions.

Inside and out, the construction materials themselves — the concrete and redwood are combined in a most sympathetic way — provide the decoration. Exterior siding, for example, features 2x2 horizontal redwood blocks placed in-between to serve the dual purpose of obscuring joints in vertical boards. Landscape architects: Osmundson & Staley.

SANCTUARY ENTRANCE is reached via covered walkway along reception room.



Morley Baer photos

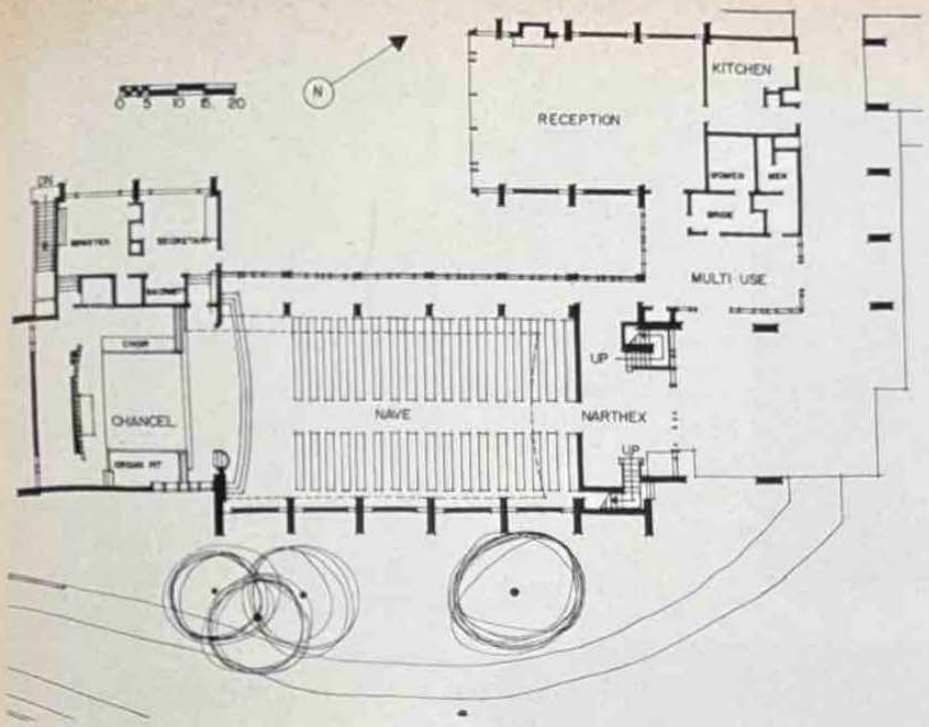
Plymouth Congregational Church
Oakland, California

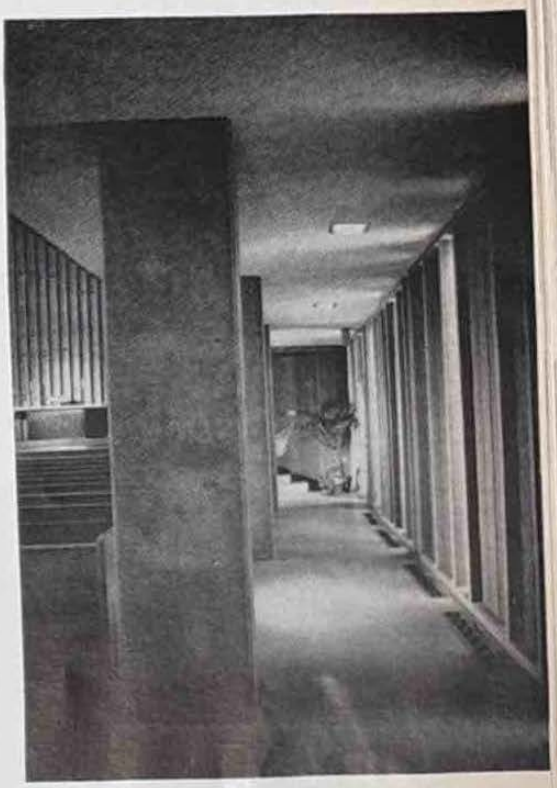
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CARLTON A. STEINER
Architect

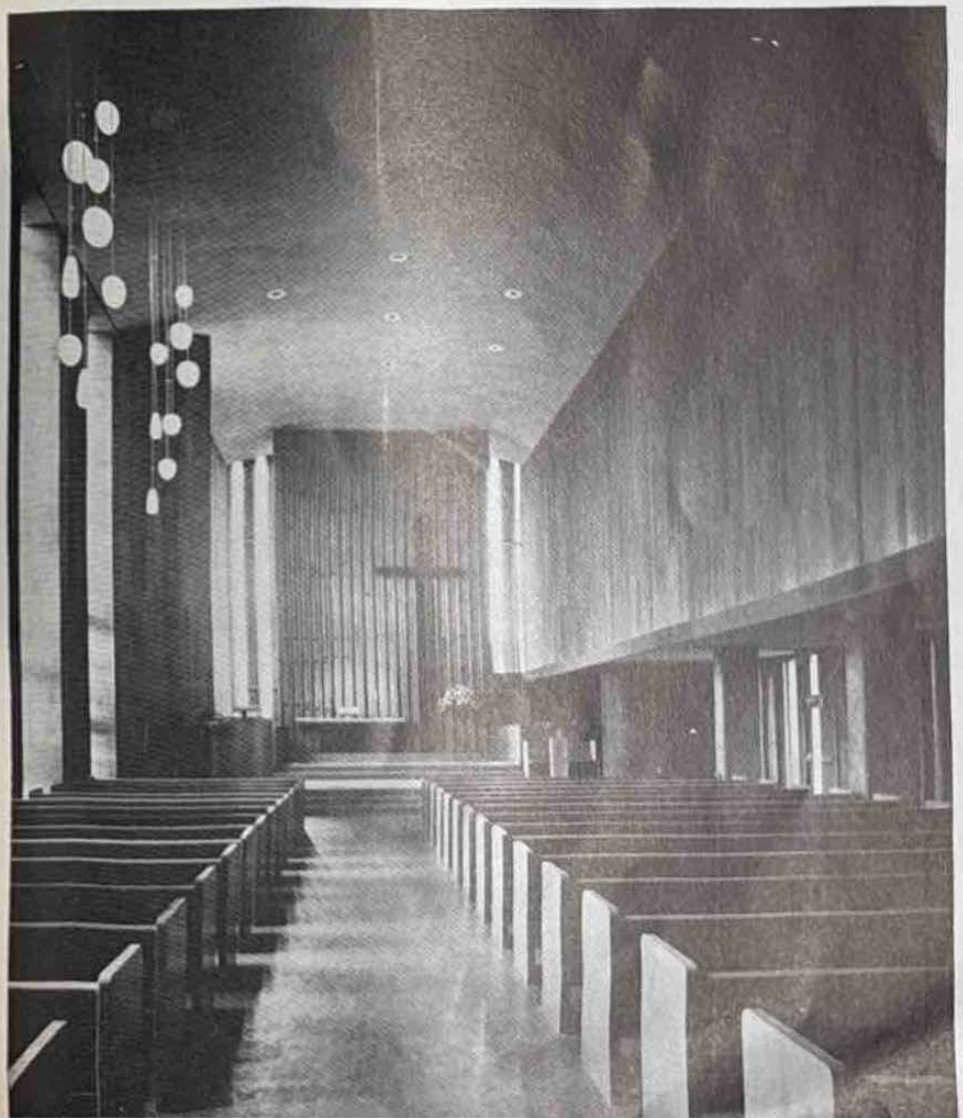
WILDMAN & MORRIS
Structural Engineers

ARNOLD B. LAHTI
General Contractor





REDWOOD GRILL provides appropriate backdrop for altar. Lighting fixtures are custom designed. Sandblasted concrete pillars are tan and integrate well with saw-textured redwood finish.



OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete; frame: reinforced concrete and wood; roof: wood; floors: integrally colored concrete.

Exterior Finish: sandblasted concrete; resawn redwood.

Roof Surfacing: tar and gravel.

Windows: stained glass with lead cames in sanctuary; clear ¼-in. plate glass in reception room.

Doors: flush solid-core mahogany.

Insulation: 4-in. rock wool at roof.

Interior Finish: exposed concrete; stained resawn redwood.

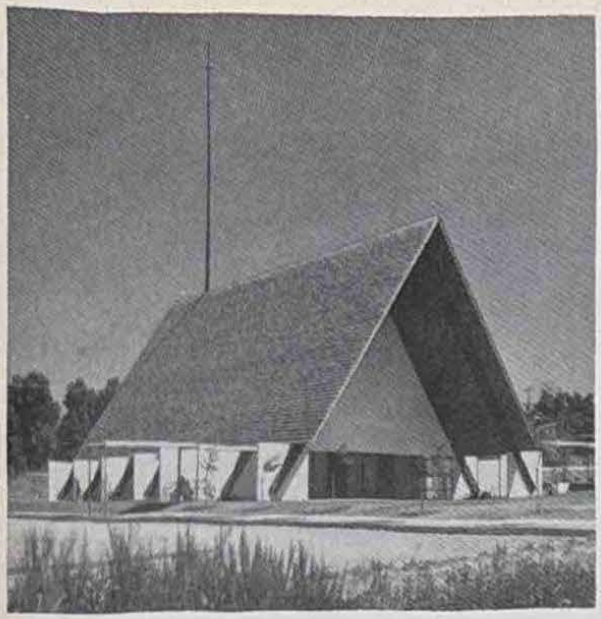
Ceilings: acoustical plaster.

Heating: hot air perimeter system, underfloor distribution.

Total Area: 7,855 sq. ft. (not including covered walkways, porch, etc.)

Total Cost: $226,000.

Date of Completion: December 1959.



Dearborn-Massar photos

Emmanuel Episcopal Church
Mercer Island, Washington

•

WALDRON & DIETZ
Architects

HAROLD L. LARSEN
General Contractor

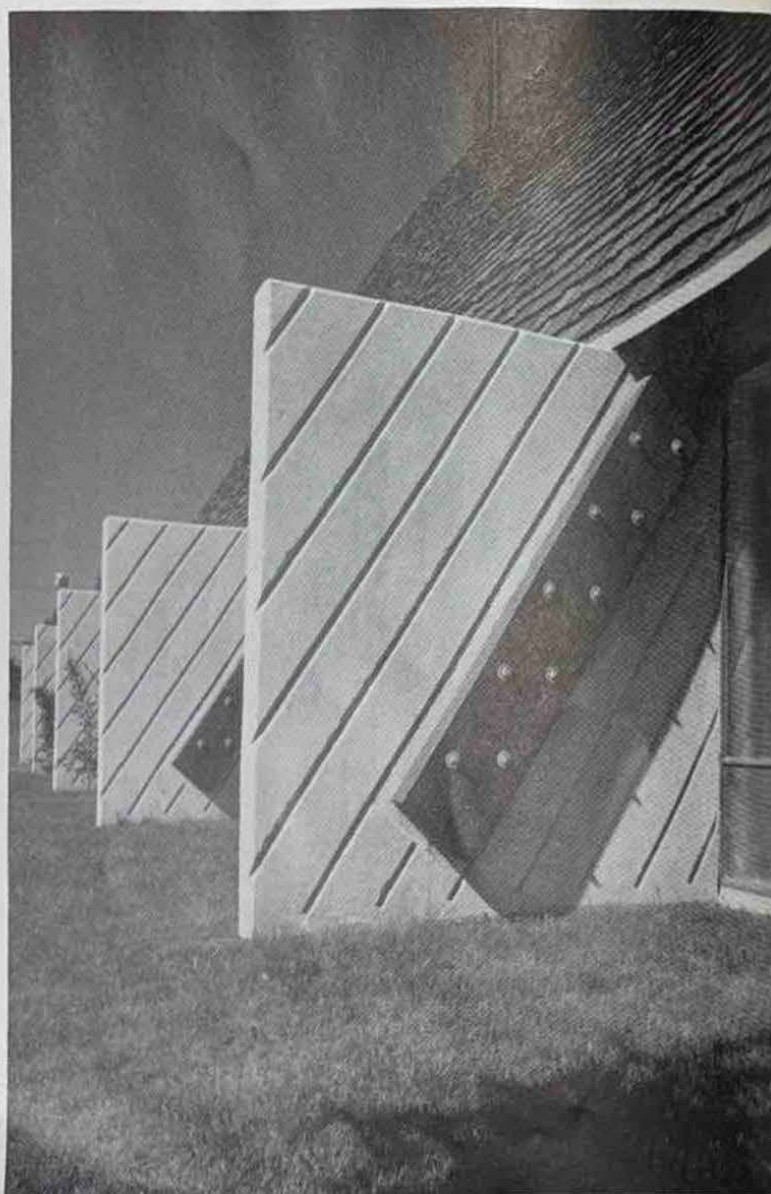
Growing parish retains its intimate scale

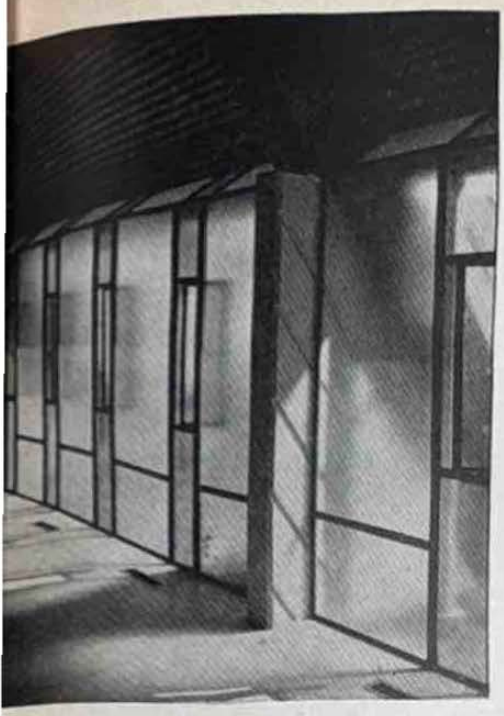
IN THIS DAY of extreme mobility and rapid change, the decision to build often brings with it the soul-searching obliteration of not only the old, outgrown structure but much that it stands for as well. Here, strong determination on the part of the client and the architects and the necessary amenable site made it possible to bridge the old and the new, to retain the feeling of a small, intimate parish church with a contemporary design expression.

The rather unique suburban quality of an island residential district just off the lake shore of Seattle provides the setting. What the parishioners sought and how this was translated on the drawing board is described by Lawrence G. Waldron:

"For many years, Emmanuel Episcopal Church had served a handful of people living in the isolation of Mercer Island before the days of the Floating Bridge connecting it to Seattle. It was a small and humble church, seating about 120 people and was largely the result of the labors of its own parishioners. With the growth of the island's population after the bridge was built, inevitably the original church was outgrown. Reluctantly the congregation turned to the task of building a new structure to house several times the number in the old church, and yet the parishioners hoped it would not be necessary to sacrifice the intimacy and scale which they

HANDSPLIT CEDAR SHAKES tie church to residential site. Size of glued laminated beams was reduced by using rigid frame connectors and pairs of beams at each concrete pier.



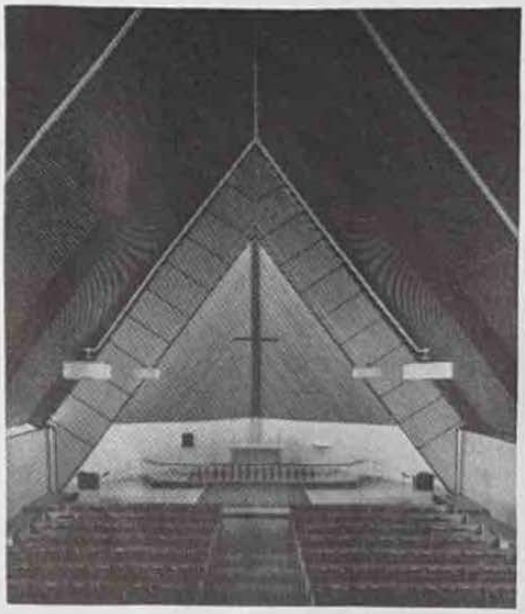


PANEL in which operating sash is located is colored cathedral glass; remaining is obscure.

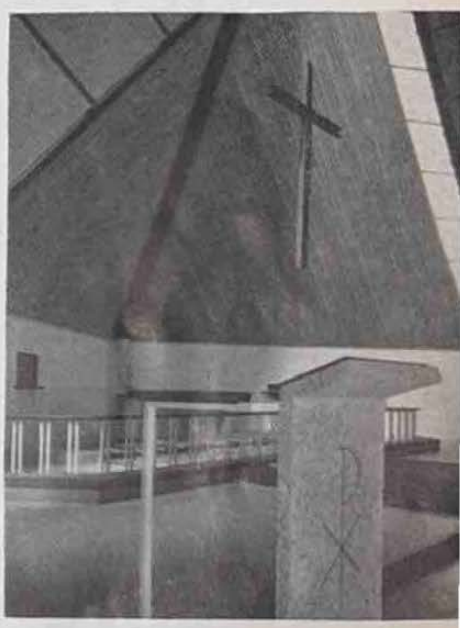
had come to associate with the original building.

"Since they were on a very limited budget, it was also necessary to plan in such a way that the church plant could be constructed in phases as money was available and as the congregation expanded further. Therefore, a simple form with wood materials, built on a campus plan, was the starting point. Simple, tall shape symbolizes repose and dignity. Eaves are low in order to achieve a sheltered feeling, with ample light admitted around the perimeter and the entire apse flooded. The nave is rather wide in proportion to its length, in order to stay below the length which would produce annoying reverberations. Choir is placed in the rear of the nave to bring the congregation closer to the altar and pulpit. Wide overhang at the entrance affords an inviting assembly area where people can talk a while after church. The court plan and disposition of other buildings likewise gives a feeling of shelter and separation from the surroundings. Units are so disposed that future additions may be made conveniently without interrupting the use of buildings already constructed."

Church seats 380 in permanent and 100 in overflow seats plus 30 in the choir. Site totals 4.2 acres, of which two are now utilized. All parts of the buildings are interconnected.



LIGHTING STANDARDS are steel, wishbone shaped.



PULPIT is textured precast concrete.

OUTLINE SPECIFICATIONS
(Church Building)

Structure: foundation: concrete spread footings; frame: 8-in. concrete slab buttresses, glued laminated beams with rigid split ring connectors; roof: laminated prestained decking of alternate 2x4s and 2x6s.

Exterior Finish: aggregate stucco.

Roof Surfacing: handsplit cedar shakes.

Sash: steel—Fentron Industries, Inc.

Interior Finish: varnished v.g. fir, t&g; oak plywood; painted plaster.

Stair Treads: precast concrete—Olympian Stone Co.

Lighting: architect-designed fixtures — Seattle Lighting Co.

Heating: warm air furnace, underfloor duct distribution—Rossoe, Inc.

First Phase

Total Area: church—6,400 sq. ft.; 11 classrooms—4,032 sq. ft.

Total Cost: $171,592.

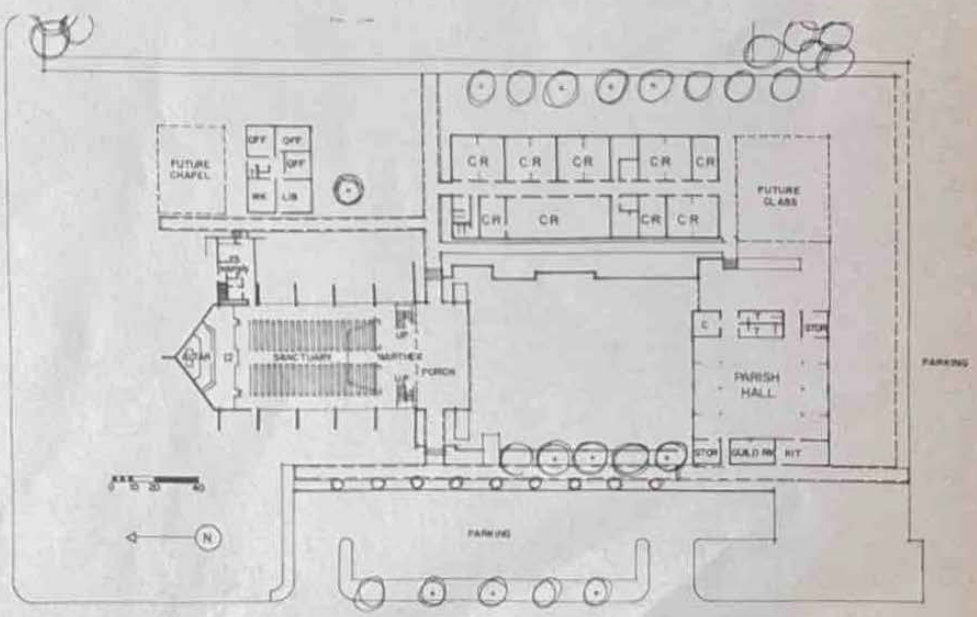
Date of Completion: February 1959.

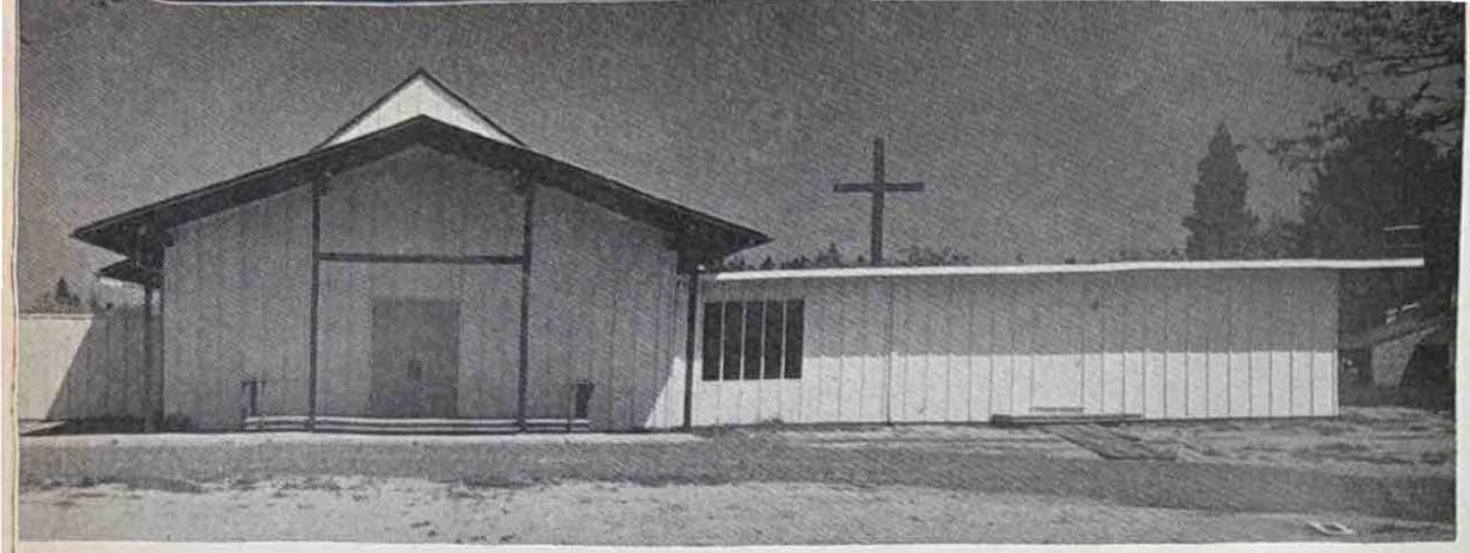
Second Phase

Total Area: office, five classrooms and parish hall—7,500 sq. ft.

Total Cost: $96,444.

Date of Completion: January 1962.



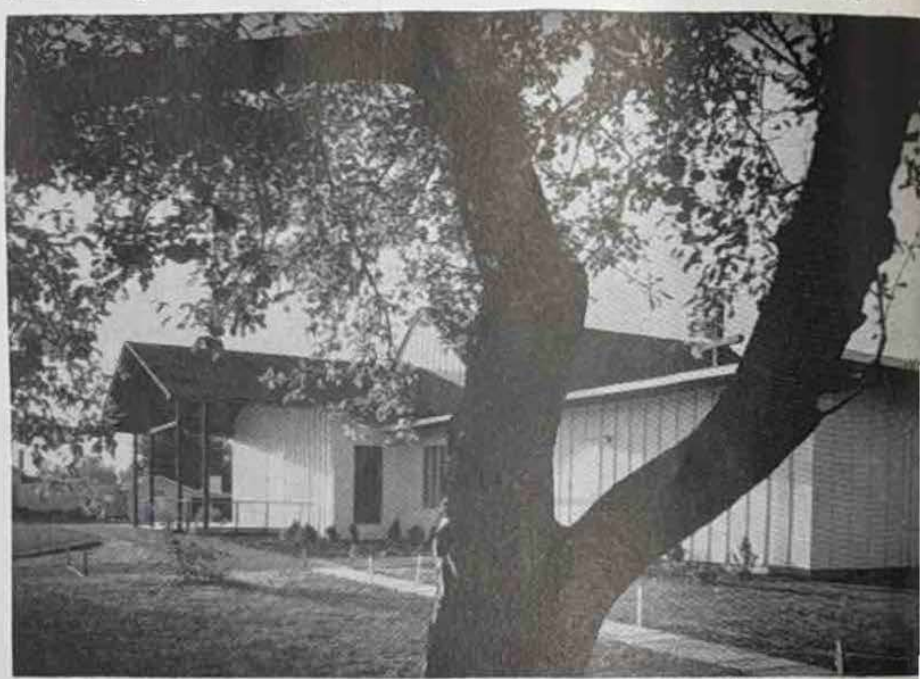


Modified old New England in Oregon

MODEST, SIMPLE LINES match the congregation's no-nonsense approach to religion. The building is set in a working class neighborhood of older, nondescript houses. Any temptation to sell the parishioners on an "architect's church" was wisely not even considered. It is not a large nor an arty structure in the usual sense. But it is designed specifically for these people and does express in fine measure their religious feeling. In that light it has all the artistry of a Grant Wood painting.

Basically it is a wood frame structure with glued laminated roof beams. Old New England flavor is modified by large glass areas that overlook courtyards, screened off from the somewhat cluttered surrounding view. As a result only the tops of trees and the sky are visible from the pews. Courtyards are planned to accommodate seasonal plantings in keeping with the church calendar—harvest time, Easter and the like. Nave seats 150; choir, 15; and narthex, 40, for a total of 205.

HONOR AWARDS JURY for Oregon Chapter, AIA, in 1961 competition commends small building "for its direct approach, providing good design within limited budget."



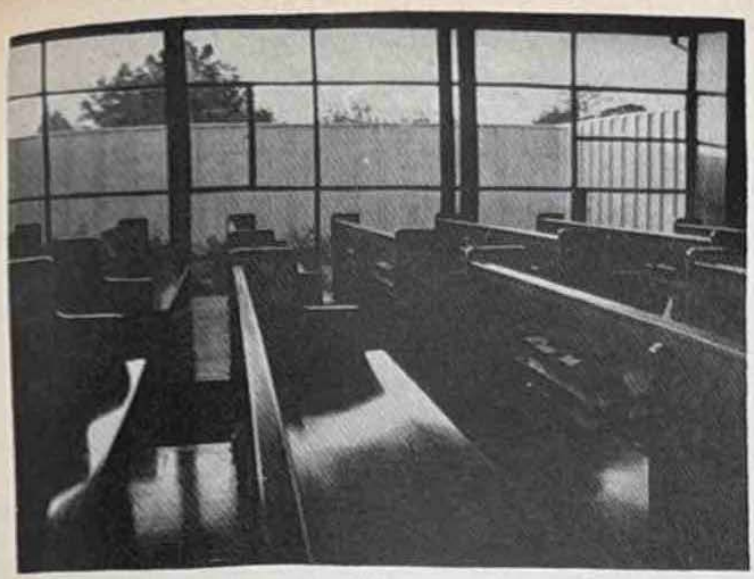
Tom Burns Jr. photos

Methodist Church
Metzger, Oregon

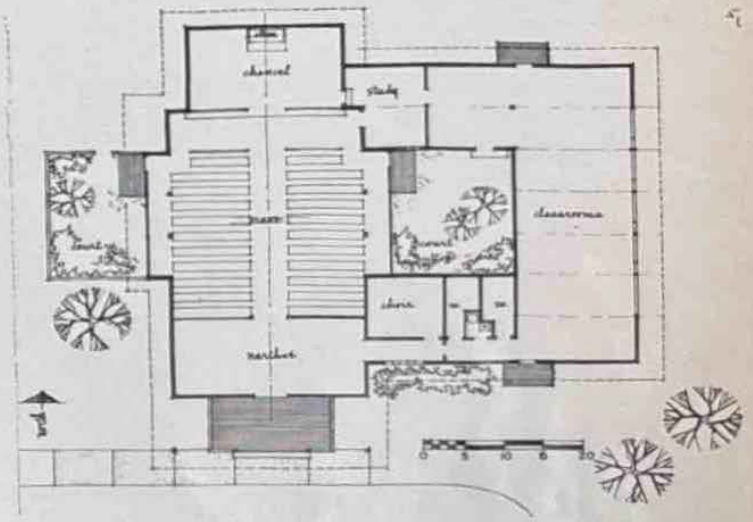
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JOHN STORRS
Architect

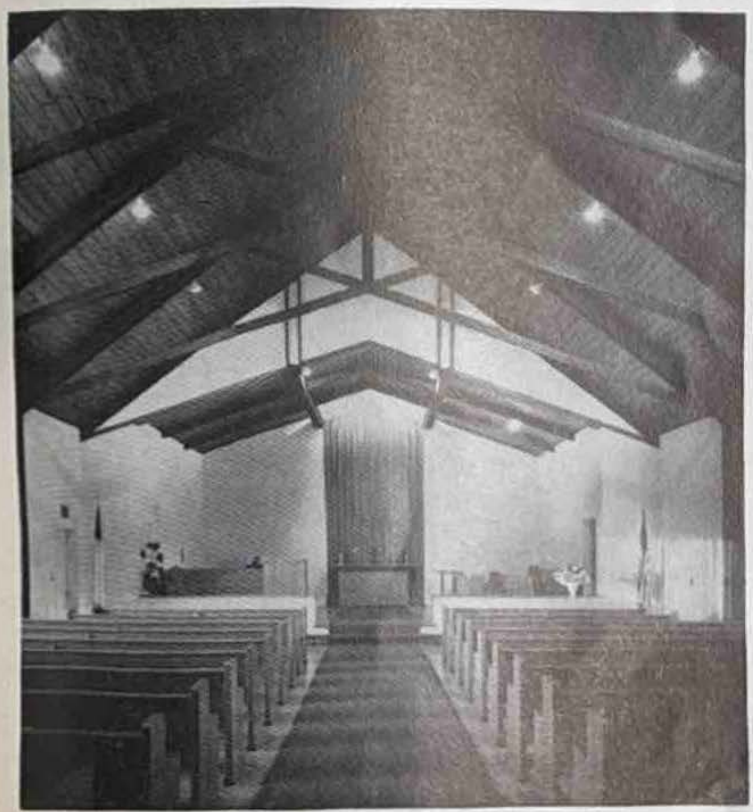
SUPREME BUILDERS, INC.
General Contractor



HIGH COURTS on either side of sanctuary provide intimate space, screen flat and uninteresting view to west.



SIMPLE HANDLING of forms, details, finishes is evident inside and out.



OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: wood scissors truss, glued laminated beams; roof: 2x6 t&g sheathing; floors: wood joists.

Exterior Finish: Welshboard with stained exposed roof and beams.

Roof Surfacing: wood shingles over sanctuary; built-up asphalt elsewhere.

Windows: stopped in glass; wood casement; industrial steel in sanctuary.

Doors: painted wood.

Floor Surfacing: vinyl asbestos tile—Armstrong Cork Co.

Insulation: rigid fiberglass and fiberglass batts.

Interior Finish: painted gypsum board; wood paneling.

Lighting: Prescolite Mfg. Co.

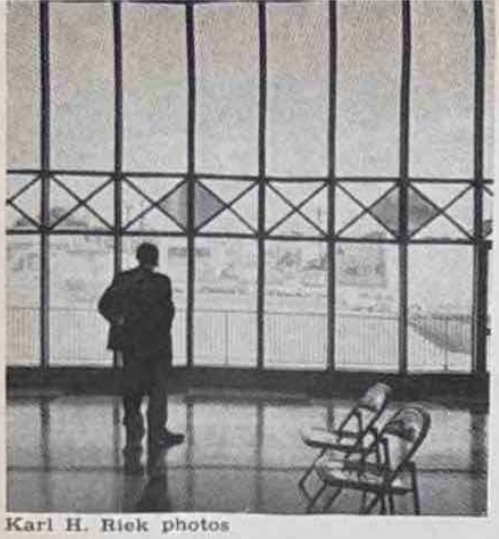
Heating: gas-fired warm air system.

Plumbing: American-Standard.

Total Area: 4,360 sq. ft.

Total Cost: $43,000.

Date of Completion: February 1959.



Karl H. Riek photos

First Presbyterian Church Addition
Oakland, California

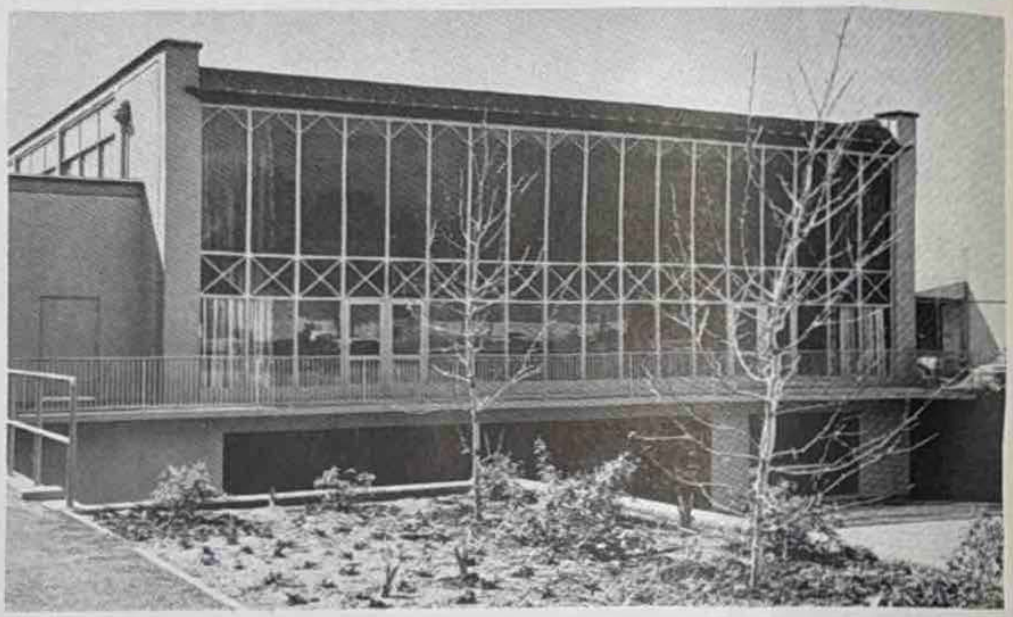
REYNOLDS & CHAMBERLAIN
Architects

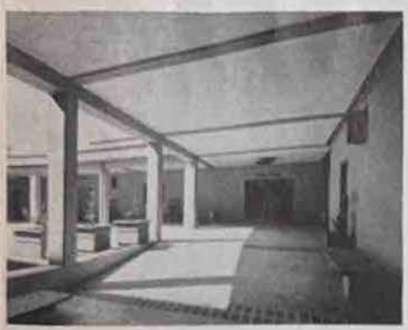
WILLIAM C. HAYS
Consulting Architect

C. A. GOSSETT & SON
General Contractors

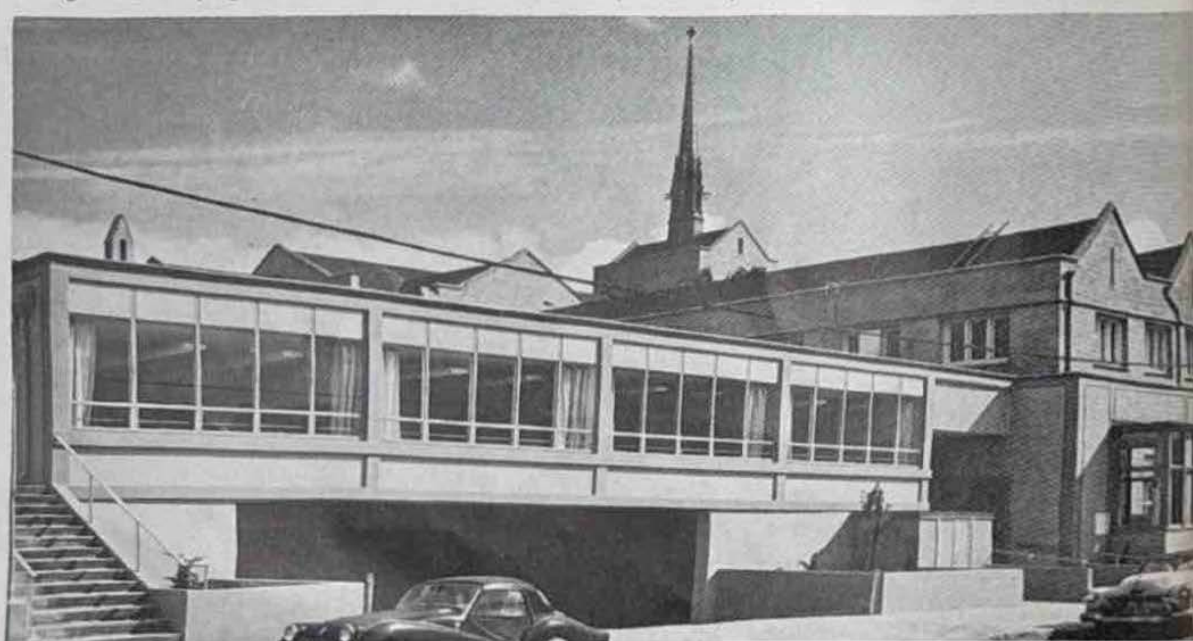
HALUK AKOL
Structural Engineer

COLORED GLASS is ⅛-in. thick combining amethyst, amber, blue, green, neutral gray.





COURTYARD plays its role in closing gap, both physically and esthetically, between existing and new elements of church plant. Rear facade is equally as successful as front. Parking is handled by drive-through arrangement, ramping down under addition where 41 spaces are provided, and outside on larger ramp.



OUTLINE SPECIFICATIONS

Structure: foundation: concrete footings, retaining walls at garage area; concrete piers and grade beams at low wings; frame: concrete columns and structural floor slab to first floor; concrete block walls, steel columns encased in concrete; roof: wood framed on steel beams (at long spans); walls; concrete block—Basalt Rock Co.; floors: concrete slabs.

Exterior Finish: masonry paint on concrete and concrete block—W. P. Fuller & Co.; copper gutters and parapet caps.

Roof Surfacing: built-up tar, gravel surfacing—Lloyd A. Fry Roofing Co.

Windows: steel sash and window wall—Michel & Pfeffer; aluminum jalousies.

Doors: plywood (Welwood Staystrate) United States Plywood Corp.

Floor Surfacing: vinyl asbestos tile and asphalt tile—Armstrong Cork Co.

Interior Finish: prefinished birch plywood (Weldwood) and painted gypsum board—United States Gypsum Co.

Ceilings: acoustical tile (Classic Cushiontone)—Armstrong Cork Co.

Heating: gas-fired hot water circulating system, baseboard radiators, heat exchanger, blower unit at fellowship room—Trane Co.

Plumbing: copper supply piping; fixtures—American-Standard.

Lighting: fluorescent—Smoot-Holman Co.

Total Area: 18,069 sq. ft.

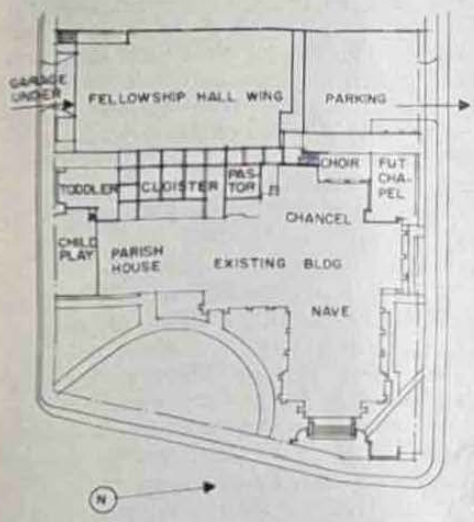
Total Cost: $321,348.

Date of Completion: January 1961.



FELLOWSHIP HALL will seat 450 at dinner meetings, 600 at lectures and stage performances.

Happy transition from the old to the new



CONTEMPORARY MATERIALS and form integrate successfully with 1912 Gothic style in this church addition in downtown Oakland. No attempt was made to reproduce the Gothic character. Instead the architects chose to complement rather than copy, a decision that proved to be highly satisfactory. Design of the window wall with its geometric pattern is an excellent example.

In any project of this type the various and conflicting ideas of the congregation is often the biggest design hurdle. As Dr. Hugh David Brucham, pastor, comments: "One of the first problems was that of resolving within the congregation the differing conceptions of location, plan and contents of the addition. I think I can truthfully say that much of the success in resolving these differences was due to the skill of the architectural firm in proposing a structure that would preserve the landscape assets which we had, make the most economical utilization of the available area and provide the actual needed floor space in the most pleasing room arrangement possible."

Fire zone and building code restrictions limited design by requiring that the addition have concrete or masonry walls, no openings on the west line which borders commercial property and adjoin the existing building at as few points as possible.

To meet these requirements the large elements — fellowship hall, kitchen and classroom facilities — are placed along the west side of the property, with a parking garage dug into the ground below. Small elements — pastor's study wing, a toddlers' wing and an open cloister — adjoin the original building. Space has been reserved for a future small chapel and additional choir facilities.

Fellowship hall is fully equipped as a multipurpose room. Motorized drape divides the space in two for small meetings. Hall is situated so that there is direct access from the older structure through the new cloister, may be reached under cover from the garage area and is easily accessible to either street. Toddlers' area and preschool classrooms are located to the south.

Architect for the original building served as consultant; Bale & Co. were mechanical-electrical engineers.

Excerpts from an address given by the Minnesota architec
before the 1961 National Conference on Church Architectur

The contemporary church: an appraisal

by EDWARD A. SOVIK

One of the issues that we have all been meeting is the matter of "contemporaniety." We used to have a great sense of accomplishment whenever we were able to persuade a congregation that they shouldn't harness themselves or us to a medieval or georgian carriage.

And our intent was earnest and honest. We have insisted that *the great thing about Christianity is not that it is old but that it is alive;* that if the church is to speak to people in the 20th century it should speak their language; that we are architects, not archeologists; that great churches were always contemporary when they were built; and that 20th century techniques and materials can be forced into historical molds only with the sacrifice of efficiency, logic and integrity.

But now that the battle is pretty well won we realize that it wasn't a great victory after all; it hasn't brought good churches and may have encouraged a lot of bad ones. The reasons are not very hard to find. The church has no more business tying itself to the motifs, devices, patterns and accidents of a secular culture in the 20th century than to the forms of the religious culture of the 13th. In neither case is the church being the church. The point is that even if it is something, to be "modern" is not enough.

A church building has to be a quality architecture as well as 20th century architecture. Now there is at least a sort of concensus among architects about what we mean by quality architecture. There are a set of criteria that we learn in our schools, read about and talk about.

We agree that a good building ought to fit the physical needs of the program. Its circulation ought to be right; the lighting, heating, ventilating and the acoustics ought to be right. It ought to be comfortable, useful, efficient, durable and very inexpensive while not appearing to be so. Sometimes we use the word "functional," which is now so commonplace that not only architects but building committees use it freely. Indeed, I think almost all laymen and a good many architects think that "functionalism," in this sense of efficient usefulness, is what 20th century architecture is all about. One is sometimes tempted by the idea that designing a church is pretty much like designing a machine; the one that is most efficient is obviously the best.

We architects, I suspect, contribute a good deal to this glorification of the utilitarian. It is easy to talk about the virtues of vinyl or ceramic tile; we know we are being understood. It is so much harder to get across the idea that no matter how usable a church is, it isn't really functioning if it only provides an efficient space for worship. But this is the truth of the matter. A church is not simply a place where the grace of God is mediated in word and sacrament. The building is not simply a shelter which ministers to the body while the pastor ministers to the mind and spirit.

We do, indeed, go further in our generally accepted standards of good architecture. We talk about integrity of structure, material and expression; at our best we avoid imitations, we avoid deceits, we love the straightforward and abhor those things which are not what they appear to be. We love the clear display of engineering. We are interested in making buildings, not stage scenery. We sometimes insist on these things as a moral matter.

Now if ever an architect ought to be concerned with this sort of integrity it is when he is working on a church. Never is it more important that he avoid the fake, the illusory, the simply clever, the gimmick and that he hold fast to what is good and forthright.

But this kind of concern for morality, however valid it is, and however important it is to us all, still does not touch close enough to religion. For morality is not the same as religion, and we haven't begun to deal with the essential matters of religious buildings until we get beyond such thinking.

• • •

Christian theology says that God's presence is among His people. . . . The final and accurate expression of this idea is that we get rid of the nave entirely and make the whole church into a chancel. To do this we must not only abandon the choir sections, deep chancels and remake altars; we must also abandon some of the cliches of current design like the dramatic windows and skylights which bathe the new chancels in light but leave the people in gloom, the elaboration of chancel walls which bring the focus of interest as far from the people as possible, and the tremendous chancel crosses which focus the spaces so strangely that not even the liturgical action can compete.

The church building has the capacity to say something about what Christians think about God and also something about what they think of the church. The image of the church as an army or a procession is the one which occurs to us most easily, and it has validity without a doubt. But the military image has some dubious connotations to people of our age; and to Protestants particularly the image of the pilgrimage procession is an unfamiliar and exotic thing. So the long and narrow church plan which is the formal expression of these concepts is, I think, subject to serious question. In our office we have come more and more to the conclusion that it should be abandoned.

There are other matters relating to the nature of the church, however, which are much more certainly defined by theology. One of the things we believe about the Christian community is that it is one community. When we worship we are not an audience attending a religious ceremony; nor are we a flock of individuals at their private devotions. We are a single community worshipping together. The word and the sacraments, the prayers and the hymns belong to all of us. This doesn't mean that we all must do the same thing. But it does mean that we are all participants. And the clearest expression of this is the unicameral church—the church where there is no special division between the space occupied by the congregation and that occupied by the clergy.

• • •

There is a general assumption made among architects that when we take up the problem of a new church we ask the client to describe the liturgical practices in detail and proceed from that point to accommodate these practices, much in the same manner that we might design a factory around certain production machines and processes.

Unfortunately the situation is not quite so simple. It is complicated by the fact that liturgical forms are not only varied but flexible and continually changing. And at present we are seeing among Christian churches a very important renewal in the liturgical life. This demands of architects as well as building committees not only skill but understanding and imagination. To treat the matter of liturgy as something stable, static and fixed is to be careless or naive. There are possibilities and problems which we must not ignore because if we do we may be missing opportunities both to enrich the lives of many Christians and to help the fractured church grow together again

PA&B staff photo

Alweg Monorail: structure and design

With the arrival of two four-car trains from West Germany, initial tests of the Alweg Monorail are set for later this month, marking the completion of the first such installation in a downtown area anywhere in the world. Built at a cost of $1,370,000 and incorporating 144 precast, prestressed concrete beams, it is a fascinating project from the standpoint of structure, design and construction; but it holds far greater significance as a proposed solution to the steadily growing mass transportation problem—with its ultimate effect upon our urban environment.

Alweg Monorail: structural elements and design



by JOHANN F. ENDERLEIN
Structural Engineer
Alweg Rapid Transit Systems
of Washington State, Inc.

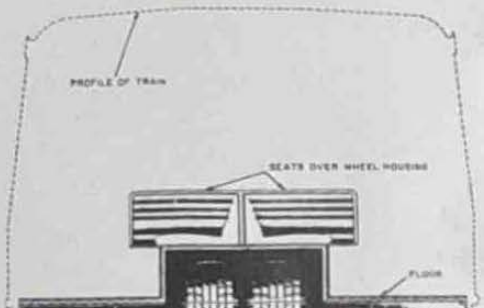
The Alweg system offers fast mass transportation for either passengers or freight in that it operates a rubber-tired high-speed train straddling an elevated beamway completely free of interference with any other traffic.

The Alweg train runs on concrete beams which, at their ends, are supported by either single or T-shaped concrete columns, or by portal-like frames. These are spaced up to 90 ft. apart, depending on local conditions and whether single or double track is installed.

The cars straddle the concrete rail beam with dual pneumatic drive wheels on top of the beam, while horizontal guide wheels, also pneumatic, bear against its side to stabilize and guide the cars.

The car body is made of lightweight metal and drapes over the track beam, thus providing ample space underneath the floor for the installation of all necessary equipment as motors, main and auxiliary electrical equipment, the brake mechanism and all the other essential accessories. The passenger space is located above the beam. Soundproofing insulates effectively motor compartments and wheel casings.

The trains are powered by either electric motors or diesel engines. At the Seattle Alweg installation the electric motors and their control equipment receive their 600-volt d.c. current from a contact rail running along the side-center of the concrete rail beam. Both axles of each individual car are powered and also equipped with dynamic and mechanical brakes. A fully automatic speed control not only adjusts the train speed to the requirements of the track layout but also controls the braking process. Among other safety devices included are fire extinguishers, also gangways for transferring passengers from one train to the other in case of power failure.



SCHEMATICS OF MONORAIL SYSTEM

In the event of deflation of any of the tires, solid rubber wheels of somewhat smaller diameter, located at each vertical and horizontal pneumatic tire will engage the beam before the tire has deflated to any extent — without any noticeable effect on passenger comfort.

For Seattle's World's Fair, Alweg has designed two trains with four cars to each train, which will shuttle back and forth on a one-mile long overhead double track between the downtown business district and the exposition grounds. The train is 120 ft. long and 10 ft. wide. A four-car train will have 124 seats, but during rush periods, including standees, it can carry 450 persons each 95 second trip amounting to a maximum capacity of 10,000 passengers an hour each way.

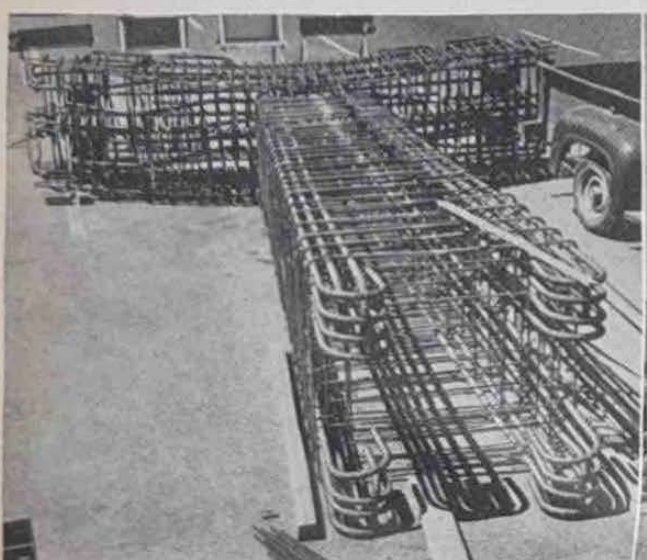
The construction contract was given to Howard S. Wright Construction Co., Seattle, and the contract for the precast and prestressed concrete beams to Concrete Technology Corp., Tacoma. Actual construction work started in the spring of 1961.

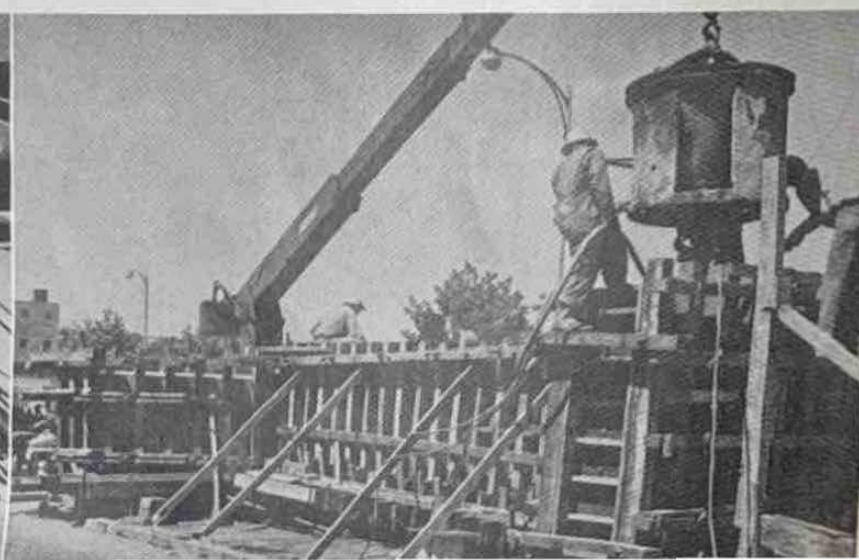
Concrete for all precast prestressed beams is required to have a minimum 28-day compressive strength of 6,000 psi, and a strength of 5,000 psi. at the time of initial prestress.

The specification for prestressing steel follows the "Tentative Recom

This article is based on excerpts from a paper originally given at the seventh annual convention of the Prestressed Concrete Institute in Denver.

REINFORCING STEEL CAGE of column is laid out on street close to erection spot prior to pouring of concrete.





mendations" of the ACI-ASCE Joint Committee 323 by adhering to its proposed temporary and design load stresses. Based on seven-wire uncoated ½-in. diameter strands with a guaranteed ultimate tensile strength of 265,000 psi., the effective steel prestress after losses for both pretensioning and post-tensioning is 150,000 psi.

The exterior forms are made of steel for straight and curved beams as well, the main difference being that the curved beam form is adjustable in vertical and horizontal direction. This allows for varying radius and superelevation in order to obtain beam side surfaces identical to a truncated cone. The curved beam form is adjusted in 5-ft. intervals according to beam coordinate data sheets supplied by Alweg.

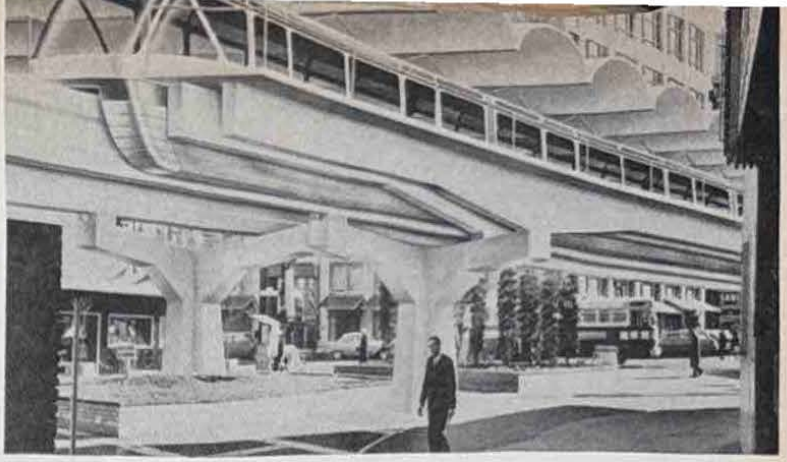
The inner form for the straight beam is collapsible and made of steel. For the curved beam, however, the fabricator selected the use of an expendable inner form. Intensive external vibration is needed to place the zero-slump concrete.

The functions of the beam bearing are manifold. Not only the gravity loads of beam and train must be transmitted through the bearing to the supporting structure, but the braking and acceleration forces, the lateral reactions due to wind and centrifugal forces and the resulting torsion moments as well. Furthermore, allowances have to be made to compensate for the effects of temperature, creep and shrinkage of the beam and for any possible misalignment of the columns.

Preformed fabric rubber pads, capable of absorbing the small amount of beam rotation due to live load deflection, separate the beam from the column head. Changes in beam length at the expansion end are accomplished by two sheets of stainless steel bonded to the fabric rubber pads and sliding on top of each other.

High-strength steel bolts serve as anchors with fabric rubber pads as washers on both ends and are pretensioned to an amount slightly in excess of the calculated uplift force. This way the lateral displacement of the top of the beam is restricted to the deformations in the relatively thin elastic bearing and washer pads, since the strain in the 7-ft. long anchor bolts remains almost uniform due to the compensating effect of the elastic washers. While this system only accounts for the transmittal of gravity loads and torsion moments, the longitudinal and transverse forces are resisted by shear lugs anchored to the column head.

The spaces between the beam ends are bridged by steel fingerplates at the top and the sides to allow for expansion and contraction and to assure a smooth ride.



DOWNTOWN WESTLAKE STATION is supported by steel beams. Platform level is 25 ft. above Pine Street and held up by four reinforced concrete piers. Speed ramps transport passengers to and from street level. Vaulted roof of station is aluminum and of ramps, plastic. Both terminals were designed by Adrian Wilson & Associates, architects-engineers.



ERECTION requires only 30 minutes for each 55-ton column. Contractor is allowed 20-ft. wide working area along route and is permitted to move equipment outside this zone, but generally speaking three lanes for traffic are maintained at all times.



PRECAST CONCRETE BEAMWAY is 3 ft. wide and 5 ft. deep, supported by columns placed about 85 ft. apart on straightway.

The majority of the supporting structure for the Seattle monorail consists of T-shaped concrete columns. These columns are 24 ft. high as an average, 4 ft. of which are embedded in the ground. Minimum clearance under the cantilevering crossarms is 15 ft.; under the rail beams, approximately 20 ft. The tapering column shafts are at street level about 4 ft. square, thus creating minimum interference with normal vehicular traffic.

All columns are formed and precast immediately beside their foundations and lifted into place by a 75-ton truck crane. Then the columns are adjusted by jacks, shimmed up and the space between column pedestals and footings filled with non-shrink grout. The actual column connection at the pedestal is accomplished by means of high-strength steel anchor bolts which are all pretensioned and thus eliminate any column sway due to anchor bolt strain.

The type of foundations for the Seattle monorail installation is determined primarily by the location of and interference with underground utilities. Along the major part of the route, a 50-year-old 12- to 24-in. diameter sewer at 19-ft. depth runs at a distance of 5 ft. parallel to the track. A stereophotographic survey of this still active sewer revealed its highly fractured condition so that the use of a spread footing did not seem advisable. Instead 4½-ft. diameter caissons are drilled to a depth 25 ft. below street level, belled out at the bottom to approximately 10-ft. diameter and widened at the top to 9 ft. square to provide additional lateral resistance. Then the reinforcing cage is lifted into place and a safety casing withdrawn at the same rate as the concrete is poured. Immediately after completion of the shaft, the reinforcement for the upper 9-ft. square shoulder is placed, the high-strength steel

Continued on page 33

safety glass

Tempered glass said to be five to eight times stronger in impact resistance is now available for the Series 20 Trimview sliding glass doors. The 7/32-in. glass is being marketed at a price increase of only 60 cents per square foot over the standard 3/16-in. crystal glass. When broken it disintegrates into small, relatively harmless particles. Trimview line is constructed of heavy-gage aluminum, double weatherstripped, and offered in seven stock sizes. Tempered glass is also available for most standard patio doors, commercial entrance doors, shower and bath enclosures.—Tempered Glass Door Sales, Inc., 372 10th, Oakland 7, Calif. (No. 1)

translucent industrial doors

Color, translucent and lightweight properties of fiberglass are used to advantage in an overhead, heavy duty door for commercial installations. Filuma 2800 is custom made of sections of reinforced fiberglass in a sculptured design, encased in extruded aluminum frames with built-in truss and overlapping section points. It is operated by adjustable torsion springs, utilizing only ⅓- to ½-hp. motor and even the largest—24-ft. wide by 16-ft. high — can be operated manually. When closed it diffuses light through the building, providing savings in lighting costs and window construction. Door has strong impact resistance, requires little maintenance. It comes in five colors.—Frantz Manufacturing Co., Sterling, Ill. (No. 2)

versatile wiring system

An unobtrusive surface raceway has been developed to meet the problem of installing electrical wiring in houses and other buildings of solid wall or sandwich type wall construction. Called the G-E Flexway, it is a com-



pletely grounded metal raceway which replaces the usual baseboard, riser or doorway trim. Beveled surface extends only ¾ in. from wall surfaces. Convenience outlets and switches can be installed at any desired location and outlets can be added or moved without cutting wires.—General Electric Co., 95 Hathaway St., Providence 7, R.I. (No. 3)

electroluminescent panels

Commercial production has begun on a series of electroluminescent panels which utilize a new type of lamp yielding light over the entire surface of the panel. Sizes ranging up to 2x2 ft. and various colors will be available in the line which is called Panelescent. Product is expected to find decorative use as insets in walls and ceilings or in furniture pieces.—Sylvania Electric Products, Inc., 730 Third Ave., New York 17, N.Y. (No. 4)

tilelike coating

A polyester based coating that dries to a tilelike finish has been developed by United States Rubber and is being distributed under the tradename Naugatile by Dorsey Products. Coating can be applied by spray or brush to cement block, concrete, plaster or other surfaces. It is water- and vapor-proof and resists stains and chemicals. Nine colors are offered. — Dorsey Products Corp., 485 Lexington Ave., New York 17, N. Y. (No. 5)



modular sun screen

Colorful sun screen made of aluminum with porcelain enamel fused to both face and back is offered in stock panel sizes based on a 1-ft. module. Angles of the Rhombic pattern create a textured, sculptured effect. Light weight (1 psi.) and variety of panel sizes available simplify installation. Panel sections range up to 4x10-ft. in size.—California Metal Enameling Co., 6904 E. Slauson Ave., Los Angeles 22, Calif. (No. 6)

block wall coating

A coating system has been specifically designed for interior concrete block walls exposed to heavy wear and requiring special cleaning methods. Called Pitt-Glaze it consists of a heavy-consistency, water-dispersed block filler over which is applied a clear, polyurethane glaze treatment. Surface is resistant to abrasion, stains, dirt and chemicals and can withstand cleaning by steam hoses or mechanical scrubbers. Filler can be tinted any desired color.—Pittsburgh Plate Glass Co., 632 Fort Duquesne Blvd., Pittsburgh 22, Pa. (No. 7)

plaster partition system

A solid plaster partition system with 1-in. core developed by Kaiser Gypsum is expected to reduce on-the-job lathing and plastering time. Key to the system, called Plaster-Wall, is a 1-in. thick, interlocking V-edge, long-length gypsum lath held in position by self-locking, metal floor runners and metal ceiling runners with pull-down lock tabs. This eliminates need for temporary bracing of the installed lath and provides the plasterer with a sturdy base permitting scratch and double-back operations on both sides of the partition the same day. Plaster-Wall can be erected as 2-in. thick one-hour fire-rated partition or 2½-in. thick two-hour fire-rated partition and in twin sets for double-partition walls.—Kaiser Gypsum Co., 300 Lakeside Drive, Oakland 12, Calif. (No. 8)

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LITERATURE

Air Conditioning Controls: describes automated and centralized control systems; 24 pp.—Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn.

Floor Maintenance: gives tips on care of various floor surfaces; 28 pp.—S. C. Johnson & Son, Inc., Service Products Division, Racine, Wis.

Nickel Stainless Steel Flashings (AIA 12-H): presents advantages and includes 20 detail drawings based on actual installations; 24 pp.—The International Nickel Co., Inc., 67 Wall St., New York 5, N.Y.

Epoxy Alloys: describes uses in concrete construction as bonding agents, structural adhesives, etc., and application methods; 4 pp.—Coast Pro-Seal & Manufacturing Co., 2235 Beverly Blvd., Los Angeles 57, Calif.

Micarta (AIA 23-G & 35-C-12): outlines features, shows off architectural uses in color photographs and detail drawings; 24 pp.—Westinghouse Electric Corp., Micarta Division, Hampton, S.C.

Plexiglas for Window Glazing: describes breakage resistance and other features, with installation instructions; 8 pp.—Rohm & Haas Co., Washington Square, Philadelphia 5, Pa.

Institutional Shower Cabinets (AIA 35-H-6): illustrates types of cabinets and floors with drawings of typical layouts and installations; 12 pp.—Fiat Metal Manufacturing Co., Inc., 9301 Belmont Ave., Franklin Park, Ill.

Loading Dock Design: offers ideas for attaining efficient flow of materials utilizing American Dockbridge loading ramp; spotlights key considerations such as work load, carrier characteristics, etc.—Robco Division, Robert H. Braun Co., 8314 E. Slauson Ave., Pico Rivera, Calif.

Woodworking Standards: classifies architectural woodwork with detailed standards for premium, custom and economy grades for architects and specification writers; covers doors, trim, sash, shelving, paneling, etc.; 75 pp.—Architectural Woodwork Institute, 332 S. Michigan Ave., Chicago 4, Ill.

Drywall Trim Techniques (AIA 20-C): depicts installation techniques for drywall metal trimming with detail drawings on tracing stock; three folders.—Angeles Metal Trim Co., 5118 E. Washington Blvd., Los Angeles 22, Calif.

Fire Protected Wood (AIA 19-A-3): uses case histories to show safety features of Non-Com wood treated for fire protection; 6 pp.—Wood Preserving Division, Koppers Co., Inc., 750 Koppers Bldg., Pittsburgh 19, Pa.

Geocoustic (AIA 29-B): describes patch sound treatment technique using Geocoustic units; includes design ideas; 12 pp.—Pittsburgh Corning Corp., 7 Gateway Center, Pittsburgh 22, Pa.

Weatherstripping by Zero (AIA 35-P-6): details equipment available in aluminum, bronze, stainless steel and neoprene for all types of doors and windows, together with suggested applications; has a "simple formula" specification; 28 pp.—Zero Weatherstripping Co., Inc., 451 E. 136 St., New York 54, N.Y.

pa&b pick of the month

Third in Robco's "Handbook of Wall Design" series continues to maintain the high standard established by its predecessors in presenting a lot of useful information in a straightforward, easy-to-follow manner. "Guide Specifications for Structural Glazed Facing Tile Walls" is a 23-page guide for architects, contractors, manufacturers and inspectors covering workmanship, mortar, joints and tile. Also included in the plastic spiral binding are ASTM's tentative specifications for ceramic glazed structural clay facing tile, facing brick and solid masonry units.—Robinson Brick and Tile Co., 500 S. Santa Fe Drive, Denver 23, Colo.



Fire-Resistance Design Manual (AIA 21-A-2 and 20-B-2): provides at a glance relative performance characteristics of wide selection of related construction assemblies arranged in tabular form according to hourly fire-resistance rating and construction use; 32 pp.—Gypsum Association, 201 N. Wells St., Chicago 6, Ill.

Redwood Exterior Finishes: discusses various types of recommended finishes with illustrations in color; 8 pp.—California Redwood Association, 576 Sacramento St., San Francisco 11, Calif.

Laboratory Accessories: catalogs line of fixtures, valves, hardware, etc., with dimension sketches; 16 pp.—Browne-Morse Co., Muskegon, Mich.

Curtain Walls and Window Walls (AIA 17-A): introduces Full-Trim line which offers complete extrusion and glass package; 16 pp.—W. P. Fuller & Co., Trimview Metal Fabricating Division, 600 N. Third Ave., Covina, Calif.

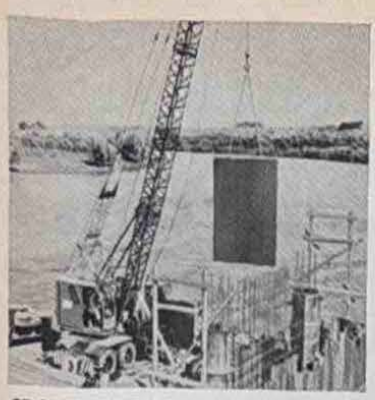
New Steels, New Shapes, New Concepts: summarizes more significant developments in steel for construction with a special section on wide-flange beam sections and discussion of new design and construction ideas; 28 pp.—United States Steel Corp., 525 William Penn Place, Pittsburgh 30, Pa.

Prefabricated Metal Stair Forms (AIA 14-D): outlines advantages with detail drawings and photographs; 8 pp.—Stairbuilders, Division of American Stair Corp., Route 66, McCook, Ill.

Colorwall (AIA 15-J): introduces vinyl coated aluminum facing with installation detail drawings; 2 pp. plus drawings.—Kawneer Co., 1105 N. Front St., Niles, Mich.

Compriband (AIA 7-D): describes waterproofing sealant for impregnating polyurethane foam with asphalt; includes typical details, application methods, short form specifications, stock sizes available; 4 pp.—Pacific Sealants, 1941 Daisy Ave., Long Beach 13, Calif.

The Story of Japanese Plywood: introduces product against a backdrop of handsome photographs depicting such fine examples as ornamental household objects, temples and the like; 33 pp.—Japanese Plywood Manufacturers' Association, Japan Trade Center, 531 Sutter St., San Francisco 20, Calif.



CRANE-MOVING of EFCO panel assemblies saved time and expense in forming concrete on this bridge at Fruitland, Idaho. Fifteen 24" x 48" forms were assembled to make 10' x 12' panel. When desired, these same forms may be used individually or assembled in other panels to form buildings and other concrete structures.

NEW EFCO catalog available on request.

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OAKLAND, CAL., 321 E. 12th
PORTLAND, O., 208 N. E. Oregon St.

Other offices coast to coast

• **Duraflake Co.:** The Albany, Ore., manufacturer has changed its name from Wood Fibreboard Co. to coincide with the name of the wood-formed board it introduced in late 1960. . . . Four Northwest firms have been named warehouse stocking distributors: M. Trumbo Co., Portland, with warehouses in Salem and Eugene; Lumber Products Co., Portland; Cascade Warehouse Co., Salem; and Ehrlich-Harrison Co., Seattle.

• **Gladding, McBean & Co.:** Firm has a new Portland showroom and warehouse at Northeast 92nd and Halsey Street. Architects for the facility were Williams & Martin; general contractor, D. Ford & Sons, Inc.

• **Soule' Steel Co.:** Stanley E. Soule' has been promoted from vice president-marketing to the newly created post of executive vice president in the San Francisco headquarters where he is responsible for the operation of the four product divisions. . . . Kenneth W. Archer and Craig C. Carpenter have been appointed to the new posts of general manager of the architectural products division and the reinforcing steel division, respectively.

• **The Colorado Fuel and Iron Corp.:** Robert W. Brown has been named director of advertising, coming to the general offices in Denver from New York where he was assistant director in the executive offices. He succeeds G. A. Sabin who has retired.

• **Riverside Cement Co.:** Donald E. Muir, formerly vice president-operations for Arizona Sand and Rock Co., has been appointed general sales manager for the Los Angeles firm.

• **Berns Air King Corp.:** New manager of the northern California sales office is David Zuckerman, handling the entire line of ventilating equipment and kitchen appliances.

• **Vancouver Plywood Co.:** Donald I. Plummer has been advanced to executive vice president and David Difford to general sales manager of the Washington firm.

• **Reiner Industries:** The Los Angeles firm has begun the manufacture of its initial product line, the Swepe remote control system, in a 25,000-sq. ft. plant at 4811 Telegraph Road.

• **Forest Fiber Products Co.:** New addition to the sales force is Les Barton, working out of Seattle.

• **Sierra Electric Corp.:** Robert E. V. Ramsing has been promoted from the post of sales manager to vice president-sales.

• **Crown Zellerbach Corp.:** Construction is underway on its new plywood lay-up plant in St. Helens, Ore.

• **Thermador Electrical Manufacturing Co.:** John F. Sorenson is sales manager for heat pumps and air conditioners, to be distributed initially in Southern California.

• **Cal-Tech Systems, Inc.:** The Glendale manufacturer has acquired another California firm, Extrusion Corporation of America, Gardena, producer of aluminum store fronts, which will be integrated with its Fullview Division.

• **Tru-Bond Adhesives Co.:** Representing the firm in California, Nevada and Arizona is Littrell Hardware Lines, Inc., with offices in Los Angeles and San Francisco.



Wherever in the West you're going . . .



West Coast Airlines provides fast, daily flights to more than 60 cities in Washington, Oregon, California, Idaho, Utah, Montana, and Calgary in Canada—and connects directly with 17 major airlines at gateway cities throughout the Pacific West.

• **The Payne Co.:** Two new sales representatives have been appointed, Charles E. Towne to the Sacramento and San Joaquin valleys and James Limbaugh to the Southern California territory.

• **The Republic Steel Company of California:** Richard M. Chewning, a vice president and director of the Los Angeles distributor since 1954, has been elected executive vice president.

ASSOCIATIONS

• **Metal Lath Association:** The organization of 13 U. S. producers, which includes two new West Coast members —Soule' Steel Co., San Francisco, and Western Metal Lath Co., Monterey Park, Calif.—has shortened its title from Metal Lath Manufacturers Association.

• **American Institute of Steel Construction:** Reelected officers include the second vice president, J. Philip Murphy, president of Yuba Consolidated Industries, Inc., Emeryville, Calif.

• **Northwest Hardwood Association:** Harry O. Mitchell, 68, secretary-manager, died unexpectedly of a heart ailment November 15.

• **Prestressed Concrete Institute:** Among the officers elected at the Denver convention is Elmer Clark, United Materials, Inc., Phoenix, who will serve as secretary-treasurer the coming year.

• **Architectural Aluminum Manufacturers Association:** The newly named group is the result of a merger of the Aluminum Window Manufacturers Association and the Sliding Glass Door & Window Institute which held a joint meeting in Scottsdale, Ariz. recently.

Monorail: structure & design

(Cont'd from p. 29)

anchor bolts are positioned and aligned and the footing is finished after the remaining concrete is poured.

To appraise the Alweg system, it can be stated that it is fully developed and that actual performance data are available from the installations in Cologne, Germany, Turin, Italy, and Disneyland.

The Disneyland monorail proved to be such an attraction that the record of close to five million passengers made it necessary to extend the tracks from 0.8 miles to 2.4 miles and to increase the train capacity.

The inherent advantage of this system over the conventional railroad equipment is its absolute derail protection, its quiet operation and the possibility of installing its overhead structure in traffic-congested cities with a minimum of traffic disturbance and the least amount of right-of-way acquisition. If, for instance, a monorail were to be built along the curb of a street, automobile traffic would hardly be affected, since the space between the columns could be utilized for car parking. Furthermore, because of the high-friction coefficient between rubber and concrete, the Alweg train negotiates grades up to 10% with ease. Also, it is possible to level out rough terrain or other obstacles simply by adjusting the column height, thus allowing much more flexibility in the route profile and layout.

An evaluation of the Alweg Monorail, which by definition is an overriding saddlebag or supported monorail system, should also include a comparison with the suspended monorail type. While the suspended system is inherently self-stabilizing, the sway of the car must be dampened even under normal operation. In addition, a wider clearance at the station platform is necessary, thus requiring bridging between the vehicle and the platform.

LETTERS

World's Fair issue

Pacific Architect & Builder:

On behalf of the Seattle World's Fair, I am pleased to learn of your plans to develop special coverage of the exposition and to distribute it to all AIA members in the U.S. The coverage of the fair by your publication to this time has been excellent and I am sure this new project will be another tremendous milestone in the chronicle of our progress.

EWEN C. DINGWALL
Vice President-General Manager
Seattle World's Fair

Pacific Architect & Builder:

The significant role played by the architectural profession from the very inception of this World's Fair is indeed a story in itself.

PAUL THIRY
Primary Architect
Seattle World's Fair

Pacific Architect & Builder:

A big spread on the Seattle World's Fair (a good one, now) will certainly hit the big time—you're right there.

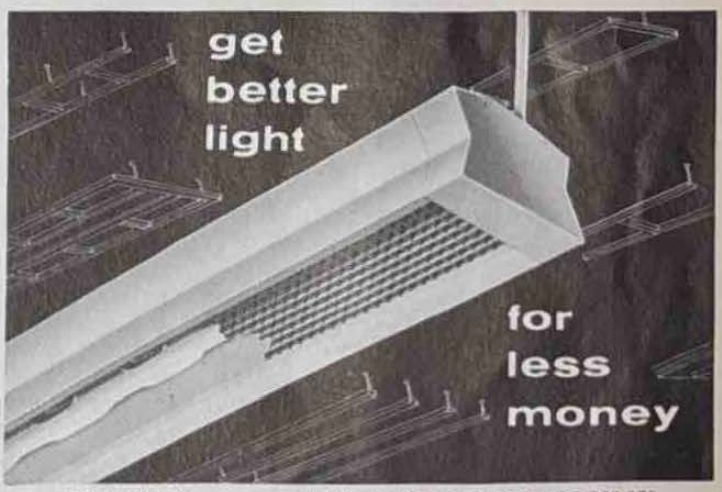
LOUIS E. KORN
Architect
Los Angeles

Congrats for Coronado

Pacific Architect & Builder:

Bill Quinn's coverage of the '61 Coronado convention was first rate!

MELTON FERRIS
Executive Director
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care and feeding of a magazine

no. 1: where pa&b hangs its hat



Victor Steinbrueck sketch courtesy of The Argus

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Architects are prone to bemoan the fact that the general public does not understand their profession; ditto for structural engineers. Likewise contractors, who are becoming increasingly sensitive about public relations and the industry image they are creating, are convinced their operations are misunderstood. By the same token, it is apparent to editors that the average reader really knows little about the mechanics of publishing—and here we use the term to encompass all aspects of the business: editorial, advertising, circulation.

But just about any reader must be aware that the publishing field is indeed a competitive one and that the architectural press in particular allows no room for complacency. The beginning of a new year then seems like an appropriate time to introduce this series of columns which will examine the publishing field in specific reference to Pacific Architect & Builder. This exploration will be done with what we believe to be an unusual amount of candor, for one of the attributes of a regional magazine is that it can venture to let down its hair now and then, even become a bit naive perhaps.

Our home office seems like a logical place to start. (Besides, it offers us an excuse to run Victor Steinbrueck's delightful sketch of our publishing-printing plant.) PA&B is published in Seattle simply because that's where it was born and reared, being the offspring of the parent magazine, Pacific Builder & Engineer, which has been serving the heavy construction industry since 1902.

Magazines tend to be more closely associated with readers in their immediate vicinity, the plain facts of geography being what they are, and as business citizens they take their place in the community. Further it must be admitted that certain events which happen locally are bound to get a better reporting break every now and then since on-the-spot coverage is readily available. Yet any worthwhile regional must be cosmopolitan in its outlook so that the place of publication should not hold any special significance. We'll have more to say about this next month when we go into the topic of the why and wherefore of a regional and we'll welcome reader reaction to this series.

R.E.K.

Pacific Architect & Builder

Published by Pacific Builder & Engineer, Inc.
1945 Yale Place E., Seattle 2, Wash. EAst 3-7007

N. B. CHAPIN, President
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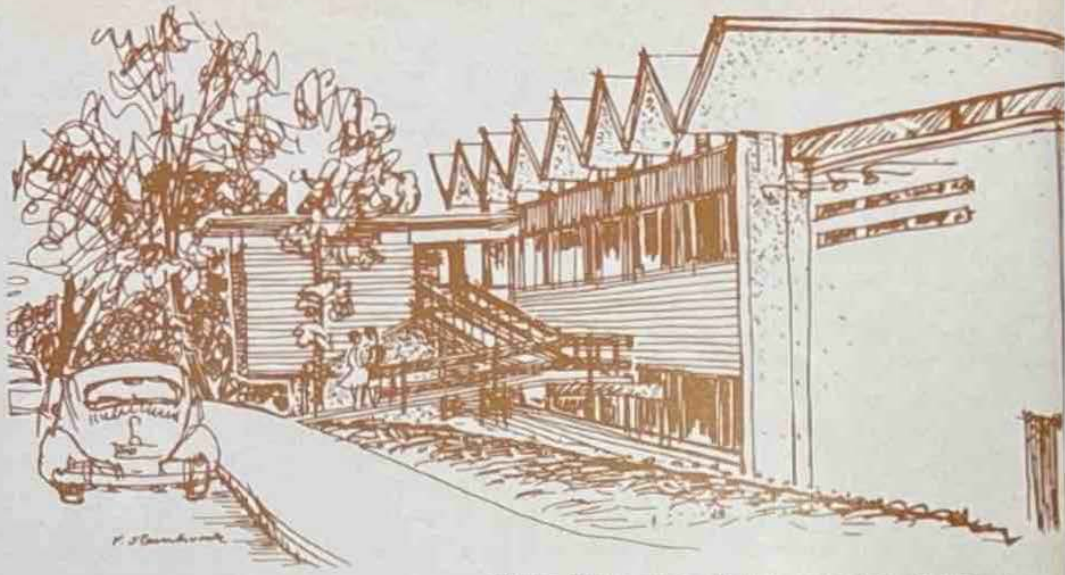
P | A
& | B

THE MAGAZINE OF WESTERN ARCHITECTURE ◆ FEBRUARY 1962



care and feeding of a magazine

no. 1: where pa&b hangs its hat



Victor Steinbrueck sketch courtesy of The Argus

not specified

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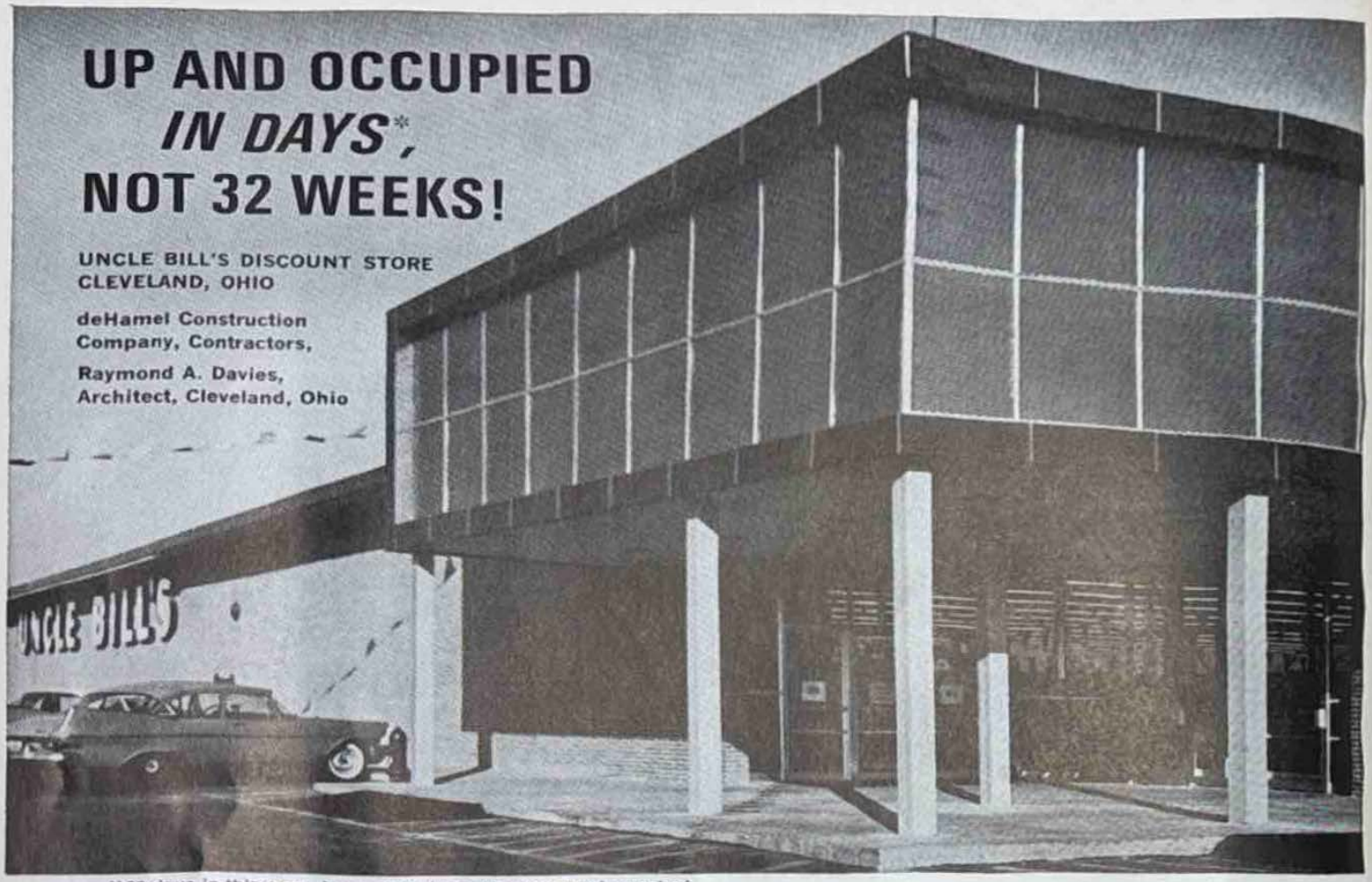
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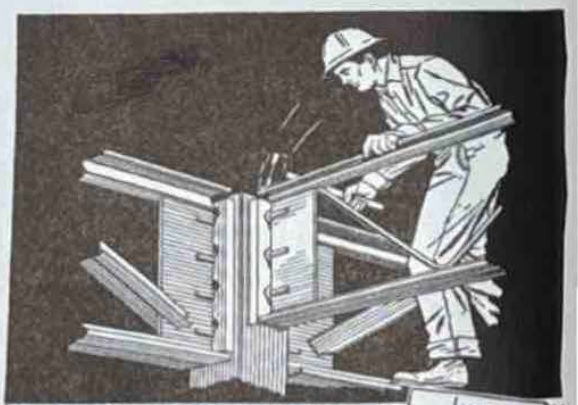
Raymond A. Davies, Architect, Cleveland, Ohio

(*60 days in this case, from ground-breaking to grand opening)

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design

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COVER: Foothill College, Los Altos Hills, Calif. (p. 14)—Ernest J. Kump and Masten & Hurd, Architects Associated; Karl H. Riek photo.

Building Permit Totals for

First Column Figures in Parentheses are Number of Residential Units • Second Column is Dollar

CALIFORNIA

	# Res.	$ Value	Total $
Alameda	(12)	$ 127,354	$ 383,473
Alameda Co.	(83)	707,000	1,213,905
Albany	( )	Nil	22,905
Alhambra	(24)	229,700	271,328
Anaheim	(93)	876,700	6,174,743
Antioch	(36)	393,706	423,469
Arcadia	(25)	419,545	592,594
Arroyo Grnde	(1)	14,000	23,470
Artesia	(17)	164,400	190,900
Atherton	(2)	122,000	185,195
Atwater	(1)	16,990	26,840
Auburn	(1)	19,000	42,998
Avalon	( )	Nil	11,300
Azusa	(18)	129,000	169,975
Bakersfield	(58)	720,700	904,280
Baldwin Park	(26)	314,900	345,995
Banning	(16)	176,236	201,936
Barstow	(1)	9,000	30,470
Bell	(23)	167,750	182,375
Bellflower	(10)	148,200	281,425
Bell Gardens	(75)	513,900	639,150
Belmont	(9)	171,000	398,950
Benicia	(3)	36,956	45,941
Berkeley	(2)	20,000	1,005,399
Beverly Hills	(7)	612,000	1,225,860
Bradbury	( )	Nil	Nil
Brawley	(2)	120,000	124,000
Brea	(37)	856,677	867,320
Buena Park	(259)	3,803,773	4,072,045
Burbank	(68)	541,800	1,273,560
Burlingame	(4)	94,550	224,190
Butte Co.	( )	Nil	162,500
Calexico	(2)	12,000	64,090
Campbell	(22)	329,860	1,312,260
Carlsbad	(5)	77,881	1,242,071
Carmel	(2)	32,500	35,000
Chico	(15)	201,216	445,641
Chino	(23)	296,811	436,435
Chula Vista	(25)	197,000	251,403
Claremont	(10)	172,200	310,525
Coalinga	(2)	26,000	32,600
Colton	(3)	30,060	178,709
Commerce	(2)	20,400	660,740
Compton	( )	Nil	144,446
Concord	(14)	210,270	1,390,085
Cntra Csta Co.	(121)	2,635,932	2,969,000
Corona	(21)	212,674	246,304
Coronado	(2)	56,400	56,400
Corte Madera	(5)	103,750	113,990
Costa Mesa	(70)	681,892	1,077,585
Covina	(61)	998,000	1,645,453
Cudahy	(17)	154,000	223,790
Culver City	(1)	14,000	286,790
Dairy Valley	( )	Nil	99,700
Daly City	(28)	478,717	536,103
Davis	(17)	174,000	185,600
Delano	(19)	193,000	232,524
Downey	(11)	216,860	622,659
Duarte	( )	Nil	76,700
El Cajon	(6)	96,750	301,080
El Centro	(2)	17,000	35,385
El Cerrito	(22)	187,155	212,468
El Dorado Co.	(21)	295,261	406,524
El Monte	(117)	1,027,583	1,228,595
El Segundo	(62)	491,000	960,617
Emeryville	( )	Nil	313,500
Escondido	(2)	28,072	203,786
Eureka	(3)	52,000	392,248
Fairfield	(21)	241,398	312,161
Fillmore	( )	Nil	1,800
Fontana	(11)	143,340	163,894
Fremont	(61)	815,000	6,996,710
Fresno	(257)	3,058,700	3,898,023
Fresno Co.	(52)	600,516	4,446,864
Fullerton	(93)	1,566,968	3,559,819
Glendale	(226)	1,916,303	2,963,771
Glendora	(26)	416,000	549,950
Hlf Moon Bay	(2)	25,000	987,875
Hanford	(82)	810,730	869,707
Hawthorne	(56)	513,950	1,272,987
Hayward	(71)	425,447	610,542
Hemet	(8)	99,000	196,666
Hermosa Beach	(11)	134,538	177,938
Hidden Hills	(2)	32,800	34,800
Hillsborough	(2)	144,000	171,700
Holtville	( )	Nil	4,475
Humboldt Co.*	( )		41,048
Hntingtn Bech	(269)	3,794,172	4,488,377
Hntingtn Park	(11)	80,450	136,685
Imperial Co.	( )	Nil	9,800
Indio	( )	Nil	36,515
Industry	( )	Nil	280,242
Inglewood	(837)	7,423,700	9,465,568
Irwindale	( )	Nil	8,233
Kern Co.	(145)	1,728,590	2,079,393
Laguna Beach	(11)	298,000	320,064
La Habra	( )	Nil	72,167
Lakewood	(5)	130,000	976,350
La Mesa	(28)	248,290	983,295
La Mirada	(1)	17,000	313,500
La Puente	(8)	41,000	388,705
La Verne	(2)	18,000	32,280
Lawndale	(50)	369,650	418,778
Lindsay	(18)	175,650	772,355
Livermore	(7)	69,000	144,400
Lodi	(15)	180,200	415,435
Lompoc	(3)	23,030	200,770
Long Beach	(125)	969,715	3,965,515
Los Altos	(14)	314,240	368,795
Los Angeles	(1,872)	20,328,065	45,730,594
Ls Angles Co.	(1,260)	16,659,360	26,997,389
Los Gatos	(12)	243,000	733,400
Lynwood	(9)	62,500	107,990
Madera	(8)	106,750	144,759
Madera Co.	(16)	134,000	192,050
Mnhattan Bch	(17)	248,800	370,289
Manteca	(22)	163,400	185,350
Marin Co.	(76)	983,130	1,144,690
Martinez	(5)	75,700	89,433
Marysville	(4)	45,500	174,150
Maywood	(6)	42,900	53,870
Menlo Park	(11)	304,000	782,427
Merced	(38)	263,184	328,874
Merced Co.	(11)	128,860	202,980
Millbrae	(12)	183,000	386,080
Mill Valley	(6)	83,000	119,418
Modesto	(51)	638,000	1,319,287
Monrovia	(9)	94,855	182,619
Montclair	(32)	362,050	426,413
Montebello	(15)	190,356	514,141
Monterey	(7)	103,000	280,162
Monterey Co.	(38)	656,410	984,442
Monterey Prk	(103)	792,090	986,340
Mountin View	(40)	338,642	479,254
Napa	(33)	401,115	604,760
Napa Co.	(20)	200,677	452,224
National City	(8)	36,000	103,328
Newport Bech	(19)	505,100	781,991
N. Sacramento	(4)	37,880	53,740
Norwalk	(6)	46,000	137,130
Novato	(5)	84,900	107,250
Oakdale	( )	Nil	3,555
Oakland	(212)	1,897,624	6,394,610
Oceanside	(2)	32,000	396,185
Ojai	(1)	6,000	6,350
Ontario	(104)	1,519,886	1,843,954
Orange	(13)	211,500	358,960
Orange Co.	(339)	6,119,066	7,064,884
Oroville	(2)	21,000	69,751
Oxnard	(168)	1,682,000	2,684,555
Pacifica	(21)	220,500	245,250
Pacific Grove	(15)	162,000	188,140
Palm Springs	(5)	111,000	216,145
Palo Alto	(122)	1,457,623	1,706,555
Pls Vrds Estts	(5)	204,660	322,920
Paramount	(14)	149,800	217,300
Pasadena	(103)	894,078	2,400,314
Paso Robles	(1)	13,000	21,758
Pico Rivera	(1)	14,000	139,065
Piedmont	( )	Nil	41,507
Pinole	( )	Nil	4,467
Pittsburg	(6)	80,368	122,508
Placentia*	( )	207,500	257,700
Placer Co.	(32)	485,442	664,672
Pleasanton	(2)	32,400	166,600
Pomona	(39)	412,750	2,831,949
Porterville	(1)	8,500	21,779
Port Hueneme	( )	Nil	32,500
Red Bluff	(5)	67,872	78,022
Redding	(2)	30,000	393,010
Redlands	(8)	101,200	248,320
Redondo Bech	(35)	319,558	661,360
Redwood City	(37)	316,600	568,402
Richmond	(32)	344,715	1,085,440
Riverside	(38)	532,350	1,060,238
Riverside Co.	(262)	2,826,827	6,589,321
Rolling Hills	(1)	46,500	62,000
Rllng Hls Ests	(3)	89,600	109,400
Rosemead	(5)	63,800	91,874
Roseville	(3)	47,212	104,071
Sacramento	(73)	769,100	1,607,700
Sacramento Co.	(307)	3,623,822	6,116,098
St. Helena	(2)	25,659	25,944
Salinas	(26)	275,000	945,141
Sn Bernardino	(72)	870,990	1,210,552
S Brnrdno Co.	(326)	2,939,622	5,094,039
San Bruno	(38)	429,500	483,020
San Carlos	(6)	132,383	234,183
San Clemente	(10)	151,201	240,313
San Diego	(408)	5,477,501	16,075,897
San Diego Co.	(113)	2,150,500	3,034,804
San Dimas	(3)	55,300	70,850
San Fernando	(2)	15,500	37,870
San Francisco	(398)	5,789,650	8,040,432
San Gabriel	(3)	52,220	84,020
Sanger	(2)	14,000	48,900
San Jacinto	(7)	56,000	62,200
Sn Joaqin Co.	(22)	293,380	947,200
San Jose	(513)	4,713,500	6,183,900
San Leandro	(125)	953,700	1,001,710
Sn Luis Obspo	(3)	49,380	253,620
S Ls Obspo Co.	(21)	237,995	495,860
San Marino	(1)	36,500	127,971
San Mateo	(61)	571,000	977,420
San Mateo Co.	(55)	682,700	9,094,650
San Pablo	(25)	324,115	578,547
San Rafael	(60)	699,443	946,038
Santa Ana	(14)	153,300	680,970
Santa Barbara	( )	981,488	1,715,994
Snt Brbara Co.	(122)	1,926,600	2,220,102
Santa Clara	(59)	512,500	1,401,529
Snta Clara Co.	(33)	629,100	2,041,873
Santa Cruz	(20)	230,200	280,032
Santa Cruz Co.	(158)	1,697,418	1,906,180
Snt Fe Springs	( )	Nil	441,700
Santa Maria	(70)	964,574	1,197,640
Santa Monica	(54)	585,350	1,589,850
Santa Paula	(5)	74,370	798,720
Santa Rosa	(37)	447,460	798,310
Sausalito	(15)	222,970	338,470
Seal Beach	(7)	72,816	149,842
Seaside	(28)	181,500	199,250
Selma	( )	Nil	17,700
Shasta Co.	(8)	100,158	124,358
Sierra Madre	(8)	76,050	118,850
Solano Co.	(6)	92,346	142,646
Sonoma Co.	(41)	461,532	658,681
South Gate	(6)	45,046	228,234
So. El Monte	(2)	12,500	63,540
So. Pasadena	(16)	204,290	251,170
S. Sn Frncisco	(14)	149,700	672,250
Stanislaus Co.	(20)	242,897	546,650
Stockton	(36)	481,470	6,188,170
Sunnyvale	(70)	1,168,267	1,737,267
Temple City	(10)	117,300	137,240
Torrance	(54)	363,175	819,460
Tracy	(17)	184,401	219,251
Tulare	(3)	51,000	808,910
Tulare Co.	(54)	426,470	637,150
Turlock	(3)	46,287	62,487
Ukiah	(1)	9,000	48,450
Upland	(39)	503,855	530,595
Vacaville	(1)	11,550	25,150
Vallejo	(34)	371,250	422,400
Ventura	(110)	1,435,100	3,607,097
Ventura Co.	(163)	2,137,800	3,082,539
Visalia	(2)	27,890	197,940
Walnut	( )	Nil	9,713
Walnut Creek	(89)	553,060	616,620
Wasco	(6)	42,800	53,800
Watsonville	( )	Nil	9,301
West Covina	(18)	759,821	759,821
Whittier	(80)	537,800	1,100,730
Woodland	(17)	223,000	232,580
Woodside	(1)	18,000	73,000
Yolo Co.	(27)	344,190	464,600
Yreka	(2)	29,500	122,972
Yuba City	(4)	17,000	438,750
Yuba Co.	( )	Nil	57,940
Total	**(13,846)**	**$164,656,425**	**$318,319,257**

*Complete figures not available

OREGON

	# Res.	$ Value	Total $
Albany	(3)	$ 32,500	$ 879,461
Ashland	( )	74,500	89,200
Astoria	(21)	200,000	208,650
Baker	(2)	32,000	33,830
Beaverton	(9)	142,740	152,240
Bend	(3)	34,400	39,600
Central Point	(4)	42,000	80,150
Clackamas Co.	(28)	403,700	435,825
Coos Bay	( )	Nil	3,172
Corvallis	(7)	93,000	145,260
Dallas	( )	Nil	116,645
Douglas Co.	(4)	65,580	710,680
Eugene	(12)	128,940	684,370
Forest Grove	(1)	14,000	42,635
Grants Pass	(6)	89,000	109,800
Gresham	(1)	17,000	44,900
Hermiston	( )	No Reply	No Reply
Hillsboro	(9)	103,995	116,575

Western States for December

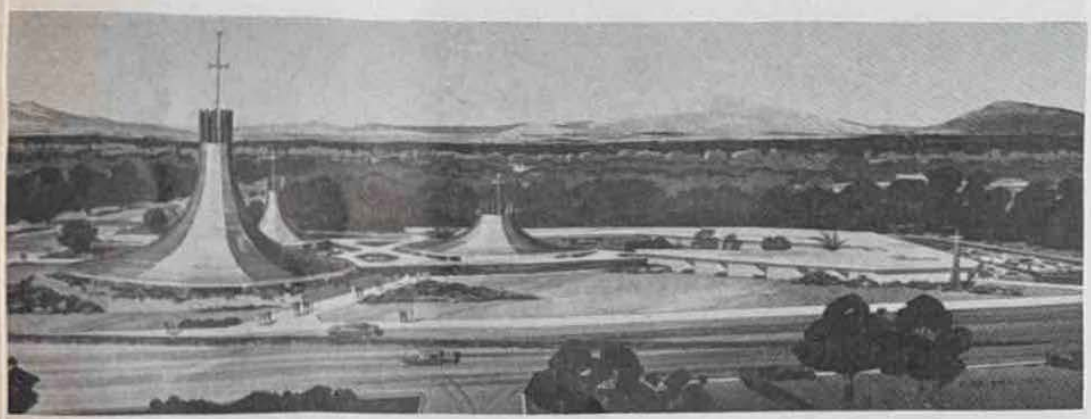
Residential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hood River	( )	Nil	3,680
Klamath Falls	(1)	14,000	21,217
La Grande	(2)	27,500	36,000
Lane Co.	(38)	333,054	466,795
Lebanon	( )	Nil	6,000
Marion Co.	(24)	317,900	353,900
McMinnville	(2)	31,000	81,070
Medford	(6)	77,000	703,152
Milln-Freewtr	( )	Nil	2,500
Multnomh Co.	(49)	775,038	1,840,693
Newberg	( )	Nil	400
Newport	( )	Nil	20,500
North Bend	(5)	32,870	52,900
Ontario	( )	Nil	31,900
Oregon City	(1)	14,800	148,150
Oswego	(8)	141,420	188,120
Pendleton	(1)	13,000	239,190
Portland	(75)	671,850	2,905,220
Prineville	( )	No Reply	No Reply
Roseburg	(4)	45,722	100,744
St. Helens	( )	Nil	Nil
Salem	(12)	175,800	340,545
Seaside	( )	Nil	9,875
Springfield	(2)	19,117	293,710
The Dalles	(3)	51,000	60,273
Washingtn Co.	(38)	708,125	882,185
Total	**(381)**	**$ 4,922,551**	**$ 12,681,112**
WASHINGTON			
Aberdeen	(3)	$ 45,580	$ 59,624
Anacortes	( )	Nil	82,938
Auburn	( )	Nil	Nil
Bellevue	(1)	37,000	164,450
Bellingham	( )	Nil	188,002
Bremerton	(2)	33,000	115,485
Camas	( )	Nil	4,920
Centralia	( )	Nil	25,144
Chehalis	( )	Nil	24,905
Clark Co.	(18)	226,000	289,700
Clarkston	(1)	12,000	21,750
Ellensburg	(2)	17,800	28,500
Enumclaw	(1)	10,000	51,100
Ephrata	(1)	14,000	14,600
Everett	(10)	164,750	382,131
Grys Hrbr Co.	(6)	49,500	56,400
Hoquiam	( )	Nil	5,333
Island Co.	(6)	53,000	78,800
Kelso	(1)	10,000	37,600
Kennewick	(5)	92,500	102,800
Kent	(18)	244,970	308,570
King Co.	(377)	5,324,715	6,230,275
Kirkland	(3)	24,000	26,200
Longview	(4)	65,500	90,824
Mercer Island	(13)	304,690	904,692
Moses Lake	(1)	10,000	17,750
Olympia	(3)	48,500	309,853
Pasco	(2)	21,300	61,434
Pierce Co.	(143)	1,672,050	1,919,590
Port Angeles	( )	Nil	36,300
Port Orchard	( )	Nil	Nil
Pullman	(1)	18,520	470,738
Puyallup	(4)	61,500	100,100
Renton	(5)	60,000	1,764,927
Richland	(5)	86,000	150,935
Seattle	(232)	2,286,250	7,632,776
Shelton	(1)	13,000	15,375
Spokane	(14)	216,000	1,573,559
Spokane Co.	(19)	295,000	926,320
Sunnyside	(1)	13,500	16,900
Tacoma	(67)	814,000	1,698,419
Vancouver	(9)	134,800	282,238
Walla Walla	(1)	17,000	130,255
Wlla Wlla Co.	( )	Nil	Nil
Wenatchee	( )	Nil	131,900
Yakima	(7)	78,000	486,100
Total	**(987)**	**$ 12,574,425**	**$ 27,019,930**
ALASKA			
Anchorage	(1)	$ 46,900	$ 254,420
Fairbanks	( )	Nil	11,923
Juneau	( )	Nil	3,600
Ketchikan	( )	Nil	Nil
Total	**(1)**	**$ 46,900**	**$ 269,943**
IDAHO			
Alameda	(8)	$ 101,800	$ 128,800
Blackfoot	( )	No Reply	No Reply
Boise	(1)	12,500	699,089
Caldwell	(2)	32,000	32,000
Coeur d'Alene	(1)	9,680	118,164
Idaho Falls	(17)	258,674	292,596
Jerome	(1)	10,000	12,300
Lewiston	(1)	33,000	49,795
Moscow	(4)	76,000	83,100
Nampa	(4)	19,500	51,500
Payette	(1)	10,000	60,000
Pocatello	(5)	54,000	112,200
Sandpoint	( )	Nil	Nil
St. Maries	( )	Nil	5,000
Twin Falls	(14)	134,500	138,715
Total	**(59)**	**$ 751,654**	**$ 1,783,259**
MONTANA			
Anaconda	( )	$ Nil	$ Nil
Billings	(42)	599,900	764,580
Bozeman	(1)	16,000	1,770,869
Butte	( )	Nil	8,000
Cut Bank	(2)	25,500	31,500
Glasgow	( )	Nil	Nil
Glendive	(1)	17,000	18,500
Great Falls	(30)	340,965	382,729
Havre	(2)	21,840	22,140
Helena	(4)	66,600	225,800
Kalispell	(1)	9,000	12,000
Lewistown	(1)	13,500	13,500
Livingston	( )	Nil	Nil
Malta	( )	Nil	Nil
Miles City	( )	No Reply	No Reply
Missoula	(5)	131,000	189,600
Total	**(89)**	**$ 1,241,305**	**$ 3,439,218**
WYOMING			
Casper	(13)	$ 180,000	$ 599,616
Cheyenne	(15)	186,500	337,653
Cody	( )	Nil	7,000
Laramie	(3)	22,800	29,281
Rawlins	(1)	20,000	21,900
Riverton	(3)	30,000	32,000
Rock Springs	(13)	117,000	135,000
Sheridan	( )	Nil	5,983
Total	**(48)**	**$ 556,300**	**$ 1,157,433**
COLORADO			
Adams Co.	(190)	$ 2,759,700	$ 2,971,570
Alamosa	(5)	50,000	63,213
Arapahoe Co.	(72)	1,369,000	1,586,087
Arvada	(34)	465,000	624,182
Aspen	( )	Nil	1,500
Aurora	(48)	229,990	808,120
Boulder	( )	No Reply	No Reply
Boulder Co.	(15)	173,993	188,993
Clrdo Sprngs	(52)	678,864	1,361,416
Cortez	( )	Nil	315
Denver	(301)	2,119,437	6,936,971
Durango	( )	Nil	34,845
El Paso Co.	(33)	461,300	1,120,685
Englewood	(24)	104,850	209,040
Estes Park	(1)	12,000	14,000
Fort Collins	(15)	186,000	479,800
Fort Morgan	(2)	14,300	16,238
Golden	(9)	85,990	127,522
Grnd Jnction	(3)	28,500	110,970
Greeley	(8)	79,000	180,292
Jefferson Co.	(365)	3,282,796	3,818,212
La Junta	(1)	13,500	15,915
Lamar	(2)	30,000	49,000
Littleton	(26)	262,000	453,385
Longmont	(19)	188,850	192,550
Loveland	(10)	96,300	99,550
Monte Vista	( )	Nil	Nil
Montrose	(1)	19,999	45,819
Pitkin Co.	( )	Nil	Nil
Pueblo	(16)	202,245	272,646
Pueblo Co.	(5)	51,000	52,050
Sterling	(6)	71,000	221,000
Trinidad	( )	Nil	3,940
Walsenburg	( )	Nil	Nil
Westminster	(64)	471,892	479,725
Total	**(1,327)**	**$ 13,407,506**	**$ 22,539,551**
UTAH			
American Frk	( )	$ Nil	$ 600
Bountiful	(14)	226,700	240,700
Brigham City	(32)	382,300	587,490
Cedar City	( )	Nil	18,500
Clearfield	(3)	32,000	40,000
Davis Co.	(4)	52,517	97,225
Kaysville	(2)	13,240	13,240
Layton	(23)	289,000	291,500
Logan	(14)	168,801	176,801
Murray	(6)	56,300	78,250
Ogden	(45)	505,162	523,662
Orem	(6)	67,850	99,015
Price	( )	Nil	Nil
Provo	(5)	58,000	126,550
Salt Lake Cty	(108)	443,060	2,458,252
Salt Lake Co.	(94)	1,414,400	1,643,509
S. Salt Lk City	( )	Nil	68,000
Spanish Fork	(1)	11,000	61,000
Tooele	(6)	66,050	113,050
Utah Co.	(1)	13,290	54,740
Weber Co.	(1)	15,000	15,000
Total	**(365)**	**$ 3,814,670**	**$ 6,707,084**
NEVADA			
Boulder City	( )	$ Nil	$ 1,045
Clark Co.	(110)	1,373,769	3,348,872
Elko	( )	Nil	1,900
Las Vegas	(143)	1,757,141	3,130,038
N. Las Vegas	(83)	791,369	865,216
Reno	(101)	1,303,963	1,604,464
Sparks	(25)	368,500	405,362
Washoe Co.	(32)	463,120	837,346
Total	**(494)**	**$ 6,057,862**	**$ 10,194,243**
ARIZONA			
Buckeye	( )	$ Nil	$ 168,165
Casa Grande	(3)	34,700	374,500
Chandler	(6)	61,000	61,000
Douglas	( )	Nil	33,150
Flagstaff	(2)	846	50,506
Florence	( )	Nil	Nil
Glendale	(2)	39,000	80,965
Maricopa Co.	(254)	2,652,438	2,905,194
Mesa	(49)	474,415	2,409,525
Phoenix	(354)	3,262,889	6,099,338
Pima Co.	(72)	817,536	1,864,403
Prescott	(5)	63,700	150,472
Scottsdale	(48)	402,500	2,688,495
Tempe	(143)	882,200	926,205
Tucson	(77)	782,544	1,959,661
Wickenburg	(1)	6,500	16,400
Winslow	( )	No Reply	No Reply
Yuma	(2)	21,000	29,480
Total	**(1,018)**	**$ 9,501,268**	**$ 19,817,459**
NEW MEXICO			
Alamogordo	( )	$ Nil	$ 56,900
Albuquerque	(76)	502,798	2,232,903
Artesia	(2)	16,800	24,378
Carlsbad	(11)	130,000	1,679,450
Clovis	(20)	189,986	401,867
Deming	(2)	15,500	24,600
Farmington	( )	Nil	6,685
Gallup	(29)	225,566	353,726
Hobbs	(12)	180,327	242,023
Las Cruces	(8)	104,467	430,491
Las Vegas	( )	Nil	14,000
Lovington	(7)	76,000	84,800
Raton	( )	Nil	1,200
Roswell	(80)	756,900	889,400
Santa Fe	(14)	106,100	153,100
Silver City	( )	No Reply	No Reply
Truth Or Consequencs	( )	No Reply	No Reply
Tucumcari	(1)	8,500	26,100
Tularosa	( )	No Reply	No Reply
Total	**(262)**	**$ 2,312,944**	**$ 6,621,623**
HAWAII			
Hawaii Co.	(29)	$ 367,450	$ 1,028,348
Honolulu	(420)	4,388,743	8,211,850
Maui Co.	(8)	62,760	2,314,998
Total	**(457)**	**$ 4,818,953**	**$ 11,555,196**
GRAND TOTAL	**(19,344)**	**$224,662,763**	**$442,105,308**



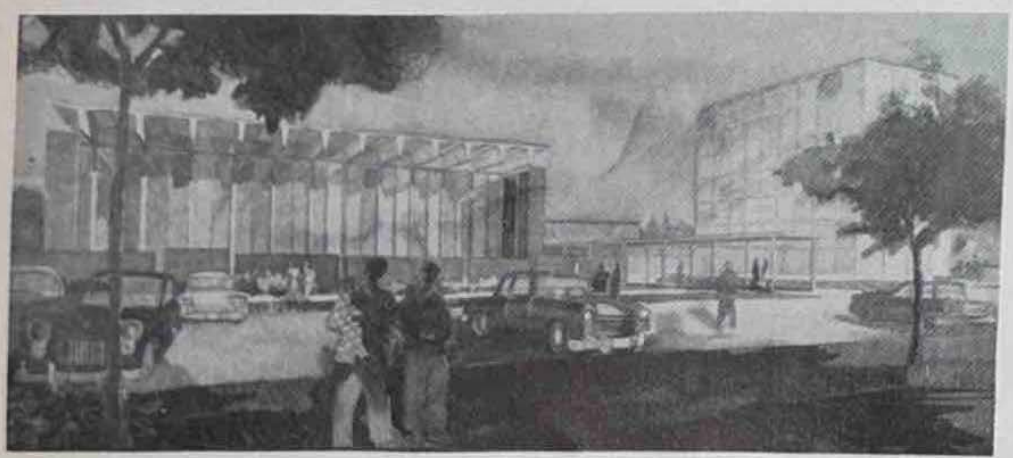
WASHINGTON: 800-STUDENT DORMITORY

for University of Washington in Seattle will house women in one wing and men in other, with common lounge, library, dining and administrative facilities. Below one-story connecting structure will be main dining room and six smaller ones; below that, three levels of garage space and mechanical rooms. Estimated to cost $4 million, reinforced concrete project will have precast concrete exterior panels on towers. Hexagonal shaped rooms will allow windows on alternating floors to face in different direction to provide maximum privacy. Architects: Kirk, Wallace, McKinley & Associates; structural engineers: Worthington, Skilling, Helle & Jackson.



ARIZONA: FOUR-UNIT RELIGIOUS PLANT

for Scottsdale Congregational United Church of Christ will feature three circular buildings with truncated cone roofs of sheet copper to house sanctuary, chapel and fellowship hall. Each of these roofs, flared back at top to admit light, will be carried on 12 laminated wood beams, curving inward and upward. Complex, however, will get underway with construction of one-story Sunday school wing (temporary sanctuary) at right. Architects: Weaver & Drover.



UTAH: YMCA BUILDING

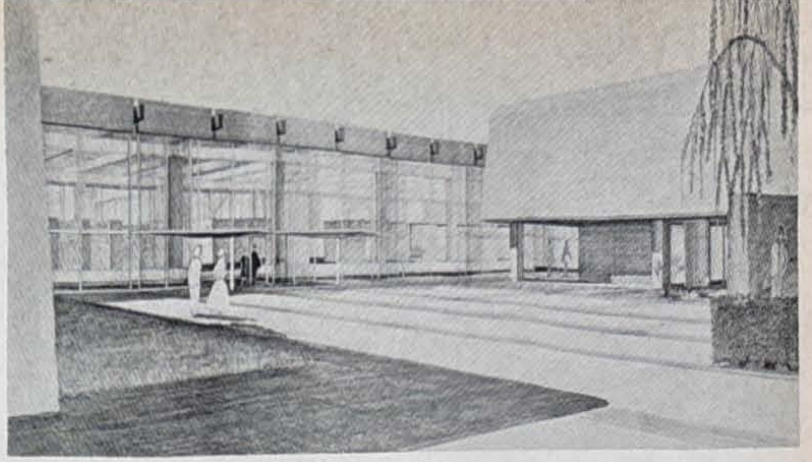
will be constructed at cost of $700,000 just east of center of Salt Lake City. Prestressed concrete and masonry structure will include T-shaped swimming pool with separate diving area, gymnasium, handball and squash courts, weight lifting and youth activity areas, businessmen's health club, etc. Future addition will provide residence rooms. Architects: Edwards & Daniels.



CALIFORNIA: 28-STORY TOWER

will be largest commercial office structure in Los Angeles area upon completion in 1964. Faced with gray glass wall set back of vertical precast concrete mullions extending outward 4 ft., California Federal Savings Plaza Building's entrance on Wilshire Boulevard will be reached via bridge that crosses reflecting pool complete with fountains. Parking will be provided for 600 cars on 2½ levels below ground and for 500 on two decks at ground level. Architects: Charles Luckman Associates; structural engineers: Brandon & Johnston.

New educational philosophy sparks new design idea



NORTH ENTRANCE

Because it is introducing new concepts in plan, instruction, office arrangements and construction techniques, the College of Education Building "is going to have a great effect upon the University of New Mexico and the Southwest," in the opinion of a Department of Architecture spokesman.

Essence of the entire project on the Albuquerque campus is the space program, the culmination of numerous conferences involving each department of the college which answered extensive questionnaires about space need and utilization; the architectural consultant who compiled and analyzed the data in reference to number of students and hours each space will be utilized each week; and the building committee which reviewed and challenged the requirements and which was permitted by the university to recommend an architect.

Then, after the selection of Flatow, Moore, Bryan & Fairburn over five other New Mexico firms, the final plan was developed, supporting the contention that "a poor program can only result in a poor facility, whereas a good program may facilitate the design of an outstanding building."

What has been accomplished is aptly described by architectural consultant Don P. Schlegel:

"For the first time the architecture of the campus is departing from the pueblo style, although the attempt is for this new complex to be in sympathy with all existing buildings and to maintain a sense of place. This direction results in a centripetal form where different functions are housed in separate units, organized around interior courts. This whole complex is enclosed by a wall with large concrete masses projecting above. The main building houses the Learning Materials Center and serves as the living room for the college, being both the visual focal point and center of student activity.

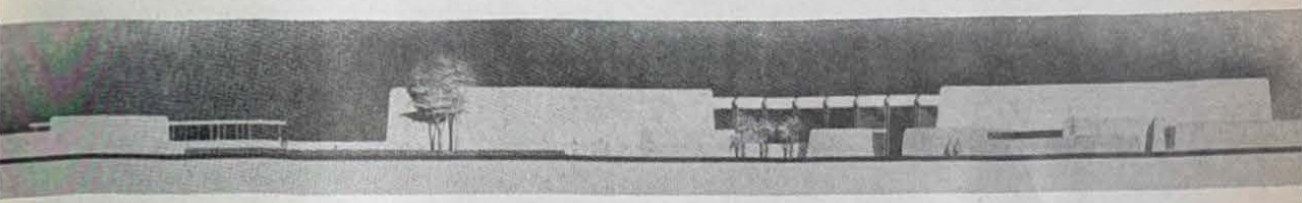
"Another interesting outgrowth of this programming is that office spaces for the faculty and graduate assistants are housed in one structure and not connected with individual teaching facilities or arranged in any kind of departmental organization or hierarchy of authority. The thinking behind this was to bring the faculty together in an atmosphere which is inducive to the exchange of ideas. Besides, it relieves the faculty of the janitorial work and the monitoring of the laboratory spaces.

"Secretaries are disconnected from departments or individual staff members and are placed in a pool which integrates typing, mimeographing, record-keeping, etc. Faculty members will dictate correspondence by telephone, which will be recorded on tape in this area, then typed by the staff.

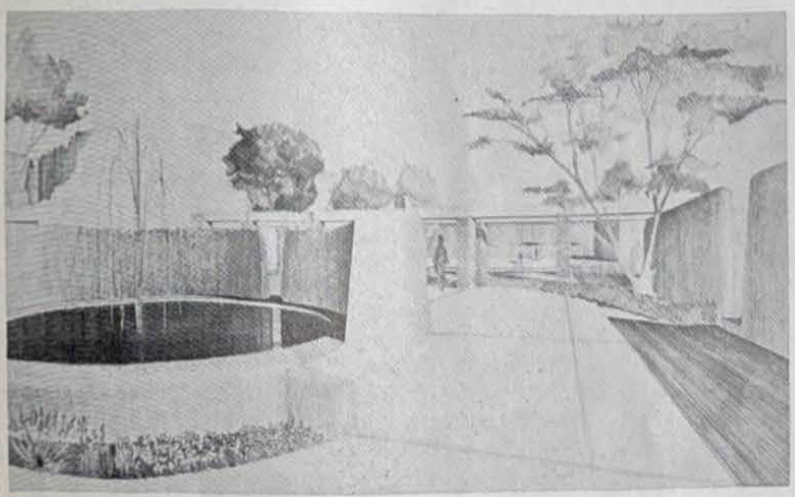
"The 'kiva' is a new idea in classroom space—a circular building based on a system of tiers, wide enough to hold three rows of chairs or a table with chairs, permitting large lecture sections or smaller ones where groups can work together on team projects.

"Television will be used extensively in the areas of guidance and testing, child growth and development. Thus students in the classrooms or kivas will be allowed to study both normal and abnormal children of all ages and under various circumstances. Another facet of TV will be a high-frequency circuit connecting the city's public schools with the education building so that classroom conditions may be observed and discussed.

"Concrete frame construction with prefabricated concrete colored panels forming the shell will appear as large masses and will work well with the existing structures, overcoming the difficult maintenance problem of cracking stucco."



NORTH ELEVATION



SOUTH ENTRANCE

THE BUILDING WEST—Permits for 1961 totaled $5,943,159,935 in the 13 western states, an increase of $485 million (8%) over the previous year. Pacific Architect & Builder's survey shows California had the largest overall gain, $376 million, followed by Colorado, $83 million, and Washington, $41.2 million. Of the grand total, residential dollar voume last year amounted to $3,135,071,185, a $273 million increase over 1960. Again, California led the field, gaining $225.3 million. Colorado's volume jumped $44.5 million, while Washington and Nevada each was $16 million greater than the previous year. The industrial-public-commercial building category reached a substantial total of $2,808,088,750 for 1961, an increase of 8% over 1960. The table on the opposite page shows the comparative totals for the West.

TOP TWENTY-FIVE—Hottest spots in the West for December (in millions): 1. Los Angeles, $45.7; 2. Los Angeles County, $21.3; 3. San Diego, $16.1; 4. San Mateo County, $9.7; 5. Inglewood, Calif., $9.5; 6. Honolulu, $8.2; 7. San Francisco, $8.1; 8. Seattle, $7.6; 9. Orange County, $7.1; 10. Fremont, Calif., $7; 11. Denver, $7; 12. Riverside County, Calif., $6.6; 13. Oakland, $6.4; 14. King County, Wash., $6.2; 15. Stockton, $6.2; 16. San Jose, $6.2; 17. Anaheim, Calif., $6.2; 18. Sacramento County, $6.1; 19. Phoenix, $6.1; 20. San Bernardino County, $5.1; 21. Huntington Beach, Calif., $4.5; $22. Fresno County, $4.5; 23. Buena Park, Calif., $4.1; 24. Long Beach, $4; 25. Fresno, $3.9.

CAMPUS CONSTRUCTION—While spanking new campuses, particularly the junior college variety, are springing up like mushrooms all over the West, the building boom continues at the well-established seats of learning. A case in point: Major projects underway or scheduled to begin this year at the University of Washington total $21,631,000. Interestingly enough, no new classroom buildings are included, although remodeling jobs and additions will add more desks and laboratory facilities.

REGARDING RAPID TRANSIT—As part of its program leading to construction of the 22.7-mile "backbone" route, the Los Angeles Metropolitan Transit Authority has allocated $925,000 for the first of the four-phase program. Kaiser Engineers, under a $750,000 contract, will undertake design engineering required to produce comprehensive construction cost estimates, while Coverdale & Colpitts will develop final passenger and revenue data required in order that bonds can be placed on the market for sale to private investors. Work on both contracts is to be completed by July 1, 1962. . . . Metro (Municipality of Metropolitan Seattle) has been endorsed by a citizens committee to take over mass transportation planning and operation in the Greater Seattle area. Its powers are limited to sewage disposal now.

BEAUTY AND THE BRIDGE—Architect William Stephen Allen, partner in the San Francisco firm of Anshen & Allen, has been named design consultant for the proposed San Mateo-Hayward Bridge, preliminary sketches of which were denounced in a series of articles written by Allen Temko for the San Francisco Chronicle. In making the appointment as chairman of the State Toll Bridge Authority, Gov. Edmund G. Brown promised he would "not allow another Richmond-San Rafael Bridge around here." The California Council, AIA, at its fall board meeting passed a resolution stating that "the esthetic and architectural qualities of the proposed structure shall make a major contribution to the visual environment of the Bay area."

AIA ELECTIONS: A race for the first vice presidency of the Institute has been assured at the 1962 convention with the nomination of two current officers: Second Vice President James M. Hunter of Boulder, Colo., and Secretary J. Roy Carroll Jr. of Philadelphia. The previously announced nomination of Henry L. Wright of Los Angeles, presently first vice president, for the top AIA post remained unopposed at this writing. "New Dimensions of Architectural Practice" will be the theme for the May 8-11 sessions in Dallas where, the Institute has been assured by the convention hotel and Chamber of Commerce, "all its members will be equally welcome."

SINGLE VS. MULTIPLE CONTRACTS—Spokesmen for and against the single contract system, heartily endorsed by the AGC, recently had their say in Spokane. Seattle's James W. Cawdrey, past president of the national organization told the Washington State School Directors Association, that the multiple method causes many contractors to "stay clear" of school construction. This prompted a joint statement by Spokane's Robert L. Wilkinson and Leslie L. Woods, representatives of electrical and mechanical contractors' associations, respectively, which said in part: "Each of the contractors who will be responsible for the main sections of a building project—general construction, electrical and mechanical—should be directly responsible to the owner for the proper execution of his phase of the project for the best results."

FLIGHT TO SUBURBIA—The quest for housing more than the assumed search for status has determined the pattern by which Los Angeles has developed. So suggests the findings of a study initiated in the Population Research Laboratory at the University of Southern California. Say the sociologists: "We can well afford to reexamine traditional schemes of urban growth before we accept new and presumably more exciting explanations for this growth which are based only on socio-psychological variables."

San Francisco: redevelopment continues well-planned route

The San Francisco Redevelopment Agency, which has been setting new lofty standards in its rehabilitation programs, scored another first when it accepted a site development plan for a neighborhood facility in Diamond Heights—a 330-acre residential community almost in the exact center of the city.

M. Justin Herman, SFRA executive director, says the plan, as developed by urban design consultant Lawrence Lackey and landscape architects Royston, Hanamoto & Mayes, should accomplish three things:

- A coordinated, three-dimensional treatment of the area by public and private interests.
- Provision of great visual benefits along with practical facilities expected in a community service area.
- The highest practical return from sale of the commercial site.

Located in the saddle of land between Red Rock and Gold Mine Hills, the 18-acre site will provide Diamond Heights residents with a church, branch library, elementary school, playground and shopping center. The proposed arrangement will offer an informal, convenient and attractive grouping of community services.

Key unifying element in the development plan is an open green plaza which will give access to all the activities. Fingers of green park area extending from it will permit safe and continuous pedestrian traffic within the center.

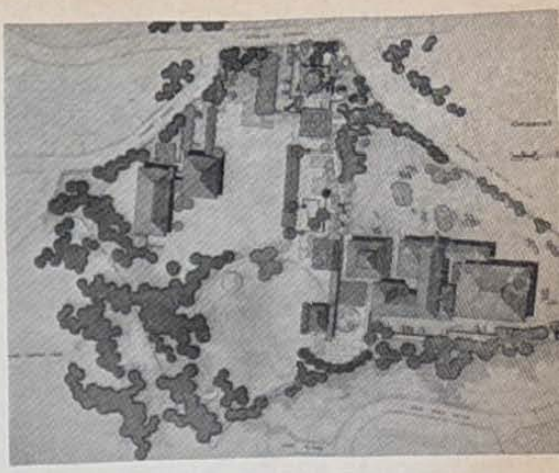
One of three churches to be built in Diamond Heights, St. Nicholas Syrian Antichan Church will be located at the north edge of the site for 300 communicants. (All three church sites in the area were sold at minimum fair market values in a sales program organized with the cooperation of the San Francisco Council of Churches. The agency was able to refrain from auctioning the sites because the competing churches agreed to allocate the parcels voluntarily to three of their numbers.)

The development study indicates that an elementary school with three play areas will occupy 3½ acres on a sheltered site to the west of the plaza. Adjacent to the school grounds there will be a large turfed playground.

A branch library has been suggested between the playground and the shopping center, with a parking area accommodating about 340 cars, whose site will be sold by competitive bid, subject to development according to the plan.

First sales of land in Diamond Heights were made last year on Red Rock Hill. A total of 246 lots for 293 homes on the slopes and 22 acres for 990 apartments on the peak were sold, at prices as much as 45% higher than the minimum set by the agency. Total sum received for the parcels, about one-third of the land to be sold in Diamond Heights, exceeded $6 million.

As a special feature of the sales program, a nationwide architectural competition for the peak parcel was conducted in cooperation with the AIA (PA&B, Dec. '61).



NEIGHBORHOOD CENTER calls for shopping center and library (lower right), playground (south edge), elementary school (upper left) and church (north edge), all unified by plaza.

A CLARIFICATION

The editors of Pacific Architect & Builder have been criticized for the use of the word "counterfeit" in a headline on page 26 of the December issue in referring to the Gay '90s treatment of a Bank of New Mexico branch in Albuquerque.

Counterfeit, in this instance, was meant only as a play on the word "banking" and the "copying" of a historical style of architecture. There was no intent to imply that the architects had not employed an honest approach to the design problem nor that they had failed to produce an excellent imitation of a building style from bygone New Mexico days.

If any of our readers derived the wrong impression from the editorial, we are sorry and hope this sets the record straight.

1960 and 1961 Comparative Totals for the 13 Western States

State	1961 Residential Only	1960 Residential Only	1961 Res. Units	1960 Res. Units	1961 Total $ Volume	1960 Total $ Volume	1961 No. Permits	1960 No. Permits
California	$2,215,933,074	$1,990,546,838	186,832	173,106	$4,047,456,390	$3,671,415,756	451,642	445,499
Oregon	103,155,216	101,475,659	7,943	7,826	223,686,279	235,301,724	27,493	26,070
Washington	175,603,749	159,555,852	12,832	11,943	400,241,151	358,956,022	49,794	47,442
Alaska	5,004,068	6,519,281	239	240	18,474,316	23,944,494	1,470	1,148
Idaho	11,913,978	12,442,419	934	942	34,258,999	32,343,547	6,561	6,205
Montana	18,525,809	18,512,035	1,501	1,630	32,382,480	42,799,059	3,987	4,126
Wyoming	11,254,039	16,421,918	880	1,289	22,265,384	26,954,874	2,834	3,193
Colorado	189,437,540	144,907,724	18,743	4,028	353,988,709	270,954,789	72,747	75,133
Utah	62,952,362	61,233,408	5,731	5,045	124,907,176	117,965,649	10,764	11,135
Nevada	69,115,120	53,259,568	5,731	4,448	121,944,801	94,386,705	11,416	9,819
Arizona	165,055,536	168,363,188	18,259	18,533	319,355,360	313,128,244	44,665	43,210
New Mexico	42,486,360	50,385,005	3,946	4,654	87,225,359	93,278,103	17,687	19,958
Hawaii	64,634,334	78,406,538	6,023	7,474	156,973,531	176,687,580	17,976	16,178
Total	**$3,135,071,185**	**$2,862,029,433**	**269,594**	**251,158**	**$5,943,159,935**	**$5,458,116,546**	**719,036**	**709,116**

State-designed buildings in California to hit $57 million

California's general building construction program handled through the Division of Architecture will exceed $57 million in 1962. Northern California projects will total $31 million and Southern California, $26 million, State Architect Anson Boyd reported in his January forecast.

These figures do not include work assigned to the Division of Architecture by the Trustees of the California State Colleges. Under legislation which became effective in 1961, the trustees have full authority and responsibility for the building program of the state colleges.

Major building projects in the north are scattered throughout the state's various institutions and service agencies. Largest project will be the bidding in March of the general, mechanical, electrical and elevator contracts for the 15-story Retirement Building, Sacramento—a general office building to be operated by the State Department of Finance. These phases of the work are expected to cost about $13.8 million. Foundations for the building are under construction and erection of the structural steel framework is expected to get underway early in March.

A new institution for the Department of Youth Authority will be ready for bidding before the end of the year. To be known as the Northern California Youth Center, it will be located in the Stockton area. Construction of the central service unit and initial housing for 400 wards assigned to the authority is estimated to cost $4 million.

Other large projects are a $2 million addition to a ward building at Stockton State Hospital and a $2 million wards and treatment unit for severely handicapped patients at Sonoma State Hospital, both for the Department of Mental Hygiene.

The Stockton ward addition will provide an additional 200 beds for male and female geriatric patients. The Sonoma unit is a highly specialized, self-sufficient facility for 200 mentally retarded patients with compound problems.

The list of major Southern California projects includes a new $10 million security correctional institution for 1,200 men at Tehachapi and a $1.2 million reception-guidance center at the California Institution for Women, Corona, both to be bid in the fall; a new $1.5 million California School for Cerebral Palsied Children (Southern California), Los Angeles, to be bid in the spring; and five ward buildings at Fairview State Hospital, Costa Mesa, costing about $3.6 million and scheduled for bidding shortly.

WOMEN IN CONSTRUCTION: GROUP GROWS IN WEST

With the presentation of a charter in Seattle last month, the National Association of Women in Construction chalked up its sixth chapter in the West—the others are in Portland, Oakland, San Francisco, Los Angeles, San Diego—and the 60th in the nation.

Membership in the Texas-headquartered organization, whose roster now exceeds 2,400 names, is open to women who are actively engaged in the construction field: those employed by architects, engineers, general contractors, subcontractors, material suppliers and construction news publications.

A rundown of the Seattle officers is indicative of the various phases of the industry represented in a particular chapter. Dorothy McCormick, Pacific Builder & Engineer, Inc. (PA&B's publisher), is president; Delores Williams, Hainsworth Construction Co., vice president; Evelyn Collyer, Seattle Northwest Chapter, AGC, secretary; and Ruth Schrum, James I. Barnes Construction Co., treasurer. Directors are Merridy Williams, office of Paul Thiry, architect: June Gehrke, Seattle Northwest Chapter, AGC; Norma Sierer, Northwest Plaster Bureau; and Jeane Fowler, Puget Sound Bridge and Dry Dock Co.

Local chapters hold monthly meetings and once each year a national convention takes place in a chapter city. The 1961 sessions, for example, were held in New Orleans in September.

Following its practice of sponsoring an annual forum, the Pacific region will conduct workshops and general discussions April 7 in Los Angeles. Florence Barbour of the host city is regional director.

WIC, as it is informally known, was established in Fort Worth in 1953 to promote good fellowship and encourage cooperation and better understanding among its members. And it just might be the gals are trying to update the old saw to the effect that behind every drafting table, specification and hard hat stands a woman—and Women in Construction don't intend to let the menfolk forget.

T-SQUARE TALK

new officers, partnerships

Raymond C. Abst has opened his own office for the practice of architecture at 1022 McHenry Ave., Modesto, Calif.

Henry Greybrook has opened an architectural office in Room 309, Corbett Bldg., Portland, where he is sharing space with another architect, Henry J. Voderberg, who has been in this location for about two years. The two men are maintaining separate practices.

Willam H. Cook and Robert J. Swaim have formed the architectural partnership of Cook & Swaim with offices at 7065 Mesa Grande Court, Tucson.

new partners

Millard J. Archuleta Jr., project manager since 1955 for Burke, Kober & Nicolais, Los Angeles architects-engineers, is a new partner. He has been associated with the firm for 10 out of the past 14 years.

firm changes

The Great Falls, Mont., architectural firm of Page & Werner is now known as Page-Werner & Associates. Principals are George C. Page and Vincent S. Werner; associates, Klynn L. Cole and Robert G. Taylor.

The architectural partnership of Holzinger-Schropfer & Associates, Casper, Wyo., has been dissolved and the principals are practicing as individuals: R. M. Holzinger at 2301 Oxford Lane and R. W. Schropfer at 1915 Oxford Lane.

Nielsen, Reeve & Maxwell, Inc., consulting engineering firm in Ogden, Utah, has changed its name to Nielsen & Maxwell. Principals are H. Eugene Nielsen and Art V. Maxwell. John O. Reeve is no longer associated with the firm but is continuing to practice under the name of John O. Reeve & Associates, also in Ogden.

deaths

A. John Brenner of Phoenix, a member of the Arizona State Board of Technical Registration and secretary of the National Council of Architectural Boards, died of a heart attack December 7. He collapsed just after leaving a meeting of the Central Arizona Chapter, AIA. A partner in the firm of Brenner & Arnold, architects, he was with Lescher & Mahoney from 1927-52 and opened his own practice the following year.

new addresses

Archie J. Fry, architect, to Auburn Professional Building, 119 A St. S.E., Auburn, Wash.

Robert F. Fisher, architect, to 220 N.E. Hillcrest Drive, Grants Pass, Ore.

honors

Charles A. DeTurk, director of the California Department of Parks and Recreation, received the Cornelius Amory Pugsley Silver Medal of the American Scenic and Historic Preservation Society in New York last month. He was cited for preserving historic landmarks, protecting natural scenery and helping to improve cities in his state.

James Framcomacaro, coordinating engineer in the international division of Daniel, Mann, Johnson & Mendenhall, Los Angeles architects-engineers, has been awarded a Brookings Institute Public Affairs Fellowship for five months of seminars and studies in Washington, D.C.

Pasadena Chapter, AIA, in initiating its annual craftsmanship program presented Certificates of Award to Clifford Nelson Associates, Pasadena, in the art of sculpture; Costamagna & Son, Inc., San Gabriel, in terrazzo; Crown Shade & Linoleum Co., Pasadena, in plastic laminates; and A. R. Mills, Gardena, in masonry. Said the awards committee: "The successful creation of all good architecture is dependent not only upon a good architect but upon highly competent building trades and allied arts and services."

In its 1961 Triennial Fine Arts and Craftsmanship Awards program, the Southern California Chapter, AIA, has made these citations, all for projects in the Greater Los Angeles area: Special Award to A. B. and A. T. Heinsbergen for a mural combining mosaic and collage techniques in the equipment building of Pacific Telephone; Fine Arts Awards to Roger Darricarrere for stained glass in the Trinity Lutheran Church; Perli Pelzig for the pulpit area, including stained glass windows, in the University Synagogue; and Tom Van Sant for a rock mosaic in the San Marino Congregational Church; Craftsmanship Awards to Peter Kiewit Sons' Co. for the American Cement Building; William S. Simpson Construction Co. for the Rand Corp. Building; Monteverdi-Young Co. for furniture in William Allen's architectural office building; and Wallis-Wiley Studio for art glass in the First Methodist Church.

PRODUCTS REGISTER

The 1962 edition of the AIA Building Products Register has come off the press with a 30-day trial subscription offer for all design professionals, contractors, investors and others interested in the single-source reference for direct comparison of building products. Copies may be ordered by writing the Institute at 1735 New York Ave. N.W., Washington 6, D.C.

elections, appointments

California State Board of Architectural Examiners has a new president, Joseph L. Johnson of Los Angeles, and a new secretary, Worley K. Wong of San Francisco.

Charles F. Hummel of Boise has been appointed to the Idaho State Board of Examiners for Architects for a four-year term, filling the vacancy created by the retirement of his father, Fredrick C. Hummel.

New president of the Vallejo (Calif.) Chamber of Commerce is architect John A. Beland.

Tacoma architect Lyle M. Swedburg has been elected secretary-treasurer of the Puget Sound Regional Planning Council.

Six AIA chapters pick slates

Among AIA chapters in the West which recently elected officers are the following:

San Diego: James W. Bird, president; Ward W. Deems, vice president; Ralph B. Redhead, secretary; Robert J. Platt, treasurer.

Pasadena: Robert E. Tryon, president; Kenneth A. Gordon, vice president; Mrs. Jean Driskel, secretary; John Kewell, treasurer.

Orange County: Jack M. George, president; Wilson V. Woodman, vice president; Charles M. Wickett, secretary; Richard Layne Tom, treasurer.

East Bay: Mitchell Van Bourg, president; Roger Lee, vice president; Rollo Wheeler, secretary; Charles Dougherty, treasurer.

Southwest Washington: John E. McGuire, president; Robert M. Jones, first vice president; K. Walter Johnson, second vice president; James Martin Harris, secretary; Donald Siefert, treasurer.

Hawaii: Gordon W. Bradley, president; George V. Whisenand, vice president; Paul D. Jones, secretary; Gordon Potter, treasurer.

Pacific Northwest Chapter, American Society of Landscape Architects, has elected Robert L. Woerner, Spokane, president; Richard M. Bowe, Portland, first vice president; William K. Roth, Portland, second vice president; Harold T. Abbott, Pullman, secretary; and James M. Coleman, Seattle, treasurer.

The Beverely Hills architectural-engineering firm of Victor Gruen Associates has named three directors: Frank Hotchkiss, planning development; Dan Branigan, planning operations; and Sydney Brisker, architecture. Hotchkiss and Branigan each has been with the planning division for seven years; Brisker has been chief architect for eight.

David John Lepore, formerly design and architectural supervisor for the Sheraton Hotel chain in Boston, has joined the staff of John S. Bolles, San Francisco architectural-engineering firm.

Los Angeles architect Harold D. Hauf has been appointed to a new FHA advisory committee for the experimental housing program.

As part of an expansion program which includes a $50,000 building project to enlarge its home offices in Corvallis, Ore., the engineering firm of Cornell, Howland, Hayes & Merryfield has appointed two partners to new top positions: Fred Merryfield as staff manager and T. B. Hayes as business development director. Milton A. Hickey has become administrative manager. Among five newly named project managers is Wayne C. Phillips, partner, architectural engineering.

Paul J. Prout, architect-civil engineer has become director of public works for Napa, Calif. He formerly was assistant city engineer of Ontario.

resignations

Walter Gordon, dean of the School of Architecture and Allied Arts at the University of Oregon since 1958, has resigned that post effective July 1. He will leave the Eugene campus to become visiting professor of art and design at Portland's Reed College and to resume private practice, which he maintained until becoming dean at Oregon. Since then he has been a member of the Oregon Capital Planning Commission. Dean Gordon's wife, Margaret, a potter, also will join the Reed faculty as visiting artist in ceramics.

Progress report No. 5: Seattle World's Fair

While the performing arts director of Seattle World's Fair was announcing an opening night entertainment panorama in grand style with something for everyone (Igor Stravinsky and Van Cliburn as part of the Seattle Symphony program, the Ceylon Dancers, Shipstad and Johnson's Ice Follies and the Spanish Riding School of Vienna), contractors were going into double shifts on behind-schedule projects and groundbreaking ceremonies continued on a few of the smaller exhibition buildings. But sticking by their guns, fair officials declared that all would be in readiness come the April 21 opening.

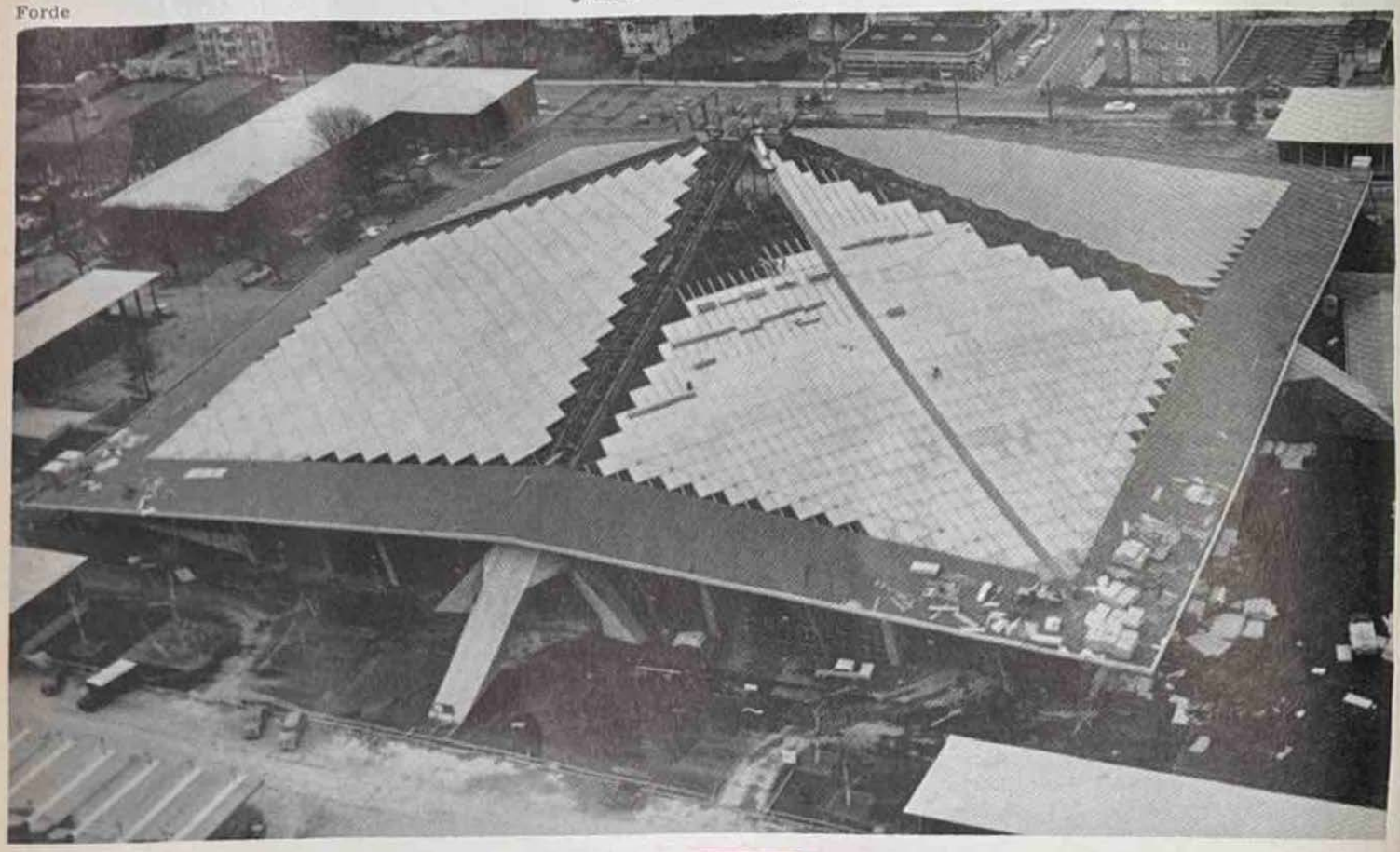
CENTURY 21 COLISEUM • Sweeping to a height of 11 stories and producing a clear span of 360 ft. in both directions, the State of Washington's exhibit building (to be converted into a sports arena after the fair) now is roofed with 3,600 aluminum panels, each built like a triple-decker sandwich with the sound and heat insulation materials serving as the two fillings. Steel trusses frame the network of tensioned cables. The main cables which hold the weight of the roof are made of 35 1/4-in. wires; the hold-down cables are of 20 1/4-in. wires. Both sets are 8 ft. apart. Underneath the 400-ft. square roof, the World of Tommorrow exhibit is taking shape, housed in a "cloud" of 3,250 aluminum cubes measuring 200 ft. across and 60 ft. high—the equivalent of a six-story structure.

EXHIBITION HALL • Most rewarding aspect of the fair as far as the local citizens are concerned is that after October 21, when the exhibitors have dismantled their displays and temporary structures have been removed or demolished, Seattle will be left with one of the best-equipped civic centers in the U.S.: Exhibition Hall with banquet facilities, 800-seat Playhouse, 3,000-seat Opera House and existing Arena. The hall's structural support in columns repeats the 30-ft. high colonnade which provides a continuity of design for all four buildings in the complex. Between the supports are louvered glass and pearl gray brick panels; roof is concrete folded plate.

SEATTLE CENTER PARKING FACILITY • Two blocks long and one block wide, this self-parking garage for 1,500 cars will be connected to the civic center across the street physically by a pedestrain overpass and esthetically by its sculptured facade. Of reinforced concrete throughout, it has a 5-in. poured concrete slab providing composite action with 313 precast, prestressed T-girders. Full-height column spandrel panels and cap rails are precast. Total construction cost including fees, taxes, pedestrian bridge, etc., will amount to $1,070 per car as compared with the national average in excess of $1,500.

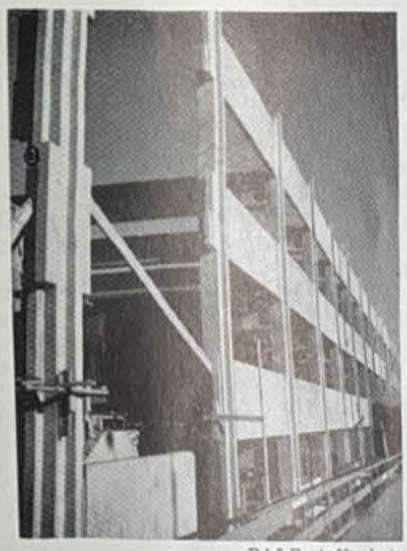
CENTURY 21 COLISEUM • Paul Thiry, architect; Peter H. Hostmark & Associates, structural engineers; Howard S. Wright Construction Co., general contractor.

Forde



PA&B staff photo

EXHIBITION HALL • Kirk, Wallace, McKinley & Associates, architects; Worthington, Skilling, Helle & Jackson, structural engineers; General Construction Co., general contractor.

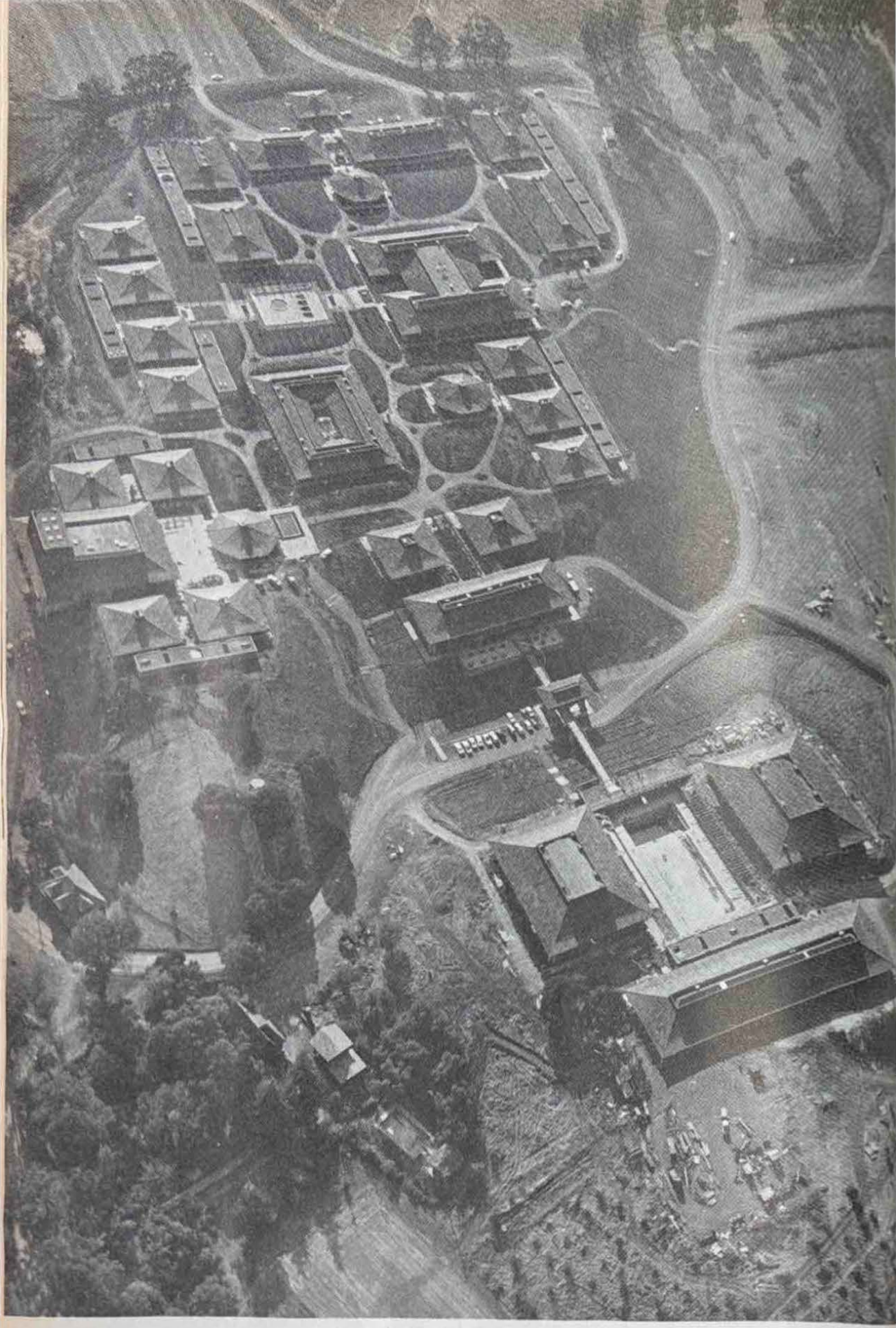


PA&B staff photo



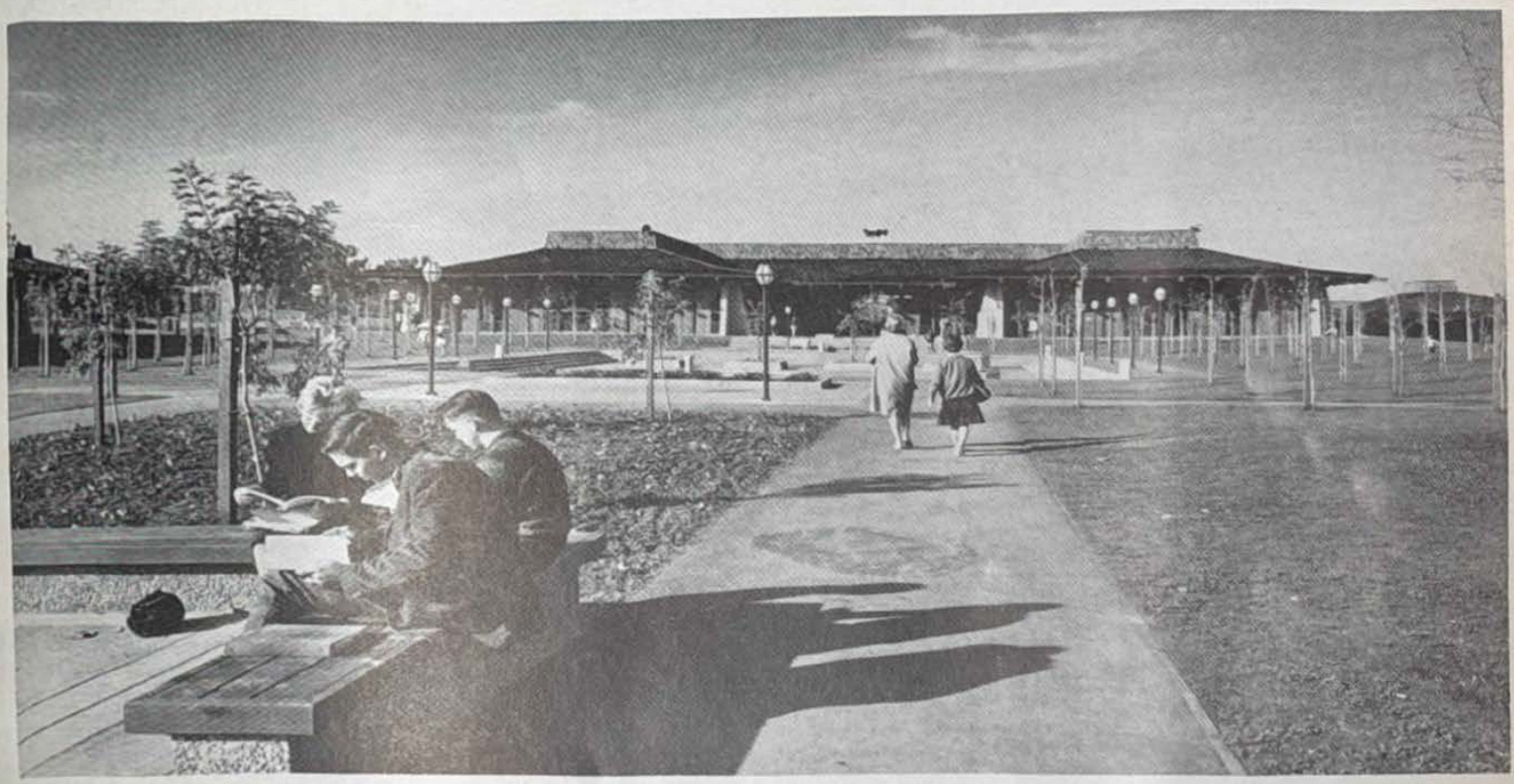
SEATTLE CENTER PARKING FACILITY • N. G. Jacobson & Associates, consulting structural engineers; Kirk, Wallace, McKinley & Associates, architectural consultants; Howard S. Wright Construction Co., general contractor.

Let the postman carry on through rain, snow and sleet, but these elements are not at all conducive to good photography; hence PA&B's World's Fair issue has been postponed one month—to April—to allow for the kind of coverage this exciting architectural show warrants.



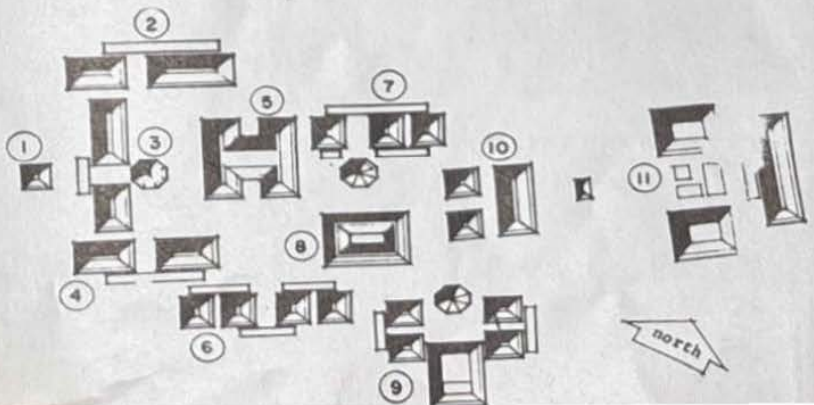
Order and direction: Foothill's environment for learning

The opportunity to master plan and design from scratch a junior college campus is indeed a challenging one—and in this particular case, the result is equally as rewarding. The swelling progression of rolling hills which form the base and backdrop of Foothill College salute the orderly new address: 12345 El Monte Ave. Tidy clumps of buildings whose heights match those of the hills on the site before grading are separated by rolling lawns and meandering paths; the basic hilly nature of the area is repeated on a smaller scale. Order and direction guide the student through continuing discoveries as the landscape and enclosures are negotiated between classes during the course of each day. Foothill is well worth considerable study for it has more than one lesson to teach the architect and the educator.



LIBRARY MALL is center of gravity of academic life, one of many pleasant outdoor spaces. Stairs can form Greek theater.

CAMPUS PLAN KEY—1. Astronomy; 2. Engineering-Technical; 3. Physical Science; 4. Natural-Health Science; 5. Library; 6. Language Arts-Mass Communications; 7. Social Science-Business Education; 8. Administration; 9. Fine and Applied Arts; 10. Campus Center; 11. Physical Education.



Foothill College
Los Altos Hills, California

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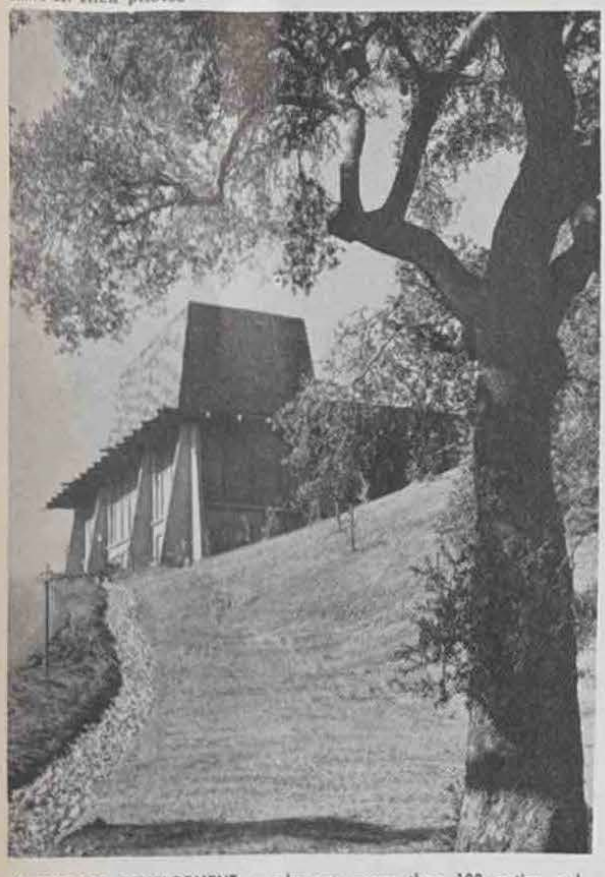
ERNEST J. KUMP
and MASTEN & HURD
Architects Associated

HUBER & KNAPIK
and EARL & WRIGHT
Structural Engineers

SASAKI, WALKER & ASSOCIATES
Landscape Architects

WILLIAMS & BURROWS, INC.
and O. E. ANDERSON, INC.
CARL N. SWENSON CO.
General Contractors

Karl H. Riek photos



LANDSCAPE DEVELOPMENT supplements more than 100 native oaks with indigenous plantings. Richness of surrounding color and warmth of natural materials blend to create this peaceful setting.

IN PLANNING this community-centered institution of higher learning for 3,500 students on a 122-acre site, the architects were asked "to create a total academic environment of naturalness and quiet dignity; to provide for maximum flexibility facilitating low-cost arrangement of interior spaces to accommodate future study course changes."

The solution was found in locating 11 major building groups according to curriculum or function, with exterior areas developed to produce a variety of courts ranging from intimate patios to large formal areas for outdoor assemblies. And the architecture itself is in sympathy with the restful, rolling hills.

The buildings combine old brick (mixture of sand and molded common, 40%, and clinker, 60%), redwood and Douglas fir (over five million board feet). Their hipped redwood split shake roofs are supported by massive piers of exposed aggregate concrete. Overall shapes vary according to use from rectangles to squares to octagons, the latter employed for the three lecture halls.

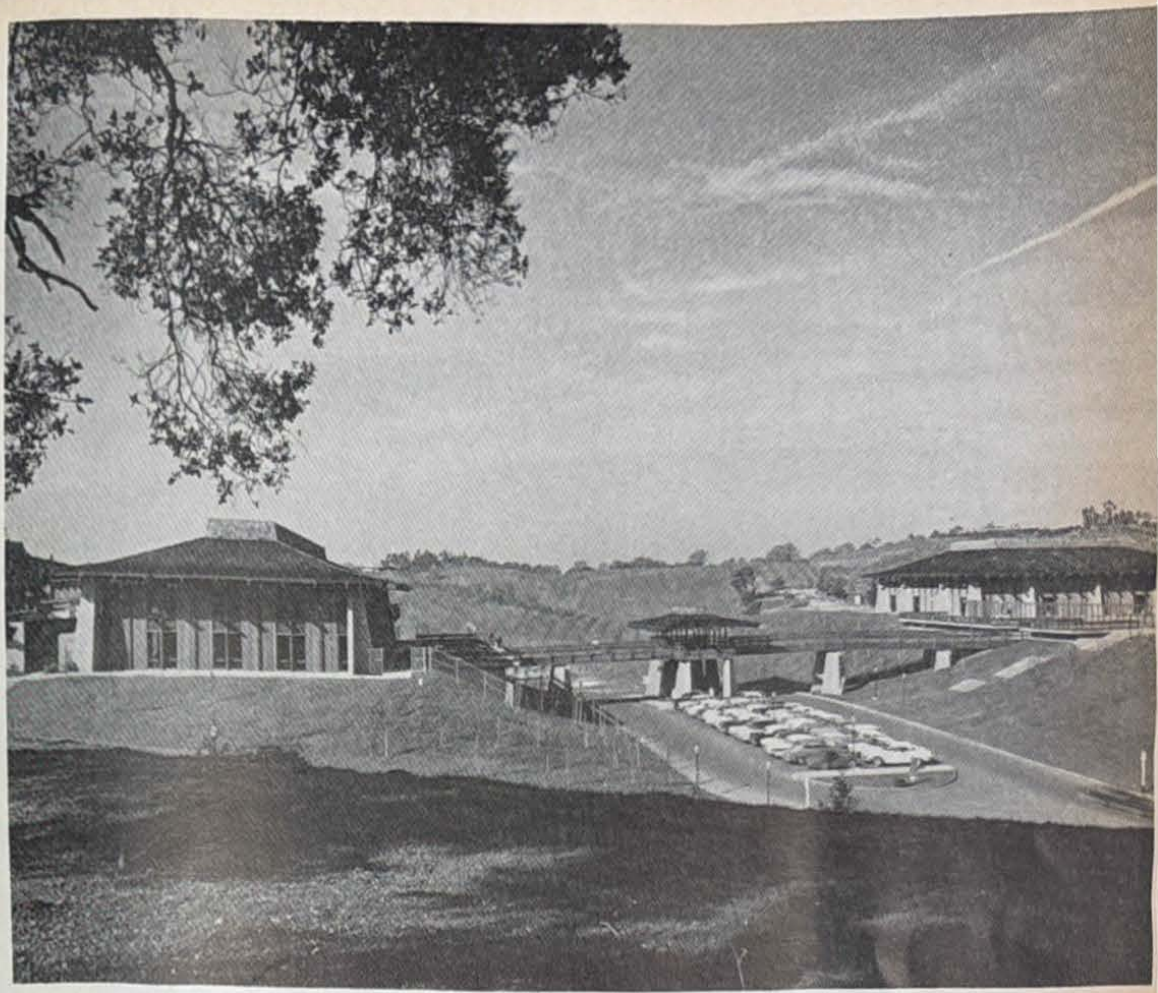
Carrying out the Kump "space module" concept, instructional buildings are developed on a unit basis, each structurally and mechanically self-sufficient. Environmental and equipment services—heating, ventilation, lighting, plumbing and utilities—are contained in the attic and can be fed to any existing or future room space of 8x8 ft. Crest parapets hide and protect the unsightly vents, etc., that typically clutter hipped roofs.

Utility distribution throughout the campus is principally in tunnels under removable sidewalk panels which border the building groups so that access for maintenance and modification can be made easily without disturbing other college activities. All instructional areas are served by a coaxial cable raceway system to accommodate television, kinescope and other audio-visual tools.

While the arrangement of coherent building groups is the key to the master plan, circulation patterns are worked out so that students in their normal travel between classes pass by and through division areas in other fields, thereby becoming at least mildly exposed to additional interests. The plan organization further lends itself to considerable utilization of special purpose facilities—i.e., laboratory classrooms whose prime function is related to laboratory courses are readily accessible from general circulation so they may also be used for unrelated classes, such as mathematics.

In still other ways, the careful attention given to every detail of campus planning manifests itself. The student personnel-counseling section of the administration building is located to encourage casual, relatively inconspicuous visits beyond the regularly scheduled conferences; and since instructors' offices are grouped in separate units, students can pay a call without having to pass through a classroom or laboratory. Science laboratories have faculty offices adjacent with visual supervision so that students can work during non-scheduled periods under the eye of instructors.

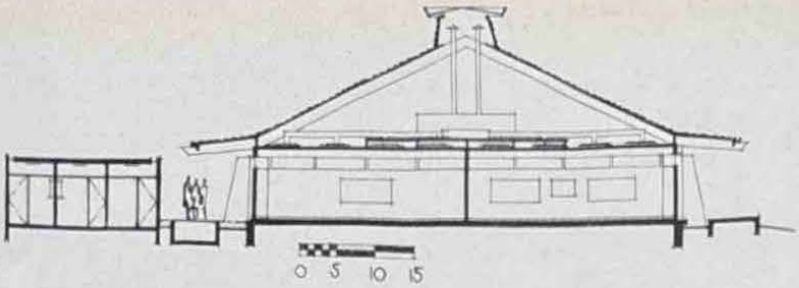
Some specific factors, intrinsic to design develop-



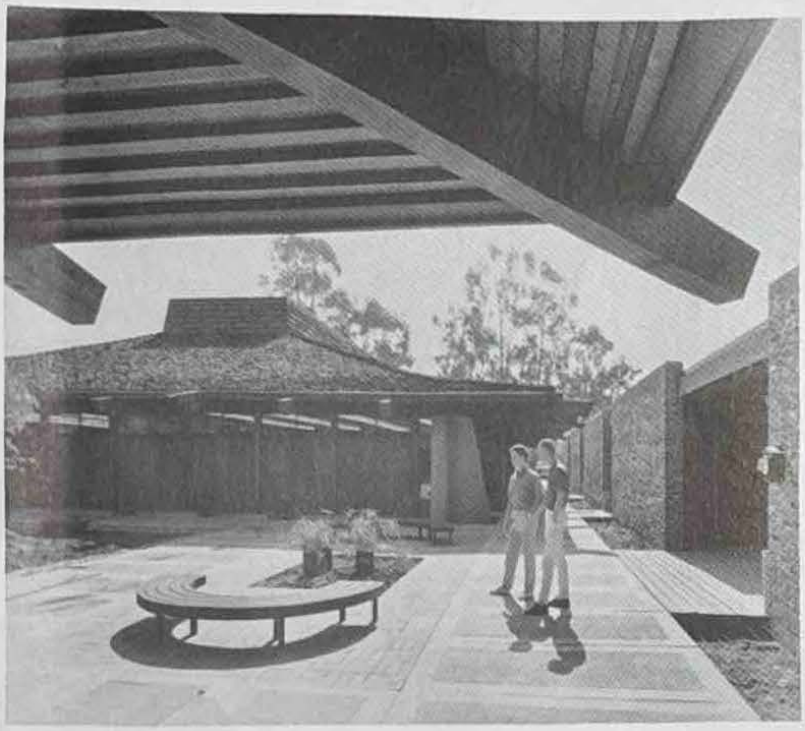
FOOTBRIDGE PAVILION between Campus Center and Physical Education plant serves as shelter for students who have organized car pool



FINE AND APPLIED ARTS COMPLEX includes auditorium (left) and small theater (right) for rehearsals or drama presentations.



TYPICAL SECTION shows how utilities are carried throughout campus in service tunnels (between office and academic buildings) and fed into service loft for distribution to any portion of interior space. Vents, etc., are shielded from view by shingled parapet rising out of hipped shake roof.



OFFICE SPACES for academic and administrative personnel are housed in separate, low brick units.



CONCRETE PIERS at four corners of each 60x68-ft. space take up lateral loads providing for maximum flexibility of interior arrangements. View here is toward auditorium entrance.

ment, are exemplified in these buildings or spaces:

• The auditorium is provided with a movable sound-retardent partition so that the total audience, just under 1,000 people, can be divided into two facilities: a little thater (350 seats) and a lecture hall (650 seats). These can be utilized concurrently due to the sound-isolation quality. In addition, the plan has taken into consideration circulation and exit arrangements, acoustics and ventilation for each of the three configurations of the space.

• Science lecture halls are equipped with a backstage service space, accessible to the exterior circulation, so that lecturers may assemble their demonstration items in the appropriate preparation areas and then wheel the articles on carts to the backstage, ready to be brought into the hall with minimum bother.

• The foreign language building, when its design is fully carried out, is intended to have a special aura representing the Old World, home of the tongues to be studied here and source of the diverse roots of much of our American culture.

• Focal courtyard of the Physical Science group features a Foucalt pendulum swinging from its tower, destined to become a campus landmark, one of the many spaces throughout "wherein learning is triggered by every aspect of the environment."

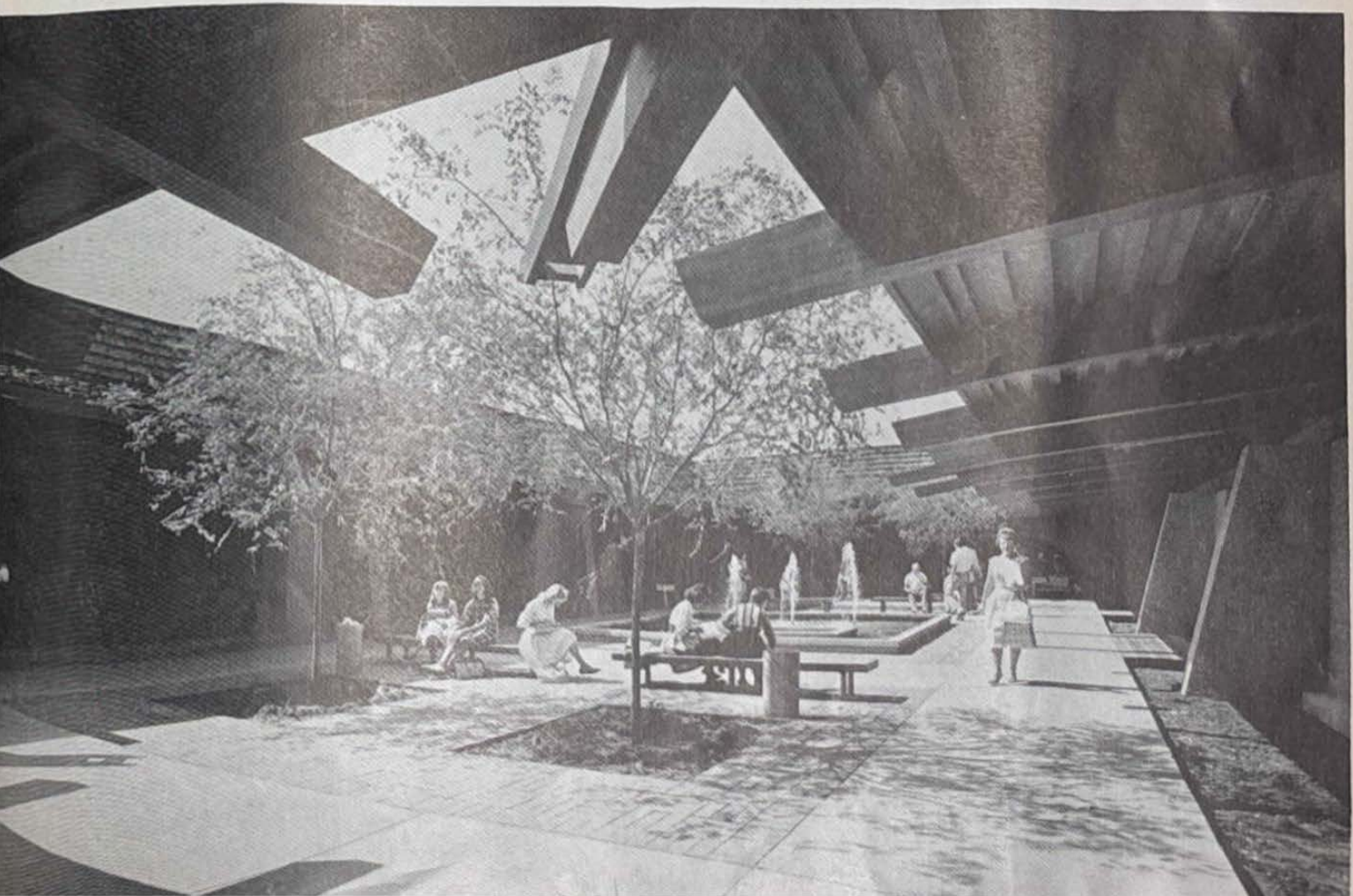
• The dental X-ray training chair space is so arranged that demonstrations and instruction can be conducted toward the lecture room or the training laboratory. A lead-lined sliding partition permits this flexible pattern with full protection from stray X-ray radiation.

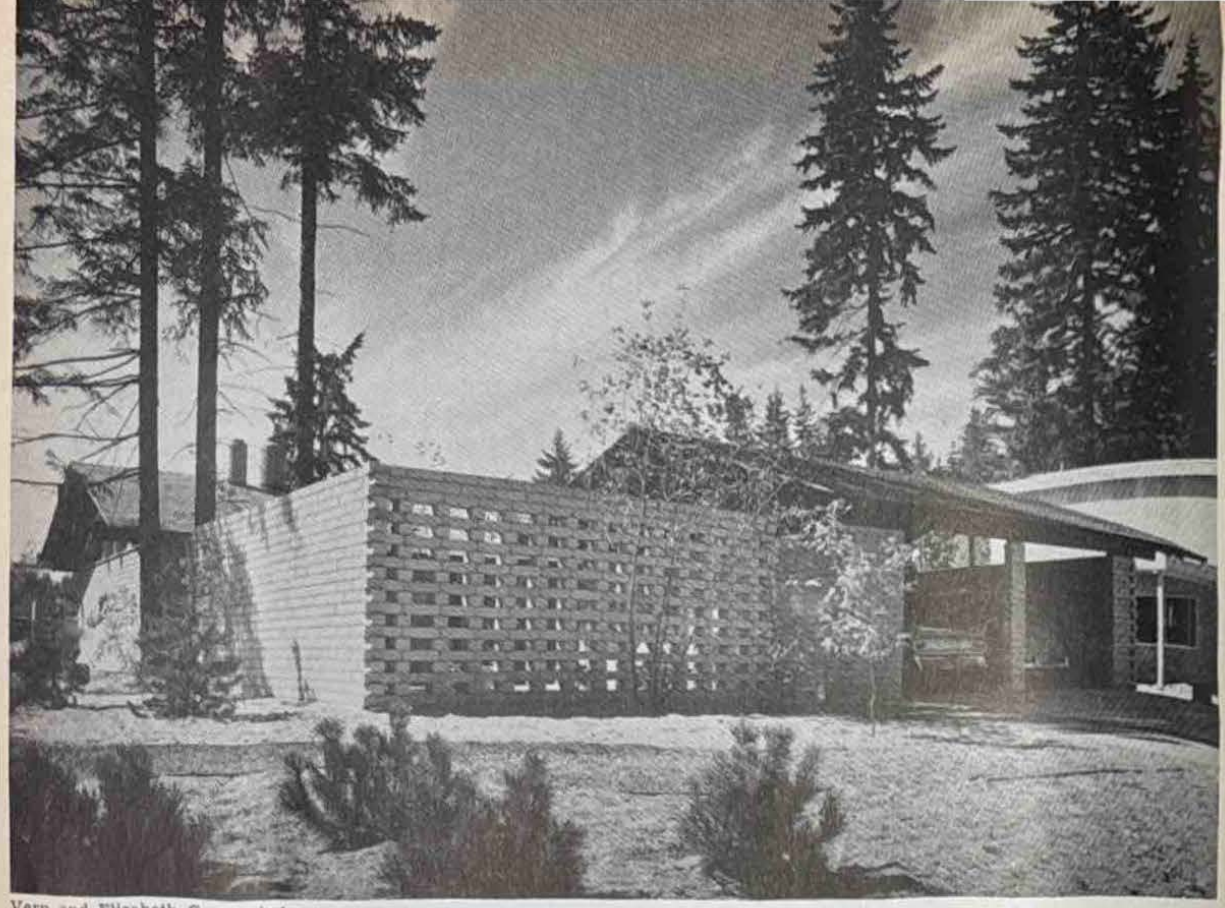
• The "appreciation hall" in the Fine Arts group is well suited to such activities as choral and instrumental music ensemble rehearsals, art and music lectures, music recitals, art exhibits and individual music practice, making it a most versatile element, a focal point for the college's cultural program.

• More than ordinary interest in aquatic sports in the vicinity inspired an unusual design of the swimming pool: a T-shape which provides for practically the complete spectrum of activities in the single installation. Thus the pool allows training and competition over the Official Amateur Athletic Union or Olympic 50-meter course. The crossbar of the T accommodates the standard 25-yd. intercollegiate course and also serves as the diving area and the water polo field of play, achieving the desired but rarely realized feature of deep water for the latter. The leg of the T is 20 yd. wide to permit training and possible competition at this third standard swimming distance, sufficient for several classes simultaneously. An underwater observation room is located at a corner so that swimmers may be viewed both head-on and from the side.

Mechanical-electrical engineers: Keller & Gannon.

LANDSCAPED COURTYARDS are developed to encourage natural informal gatherings, intimately related to instructional areas.





Vern and Elizabeth Green photos

DETACHED CARPORT and fenced court occupy street side of house.

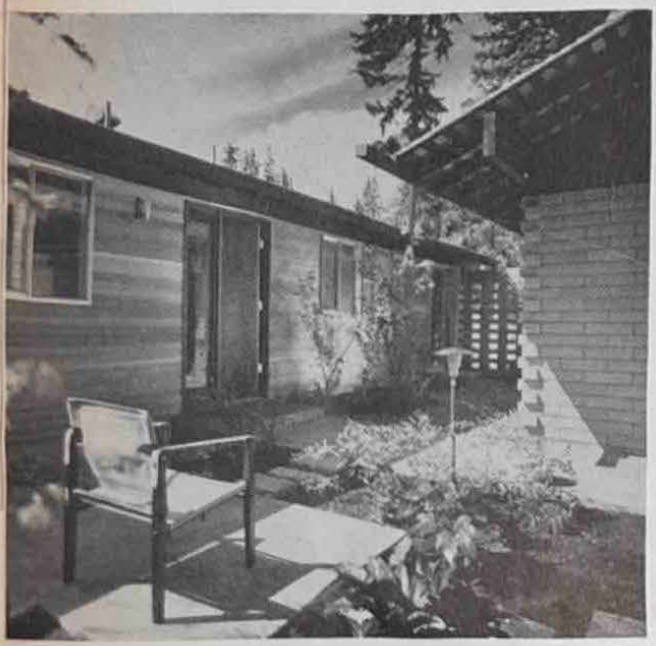
Horizon House
Lynnwood, Washington

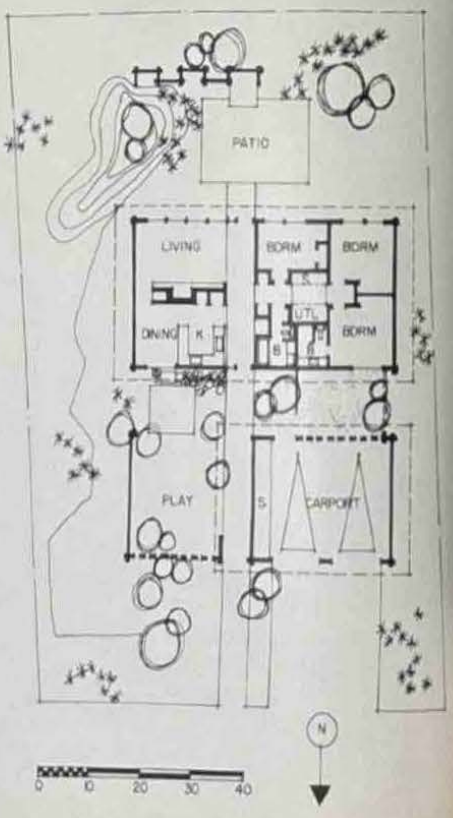
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DAN F. MILLER
Architect

STEWART & POTTER
Builders

SLIDING GLASS DOORS open to outdoor dining area in foreground.





Speculation with built-in imagination

REGIONAL WINNER in the Pacific Coast states, this house also was runnerup in the national Horizon Homes competition sponsored by the Portland Cement Association in cooperation with local concrete industries. The initial program, which will be continued this year, is to be commended as a step in uplifting the level of design in the speculative housing field.

Quite apart from its recognition for the imaginative uses of concrete, this house deserves a second look for the well-organized, workable plan which employs a passageway from front to rear to separate the main living areas from three bedrooms and two baths. Making the most of the 80x116-ft. lot, the house seems much larger than the 1,250 sq. ft. of enclosed space due to the openness, the high ceilings and particularly the skillful integration of outdoor living areas: an entry-dining court, a smaller court off the master bedroom and a rear patio-garden—all defined, of course, by concrete block screens.

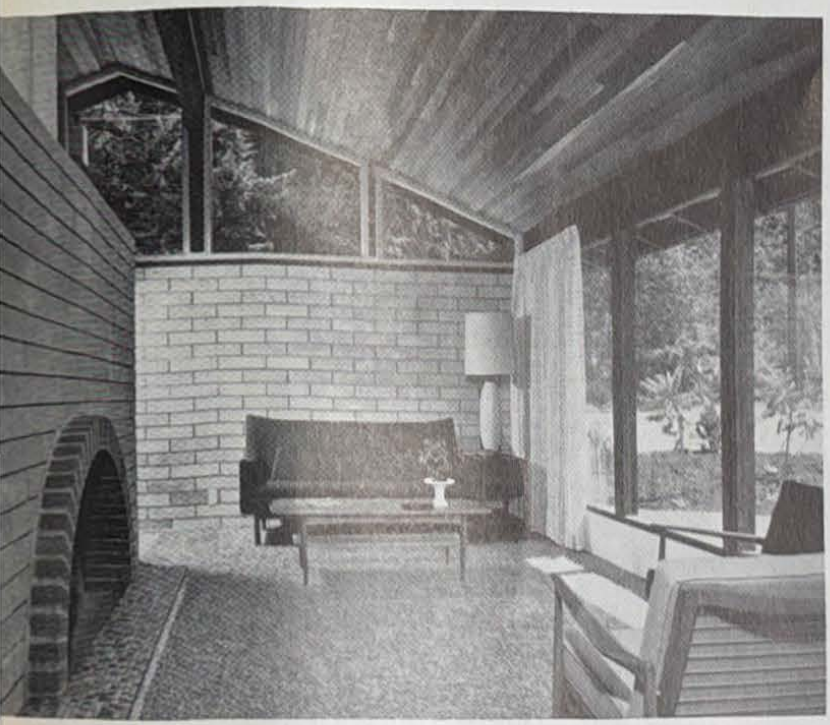
Of particular interest is the concrete block fireplace wall which divides the living room and dining room-kitchen area. Cylindrical flues serve both the fireplace and a heating unit closed off by louvered doors in the far end of the buff-toned block wall.

Senwood cabinets form one leg of the U-shaped kitchen, separating the cooking and dining spaces.

It is of credit to the architect that, in keeping with the Northwest's woodsy tradition, he decided to incorporate cedar exterior siding rather than to overdo the use of the specified material, as is often the case in such promotional programs; and it is of credit to the sponsor that it acknowledged this fact, for enlightened associations and manufacturers realize today that no one product is the answer to every building need.



LOUVERED DOORS conceal storage space and laundry facilities in bedroom wing corridor.



WALL OF WINDOWS looking out on rear patio and garden gives 11½x23-ft. living room added spaciousness. End wall's fixed panels of glass accent slope of high ceiling.

OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: pumice block—(Half-Hi unit is basic material throughout house) Graystone Division, Boise Cascade Corp.; roof: wood beams and joists; floors: concrete.

Exterior Finish: pumice block; cedar siding.

Roof Surfacing: red cedar shingles.

Windows: aluminum.

Doors: mahogany.

Floor Surfacing: vinyl-asbestos tile—Armstrong Cork Co.

Insulation: fiberglass batts; vermiculite masonry fill.

Interior Finish: exposed concrete block; cedar paneling; plasterboard.

Ceilings: 4-in. cedar boards.

Lighting: incandescent—Brenner Supply Co.

Heating: warm air system—American-Standard.

Plumbing: Kohler Co.

Total Area: 1,250 sq. ft. (excluding carport and entry court).

Total Cost: $18,500.

Cost per Square Foot: $14.80.

Date of Completion: August 1961.

Sacramento Main Office
Bank of America
Sacramento, California

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CONTINENTAL SERVICE CO.
Project Coordinator

WURSTER, BERNARDI & EMMONS
Architects

GAYNER ENGINEERS
L. H. & B. L. NISHKIAN
Consulting Engineers

ERICKSON-CAMPBELL & ASSOCIATES
General Contractors



EMPLOYEE TERRACE off cafeteria is indicated by interruption on south facade.

Phil Fein photos



SIGNS carry out design approach. Illuminated letters 36 in. high are anchored to black ceramic tile facing east and west end of penthouse. Third and fourth signs, on first floor northeast corner, consist of 12-in. stainless steel letters mounted on granite panel.



Massiveness tempered with refinement

SIMPLE, almost austere, design element tracing the steel frame is a refreshing change of pace in a day when lack of restraint dominates so many bank buildings.

Steel frame construction was selected principally because of the large spans on the ground floor. Black granite bands on the exterior reflect the frame behind by repeating its pattern. Within this frame, fillers of gray granite alternate with glass mosiac spandrels especially designed in a spectrum of colors. Below the windows, spandrels are colored and patterned to read with the gray glass above and the draperies of dark beige fiberglass behind. Above the eyebrow of the building all surfaces are treated with unglazed ceramic

material to minimize the bulk of the structure.

Bank is set back 20 ft. from the street, providing a broad plaza along one side. This also was an attempt to provide some continuity with other Sacramento buildings. In a search for a predominant architectural character in the city, the architects found there really wasn't one, except that most major structures did have generous setbacks. Two large cast stone and bronze fountains are set in the I Street plaza and tulip trees have been planted, following another Sacramento tradition.

Interior is finished handsomely in dark brown Siamese teak for cabinetwork, wainscoting and facing of escalators and in Italian travertine marble.

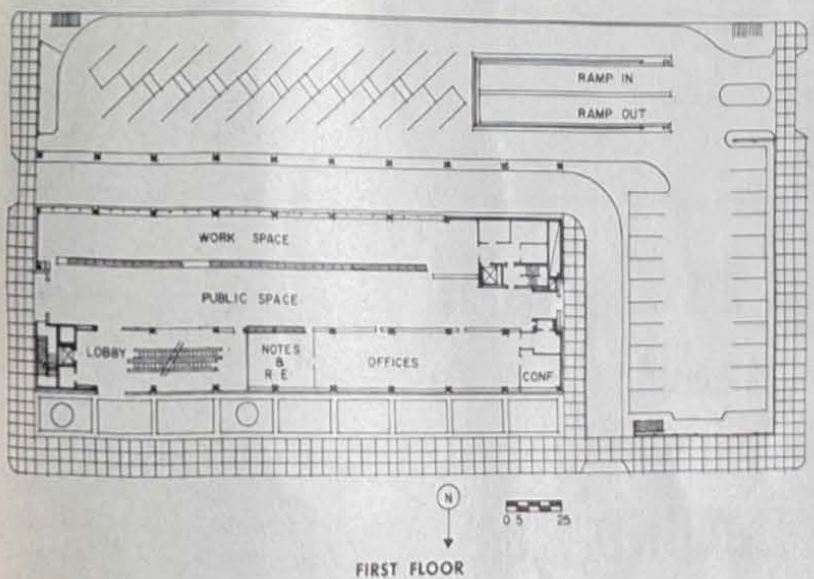
Because there was not enough space at ground level for the many special facilities related to cash handling, the entire site was used at below-street level. All cash and safe deposit vaults are in the basement, as well as a truck dock for armored cars with electronically controlled rolling steel doors and bulletproof glass windows. Motorist bank lobby with five windows also is located at this level, as is a meeting room available to community groups.

First floor houses the main banking room, officers' quarters, conference rooms and drive-in banking windows; second floor, offices and Timeplan department; third floor, employee cafeteria, kitchen and terrace, trust and appraisal departments, telephone exchange and internal offices. Frame is designed to receive two additional floors when needed.

Space for 40 cars is provided at ground level, screened from the street by a precast pierced masonry screen 4 ft. high. An additional 50 cars can be accommodated in a lower level parking garage.



MAIN BANKING ROOM is elegantly appointed with Italian travertine marble floor and walls, Siamese teak cabinetwork and wainscoting, fiberglass draperies, acoustical tile suspended ceiling.



FIRST FLOOR

OUTLINE SPECIFICATIONS

Structure: steel frame—Bethlehem Steel Co.

Exterior Finish: Andes black granite and domestic gray granite; anodized aluminum; glass mosaic tile.

Windows: gray glass—Pittsburgh Plate Glass Co.

Interior Finish: dark brown Siamese teak cabinetwork and wall paneling; travertine marble at first floor lobby; plastic fabric walls in upper floor lobbies; painted plaster and movable metal walls elsewhere—The E. F. Hauserman Co.

Floor Surfacing: travertine marble in main banking room; carpeting in first floor executive area; custom-made beige marbleized vinyl tile on remainder.

Ceilings: recessed acoustical tile—Owens-Corning Fiberglas Corp.

Lighting: recessed fluorescent.

Heating System: forced air.

Total Area: 107,408 sq. ft.

Total Cost: $4,500,000 (including land).

Date of Completion: December 1960.

Once Diamond Head looked like this...



then this happened...



...do you want this?



It couldn't happen to Mount Fujiyama



It couldn't happen to Gibraltar



Could it happen in Hawaii?

Let's face it – it could

But with your help it won't

SPEAK UP FOR DIAMOND HEAD

A ZONING AFFAIR: UP IN ARMS AT WAIKIKI

When Honolulu's newly appointed city planning director, Frederick K. F. Lee, announced his approval of the extension of apartment zoning around Waikiki's famous landmark—Diamond Head—he got a bit more than he bargained for. Irate citizens headed by a foursome including another planner, Desmond Muirhead, became so enraged they produced and distributed 5,000 copies of this flyer illustrating their vision of the extinct and extinguished volcano-to-be.

Shortly thereafter, Lee withdrew his approbation, backed up by a recently completed land use study of the area in question, while the City Council, which had been toying with the idea presented by ambitious landowners, judiciously dropped out of type.

Meanwhile, the City Planning Commission passed the buck by sending the entire problem of high-rise vs. low-rise development at Diamond Head back to the councilmen without a recommendation.

Will the people win? The matter was still unsettled at this writing, but it is encouraging to note that we have watchdogs in some of our communities who are willing to translate their convictions into action.

New specification for steel buildings

Document is guide to accepted design and construction procedures for use by architects, engineers, fabricators and contractors

For the first time since 1945, a completely new specification for the design of steel buildings has been developed by the American Institute of Steel Construction.

Besides its major contribution of substantially reducing building costs, the "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings" will also:

- Result in more imaginative designs in steel.
- Permit simpler analyses that require less expenditures of time and effort on the part of the designer, thus permitting him to study a greater range of alternatives in the given time.
- Enhance the beauty and utility of steel buildings with no sacrifice in safety.
- Expedite modernization of municipal, state and federal building codes.
- Bolster steel's competitive position in the building construction market.

Key to the lower costs is more efficient use of structural steel resulting from improved design and fabrication techniques specified by AISC. Detailed research determined the actual behavior of steel-framed structures under load. Heading this program was T. R. Higgins, AISC's director of engineering and research.

The acceptance by building officials, however, is dependent upon the local building code or the prescribed manner of securing approval for a new material. While some cities already have building codes permitting high-strength steels, many others accept the AISC specification. These cities will now be able to take advantage of these new steels and design concepts as their codes are brought up to date.

In other cities, special approval will still have to be obtained for each project in which one of these newer steels is used. The AISC specification can now be used as a reference to expedite these approvals.

The new specification appropriately was unveiled in Chicago which saw the erection in 1883 of the first true skyscraper, William LeBaron Jenny's Home Insurance Building. This building contained walls, which were not a structural element but were used as a curtain to be draped around an independent skeleton frame of iron and steel. Building frames were thus free to carry as many stories as the architect wished.

More recent developments in steel construction include the trend toward exposing the steel frame or combining the frame with suspension cables to produce structures with geometric patterns.

High points of the new document:

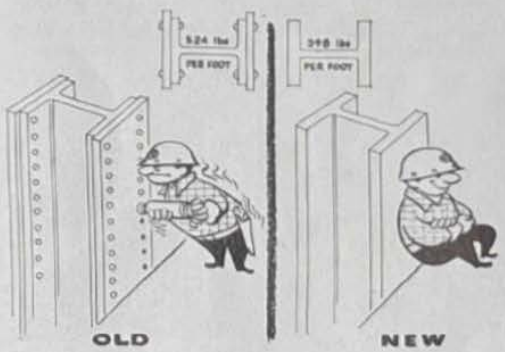
The new steels

The specification recognizes metallurgical advances that have produced stronger steels and steels that are more weldable and more corrosion resistant. When the previous specification was issued in 1945, only two basic grades of structural steel were commonly used: A7, having a yield point of 33,000 psi., and A242, up to 50,000 psi.

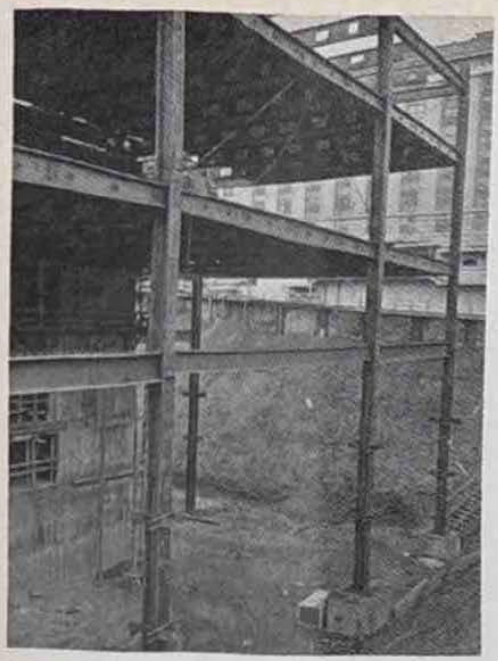
The four major steels which have been developed since then are A373 (32,000 psi.)—low carbon and manganese for controlled weldability; A36 (36,000)—higher strength with controlled weldability; A440 (50,000)—still higher strength, for riveted or bolted construction; and A441 (50,000)—strength equal to A440, with excellent weldability and improved impact properties.

In providing for these higher-strength steels, the specification incorporates new formulas that express working stresses in terms of specified minimum yield point. The basic safety factor used heretofore is retained.

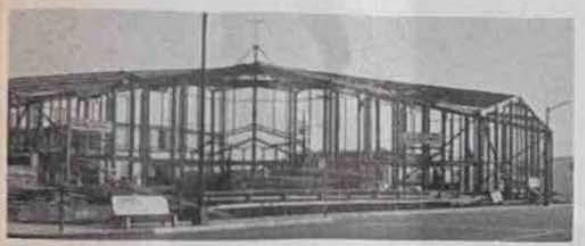
Since the advent of the new steels, a number of buildings have utilized their higher strength. The specification will make repetition of these pioneer efforts possible and convenient for designers everywhere. In Portland, for example, much of the 16-story Standard Insurance Co. Building is



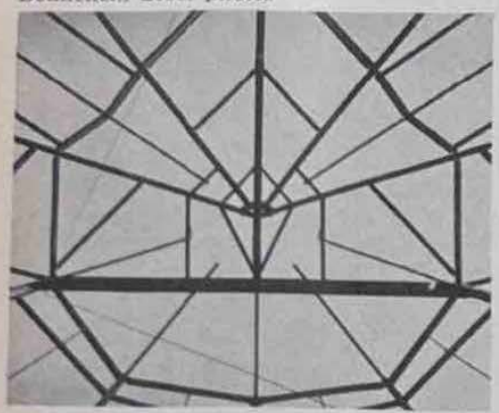
TWO COLUMN SECTIONS shown above have same load-carrying capacity but new high-strength member weighs 24% less than old carbon steel member. In addition, there is significant savings in fabrication costs through elimination of cover plates.



STEEL TONNAGE for 16-story Standard Insurance Co. Building in Portland is reduced 20% by using higher strength to save about $80,000. Architects: Skidmore, Owings & Merrill; Cooper & Rose' & Associates, structural engineers; Anderson-Westfall Co., Inc., general contractor; Fought & Co., steel fabricator.



Bethlehem Steel photos



STRUCTURAL MEMBERS in roof of Oakland's St. Louis Bertrand Church converge at point directly above altar. Despite complexity of steel sizes and shapes, careful detailing (51 sheets of drawings in all) and fabrication made pieces go together in field with precision. Architects: Schubart & Friedman; structural engineer: A. V. Saph Jr.; general contractors: Jacks & Irvine; steel fabricator: Schrader Iron Works.

being framed in A440 steel rather than A7. Tonnage was reduced 20% or about 560 tons; cost of structural steel was reduced about $80,000.

Composite design

The use of poured concrete for floors is nearly as old as the history of steel in building construction. Concrete floor slabs evolved with the development of steel building construction, for the two went hand in hand.

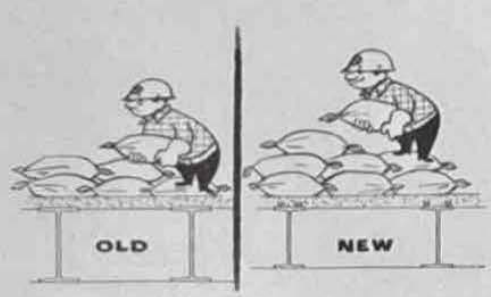
Then a discovery was made. In the 1920s designers began to realize that when beams and joists were encased integrally with the poured concrete slab, the resulting floor system was far stronger than if the same amount of concrete was simply poured as a deck without bond to the steel frame. Or, put another way, this new "composite" construction allowed less steel and concrete to carry the same load.

As newer methods of construction and lightweight fireproofing materials were developed, steel beams no longer required a concrete encasing. Thus, it became necessary to provide some type of connection that would join a poured concrete deck with its supporting beam. The answer: shear connectors.

Welded on top of a beam's upper flange, these shear connectors (continuous spirals, steel channels or studs) become buried in concrete when the deck is poured. Thus, the slab may be regarded as the flange of a composite T-beam in which concrete and steel act as an integral unit. Now, the two work together to support as much as 35% more load. In terms of resulting strength, we might say that "the whole is greater than the sum of its parts."

The specification's provisions governing composite design will result in considerable savings:

- Beams can now be proportioned and selected on the basis of composite action. This means that the T-beam analysis of composite design allows the designer to employ a smaller beam to carry the same load, often with shallower floor construction.
- Full utilization of this composite strength under previous design practice required that concrete forms be shored up from below until the concrete set. These forests of shores are a fire hazard and impede work underneath. The new specification permits the contractor to hang the forms without penalizing the economy of design.
- AISC-sponsored research at Lehigh University has indicated that fewer shear connectors are required than have been used in the past. Moreover, they may now be spaced uniformly, thus reducing the cost of both labor and materials.

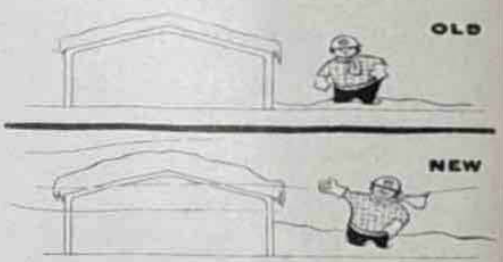


NEW BEAM AND SLAB can support as much as 35% more load than corresponding elements in older designs; or same load can be supported by lighter steel sections; or combination of less steel and more load can be chosen to suit designer's requirements.

Plastic design

Plastic design theory is based on the fact that if a large enough load is placed on a steel beam, the beam will pass through the elastic range into the plastic range. Nevertheless, the beam continues to support the load safely because portions of the load are transferred to other lower stressed segments of the frame.

First announced in 1957 after years of research, plastic design theory has been used in hundreds of buildings. Younger designers in particular have shown marked enthusiasm for this method of design. This provision in the specification will make plastic design more convenient to employ.

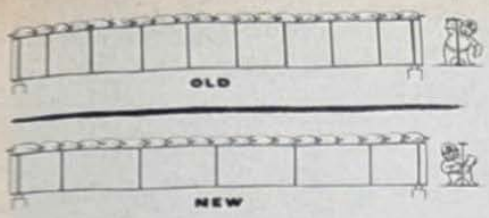


PLASTICALLY DESIGNED STRUCTURES require up to 15% less steel to carry same loads with no reduction in design factor of safety. Design time is saved and fabrication often simplified.

Plate girder design

For the past three years, AISC has supported research at Lehigh University on the design of plate girders. In the past these structural members have been more common in bridge construction. But the new specification, by encouraging longer spans and fewer interior columns and thus reducing costs, will enhance their use in buildings.

Dr. Konrad Basler, a Swiss engineer-scientist who has conducted extensive plate girder research on this subject in the U.S., recently commented: "The new specification is the re-



TYPICAL GIRDER designed by new method requires thinner web plate and fewer transverse stiffeners than one designed by old provisions.

sult of an ultimate load approach, although worded in terms of permissible stresses at the working level. It is therefore not possible to use the previous specification with its familiar formulas and just change the numerical constants a little. A new approach is needed. To learn it is the price of progress, but the rewards are obvious.

"With no sacrifice in structural safety, more efficient and more economical plate girders can now be built. Through research, a broader, clearer understanding of the load-carrying action of plate girders has been obtained, resulting in some instances in safer design rules than those which were drawn up when little was known about the ultimate strength of girders."

Two major changes have been made in the design provisions for plate girders. They will, on the average, effect a 10 to 20% savings in weight of steel:

- The web depth-thickness ratio has been liberalized, both as to its maximum value and to the value beyond which intermediate transverse stiffeners must be employed.
- A more liberal spacing of intermediate transverse stiffeners is now permitted than heretofore.

Earlier design specifications have assumed that the limit of structural usefulness in a plate girder was reached when the intensity of shear stress in the web reached a theoretical "buckling stage." While such a buckling stage does measure the strength of a column, it has now been clearly shown, both analytically and experimentally, that the plate girder web is capable of carrying loads far in excess of those producing the theoretical buckling stage.

This added capacity is due to the formation of "tension fields," the utilization of which is basic in aircraft design. Under the new theory, transverse stiffeners act as compression struts in conjunction with tension fields functioning as diagonals, to form a Pratt truss.

Other provisions

Provisions for more precise column design, high-strength bolts, tubular or box type steel members and other areas of steel design and construction are also included in the new specification.

Some of these, such as the use of new high-strength bolts, are provisions which come "after the fact" — their acceptance and use is already widespread and has been endorsed by AISC for some time.

By relating allowable stresses to the yield point of steel, the new specification is a flexible document, facilitating amendment as stronger steels are produced and more economical ways of fabricating them are developed.

Spreading the word

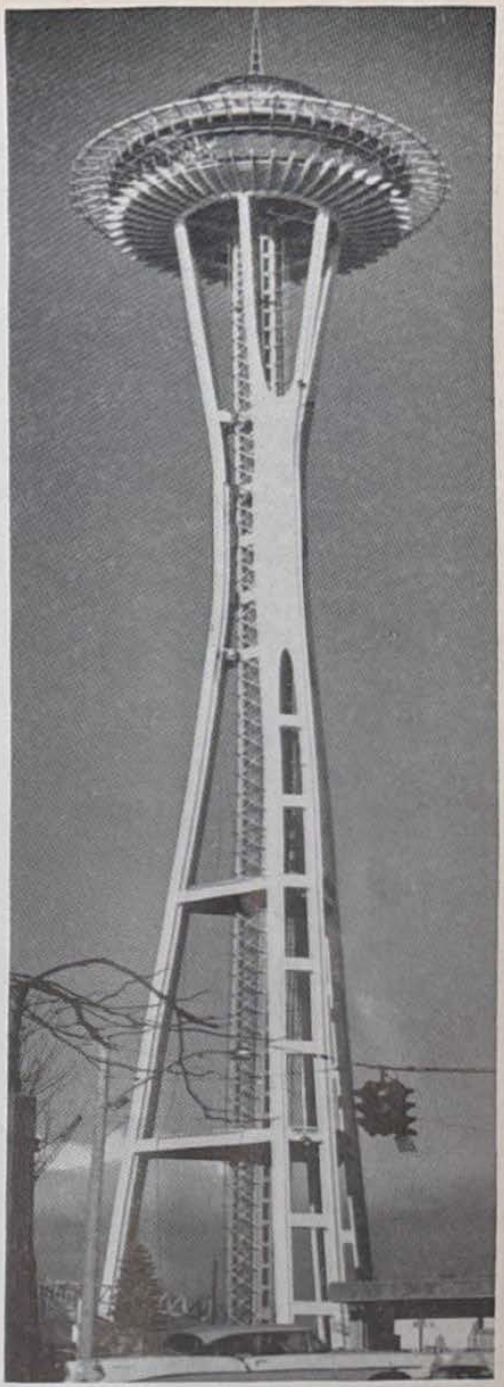
Not everyone, of course will agree with all the changes, some of major importance. And aware that there always is a selling job to do in connection with anything new, AISC representatives and member company personnel are conducting meetings to explain the technical details to architects, engineers, fabricators and building officials throughout the nation.

Conferences already have been held in four cities, including San Francisco. From now on, "regional faculties" will operate out of AISC's 21 field offices to bring these seminars to numerous cities.

West Coast members of the 26-man committee who worked on the specification include Reuben W. Binder (retired), San Francisco; Prof. Egor P. Popov, University of California, Berkeley; and Prof. David M. Wilson (deceased), University of Southern California, Los Angeles.



WESTERNERS at indoctrination meeting in New York include C. M. Corbit and E. E. Gunnette, AISC regional engineer for Los Angeles and Seattle, respectively; A. L. Collin, Kaiser Steel Corp., Los Angeles; B. E. Weeks, Leckenby Structural Steel Co., Seattle; H. C. Smith, AISC regional engineer, San Francisco; and G. P. Willard, American Bridge Division, United States Steel Corp., Los Angeles—all part of "regional faculty."



SPACE NEEDLE rising 600 ft. above Seattle World's Fair consists of trio of tapering legs formed from 36-in. steel beams, topped off with revolving restaurant and observation platform. Increased design stress in tower is provided by A36 steel, having 9% higher yield point over A7. Architects-engineers: John Graham & Co.; general contractor: Howard S. Wright Construction Co.; steel fabricator and erector: Pacific Car & Foundry Co.

hardboard ceiling panel

For hard use interiors such as children's play rooms, recreation rooms and high school gymnasiums, Evans has introduced a hardboard ceiling panel called Evanite Golden Web. Solid or perforated, it is 4x4 ft.x½ in. scored with deep V-grooves on 16-in. centers to give a tiled effect. Finish is a soft white latex base overlaid with a lacey web of gold. It can be applied directly to ceiling joists or wall surfaces or mounted over a fiberglass blanket. — Evans Products Co., Box 3295, Portland 8, Ore. (No. 1)

louvered windows

Dual louver windows that provide their own light and glare control have been developed for both individual and window wall installations. Outer louvers are made of aluminum, redwood or glass; inner louvers of glass. Windows are divided by controls allowing the top and bottom of frame to be adjusted.—Clearview Corp., 2625 Elm St., Dallas, Texas. (No. 2)

plastic building panel

A nonflammable plastic building panel used successfully in Europe and Japan for a number of years has been introduced in this country by Carlon, previously best known for its plastic pipe. Flat and corrugated panels are made from polyvinyl chloride resin. They are available in either flat sheets or rolls 4 ft. wide and in lengths up to 100 ft. Panels are transparent, rich in color, light weight and resistant to moisture and corrosion.—Carlon Products Corp., Box 133, Aurora, Ohio. (No. 3)

automatic monitoring system

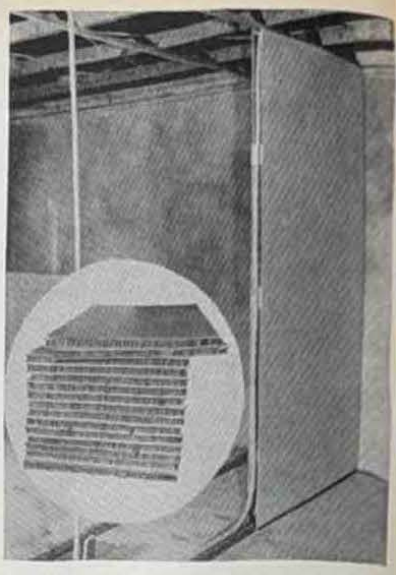
For schools, factories and other large commercial buildings, Minneapolis-Honeywell is marketing an automatic system scanner that continuously watches over as many as 100 different remote points. Called Scanalarm, the system can guard temperatures,



humidities, flows, pressures, windows, doors, fire alarms, security systems and electrical equipment. It can be furnished as an integral part of the company's Supervisory DataCenter or as a separate control device. When any check point goes into an off-normal condition, panel lights go on and warning buzzer sounds. Scanalarm then automatically scans all points until all off-normal conditions are corrected. No power is consumed when the machine is not scanning.—Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (No. 4)

sliding store front

The old bazaar type, shuttered store front has been adapted to modern materials and selling conditions in an aluminum and glass wall that disappears to open up a complete store front or sales area. Phantom Wall is designed particularly for shopping centers and arcades but is also adaptable as an in-store divider or for swimming pools and like installations. It is a folding aluminum wall operating on a single flat track that stacks into a small space when open. —Alumiline Corp., Dunnell Lane, Pawtucket, R. I. (No. 5)



honeycomb panels

An easily installed interior partition panel made of gypsum wallboard and kraft fiber stock has been introduced to the coast building industry by its Middle West manufacturer. Called Hof-Kor, the panel has a cellular honeycomb core of kraft fiber stock treated with phenolic resin to resist moisture, termites and fungi. Both sides are faced with wallboard for a 2½ in. total thickness. Panels are manufactured in 4x8-ft. modules. They slide into wood runners anchored to the floor and ceiling, are joined together with hollow metal splines for proper alignment and nailed to the runners (the only place nails are used on the drywall). System eliminates conventional framing and adds to usable room space; flexible honeycomb core permits easy installation of conduit.—Hoffman Industries, 1840 E. 25th St., Los Angeles, Calif. (No. 6)

weather-resistant film

A factory-applied tough, weather-resistant film of Hypalon synthetic rubber for protecting and finishing exterior building panels was introduced by Du Pont at the NAHB convention in December. Developed in cooperation with building materials manufacturers for bonding by hot press or roll lamination, it is commercially available at the present time on the weather side of exterior plywood panels. Hypalon has good color retention, expands and contracts with the substrate, will maintain its elastic qualities despite aging and should outlast conventional finishing materials several times, the company reports. It can be repainted by Hypalon or standard exterior finish.—E. I. du Pont de Nemours & Co., Wilmington, Del. (No. 7)

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LITERATURE

Perforated Metals: shows stock patterns in actual sizes with key data on each; (Bulletin CD-501) — 12 pp. — National Standard Co., Niles, Mich.

Prefinished Doors (AIA 16-C): presents Lifeseal standard wood-core, fire and lead-lined X-ray doors surfaced with Formica laminated plastic.—Formica Corp., 4614 Spring Grove Ave., Cincinnati 32, Ohio.

Vermiculite: discusses Zonolite plaster, fireproofing and acoustical systems, with technical data on noise reduction, insulating values, etc.; 8 pp.—Zonolite Co., 135 S. LaSalle St., Chicago 3, Ill.

Architectural Grade Paneling (AIA 19-F): is essentially a primer on the selection of Weldwood stock sequence-matched sets and custom-made blueprint-matched panels, handsomely illustrated; 26 pp.—United States Plywood Corp., 55 W. 44th St., New York 36, N. Y.

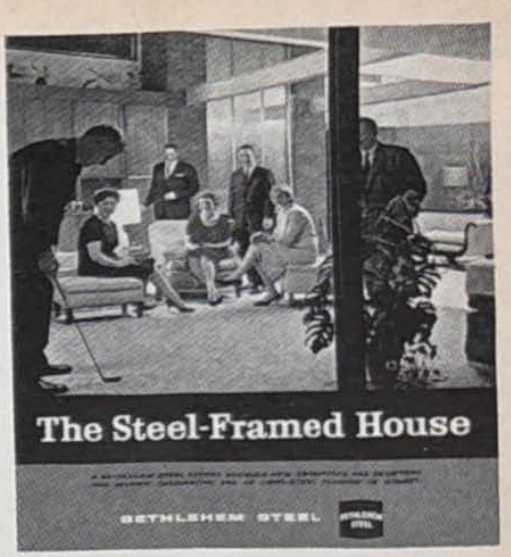
Skylights (AIA 20-A): catalogs Wasco Skydomes; depicts several unusual custom-engineered installations; 16 pp. — Wasco Products Dept., American Cyanamid Co., 5 Bay State Road, Cambridge 38, Mass.

Safety Equipment (AIA 29-H-3): describes emergency deluge showers, safety zone decontamination stations, special fixtures, etc.; 28 pp. — Speakman Co., Box 191, Wilmington 99, Del.

Termite Protection (AIA 19-A-3): gives construction recommendations; describes protection contract; 4 pp. — E. L. Bruce Co., Terminix Division, Memphis 1, Tenn.

Proper Mortaring Practices (AIA 3-8-9): illustrates recommended practices with tables of quantities, descriptions of joints; 16 pp. — Permanente Cement Co., 300 Lakeside Drive, Oakland 12, Calif.

Area Lighting Guide: provides charts and data for figuring type, spacing, mounting heights, number of units, etc., for area to be lighted with information on all equipment needed and prices; 30 pp.—General Electric Co., 3325 Wilshire Blvd., Los Angeles 5, Calif.



pa&b pick of the month

"The Steel-Framed House" is the latest in a series of excellent publications by Bethlehem Steel illustrating the use of light steel framing in private residences. The 32-page booklet offers a good variety of examples depicting how structural steel solved such site problems as steep slopes, rocky terrain, narrow frontage, etc.—Bethlehem Steel Co., Box 3494, Rincon Annex, San Francisco 19, Calif.



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TECHNICAL PUBLICATIONS

Relationship of Initial School Plant Cost and Compactness in Secondary School Buildings. By H. William Meadville. Educational Facilities Laboratories, Inc., School of Education, Stanford University, Stanford, Calif. 1961. 79 pp. $2.

Dissertation by a candidate for the doctoral degree, complete with charts and graphs.

Stone in Arizona. By Roland C. Townsend. Arizona Development Board, 1521 W. Jefferson St., Phoenix, Ariz. 1961. 52 pp. No charge.

Economic study summarizing data on the building stone industry with a map of the state showing present quarry locations and some of the more feasible sites that should be helpful to architects and builders working in the state.

Recommended Levels of Illumination. Illuminating Engineering Society, 1860 Broadway, New York 23, N.Y. 1961. 16 pp. 20 cents.

Reprint of a section of the official Lighting Handbook of the Illuminating Engineering Society, this booklet shows minimum recommended levels of illumination for every task approved by the IES Council.

Portfolio of Motor Freight Terminals Constructed in 1960. The Operations Council, American Trucking Association, Inc., 1616 P St. N.W., Washington 6, D.C. 28 pp. $4.95.

Plastic-bound portfolio contains photographs of both large and small terminals and specific information about each project included. Among the facts given: location, community served, type of operation, construction cost, size of plot, number of employees, dock features, construction material used, apron surfacing, parking area space, exterior illumination and maintenance facilities.

Pressure Treated Timber Foundation Piles for Permanent Structures. American Wood Preservers Institute, 111 W. Washington St., Chicago 2, Ill. 1961. 62 pp. $1.50.

Provides a broad range of working information for foundation engineers, including reports of five recent loading tests; a discussion on the universal use of timber piles; a review of risks of foundation failures involved in using untreated timber piles; complete specifications for the selection of timber, preservatives and treatment; and foundation design and driving data. The book is well illustrated throughout.

Audio-Visual Guide to Better Projection. Radiant Manufacturing Corp., 8220 N. Austin Ave., Morton Grove, Ill. 1961. 36 pp. No charge.

Edited by Dr. Irene F. Cypher, associate professor of education at New York University, the book covers architectural arrangements that make for problems in the projection room.

Plywood with Tongue and Groove Joints. By Daniel H. Brown and Ronald H. Drawsky. Douglas Fir Plywood Association, Tacoma 2, Wash. 1961. 18 pp. No charge.

Laboratory report giving performance details of joints that can eliminate blocking for edge support of plywood roof and wall sheathing.

Load Calculation for Residential Winter and Summer Air Conditioning. National Warm Air Heating and Air Conditioning Association, 640 Engineers Bldg., Cleveland 14, Ohio. 1961. 81 pp. $2.50.

Supersedes and eliminates earlier manuals as a result of the development of an industry-accepted single load calculation.

Douglas Fir Use Book. West Coast Lumbermen's Association, 1410 S.W. Morrison St., Portland 5, Ore. 1961. 326 pp. $5.

Revised edition with new chapters on hyperbolic paraboloid shells and wood tanks and pipe.

Nuclear Fallout and Family Survival. Douglas Fir Plywood Association, Tacoma 2, Wash. 1961. 34 pp. No charge.

Includes construction plans for above ground and basement type shelters and study plans for an underground model (plans for the latter are available from DFPA at 50 cents a copy).

Concerning Some Legal Responsibilities in the Practice of Architecture and Engineering and Some Recent Changes in the Contract Documents. Engineers Joint Council, 345 E. 47th St., New York 17, N.Y. 1961. 26 pp. $1.

Authored by attorney John R. Clark of Philadelphia, the document is based upon a report developed by the EJC-AIA liaison committee.

Modern Color Planning for Schools, Factories, Hospitals (three separate booklets). The O'Brien Corp., 2001 W. Washington Ave., South Bend 21, Ind. 1961. 16 pp. 65 cents each.

Features actual paint swatches and recommended color schemes for all areas of the school, factory and hospital.

Space for Teachers. By Raymond C. Schneider. Educational Facilities Laboratories, Inc., School of Education, Stanford University, Stanford, Calif. 1961. 24 pp. 25 cents.

Prepared and illustrated by an architect who also is a lecturer in education and associate director of the School Planning Laboratory, this is the first of an intended series on basic ideals and concepts on the planning of space for education facilities.

Marinas: Recommendations for Design, Construction and Maintenance. By Charles A. Chaney. National Association of Engine and Boat, Manufacturers, Inc., 420 Lexington Ave., New York 17, N.Y. 1961. 247 pp. No price listed.

Second edition offers designers and builders a manual of methods and materials that may be incorporated into water front facilities for small craft. Contents range from investigation of the site to operation and rentals.

Decorating and Shading with Colorful Canvas. Canvas Awning Institute, Inc. and National Cotton Council, Box 9905, Memphis 12, Tenn. 24 pp. 25 cents.

Illustrates varied shapes and styles of canvas sunshades for windows, doorways, poolsides, patios, walkways and carports and also the use of the material for accessory and commercial purposes. A color guide is included.

Industrial Layout. Semco, Sweet & Mayer, 8255 Sunset Blvd., Los Angeles 46, Calif. 28 pp. No charge.

Manual outlining the plant layout and material handling planning services offered by the consulting industrial engineering firm. Numerous cartoons illustrate the text.

Techniques of Plant Maintenance & Engineering. Clapp & Poliak, Inc., 341 Madison Ave., New York 17, N.Y. Vol. 12. 349 pp. $1

Report of the 1961 Plant Maintenance & Engineering Conference, including texts of 37 papers, illustrated by charts, diagrams and tables; discussions of 607 audience-posed questions and an additional 155 subjects covered in problem sessions.

Professional Climate in Engineering. College of Engineering, University of Cincinnati, Cincinnati 21, Ohio. 1961. 104 pp. $5.

Twelve papers which report the proceedings of the College-Industry Conference which drew 306 engineering supervisors from 77 cities in 28 states to Cincinnati last year.

Planning Playspaces. Play Sculptures Division, Creative Playthings, Inc., Box 110, Princeton, N.J. 1961. Envelope file. No charge.

Portfolio includes 32-page sketchbook of play settings; a 32-page catalog of playground equipment and street furnishings; and 48 specification sheets and installation scale drawings.

Fluorescent Lighting Manual. By Charles E. Amick. McGraw-Hill, 327 W. 41st St., New York, N.Y. 416 pp. $12.50.

This practical guide to design, installation and repair of fluorescent lighting systems, which first appeared just a short time after these lamps were introduced commercially, has been brought up to date.

Landscape Architecture. By John Ormsbee Simonds. F. W. Dodge Corp., 119 W. 40th St., New York 18, N.Y. 1961. 244 pp. $12.75.

Comprehensive presentation of ideas and experience on the entire landscape process from site selection to completed project. Well illustrated with over 200 photographs and line drawings, the book consists of seven major sections: fundamentals, the site, organization of spaces, visual aspects of plan arrangement, circulation, structures in the landscape and planning the region. The author, a landscape architect, has drawn upon his years of study, travel and practice to provide a perceptive analysis of the landscape which surrounds us which will serve both as a workbook for the landscape architect and a reference for the city planner and architect.

Automatic Control of Heating and Air Conditioning. By John E. Haines. McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 36, N.Y. 1961. 375 pp. $10.50.

Second edition by a vice president of Minneapolis-Honeywell Regulator Co. contains four new chapters: electronic control circuits, electronic control units, control of domestic air conditioning and control of peripheral distribution units.

Prestressed Concrete—Design and Construction. By James R. Libby. Ronald Press Co., 15 E. 26th St., New York 10, N.Y. 1961. 468 pp. $12.50.

Practical reference provides structural engineers, architects and plant product manufacturers with a comprehensive treatment of theory and practices. Author is a consulting engineer.

Practical Design of Structural Members. By Thomas A. Lucy. F. W. Dodge Corp., 119 W. 40th St., New York 18, N.Y. 1961. 432 pp. $12.

Manual of design data based on the author's experience as a consulting engineer, containing time-saving short cuts and methods applicable to all conditions and requirements of stress analysis. All basic member and connections are covered for reinforced concrete, structural steel and wood, plus thorough analyses of rigid frames, wind stresses and earthquake resistance. Over 500 illustrations, diagrams, charts and tables are included.

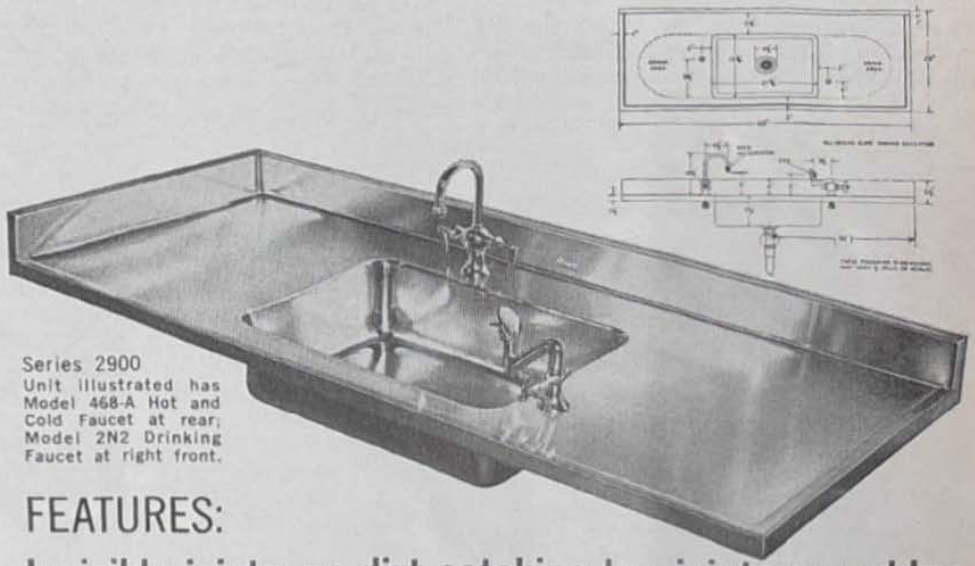
Erecting Structural Steel. By Samuel P. Oppenheimer. McGraw-Hill Book Co., Inc., 330 West 42nd St., New York 36, N.Y. 1961. 272 pp. $9.50.

Provides a step-by-step guide to the full range of steel erection operations from planning the structure to installation of roof beams; treats all the vital erecting functions and phases from descriptions and uses of equipment and tools, through rigging fundamentals and field work practices, to organization and business aspects. A wide variety of structures are covered, including large and small buildings, towers and miscellaneous ironwork such as stairways and door frames. Book is both a practical working tool and a reference.

Practical Prestressed Concrete. By H. Kent Preston. McGraw-Hill Book Co., Inc., 330 West 42nd St., New York 36, N.Y. 335 pp. $11.50.

Furnishes easy-to-follow information on the design of safe, economical members and structures of prestressed concrete. Book outlines basic principles, design procedures and numerical examples in terms of simple arithmetic and standard stress and moment formulas familiar to every engineer. All design examples are based on "Tentative Recommendations for Prestressed Concrete" as prepared by an ACI-ASCE committee.

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• **Duraflake Co.**: Lester L. Barton, previously associated with Forest Fiber Products Co., has joined the Albany, Ore., firm as a sales engineer.

• **General Electric Co.**: Harry P. Gough of Atherton has succeeded the retiring C. C. (Larry) Walker as regional vice president, with headquarters in San Francisco.

• **Kaiser Steel Corp.**: A. L. Collin has been appointed assistant manager of engineering sales for the Oakland firm. . . . Kaiser Steel Sales Corp., a newly formed, wholly owned subsidiary, has opened an office in Honolulu, headed by George C. McClintock, a transfer from the home office.

• **Forrest Industries, Inc.**: Ralph C. DeMoisy has been named general manager for the Pacific Plywood, Pacqua and Sierra Divisions of the Dillard, Ore., firm.

• **San Rafael Glass & Paint Co.**: A subsidiary firm, Tempered Glass Door Sales, Inc., has been set up at 372 10th, Oakland, to distribute the Trimview patio door.

• **Stran-Steel Corp.**: Steel Engineers Co., Salt Lake City, has been appointed distributor in Utah and eastern Idaho for the entire line of architectural building products.

• **Riverside Cement Co.**: The Los Angeles firm has named John E. Richter to the newly created post of technical service and promotion representative for white cement.

• **Cal-Tech Systems, Inc.**: Jack I. Salzberg, former general manager of Metro Metal Products, Inc., has been named president of the Glendale, Calif., company. . . . J. J. (Jerry) Johnston has been appointed general manager of the Fullview Division.

• **Forest Fiber Products Co.**: New merchandising manager is Leo G. Graham who comes to Forest Grove, Ore., from San Francisco where he was in the management program of J. C. Penney Co.

• **Kaiser Aluminum & Chemical Corp.**: Edwin W. Fish has been named building products manager, following the Oakland firm's announcement that it is introducing a number of new items for residential construction.

• **National Gypsum Co.**: The Buffalo-based manufacturer which entered the West Coast building market in 1960, has established a dealer sales district at 850 S. Van Ness Ave., San Francisco, headed by Mace T. Coleman. The firm also has created a western commercial trade sales district with headquarters in Los Angeles, managed by George H. Emmitt, and has transferred Rexford P. Oleson from Omaha as manager of the Los Angeles dealer sales district.

• **Owens-Corning Fiberglas Corp.**: E. J. Varvello has been appointed manager of the Seattle Fiberglas Engineering and Supply Division, leaving Sacramento where he managed that office the past three years.

• **Filon Plastics Corp.**: Arthur M. Barr Sr. has been promoted from national sales manager to vice president, sales-marketing, for the Hawthorne, Calif. manufacturer.

• **W. P. Fuller & Co.**: The San Francisco-based firm has moved its glass and metal contract headquarters to Los Angeles due to the "accelerating pace of business throughout Southern California."

• **Fabricon Products, Inc.**: Robert L. Spint has been named manager of distributor sales for the plastic laminate division, directing the program outside the home Los Angeles metropolitan area.

• **Prescolite Manufacturing Corp.**: Launched in Berkeley 18 years ago, the national lighting fixtures producer has moved its California operation and executive offices to new $1 million quarters in nearby San Leandro at 1251 Doolittle Drive.

• **Washington Steel Products**: New general sales manager for the Tacoma firm is Donald G. Bridge, most recently with Bommer Spring Hinge Co., Inc., Landrum, S. C.

• **Timber Structures, Inc.**: George Birkemeier has been elected vice president of the Portland firm and will continue in the capacity as chief engineer, a post he has held since 1957. He currently is chairman of the technical advisory committee of the American Institute of Timber Construction.



West Coast Airlines provides fast, daily flights to more than 60 cities in Washington, Oregon, California, Idaho, Utah, Montana, and Calgary in Canada—and connects directly with 17 major airlines at gateway cities throughout the Pacific West.

• **Interior Systems, Inc.**: The new California corporation headquartered in Los Angeles has purchased the rights and manufacturing equipment of the former Interior Systems, division of John C. Virden Co., Cleveland.

• **Baxter-Wycoff Co.**: The wood preserving company has moved its Seattle offices to 560 White-Henry-Stuart Bldg.

• **Preservative Paint Co.**: In line with the broadening of the top management level of the Seattle firm, two vice presidents have been named: Russell E. Miller in charge of sales and Robert N. Miller in charge of marketing. In other appointments, Robert West has been designated executive vice president and Robert Sheehan, assistant to the president and secretary-treasurer.

• **Weyerhaeuser Co.**: Gene T. Skrivan, economist and director of research for Cahners Publishing Co., Chicago, has gone to Tacoma to assume the new post of manager of construction markets for the expanded wood products division.

• **Bestwall Certain-Teed Sales Corp.**: New district sales office in Denver, headquartered in the Continental Terrace Building, 2785 N. Speer Blvd., is being managed by Benjamin H. Glade, coming from Salt Lake City.

• **Formica Corp.**: William C. Hill, formerly architectural sales representative in New York City, has been named Portland district manager. . . . Frank W. Blair has been added to the Los Angeles sales office. . . . New distributor is Haley Wholesale Co., Santa Barbara.

• **Sierra Electric Corp.**: Named to the newly created position of district sales manager for Southern California and Nevada is Larry Keeshen.

• **The Celotex Corp.**: The firm has appointed three district sales managers, one a new post, and the retirement of two others. George L. Benson, formerly of Pittsburgh, succeeds Lou Matz, retiring after almost 25 years of service. Herbert O. Pfenning moves to Denver from Los Angeles, replacing C. P. Lingle, who retires as a 27-year veteran. John T. Nelson, most recently of Denver, is headquartering in the new Oakland district.

• **Calaveras Cement Co.**: With the December firing of the 425-ft. kiln in its streamlined plant 12 miles north of Redding, Calif., the $15 million installation is now in final stages of construction.

• **United States Plywood Corp.**: The firm has established a Pacific South division in Los Angeles, headed by Don L. Braley, and a northwestern division in San Francisco, headed by Wallace E. Williams.

• **National Starch and Chemical Corp.**: The Los Angeles sales office now is located in a newly acquired adhesives manufacturing plant at 2117 Saybrook Ave.

• **Rippolite Plastic Products, Inc.**: The Burbank, Calif., firm has named Richard C. Schaub as general sales manager and Rowland Gibbs as sales manager, western region.

• **Vancouver Plywood Co.**: A wholly owned subsidiary, Vanport International, has been formed to engage in the general importing business with headquarters at the World Trade Center, San Francisco, and John Vanguard as executive vice president.

• **Hamilton Manufacturing Co.**: A sales and service office has been opened at 719 Industrial Road, San Carlos, Calif., to handle laboratory, homemaking, arts and crafts, language laboratory and library stack equipment, under the supervision of W. C. Cox, West Coast sales manager.

• **Utility Appliance Corp.**: James M. Starke has been named vice president and general manager and Stan Skafte as vice president in charge of sales for the Los Angeles firm.

• **H. K. Porter Co., Inc.**: W. J. McMillan has been appointed branch manager of the Los Angeles branch, National Electric Division.

• **Food Machinery and Chemical Corp.**: The Form-Crete section, headquartered in Riverside, Calif., has named Kenneth A. Bath as sales engineer for Washington, Oregon and northern California.

ASSOCIATIONS

• **Portland Cement Association**: Architect Pete M. Pirotte has joined the Seattle district office as field representative, coming from Spokane where he has been associated with architectural and structural engineering firms.

• **Gypsum Drywall Contractors of California**: New officers are William Thompson, San Francisco, president; John Marton, Sacramento, vice president; Phillip Nolby, Los Angeles, secretary; and Larry Larson, San Francisco, treasurer (re-elected). . . . Edward Parker, based at the Los Angeles headquarters, has inaugurated a nationwide technical service for Gypsum Drywall Contractors International, working with both architects and builders.

• **Hawaii Chapter, American Concrete Institute**: Initial slate of officers all from Honolulu, is headed by structural engineer Alfred A. Yee. Tsutomu Izumi, superintendent of building, City and County of Honolulu, is vice president; J. Bruce Vessey, Construction Products, Ltd., secretary-treasurer.

• **Concrete Masonry Association**: The organization of California manufacturers has appointed Joe Willis, veteran newspaper and magazine publisher, to the newly created post of promotion director.

• **Wood Products Association of Hawaii**: New executive secretary is W. Robert Johnston who leaves the San Francisco Bay area where he had handled public relations and sales promotion for building products firms.

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Subscriptions: $5 a year.

BPA

Pacific Printing Co.

Our initial column in this series on publishing in general and Pacific Architect & Builder in particular concerned itself with our headquarters and how we happen to be based in Seattle. The next logical question seems to be: why publish a regional at all in view of the existence of several well-edited nationals that serve the architectural profession.

First of all, we would like to point out emphatically that it is not the role of a regional to replace the nationals. Our job is to supplement, or more accurately, to complement, since the latter means "to provide something felt to be lacking or needed" whereas the former means "merely to add to." If PA&B does not complement the nation's architectural press, then it has no reason for being.

There are, of course, certain editorial activities in which a national excels because of its broader scope and its larger budget, etc.; by the same token, there are a number of tasks that become the prerogative of a regional and still others that it can perform more competently than its national counterparts.

The inherent advantages of serving a smaller geographical area are obvious: a regional is more intimate with its readers and is more sympathetic to the architecture in terms of the place; it provides more comprehensive and up-to-date news coverage on all fronts; it uncovers the smaller yet nevertheless significant buildings as well as the lesser known and younger architects; it works hand in hand on occasion with the imaginative designer, structural engineer or manufacturer in helping to promote new products or applications developed within the territory for a particular problem, be it site, climate or client; it keeps on top of such special assignments as the Seattle World's Fair (i.e., our month-to-month progress report, to be climaxed by an all-Century 21 issue).

Furthermore, we think it proper to note here that PA&B holds a unique position as far as architectural regionals go. It is a locally owned, independent publishing venture as opposed to the majority of midwestern and eastern journals which are AIA affiliated; and it encompasses by far the largest geographical area—the 13 western states—and we do not arbitrarily throw in Texas, which is seldom considered a part of the western market. Finally, this region in itself claims two distinctions: it is undoubtedly more exciting designwise than any other section in the U.S. and its dollar volume of building represents more than one-quarter of the total national picture.

There's another side to this regional coin, for these editorial values can be translated into sales dollars for the advertiser (although it must be apparent to most readers that not too many advertisers are aware of this at the moment!). But the advertiser can pinpoint his message to a more localized market; he can run branch and distributor addresses if he wishes (which in turn is a service to the reader); and there can be no question about the "visibility" of his message in the less massive format. Likewise, the architect, the specification writer, the contractor benefits because he knows the products and services which are advertised in a regional are readily available.

But already we can hear some of our readers taking us to task for having the audacity to mention that word "advertising" in our editorial columns. The truth of the matter is that if we are going to maintain an independent press, architectural or otherwise, it has to be supported by advertising dollars—unless there's a golden angel in the background ready to hand out a subsidy. And this will be a good stopping point until next month when we consider more fully a sensitive but vital topic: the economic facts of publishing life.

R.E.K.

Pacific Architect & Builder

UNIVERSITY OF OREGON
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P|A
&|B

THE MAGAZINE OF WESTERN ARCHITECTURE ◆ MARCH 1962





ARE YOU PUZZLED?

Architects and specification writers know that there are Roofing Asphalts available to fit the requirements of all climates and roof deck slopes—but may be puzzled by the selection of proper type because wide local variation in climate is typical of the West.

THIS SHOULD HELP:

Asphalt and gravel built-up roofs may be specified for any climate and for any roof slope from "dead-level" to 3" per foot. Maximum service life may be expected if the Asphalt used is of the lowest possible Softening Point (i.e., the softest), consistent with roof deck slope and climate. Simply stated, this means that the Asphalt should be soft enough so that any tiny cracks which may develop through thermal expansion and contraction in the deck, or through building settlement, will tend to flow together, or "heal," during warm weather; but should not be so soft that it will flow down the roof during a hot spell.

Selection of Asphalt Softening Point may often be done on the basis of local experience. Where such experience records are meager, the following table will serve as a guide for your selection and specification of roofing Asphalt type:

DECK SLOPE	NORMAL[1] CLIMATE	HOT[2] CLIMATE
0"—½"	dead-level	dead-level
½"—1"	flat	flat
1"—1½"	flat	steep
1½"—2"	flat	steep
2"—2½"	steep	special steep
2½"—3"	steep	special steep

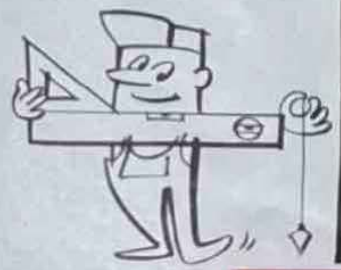
1 Not more than an occasional day with air temperature over 95°F.

2 Extended periods with day-time air temperatures over 95°F, with clear sky, bright sun.

Note: Typical Softening Points are:

dead-level	140°F
flat	170°F
steep	190°F
special steep	210°F

Assure your next building of trouble-free, low-cost protection by specifying the proper Asphalt roofing materials. Want more information? Fill out and send coupon.



THE ASPHALT INSTITUTE
810 University Avenue, Berkeley 10, California

Gentlemen: Please send me without obligation more information on Asphalt roofing.

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Pacific Architect & Builder

March 1962

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Cover: U.S. Air Force Academy, Colorado Springs, Colo. (p. 16) —Skidmore, Owings & Merrill, Architects-Engineers: Stewart's photo.

First Column Figures in Parentheses are Number of Residential Units • Second Column is Dolla

CALIFORNIA

	# Res.	$ Value	Total $
Alameda	(55)	$ 478,430	$ 593,028
Alameda Co.	(155)	1,307,700	1,943,233
Albany	(7)	81,608	94,581
Alhambra	(33)	226,950	538,389
Anaheim	(412)	3,737,073	5,739,513
Antioch	(19)	155,080	185,521
Arcadia	(23)	265,009	435,623
Arroyo Grnde	(73)	735,066	788,716
Artesia	(93)	1,209,900	1,311,200
Atherton	(3)	102,000	208,440
Atwater	( )	No Reply	No Reply
Auburn	(4)	60,000	112,770
Avalon	( )	Nil	12,300
Azusa	(92)	656,000	873,550
Bakersfield	(47)	539,400	1,239,810
Baldwin Park	(28)	215,280	267,890
Banning	(15)	171,592	196,437
Barstow	(5)	25,900	47,228
Bell	(14)	111,700	145,370
Bellflower	(22)	195,100	285,225
Bell Gardens	(34)	229,800	346,670
Belmont	(30)	384,000	631,598
Benicia	(2)	28,591	30,691
Berkeley	(10)	120,350	1,627,515
Beverly Hills	(7)	689,000	1,962,159
Bradbury	(1)	34,000	38,450
Brawley	(1)	18,000	43,550
Brea	(5)	74,641	232,425
Buena Park	(98)	1,663,365	1,968,384
Burbank	(16)	142,800	473,157
Burlingame	(7)	166,100	1,003,847
Butte Co.	( )	Nil	87,700
Calexico	(4)	30,150	149,350
Campbell	(3)	33,450	265,276
Carlsbad	(13)	152,714	192,158
Carmel	(5)	89,500	172,060
Chico	(20)	268,453	932,541
Chino	(6)	73,637	243,776
Chula Vista	(27)	171,000	681,319
Claremont	(5)	93,300	342,810
Coalinga	(1)	10,000	16,285
Colton	(2)	23,624	81,055
Commerce	(3)	29,230	444,410
Compton	(9)	59,400	214,015
Concord	(135)	1,747,500	3,080,624
Cntra Csta Co.	(213)	2,818,017	4,763,237
Corona	(46)	426,800	459,849
Coronado	( )	No Reply	No Reply
Corte Madera	(8)	171,743	181,888
Costa Mesa	(190)	4,635,830	5,009,620
Covina	(7)	41,700	184,095
Cudahy	(21)	194,400	208,675
Culver City	(4)	72,000	215,183
Dairy Valley	(1)	39,000	63,550
Daly City	(114)	1,341,500	1,394,653
Davis	(21)	263,000	283,450
Delano	(9)	103,900	110,360
Downey	(22)	587,595	1,244,301
Duarte	(1)	16,000	549,214
El Cajon	(61)	371,600	536,710
El Centro	(32)	513,500	594,690
El Cerrito	(11)	172,478	747,412
El Dorado Co.	(43)	502,007	630,281
El Monte	( )	No Reply	No Reply
El Segundo	(23)	181,000	181,000
Emeryville	(4)	15,000	160,300
Escondido	(46)	409,192	508,243
Eureka	(18)	10,690	197,245
Fairfield	(79)	949,614	976,990
Fillmore	( )	Nil	156,025
Fontana	(11)	138,178	163,877
Fremont	(132)	1,609,800	1,908,479
Fresno	(80)	862,064	1,365,051
Fresno Co.	(64)	767,824	1,947,328
Fullerton	(29)	510,085	2,216,862
Glendale	(159)	1,088,890	2,014,890
Glendora	(90)	1,033,800	1,105,675
Half Moon By	(2)	27,000	27,000
Hanford	(8)	116,250	2,036,305
Hawthorne	( )	No Reply	No Reply
Hayward	(19)	125,500	401,630
Hemet	(8)	81,000	162,775
Hermosa Bech	(17)	152,910	169,110
Hidden Hills	(1)	35,000	44,400
Hillsborough	(4)	171,000	171,000
Holtville	( )	Nil	3,805
Humboldt Co.	( )	Nil	322,000
Huntingtn Bch	(82)	1,021,263	1,362,801
Huntington Pk	(49)	363,025	584,497
Imperial Co.	( )	Nil	76,200
Indio	(27)	477,900	617,110
Industry	( )	Nil	1,017,100
Inglewood	(35)	343,560	1,003,730
Irwindale	( )	Nil	8,000
Kern Co.	( )	Nil	1,816,000
Laguna Beach	(46)	701,000	758,089
La Habra	(101)	820,230	1,075,198
Lakewood	(25)	256,000	338,250
La Mesa	(22)	295,070	425,203
La Mirada	( )	Nil	60,200
La Puente	(19)	176,250	199,295
La Verne	(2)	14,000	29,435
Lawndale	(15)	159,550	207,350
Lindsay	(2)	26,000	33,590
Livermore	(25)	264,200	314,907
Lodi	(38)	347,800	426,200
Lompoc	(28)	205,846	241,476
Long Beach	(236)	1,763,705	5,585,990
Los Altos	(31)	709,170	709,170
Los Angeles	(853)	17,013,905	86,835,448
Ls Angles Co.	(1045)	14,634,307	20,576,872
Los Gatos	(20)	309,000	321,400
Lynwood	(6)	49,500	364,338
Madera	(17)	126,690	236,731
Madera Co.	(6)	71,000	179,050
Manhattn Bch	(20)	307,870	393,774
Manteca	(9)	78,000	287,193
Marin Co.	(36)	639,690	1,035,403
Martinez	(3)	60,150	72,287
Marysville	(1)	14,000	62,200
Maywood	(4)	22,500	347,783
Menlo Park	(4)	75,000	376,968
Merced	(11)	137,687	198,042
Merced Co.	(24)	196,800	316,320
Millbrae	(5)	89,500	324,990
Mill Valley	(14)	265,000	284,614
Modesto	(66)	851,000	1,154,805
Monrovia	(100)	713,620	1,279,175
Montclair	(37)	364,200	433,675
Montebello	(34)	326,851	705,797
Monterey	(10)	171,700	656,209
Monterey Co.	(38)	517,000	636,910
Monterey Prk	(28)	302,910	729,128
Mountain Vew	(302)	1,766,274	2,119,318
Napa	(10)	129,899	179,161
Napa Co.	(16)	246,934	295,362
National City	(21)	163,326	260,802
Newport Bech	(52)	1,289,765	1,777,633
N. Sacramento	(36)	346,868	370,905
Norwalk	(47)	287,600	400,510
Novato	(21)	376,750	387,780
Oakdale	(2)	27,363	50,507
Oakland	(293)	2,306,493	6,022,145
Oceanside	(67)	957,500	1,179,969
Ojai	( )	Nil	10,100
Ontario	(36)	420,995	889,267
Orange	(523)	5,752,750	6,446,418
Orange Co.	(350)	6,466,400	7,314,513
Oroville	(2)	27,100	89,496
Oxnard	(3)	53,650	1,074,745
Pacifica	(41)	435,800	736,211
Pacific Grove	(18)	175,572	344,259
Palm Springs	(34)	767,000	1,195,470
Palo Alto	(11)	147,302	1,112,374
Pls Vrds Estts	(8)	318,390	335,540
Paramount	(19)	247,000	328,100
Pasadena	(98)	1,372,310	2,657,163
Paso Robles	(4)	55,390	70,615
Pico Rivera	(19)	313,300	591,835
Piedmont	(2)	75,000	148,222
Pinole	(23)	307,750	333,027
Pittsburg	(29)	346,298	360,704
Placentia	( )	Nil	1,090,244
Placer Co.	(27)	384,777	746,390
Pleasanton	(2)	32,000	42,355
Pomona	(166)	2,138,496	3,524,225
Porterville	(24)	204,500	538,483
Port Hueneme	(2)	8,000	47,500
Red Bluff	(2)	26,114	31,639
Redding	(2)	27,000	468,178
Redlands	(5)	90,500	196,186
Redondo Bech	(56)	601,591	1,316,251
Redwood City	(56)	450,490	831,519
Richmond	(43)	404,000	1,041,604
Riverside	(69)	696,070	1,262,830
Riverside Co.	(215)	2,817,924	3,741,505
Rolling Hills	(1)	46,800	56,850
Rllng Hlls Ests	(5)	153,400	164,500
Rosemead	(7)	77,700	103,353
Roseville	(5)	44,497	71,322
Sacramento	(103)	1,253,100	5,697,700
Sacramnto Co.	(300)	3,845,564	6,757,540
St. Helena	(1)	12,276	20,446
Salinas	(22)	278,000	534,147
Sn Bernardino	(48)	482,580	1,178,713
S. Brnrdno Co.	(368)	3,290,162	6,182,656
San Bruno	(146)	1,260,900	1,390,81
San Carlos	(21)	431,430	526,56
San Clemente	(80)	1,633,796	1,743,12
San Diego	(346)	6,022,869	10,714,67
San Diego Co.	(133)	2,430,500	3,695,29
San Dimas	(19)	250,600	272,80
San Fernando	(14)	139,785	179,90
San Francisco	( )	2,566,000	3,220,07
San Gabriel	(17)	167,136	236,19
Sanger	(3)	31,760	55,85
San Jacinto	(2)	14,430	25,20
San Joaqin Co.	(30)	262,433	546,21
San Jose	(672)	7,653,058	8,649,20
San Leandro	(4)	61,000	1,360,41
San Luis Obispo	(27)	409,555	574,11
S. Ls Obsp Co.	(55)	801,057	1,297,80
San Marino	( )	Nil	61,80
San Mateo	(25)	5,810,000	6,026,72
San Mateo Co.	(132)	2,482,150	3,125,80
San Pablo	(11)	90,180	159,62
San Rafael	(121)	1,167,292	1,430,51
Santa Ana	(176)	2,769,058	3,770,80
Santa Barbara	(56)	680,000	1,395,13
Snta Brbr Co.	(200)	3,511,700	7,328,76
Santa Clara	(102)	786,600	968,15
Santa Clra Co.	(29)	589,100	1,740,33
Santa Cruz	(28)	274,625	336,31
Santa Cruz Co.	(157)	1,608,307	1,886,66
Snta Fe Sprngs	(1)	12,000	279,39
Santa Maria	(217)	2,484,413	2,608,63
Santa Monica	(147)	1,611,860	2,094,80
Santa Paula	(4)	48,115	73,43
Santa Rosa	(124)	1,288,700	1,428,49
Sausalito	(12)	21,800	161,16
Seal Beach	(15)	136,929	189,37
Seaside	(17)	97,000	182,30
Selma	(4)	51,000	60,67
Shasta Co.	(38)	393,099	481,26
Sierra Madre	(35)	657,050	693,26
Solano Co.	(7)	83,805	119,70
Sonoma Co.	(107)	846,896	1,106,07
South Gate	(20)	151,260	395,70
So. El Monte	( )	Nil	253,40
So. Pasadena	(3)	36,360	158,90
So. Sn Frncsco	(6)	68,875	522,82
Stanislaus Co.	(26)	306,875	666,60
Stockton	(65)	1,281,376	1,464,31
Sunnyvale	(146)	1,920,101	2,745,30
Temple City	(9)	115,900	170,60
Torrance	(219)	2,646,955	3,966,60
Tracy	(15)	138,412	146,80
Tulare	(6)	70,600	118,50
Tulare Co.	(27)	176,244	425,70
Turlock	(2)	24,484	107,00
Ukiah	(5)	99,989	145,80
Upland	(83)	1,748,000	1,791,80
Vacaville	(8)	84,700	129,90
Vallejo	(39)	400,000	453,90
Ventura	(130)	1,449,406	1,585,70
Ventura Co.	(492)	5,457,850	6,021,80
Visalia	(35)	448,933	814,00
Walnut	(3)	42,800	82,40
Walnut Creek	(14)	237,875	331,40
Wasco	(6)	42,800	53,80
Watsonville	(6)	82,387	105,80
West Covina	(28)	512,900	1,268,50
Whittier	(19)	138,000	359,70
Woodland	(14)	196,644	296,10
Woodside	(3)	83,000	117,60
Yolo Co.	(28)	272,335	457,80
Yreka	( )	Nil	11,80
Yuba City	(18)	131,516	258,00
Yuba Co.	( )	Nil	11,30
Total	**(14,732)**	**$194,993,594**	**$368,170,11**

OREGON

Albany	(10)	$ 118,000	$ 147,13
Ashland	(3)	24,250	24,75
Astoria	(1)	5,200	168,80
Baker	( )	Nil	13,90
Beaverton	(30)	561,677	790,91
Bend	(2)	30,000	38,50
Central Point	(5)	43,000	94,80
Clackamas Co.	(45)	596,940	648,16
Coos Bay	( )	Nil	25,70
Corvallis	(9)	106,000	338,25
Dallas	(2)	27,500	35,94
Douglas Co.	(3)	19,125	45,33
Eugene	(29)	320,555	1,247,03
Forest Grove	(1)	17,500	154,43
Grants Pass	(4)	39,250	64,68
Gresham	(2)	34,650	37,15
Hermiston	(2)	32,105	48,17
Hillsboro	(10)	138,400	224,63

*Complete figures not available

Western States for January

sidential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hood River	(1)	8,000	10,971
Klamath Falls	( )	Nil	7,635
La Grande	(1)	16,000	41,137
Lake Oswego	(15)	295,100	307,700
Lane Co.	(62)	686,692	3,567,511
Lebanon	( )	Nil	16,900
Marion Co.	(43)	580,871	703,871
McMinnville	(5)	59,000	67,410
Medford	(8)	113,500	234,909
Milton-Freewtr	( )	Nil	Nil
Milwaukie	(5)	66,750	249,050
Multnomh Co.	(93)	1,344,580	2,352,557
Newberg	(1)	10,500	11,590
Newport	(3)	40,000	51,000
North Bend	(3)	38,428	242,756
Ontario	( )	Nil	3,950
Oregon City	(1)	9,800	23,350
Oswego	(11)	295,100	307,700
Pendleton	(2)	23,000	55,150
Portland	(41)	544,350	4,646,705
Roseburg	(6)	68,898	168,034
St. Helens	(2)	19,000	20,550
Salem	(40)	355,100	509,073
Seaside	( )	Nil	124,600
Springfield	( )	Nil	Nil
The Dalles	(1)	10,000	46,150
Washngtn Co.	(70)	11,268,775	11,730,425
Total	**(572)**	**$ 17,967,596**	**$ 29,649,305**

WASHINGTON

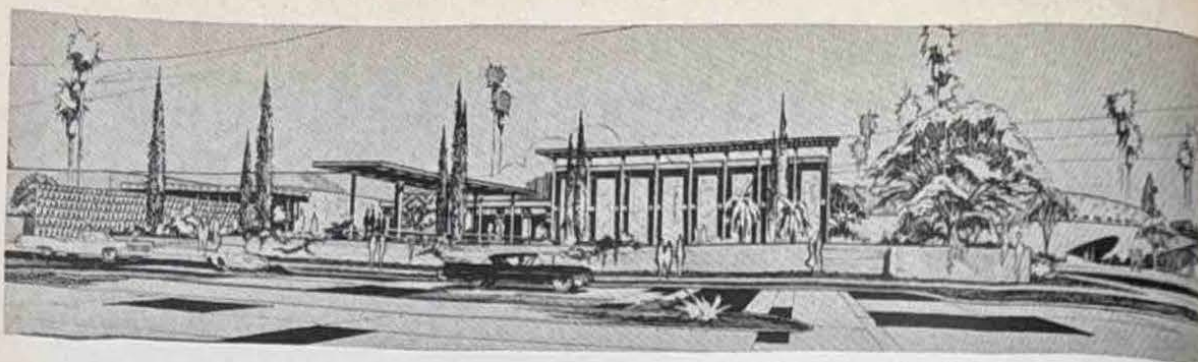
Aberdeen	(2)	$ 28,000	$ 40,230
Anacortes	( )	Nil	6,920
Auburn	(36)	327,000	413,800
Bellevue	(5)	146,000	191,350
Bellingham	(2)	28,000	399,850
Bremerton	(1)	17,000	250,140
Camas	( )	Nil	11,425
Centralia	(1)	9,600	35,526
Chehalis	( )	Nil	14,170
Clark Co.	(40)	503,000	529,200
Clarkston	(1)	12,000	18,550
Edmonds	(22)	369,000	423,400
Ellensburg	( )	Nil	11,826
Enumclaw	( )	Nil	Nil
Ephrata	( )	Nil	11,125
Everett	(9)	153,141	267,604
Grys Hrbr Co.	(3)	47,000	64,350
Hoquiam	( )	Nil	53,134
Island Co.	(10)	69,000	86,560
Kelso	(7)	57,264	79,664
Kennewick	(1)	15,000	36,050
Kent	(12)	208,900	427,336
King Co.	(352)	5,814,410	7,555,725
Kirkland	(4)	45,000	51,950
Longview	(30)	273,000	378,790
Lynnwood	( )	No Reply	No Reply
Mercer Island	(17)	406,239	420,143
Moses Lake	(2)	41,100	62,200
Mtlke Terrace	(16)	213,000	229,500
Olympia	(20)	175,750	261,716
Pasco	(2)	22,000	100,278
Pierce Co.	(199)	2,183,700	2,359,882
Port Angeles	(3)	27,500	192,750
Pullman	(21)	80,000	84,000
Puyallup	(6)	55,800	106,350
Renton	(19)	228,700	474,108
Richland	(8)	157,600	267,114
Seattle	(76)	1,332,700	8,838,361
Shelton	(1)	16,000	16,500
Snohomish Co.	( )	No Reply	No Reply
Spokane	(22)	301,050	1,600,806
Spokane Co.	(18)	311,400	526,060
Sunnyside	(2)	20,000	322,000
Tacoma	(46)	710,550	2,917,639
Thurston Co.	(17)	64,075	504,000
Vancouver	(19)	284,557	473,715
Walla Walla	(4)	45,000	243,749
Walla Wlla Co.	( )	Nil	640
Wenatchee	( )	Nil	23,300
Yakima	(8)	95,000	701,525
Total	**(1,064)**	**$ 14,894,036**	**$ 32,085,013**

ALASKA

Anchorage	( )	$ Nil	$ 349,176
Fairbanks	( )	Nil	26,200
Juneau	(1)	10,000	45,139
Ketchikan	(1)	16,000	23,000
Total	**(2)**	**$ 26,000**	**$ 443,515**

	# Res.	$ Value	Total $
IDAHO			
Alameda	(5)	$ 63,500	$ 66,100
Blackfoot	(1)	15,250	19,950
Boise	(7)	81,500	493,108
Burley	( )	No Reply	No Reply
Caldwell	(3)	31,100	39,892
Coeur d'Alene	( )	Nil	53,026
Idaho Falls	(5)	80,520	126,815
Jerome	( )	Nil	5,900
Lewiston	(3)	48,000	88,200
Moscow	( )	Nil	14,750
Nampa	(1)	10,000	40,760
Payette	(1)	12,000	17,800
Pocatello	(4)	77,000	109,185
Sandpoint	( )	Nil	Nil
St. Maries	( )	Nil	Nil
Twin Falls	(4)	46,500	72,400
Total	**(34)**	**$ 465,370**	**$ 1,147,886**
MONTANA			
Anaconda	( )	$ Nil	$ 13,500
Billings	(18)	255,800	366,700
Bozeman	( )	Nil	1,800
Butte	(1)	15,000	18,978
Cut Bank	( )	Nil	Nil
Glasgow	(10)	133,000	133,700
Glendive	( )	Nil	54,000
Great Falls	(11)	75,501	113,145
Havre	( )	Nil	2,525
Helena	(2)	32,000	35,703
Kalispell	(1)	10,000	16,300
Lewistown	(3)	14,000	14,000
Livingston	( )	Nil	Nil
Malta	( )	Nil	Nil
Miles City	( )	No Reply	No Reply
Missoula	(2)	22,500	32,400
Total	**(48)**	**$ 557,801**	**$ 802,751**
WYOMING			
Casper	(9)	$ 131,500	$ 1,324,670
Cheyenne	(18)	197,000	243,995
Cody	( )	Nil	Nil
Laramie	( )	Nil	26,120
Rawlins	(1)	12,000	74,900
Riverton	( )	Nil	101,000
Rock Springs	( )	Nil	40,000
Sheridan	( )	Nil	26,414
Total	**(28)**	**$ 340,500**	**$ 1,837,099**
COLORADO			
Adams Co.	(160)	$ 2,125,000	$ 3,557,660
Alamosa	(1)	19,500	21,500
Arapahoe Co.	(62)	1,237,408	1,315,101
Arvada	(51)	635,000	2,455,375
Aspen	( )	Nil	Nil
Aurora	(75)	626,320	986,995
Boulder	(20)	252,900	522,997
Boulder Co.	(26)	267,000	291,400
Colrdo Sprngs	(55)	651,120	2,542,678
Cortez	(1)	9,800	12,300
Denver	(110)	1,280,396	5,135,219
Durango	(2)	23,320	38,070
El Paso Co.	(46)	672,500	2,104,932
Englewood	(37)	226,500	525,584
Estes Park	(2)	28,000	35,350
Fort Collins	(7)	92,500	115,465
Fort Morgan	( )	Nil	7,453
Golden	(11)	106,300	180,450
Grand Juctn	(1)	9,000	19,730
Greeley	(5)	65,796	105,487
Jefferson Co.	(178)	1,861,541	2,877,635
La Junta	( )	No Reply	No Reply
Lamar	(2)	21,000	21,000
Littleton	(10)	69,000	222,474
Longmont	(8)	101,700	147,515
Loveland	(3)	35,000	37,300
Monte Vista	(1)	7,000	2,075
Montrose	(2)	27,504	56,041
Pitkin Co.	( )	Nil	Nil
Pueblo	(25)	231,296	231,296
Pueblo Co.	(3)	34,000	139,819
Sterling	( )	No Reply	No Reply
Trinidad	( )	Nil	6,312
Walsenburg	( )	Nil	1,600
Westminster	(12)	258,600	413,751
Total	**(916)**	**$ 10,975,001**	**$ 24,130,564**

	# Res.	$ Value	Total $
UTAH			
American Frk	( )	Nil	$ 5,700
Bountiful	( )	No Reply	No Reply
Brigham City	(8)	$ 105,500	151,800
Cedar City	( )	Nil	28,000
Clearfield	(11)	95,000	96,600
Davis Co.	(4)	46,660	100,910
Kaysville	(5)	36,840	193,040
Layton	(12)	143,000	150,500
Logan	( )	Nil	11,500
Murray	(14)	155,000	159,400
Ogden	(10)	161,500	346,400
Orem	(4)	42,796	59,556
Price	( )	Nil	Nil
Provo	(6)	77,000	287,100
Salt Lake City	(76)	638,600	1,106,320
Salt Lake Co.	(166)	2,044,350	2,192,000
S Salt Lke Cty	( )	Nil	33,800
Spanish Fork	( )	Nil	900
Tooele	(45)	468,362	474,991
Utah Co.	( )	Nil	81,100
Weber Co.	(2)	24,000	26,000
Total	**(363)**	**$ 4,038,168**	**$ 5,505,617**
NEVADA			
Boulder City	(23)	$ 306,897	$ 320,239
Clark Co.	(160)	2,261,191	5,566,465
Elko	(1)	11,350	25,650
Las Vegas	(320)	4,191,216	4,496,421
N. Las Vegas	(6)	57,279	116,014
Reno	(31)	396,239	1,776,014
Sparks	(49)	568,000	707,476
Washoe Co.	(18)	403,826	853,761
Total	**(608)**	**$ 8,195,998**	**$ 13,862,040**
ARIZONA			
Buckeye	(2)	$ 18,000	$ 18,525
Casa Grande	(4)	36,995	155,503
Chandler	(14)	113,379	379,791
Douglas	(4)	30,500	40,280
Flagstaff	(5)	36,973	56,383
Florence	(1)	3,000	3,800
Glendale	(4)	53,000	117,695
Maricopa Co.	(215)	2,209,217	2,601,828
Mesa	(57)	526,289	956,065
Phoenix	(430)	3,214,248	6,468,921
Pima Co.	(160)	1,707,075	2,058,100
Prescott	(5)	44,150	87,959
Scottsdale	(110)	753,130	1,394,598
Tempe	(207)	1,461,750	2,242,132
Tucson	(145)	1,300,990	2,725,061
Wickenburg	(1)	7,500	32,100
Winslow	( )	No Reply	No Reply
Yuma	(26)	124,000	214,850
Total	**(1,390)**	**$ 11,640,196**	**$ 19,553,591**
NEW MEXICO			
Alamogordo	(1)	$ 8,096	$ 19,052
Albuquerque	(116)	1,603,922	2,226,730
Artesia	(5)	51,250	74,290
Carlsbad	(12)	135,000	169,690
Clovis	(49)	442,319	552,002
Deming	(2)	18,000	111,640
Farmington	( )	Nil	225,094
Gallup	( )	Nil	402,505
Hobbs	(15)	198,978	256,158
Las Cruces	(17)	203,500	220,950
Las Vegas	(1)	7,000	7,000
Lovington	(1)	15,000	19,850
Raton	( )	Nil	21,000
Roswell	(129)	1,158,000	1,670,740
Santa Fe	(11)	108,100	308,927
Silver City	( )	Nil	10,695
Truth Or Consequences	( )	No Reply	No Reply
Tucumcari	( )	Nil	93,750
Tularosa	( )	Nil	Nil
Total	**(359)**	**$ 3,949,155**	**$ 6,396,073**
HAWAII			
Hawaii Co.	(32)	371,146	782,257
Honolulu	(528)	4,992,661	11,191,475
Maui Co.	(15)	164,812	1,168,610
Total	**(575)**	**$ 5,528,619**	**$ 13,142,342**
GRAND TOTAL	**(20,691)**	**$273,571,974**	**$516,725,913**



ARIZONA: JEWISH COMMUNITY CENTER

now underway in Phoenix will include two-story administration bui ing with multipurpose auditorium, youth wing, health club, two outdo pools and fenced play courts as first stage of construction. Auditori will have stage and seat 600. When entire $1 million complex completed, it will contain 66,000 sq. ft. Architect: Stanley M. Ste



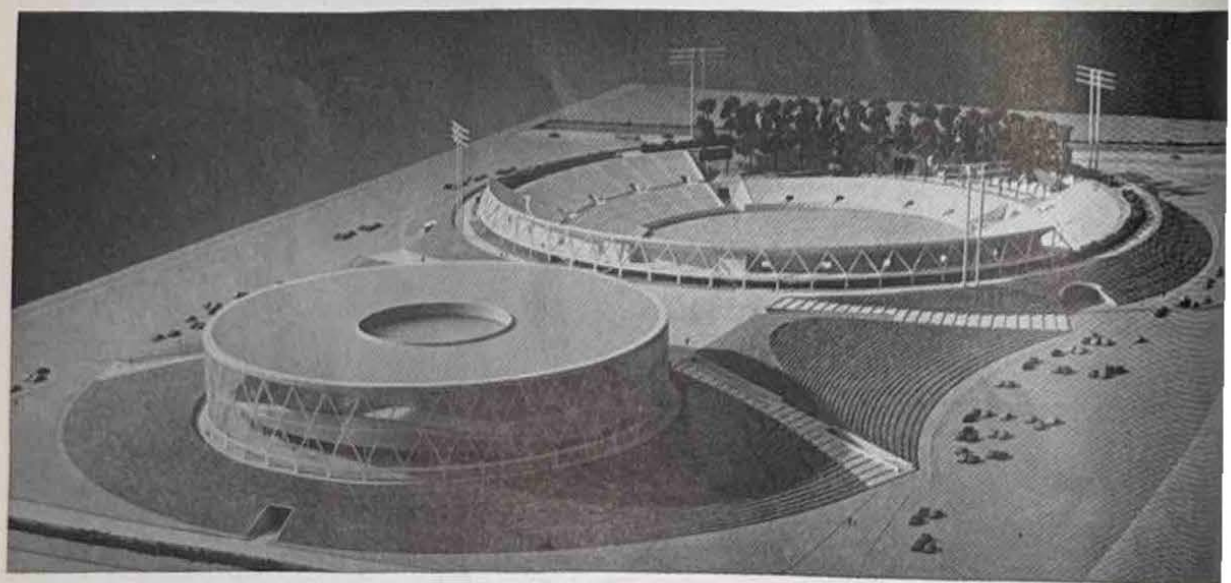
PROJECT PREVIEW

OREGON: BRANCH OFFICE

of Equitable Savings and Loan Association when completed in Eugene this fall will be largest of 15 operated by Portland-based company. Incorporating 12,000 sq. ft., three-story steel frame structure will have large glass areas, bronze filler panels and perforated copper sun screens. Off-street parking will be provided. Architect: Lewis Crutcher.

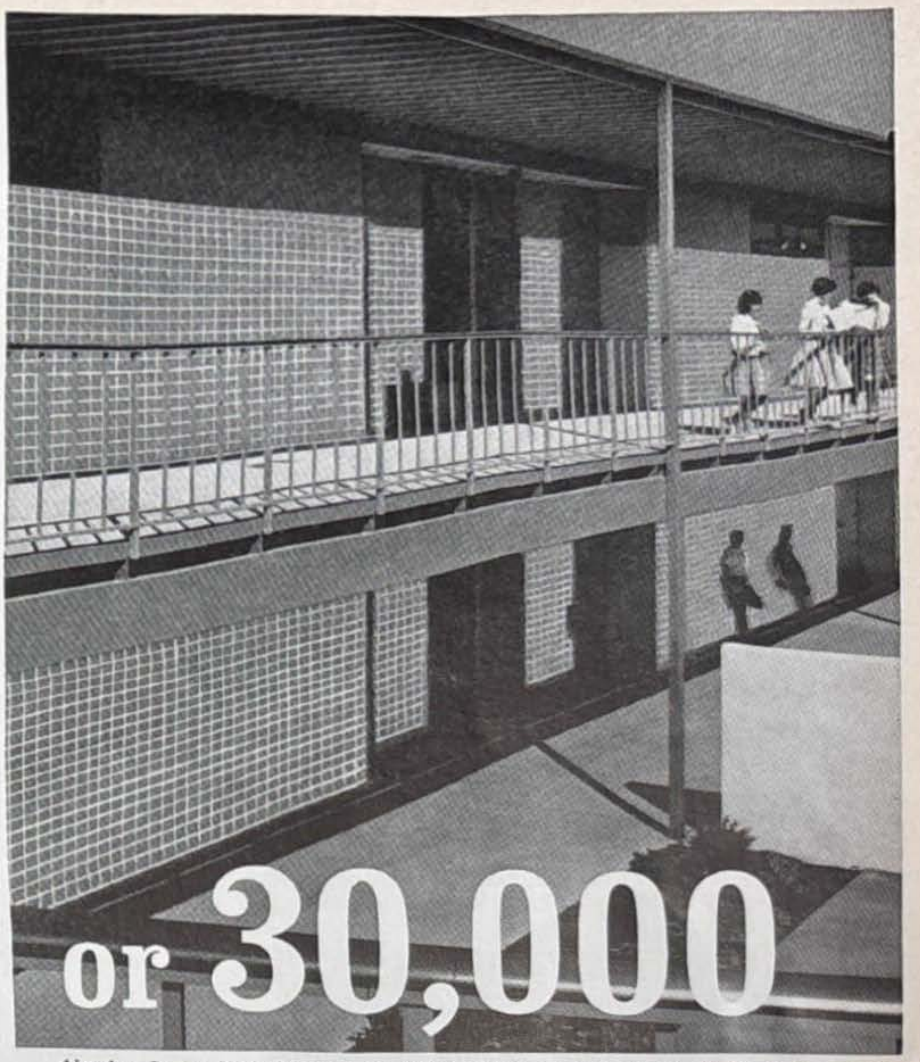
CALIFORNIA: $5 MILLION STADIUM COMPLEX

as seen in this model is being considered by Oakland City Council an Alameda County Board of Supervisors. Seating 48,500, stadium w have three sections of movable seats to make it adaptable for bas ball or football. Arena will seat 10,500 for ice hockey and even requiring similar floor space, expanding to 13,000 for boxing matche Series of shops and offices is planned between two main structure Architects: Skidmore, Owings & Merrill.





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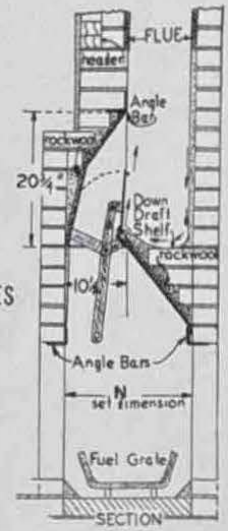
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SUPERIOR HI-FORM DAMPERS

FOR MULTIPLE AND SINGLE OPENING FIREPLACES





FOR MULTIPLE | OPENING FIREPLACES

FORMS COMPLETE THROAT, eliminating construction errors.

HEAVY STEEL CONSTRUCTION for lifetime service. NO BRITTLE CAST IRON PARTS TO BREAK.

When damper is in open position, closure blade **cannot swing back beneath chimney flue,** but **acts as a buffer** to prevent downdraft wind currents from entering throat to interfere with draft. **Tight closure prevents** loss of furnace heat.

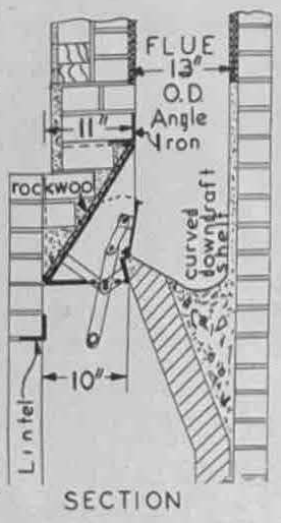
Rockwool blanket provided for use between form and masonry. **Only proven method** of absorbing metal expansion **to prevent cracking of masonry.**

Permits chimney flue to be located directly above center of unit, **saving considerable labor** and **material** necessary with other designs to offset chimney and downdraft shelf.

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Building Briefs

THE BUILDING WEST—Permits totaling $516,725,913 were issued during January by the nearly 500 cities and counties in the 13 western states surveyed by Pacific Architect & Builder. This is an increase of $96 million (23%) over the same period a year ago. California, with $367 million, gained $74 million. Oregon and Washington were up $29 million and $5 million, respectively, over January 1961. Residential building hit $272,667,584 for an increase of $54 million (25%). With $194 million in this category, California gained $37 million. Oregon shared $17 million of the dollar volume for residences, a $12 million jump. And Nevada, totaling $8 million, doubled its volume over January 1961. Industrial-commercial-public building continued strong, chalking up $242,358,453 for this January, an increase of $41 million over the same month last year.

TOP TWENTY-FIVE—Hottest spots in the West for January (in millions): **1.** Los Angeles, $86.8; **2.** Los Angeles County, $20.6; **3.** Washington County, Ore., $11.7; **4.** Honolulu, $11.1; **5.** San Diego, $10.7; **6.** Seattle, $8.8; **7.** San Jose, $8.6; **8.** King County, Wash., $7.6; **9.** Santa Barbara County, $7.3; **10.** Orange County, $7.3; **11.** Sacramento County, $6.8; **12.** Phoenix, $6.5; **13.** Orange, Calif., $6.4; **14.** San Bernardino County, $6.2; **15.** San Mateo, Calif., $6; **16.** Oakland, $6; **17.** Ventura County, Calif., $6; **18.** Anaheim, Calif., $5.7; **19.** Sacramento, $5.7; **20.** Long Beach, $5.6; **21.** Clark County, Nev., $5.6; **22.** Denver, $5.1; **23.** Costa Mesa, Calif., $4.7; **24.** Contra Costa County, Calif., $4.7; **25.** Portland, $4.6.

THUMBS DOWN ON HIGH-RISE—A bill which would have permitted Diamond Head developpers to build high-rise apartments was tabled in mid-February by Honolulu's City Council (see Photo Editorial for Feb. '62). In so doing, it reaffirmed an earlier stand in favor of a development plan approach to the entire area. The council's action was praised as "fair and just" by architect Alfred Preis, chairman of the Chamber of Commerce subcommittee on beautification. He also commended the support of the new city planning director, Frederick K. F. Lee, whose original statement to the press concerning the zoning matter apparently was misconstrued. In any event, Lee's push for a sound plan for the area coupled with the pressure of public opinion won over the dissenting councilmen.

CONSULTING THE CALENDAR — Proposed changes to "Building Code Requirements for Reinforced Concrete" will highlight the technical program at the American Concrete Institute's 58th annual convention at Denver's Brown Palace Hotel March 12-15. A major change is the inclusion of ultimate strength design in the main body of the code paralleling the working stress design method.

Foothill College is lone top winner in AIA competition

In a competition marked by one of the "stingiest" juries in many an Octagon moon, the AIA's 1962 Honor Awards program ended up with one top winner—Foothill College at Los Altos, Calif. (last month's cover feature). Among the seven Awards of Merit were two more California projects.

In selecting only eight of 382 designs, the jury, which included Seattle's Paul Hayden Kirk, said it "hopes that it can bring to the attention of the profession a concern for the present condition of our physical environment. It is the jury's opinion that fundamental logic so basic to architecture was often ignored. Superficiality, the patent solution and the lack of individuality and artistic expression were strikingly obvious. We call for our colleagues to reexamine the basic doctrine of simplicity and human need and to strive through their works to give a greater essence to the environment they create."

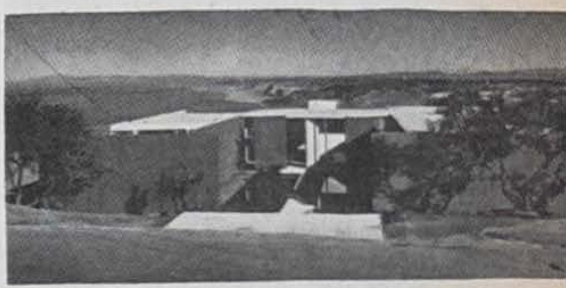
Winning architects besides the Californians were Ballard, Todd & Snibbe, Princeton, N.J.; Paul Rudolph, New Haven, Conn.; Deeter & Ritchey, Pittsburgh; Marcel Breuer & Associates, New York; and Ulrich Franzen, New York.

The AIA had announced earlier that the 1962 Gold Medal will be awarded to the late Eero Saarinen, who died last September at the age of 51. Other awards to be presented during the convention in Dallas May 7-11:

- Fine Arts Gold Medal to Stuart Davis of New York "for a half century of artistic probing in paint, culminating in a colorful and magnificent expression; for his sympathetic understanding of architecture and the integrity of the plane, which his murals consistently proclaim."
- Industrial Arts Gold Metal to Sundberg-Ferar, Inc., industrial designers of Southfield, Mich., "for superiority in developing outstanding elegance and commodity for a large variety of designs to be executed by the machine, from the RCA Whirpool Miracle Kitchen through a variety of electronic computers to the impeccable IBM Executive Typewriter."
- Architectural Photography Gold Medal to Ernst Haas of Australia and New York "for his startlingly fresh approach for the photography of architecture and environment; for his revealing imagination and extension of vision that open eyes even to the familiar; for his visual poetry."
- Allied Professions Gold Medal to Ammann & Whitney "for brilliant achievement in bridge engineering, notably the George Washington and Bronx-Whitestone Bridge in New York and the Golden Gate of San Francisco; for their imaginative collaboration with architects for important commissions on four continents."
- Citation of Honor to Lewis Mumford of Amenia, N.Y., "for his monumental book 'The City in History,' summing up his lifetime of study."



FOOTHILL COLLEGE, Los Altos Hills, Calif.: Ernest J. Kump and Masten & Hurd, architects associated; Huber & Knapik and Earl & Wright, Inc., structural engineers; Sasaki, Walker & Associates, landscape architects; Williams & Burrows, Inc., O. E. Anderson, Inc., and Carl N. Swenson Co., general contractors.



RESIDENCE FOR DEVELOPER, La Jolla, Calif.: Killingsworth-Brady-Smith, architects; Amatea Construction Corp., contractor.



HOUSING GROUP, Berkeley: Roger Lee Associates, architects; A. L. Muzzini, contractor.



JURORS Karl Kamrath, Houston; Paul M. Heffernan, Atlanta; A. G. Odell Jr. (chairman), Charlotte; Paul Hayden Kirk, Seattle; Charles R. Colbert, New York.

Photos: Rondal Partridge, Julius Shulman, Roger Sturtevant.

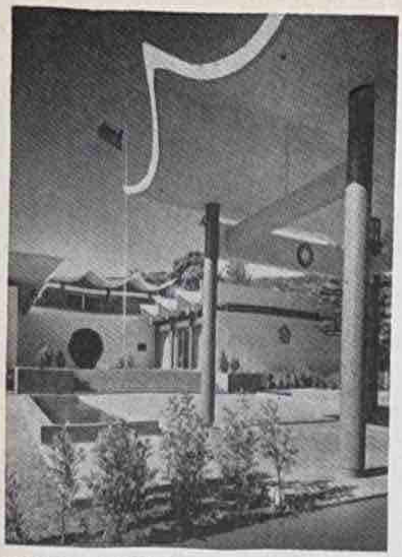
MR. CANTY GOES TO WASHINGTON

The West's loss of Donald J. Canty of Berkeley to regional architectural journalism (and PA&B's editors say this with all sincerity) became the profession's national gain when he went to Washington, D.C., late in January to head the information services and serve as assistant editor of the AIA Journal.

Canty's appointment to this important Octagon post cannot help but strengthen the line of communications between the national headquarters and the AIA in its three western regions; perhaps even more significant, he brings with him to Washington a first-hand understanding of the peculiarities of the profession as it practices in the West and its dedication to design—a dedication that has not been very much in evidence over the recent years in the top echelon.

Canty replaces Wolf Von Eckardt who has been AIA's public information officer and art director since 1958 and has resigned to free lance as an architectural writer and critic. He continues as the art director of the AIA Journal.

With degrees from Santa Clara and Northwestern Universities, Canty has specialized in architectural journalism since 1953. He was appointed executive assistant to the California Council, AIA, in 1956 and also edited four issues of the Book of Homes, a semi-annual magazine of western residential construction. In May 1959 he became executive editor of Western Architect and Engineer which was combined with Architectural Record in December as a result of McGraw-Hill Co.'s purchase of F. W. Dodge Corp.



CHINESE CONSULATE GENERAL BUILDING: Howard Wong, architect.

Hawaii Chapter, AIA, cites seven projects in design program

Seven buildings in the Honolulu area were cited in the 1962 Honor Awards program of the Hawaii Chapter, AIA, at the annual banquet January 27. Isami Enomoto was given a special architectural art award.

The fourth annual Pan-Pacific Architectural Citation went to one of Mexico's leading architects, Hector Mestre, for "consistent excellence of design." His buildings include the Banco Comercial Mexicano Office Building, Mexico Country Club, Bacardi Distillery, La Comercial Insurance Co. Building, Technological Institute of Mexico and a number of residences in Mexico City, his home.

A member of the Sociedad de Arquitectos Mexicanos and Colegio Nacional de Arquitectos, Mestre has represented his country at a score of architectural conferences throughout the world since 1948.

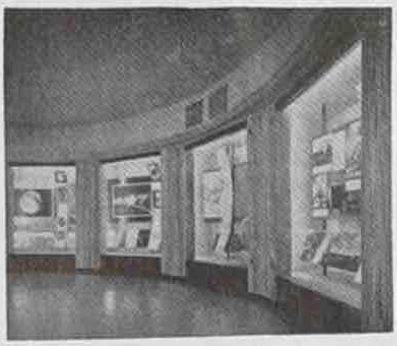
During several television interviews and press conferences while in Honolulu, Mestre commented on the poor planning for the development of Waikiki. "If there is a plan for the area, it evidently is not being followed," he declared. He also lectured at the University of Hawaii and had a showing of his works at the Honolulu Academy of Arts.

Previous winners of the Pan-Pacific award have been Kenzo Tange of Tokyo, Grounds, Romberg & Boyd of Melbourne and Leandro Loscin of Manila.

Honor Awards



BLANCHE W. HILL RESIDENCE: Vladimir Ossipoff, architect.



BISHOP MUSEUM PLANETARIUM and OBSERVATORY: Merrill, Simms & Roehrig (now Merrill, Roehrig, Onodera & Kinder), architects.



McKINLEY HIGH SCHOOL CAFETERIA BUILDING: Takashi Anbe, architect.

Honorable Mentions

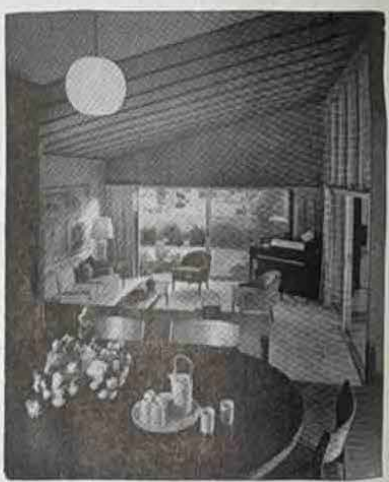
Photos: R. Wenkam (5), Williams.



RICHARD K. TAM RESIDENCE: Edward Sullam, architect.



AINA HAINA BRANCH, FIRST NATIONAL BANK: Law & Wilson (now Wilson Associates), architects.



HAROLD Y. ISHII RESIDENCE: Bradley & Wong, architects.



In a lecture delivered in Honolulu on the occasion of receiving the Pan-Pacific award, Hector Mestre pointed out several significant influences upon Mexican architecture: the country's fast-growing population (7% yearly); earthquakes and resultant testing of new structural forms such as floating foundations, thin shell reinforced concrete and molded plastics; and a cultural inheritance of elegance and form and an extraordinary feeling for proportion. All of these influences are evident in the designs for which the architect was presented this honor.

Eugene firm wins 3 awards in AIA design competition

Three of the six design citations presented in the 1962 competition of the Southwest Oregon Chapter, AIA, when to Wilmsen, Endicott & Unthank, who captured both First Honor Awards and an Award of Merit.

The all-architect jury—John M. Morse, Seattle; Bruce Walker, Spokane; and Robert Anshen, San Francisco—in its report at the January 27 banquet at the Lane County Fairgrounds in Eugene said "the area is fortunate in having so many structures of fine character." They reviewed 16 entries.

The development around the Courthouse Square was cited by the jurors as "outstanding in this area" and that "the pedestrian alleys are delightful." They also offered these comments:

- U. S. National Bank of Portland, 17th and Oak Branch:—"A charming, unpretentious and mature building. A simple plan and a very consistent appearance from all aspects, inside and out; particularly admired for the elegant use of inexpensive materials. The attractive wood pole sculpture is an integral part of the design of the exterior space."
- U. S. National Bank of Portland, Eugene Branch—"A well-detailed, sophisticated downtown bank building that makes good provision for off-street parking below grade. This confident building is a fine addition to Courthouse Square and its view into the square must make life very happy for bankers and their clientele!"
- Standard Insurance Building—"A well-proportioned two-story office building made welcoming by warmly stained woods and given interest with screen walls and handsome big trees nearby."
- Peace Presbyterian Church—"An original and interesting first unit in a highly admired master plan for total development. It is hoped that future units will be successfully added to make an ultimate unity of all the various parts—a noble challenge!"
- River Road Medical Group Building—"A skillful and well-disciplined plan for a small medical building serving four doctors. Dividing the functions into various clear areas gives direction and clear purpose that should be appreciated by those using the building."
- Low Rent Housing Project — "Carefully proportioned houses, sensitively detailed. The subdued colors and variety of setting as related to the roads make this a pleasant solution to the very difficult problem of setting duplexes on conventional lots and of designing them under stringent government standards."

Honor Awards



U. S. NATIONAL BANK OF PORTLAND, EUGENE BRANCH: Wilmsen, Endicott & Unthank, architects; James Bartell, artist.



U. S. NATIONAL BANK OF PORTLAND, 17th and Oak BRANCH, Eugene: Wilmsen, Endicott & Unthank, architects; Eugene Bennett, artist.

Photos: Tom Burns Jr. (3), Fehly Studio, Kenn Knackstedt.

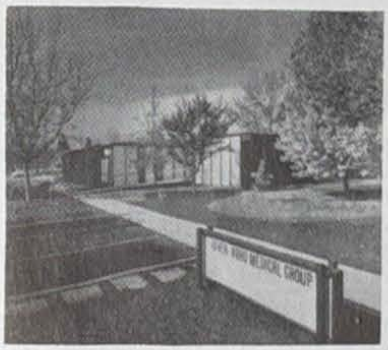
Awards of Merit



STANDARD INSURANCE BUILDING, Medford: Wilmsen, Endicott & Unthank, architects; Eugene Bennett, artist.



PEACE PRESBYTERIAN CHAPEL, Eugene: Stafford, Morin & Longwood, architects.



RIVER ROAD MEDICAL GROUP BUILDING, Eugene: Lutes & Amundson, architects.



LOW RENT HOUSING PROJECT, Springfield: Lutes & Amundson, architects.

Prison chapel subject of design competition in Washington

All registered architects who are residents of Washington are eligible for a one-stage competition to design a chapel at the federal penitentiary on McNeil Island.

The winner will be awarded the commission plus a $2,000 cash prize. Three other prizes of $1,500, $1,000 and $500 will be offered.

The jury will consist of Dean Walter Gordon of the School of Architecture and Allied Arts, University of Oregon; San Francisco architects Theodore C. Bernardi and Robert Anshen; Judge George H. Boldt of the Superior Court, Tacoma; and James V. Bennett, director, Bureau of Prisons.

Entries will be received to April 15. The competition program is available through the professional adviser, Dean Arthur P. Herrman of the College of Architecture and Urban Planning, University of Washington, Seattle.

new offices

Charles J. Grein has opened an office for the general practice of architecture at 7100 Van Nuys Blvd., Van Nuys, Calif.

firm changes

The Seattle architectural firm of Bassetti & Morse will be dissolved April 1 when Fred Bassetti and John M. Morse, who have been partners for 15 years, establish separate offices. Morse will continue to practice in the Tower Building. Bassetti, who will go to Columbia University in April for a month's stay as visiting critic, will open an office elsewhere upon his return. The firm has received numerous design citations on both the national and local levels.

David Vhay, George Ferrari and Herb Widmer of the Reno firm of Vhay Associates have formed a new partnership known as Vhay, Ferrari & Widmer.

The Honolulu firm of Wimberly & Cook, architects, has been succeeded by Wimberly, Whisenand, Allison & Tong, continuing to occupy the quarters at 315 Royal Hawaiian Ave. Associated with George J. Wimberly are George V. Whisenand, Gerald L. Allison and Gregory M. B. Tong, all longtime members of the previous firm. Former partner Howard L. Cook will open his own Honolulu office.

Engineer James M. Hastings has joined the Denver architectural firm of Langhart & McGuire, now known as Langhart, McGuire & Hastings. A graduate of Catholic University of America, the new partner formerly was a member of Ketchum, Konkel & Hastings. Nearing completion at 1716 Boulder St. is a new office building which will house the firm, adjacent to the present office occupied for several years by Victor D. Langhart & John F. McGuire in their partnership.

Glen H. Mortensen and Jack L. Hollstien have formed the architectural firm of Mortensen & Hollstien with offices at 142 N. California St., Stockton. Mortensen was in partnership with Eric W. Johnson until the latter's death November 6. Hollstien has been associated with several architectural firms since 1943 when he moved to Stockton from Nebraska.

deaths

William Mooser Sr., FAIA, at 93 the oldest active member of the architectural profession in California, died January 13 in his native San Francisco. The first city architect, he received the CCAIA Distinguished Service Citation in 1961. His survivors include a son, William Jr., also a San Francisco architect.

Portland architect Francis B. Jacobberger, 63, died February 4 following a long illness. Beginning his career as a draftsman in 1921, he took over the practice of his father, Joseph Jacobberger, in 1930. At the time of his death he was a principal in the firm of Jacobberger, Franks & Norman, which will continue to operate under that name. Co-author of the state's architectural practice law and president of the Oregon Chapter, AIA, in 1945-46, he was elected to fellowship in the Institute in 1952.

Jack Freeman Whipple, 41-year-old Stockton architect, died February 21, apparently of a heart attack. He was a principal in the firm of Clowdsley & Whipple, whose design for a new governor's mansion in Sacramento was chosen as one of 10 semi-finalists. He was the second Stockton Courthouse designer to die, Eric Johnson having succumbed last November.

Eber Francis Piers, 72, Ogden architect who designed more than 300 structures in Utah, died in December after a stroke. Working with his son, John L. Piers since 1952, he began practice in 1911.

California starts search for state architect

A qualifications review committee and interview board has been selected to screen candidates applying for the position of state architect in California to be vacated by Anson Boyd, retiring this spring. Top salary for the job is expected to be $20,500.

Assisting the director of public works, Robert B. Bradford, are architects Welton Becket of Los Angeles, Mario Ciampi and Wayne Hertzka of San Francisco and Frank L. Hope of San Diego; structural engineer John A. Blume of San Francisco; and Stanford University's vice president for business affairs, Alf E. Brandin. Bradford will conduct the final interview.

Candidates must have a broad and extensive architectural administrative experience and be eligible for professional registration in California. Applications will be accepted through April 13. Further details are available from John F. Fisher, executive officer, State Personnel Board, 801 Capitol Ave., Sacramento 14, Calif.

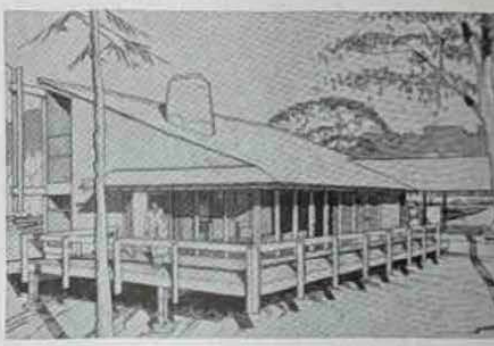
Zema repeats win in Seattle's Home of Month competition

Initial winner of the AIA-Seattle Times Home of the Month program eight years ago, Gene Zema, scored a repeat victory when a house he designed on Mercer Island was selected over the 11 others shown during 1961. The architect received a fountain trophy commissioned by the Times, the clients, Mr. and Mrs. H. P. Lupton, $500. Builder George Watts also was cited at the January 25 banquet presentation.

The all-architect jury—A. O. Bumgardner, Aaron Freed and John Rohrer—said the outstanding feature of the winner "is the quality of its interior space. It has an open plan arranged in two stories, providing individual spaces of an intimate character; yet these private areas are clearly seen to be part of one exciting architectural volume.

"Effective use of the elements of surprise and contrast are noted as one walks through the house. But if architecture has here been treated as an exercise in pure space, the qualities of warm residential character and livability have in no way been compromised.

"Each jury member felt this to be a house in which he would like to live."



WINNING HOUSE makes logical use of narrow lot to maintain privacy, yet provides good water view through native trees.



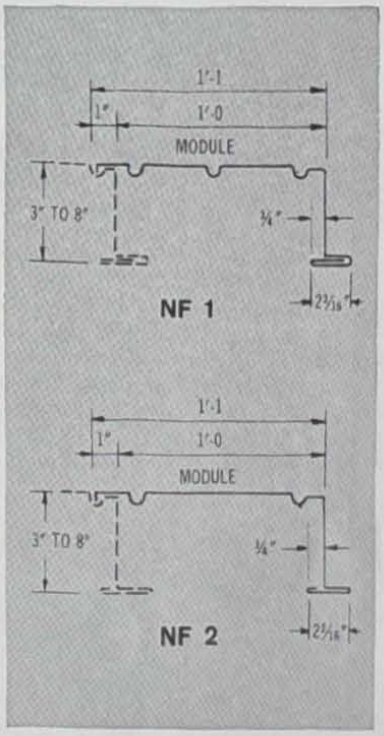
FOUNTAIN TROPHY is examined by architect Gene Zema, banquet speaker Albert Bush-Brown of MIT, and sculptor Virginia Wysel.

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a narrow-flange long-span structural section

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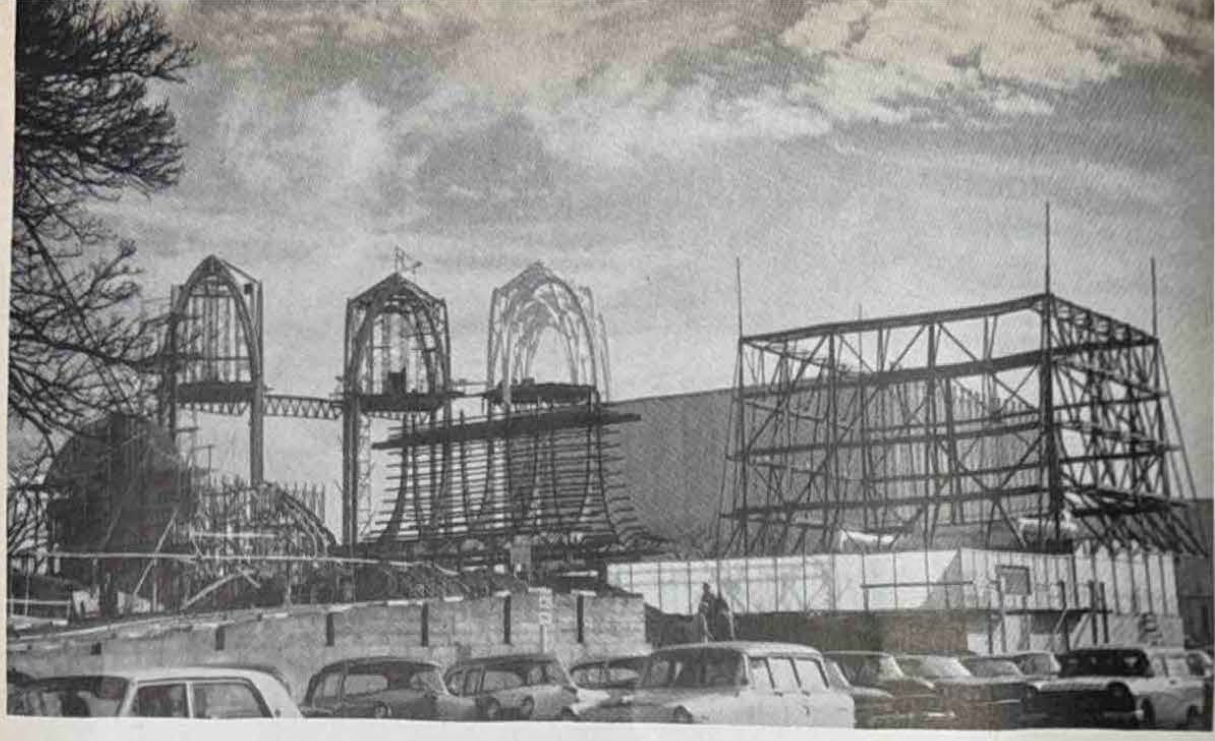
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The month-to-month progress reports will be climaxed in April when Pacific Architect & Builder devotes its entire issue to a comprehensive coverage of the World's Fair, both from a design and construction standpoint. Requests for additional copies, which will be available in a limited quantity at $1 each, will be accepted to March 20.

Progress report No. 6: Seattle World's Fair

FEDERAL SCIENCE PAVILION • Framed by the concrete grillwork which makes up the walls facing the courtyard and major thoroughfares, the five precast concrete towers, rising 100 ft. to their peaks, dominate the six-unit complex. The vaults will be illuminated at night by fixtures suspended from stainless steel rods.

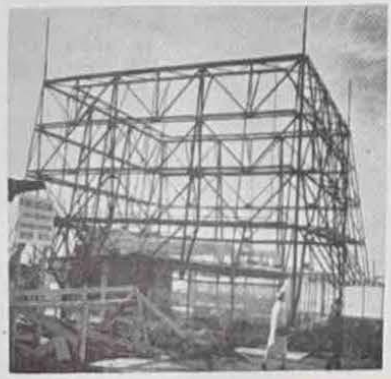
SEATTLE - FIRST NATIONAL BANK • Walls of the steel structure are glass at the ground level, enclosing a complete banking facility, and fiberglass above, decorated with colorful maps of Washington and the world to indicate the scope of the client's operations.

INFORMATION CENTER • Sponsored by General Insurance Co., this pagoda-like structure will be manned by personnel who will be able to answer questions not only about the fair but about Seattle and the entire Puget Sound area. The Douglas fir laminated beams will be covered with a coral-colored vinyl-impregnated nylon fabric. Not shown is the 50-ft. pole to which the pavilion's "information" sign is attached.



FEDERAL SCIENCE PAVILION • Minoru Yamasaki & Associates—Naramore, Bain, Brady & Johanson, associated architects-engineers; Worthington, Skilling, Helle & Jackson, structural engineers; Purvis Construction Co., general contractor.

SEATTLE-FIRST NATIONAL BANK • Paul Thiry, architect; Peter H. Hostmark & Associates, structural engineers; Northland Constructors, general contractors.

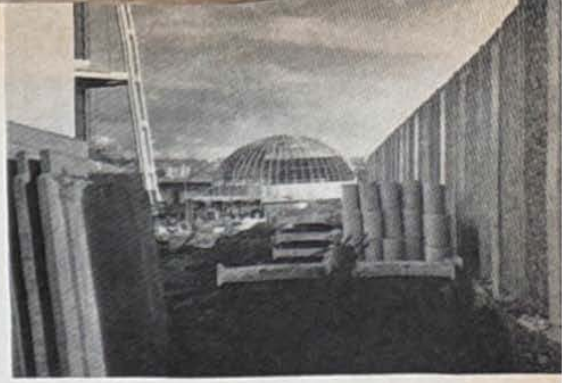


PA&B staff photos



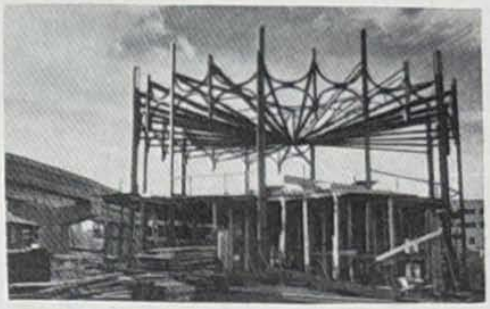
INFORMATION CENTER • Austin Associates, architects-engineers; McCann Construction Co., Inc., general contractor.

ALASKA EXHIBITION BUILDING • Plywood sheathing over glued laminated ribs make up the two-level domed structure, connected by a circular ramp. Sprayed with asbestos fiber, the dome itself will become a projection screen for the Aurora Borealis display. The National Bank of Commerce, which is providing free space for the 49th state, will occupy one-fourth of the 4,000-sq. ft. building.



ALASKA EXHIBITION BUILDING • Mandeville & Berge, architects-engineers; Howard S. Wright Construction Co., general contractor.

SKYRIDE TERMINAL • From this playful structure in the gayway zone to an identical one in the international exhibits area, the "76 Skyride" will lift visitors riding in three-passenger cars 60 ft. above the fairgrounds along 1,400 ft. of cable. Stations consist of exposed steel framework with reinforced concrete platforms and foundations; roofs are sunbursts of half-cone shaped plastic panels. The Skyride is manufactured by a Switzerland firm that made similar devices for the 1958 Brussels World's Fair and Disneyland.



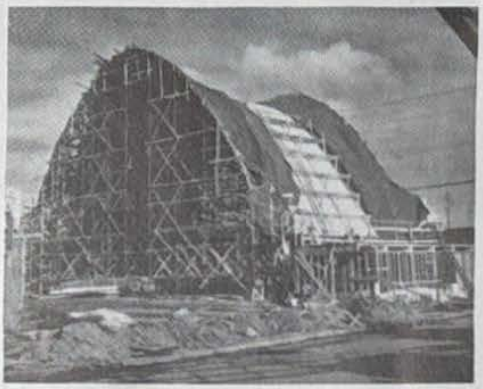
SKYRIDE TERMINAL • Tucker & Shields, architects; John H. Stevenson Sr., structural engineer; Howard S. Wright Construction Co., general contractor.

CHRISTIAN PAVILION and CHILD CARE CENTER • Rods drop down from glued laminated arches arranged in a series of umbrellas to support the simple wood ceiling diaphragm. A thin strip of glass runs the length of the building directly beneath the roof. Front facade will feature a stained glass panel produced by John W. Winterich & Associates, winner in an international competition conducted by the Stained Glass Association of America. The center will accept children from three through seven years of age in two-hour sessions. A small chapel and exhibition hall also are part of the project.



CHRISTIAN PAVILION and CHILD CARE CENTER • Durham, Anderson & Freed, architects; Hal Roe, structural engineer; Elling Halvorson, general contractor.

ENTRY GATE • Three layers of 1-in. 1x6 t&g boards, bonded together with glue, staples and nails and painted white, span 75 ft. at the Fifth Avenue east entrance. The south gate, designed by the same architectural firm, will feature ornamental poles. The remaining two gates will consist of ticket booths and tree groupings.



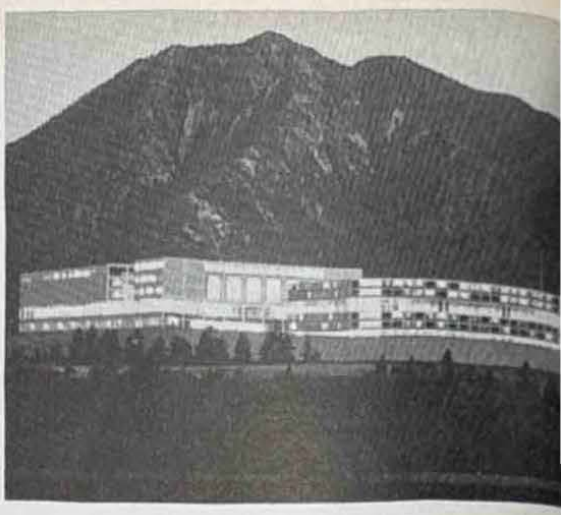
ENTRY GATE • Bassetti & Morse, architects; Worthington, Skilling, Helle & Jackson, structural engineers; Wick Construction Co., general contractor.

ELECTRIC UTILITIES PAVILION • Of gunite construction, the exhibit will feature a 40-ft. high model dam with water flowing over the spillway at the rate of 3,000 gpm. and a 22-ft. long map of Washington floating in the pond, pinpointing all the dams in the state.



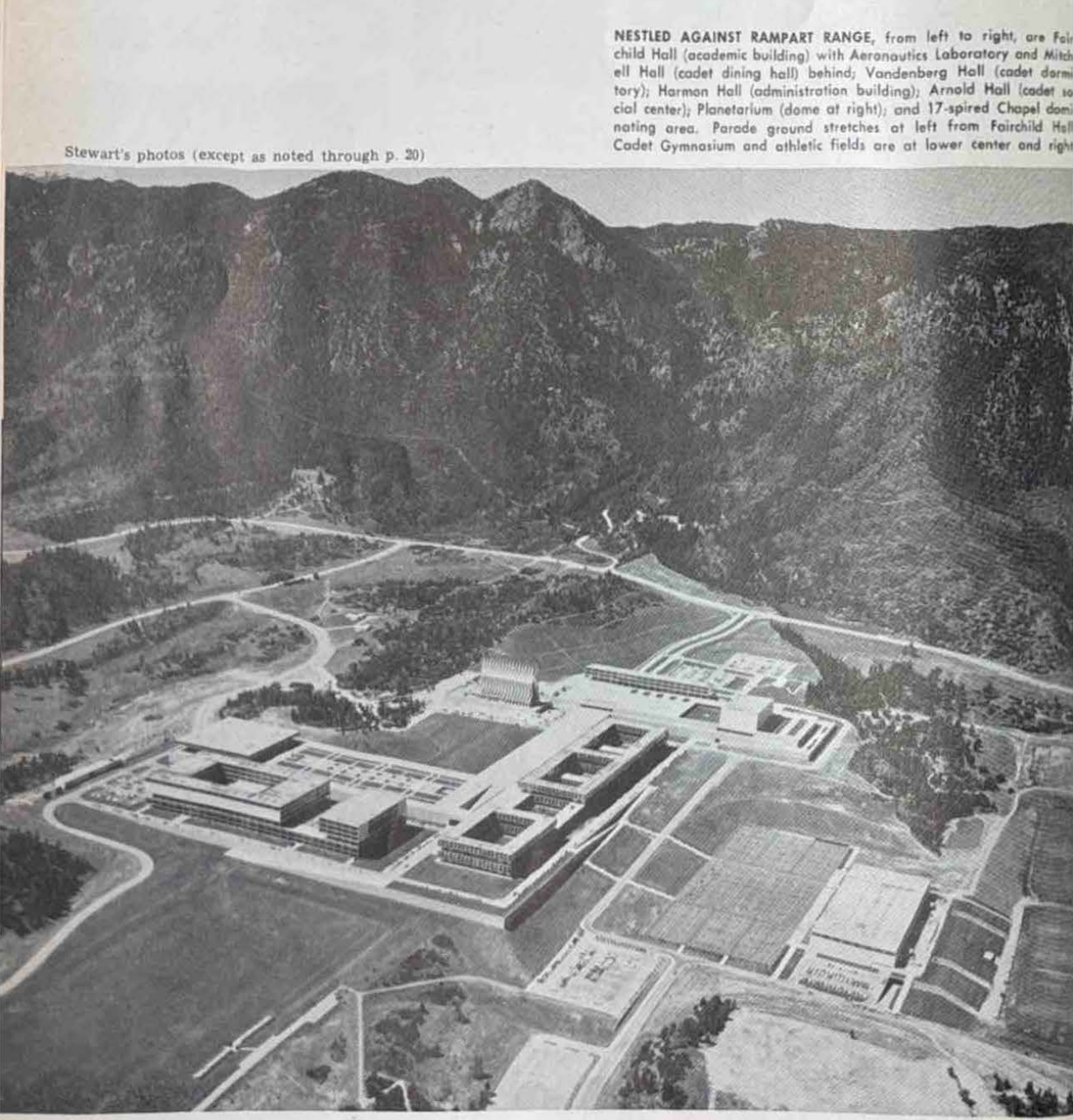
ELECTRIC UTILITIES PAVILION • Hartwig Displays, designer; Jack N. Bryant, architect; Harvey H. Johnson, structural engineer; Harvey H. Johnson Co., general contractor.

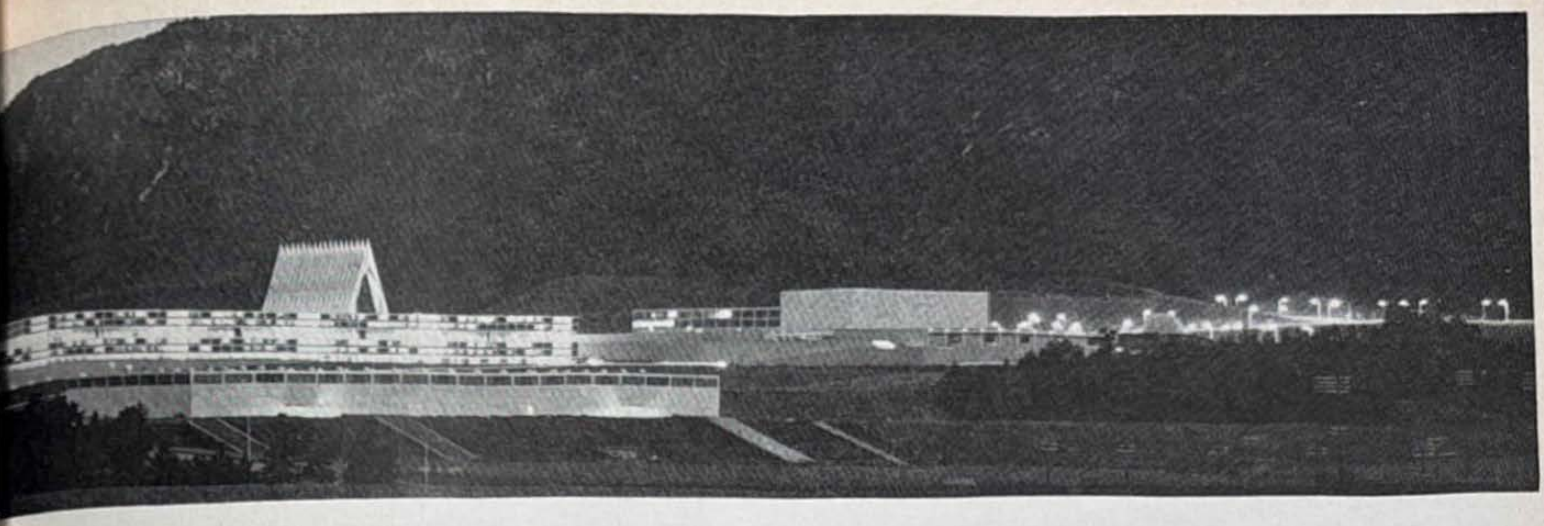
U. S. Air Force Academy: 1962



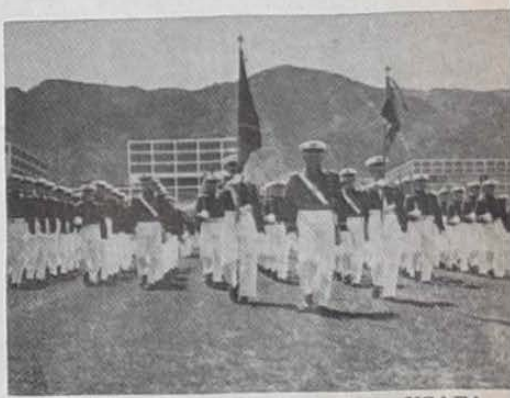
NESTLED AGAINST RAMPART RANGE, from left to right, are Fairchild Hall (academic building) with Aeronautics Laboratory and Mitchell Hall (cadet dining hall) behind; Vandenberg Hall (cadet dormitory); Harmon Hall (administration building); Arnold Hall (cadet social center); Planetarium (dome at right); and 17-spired Chapel dominating area. Parade ground stretches at left from Fairchild Hall. Cadet Gymnasium and athletic fields are at lower center and right.

Stewart's photos (except as noted through p. 20)





SKIDMORE, OWINGS & MERRILL, Architects-Engineers



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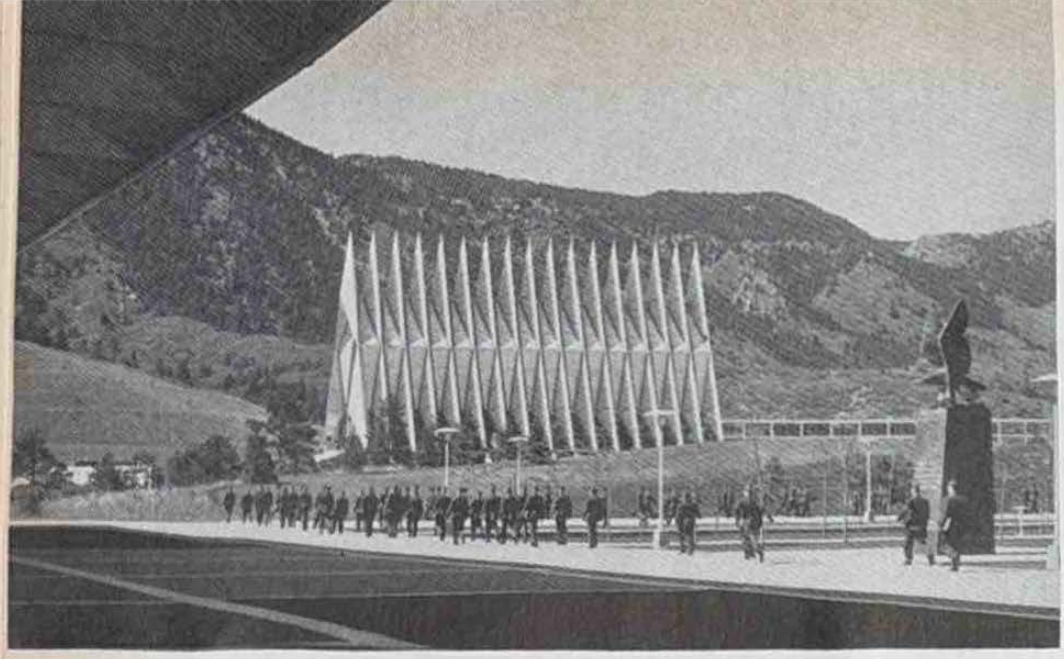
With the Chapel scheduled for completion this summer, the time seems right to revisit the U.S. Air Force Academy (PA&B for March '61 and Nov. '60) north of Colorado Springs, Colo. Except for this controversial project, all presently authorized government-financed construction is finished. Congress appropriated $138.8 for construction, including $1.9 million spent at the interim site on facilities which have reverted to other Air Force uses. In addition to these funds, the Air Force has utilized almost $23 million for equipment and furnishings at the academy.

The 40,000-seat football stadium (architects: Praeger-Kavanagh-Waterbury), which was financed by private funds raised by the Air Force Academy Foundation, should be ready for the coming gridiron season. The foundation, a nationwide group of civic leaders set up to provide those facilities which cannot be financed with government funds, has also given the academy an 18-hole golf course and a recreation area in the nearby mountains. The next planned project is the establishment of a Memorial Education Center on the grounds.

There are several additional facilities which the academy would like to have in the future. These, which would require appropriated funds and have not yet been authorized, include a light plane airfield and a fieldhouse.

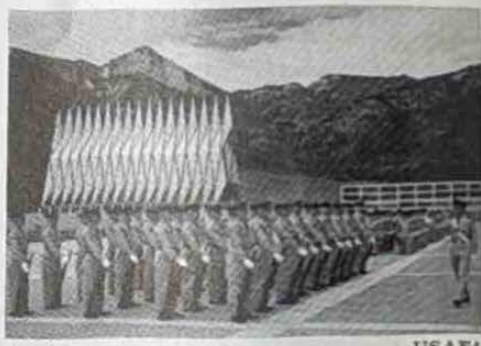
But to what does this complex of glass, aluminum, steel, granite and white marble add up architecturally? It is indeed a question which has been asked many times in professional circles and one which has been answered in many different ways. It is grossly unfair to venture an opinion without having seen the academy first hand, without having experienced the grandeur of the site.

Simply stated, the academy is an appropriate and successful solution in the eyes of this writer, particularly the skillful handling of the master plan to the terrain—a series of mesas fingering out from the Rampart Range. The orderly buildings reflect the discipline that is part and parcel of cadet life; and the Chapel, its 17 aluminum spires soaring to the sky, dominating the campus from every vantage point for miles around, is vitally expressive of the age in which we live. R.E.K.



AIR FORCE ACADEMY
Chapel

RIGIDITY of steel structure, which supports 17 spires rising almost 150 ft. above ground level, is matched by cadets on terrazzo plaza.



USAFA

THE TRI-FAITH CHAPEL had a difficult time getting off the ground as it became embroiled in arguments on all fronts—legislative as well as architectural—but finally its completion is only several months from reality. The project, nevertheless, continues to be a matter of dispute.

The architects-engineers call their design "a chapel of the future for an Air Force of the future." Critics, on the other hand, have given it a variety of appellations, including "the tin tent."

The 100 steel pipe tetrahedrons now are covered with aluminum and divided by narrow panels of stained glass. The building provides separate houses of worship for the Protestant, Catholic and Jewish faiths within one structure. This "integration" also has been the grounds for attack.

A broad flight of stairs leads to the vestibule of the Protestant nave above the terrace level. Flanking each side of the enclosure will be 36 pews with a seating capacity of 900 cadets. The glass panels will suffuse the worship area with multicolored lights.

The Catholic nave, located on the



RETAINING WALLS are granite faced.

terrace level, is essentially rectangular in character. Its exterior walls are precast concrete panels with stained glass inserts similar to those in the Protestant area. Twenty-one pews will flank each side, seating 500 cadets. The sacristy, vestry and altar will be located on the north end. Dual sets of steps lead to this level.

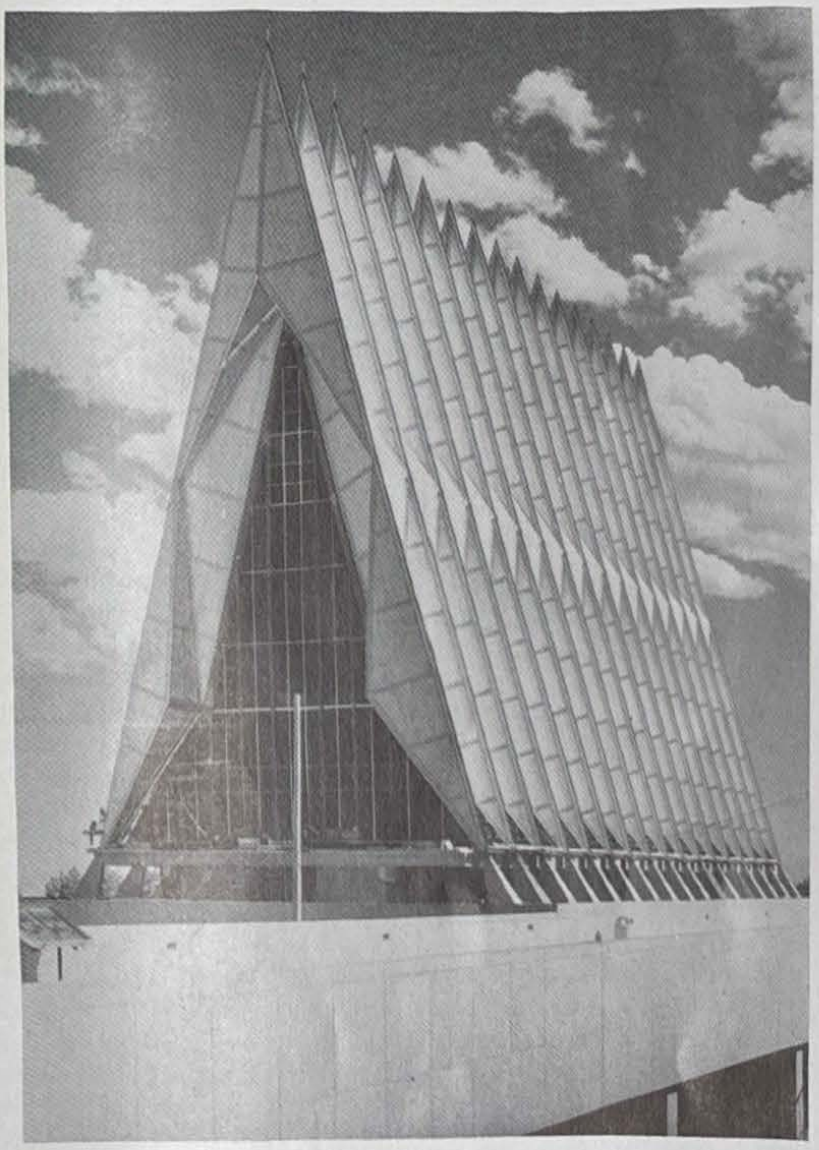
The circular Jewish worship center is located on the same level as the Catholic area, directly north of it. It will be enclosed by vertical wooden uprights with inserts of white opalescent glass opening into four separate vestibules. Three groups of pews facing the east will seat 100.

While attendance at religious services is mandatory for cadets of the fourth class (freshmen), Protestant cadets of the third and second classes have the option of attending services at the church of their choice in Colorado Springs. Catholic cadets attend mass at the academy. Chapel attendance for first class cadets is entirely optional.

Robert E. McKee, General Contractor, Inc., got the project underway in September 1959. The total contract of $3,385,136 includes $3,237,298 for the Chapel, $94,201 for associated utilities and $53,637 for paving.

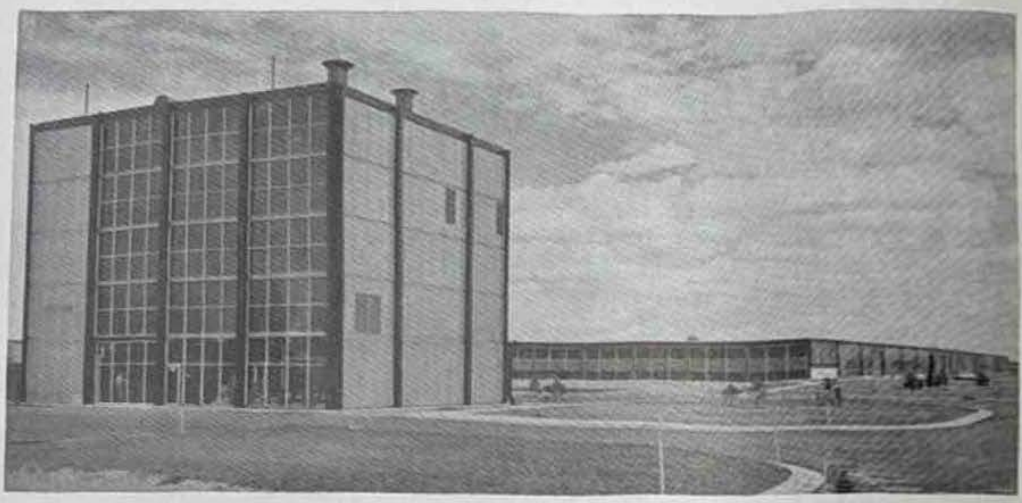
Mississippi Valley Structural Steel Co. was the fabricator for the intricate tubular framing system.

TETRAHEDRONS are separated laterally by 2-ft. wide window strips.

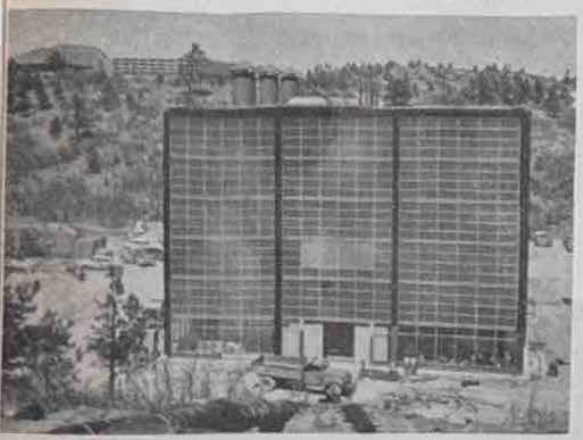


AIR FORCE ACADEMY: Heating Plants





PLANT NO. 1 is located south of Academic Area; No. 2 in service and supply area.



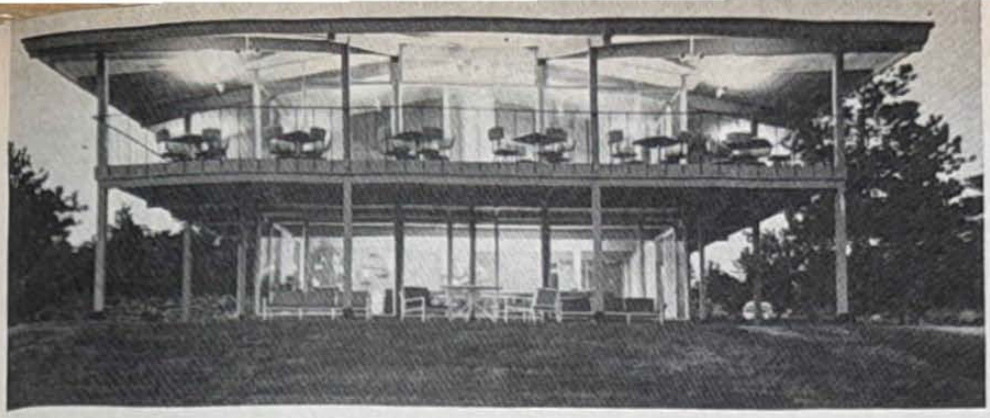
Plant No. 1 won second prize in the initial Air Force-wide competition for excellence of operation and maintenance of heat-generating facilities. It was particularly commended for its efficiency computations, annual dollar operating costs, supply storage and housekeeping standards on a par with, and in some cases superior to, many major U.S. industrial plants.

TYPICAL of the extent of the planning and detailing which has gone into every aspect of the academy complex are such utilitarian buildings as the two heating plants which in no way detract from their surroundings; if anything, the blue steel structures which frame a lighter blue heat-absorbent glass become an asset in their respective locales.

Like their neighbors, the plants symbolize the space age with their clean lines and their color. Both are similar in concept except that No. 1 is all glass (smooth on the interior, rough on the exterior to deflect the sun's rays), while No. 2 has some concrete walls, painted gray. Inside, both make the most of color—blue boilers, red machinery, yellow handrails. Boilers are adaptable to nuclear power.

Heating water is supplied from No. 1 through separate transmission piping to all of the Academic Area buildings, Officers' Club, Community Center buildings and the Hospital; No. 2 takes care of the service and supply area needs.

The photographs on this page indicate how the plants are integrated into the overall plan; they also suggest the scope of the academy grounds which include 17,900 acres of mesa and scraggly forest on the foothills of the Rockies with a population of about 300 deer. About 10,000 acres are usable. And standing guard over all of this is towering Pike's Peak, 14,110 ft. high.





TWO-LEVEL PLAN makes most of natural sloping site, upper being at grade at approach and entrance side and lower at grade on golf course side. Exterior walls are set back 6 ft.



Eisenhower Golf Clubhouse
Colorado Springs, Colorado

●

LANGDON MORRIS
Architect

ROBERT L. BARTLETT
Contractor

THE PROGRAM, comments the architect, required "a building which was strongly related to SOM's academy buildings and at the same time inexpensive ($8 per square foot), warm, gay and predominantly wood construction."

One of the principal methods of relating the clubhouse to the other structures was the formal plan. In addition, it incorporated these five design elements which are common to the academy complex: floor-to-ceiling glass; aluminum trim for the glass; outside metal railings; exposed aggregate precast wall panels; and exposed structural columns and spandrels in the same bay proportion.

The two-level building has 6,250 sq. ft. under a hipped roof. Frame is of glued laminated fir beams and columns. Decking is 4x6 red hemlock with its grooved pattern spanning 16 ft. on the roof and 8 ft. on the floor. Exterior walls are prefabricated sandwich panels with green aggregate facing, 8-ft. high sliding glass doors and 8-ft. high narrow windows which are glazed with obscure glass.

For year-round use of the cadets, base officers and personnel, the clubhouse contains men's and women's lockers, snack bar, kitchen and storeroom, lounge and outside deck on the upper level; golf club and cart storage room, utility room and general storage, pro shop and manager's office on the lower level.

The following letter by the drama and music critic for the Seattle Times might very well have been addressed to the governor of any state or the mayor of just about any city in the West. While the editors of Pacific Architect & Builder do not necessarily agree with every point made by Mr. Guzzo, they do support in principle his efforts to encourage cooperation between the design and engineering professions on public projects.

Let's stop the 'engineering handouts'

by LOUIS R. GUZZO

An open letter to Governor Rosellini and Mayor Clinton:

With your leadership, the state and city can put an end to the age of "engineering handouts."

The people of Seattle have indicated emphatically that they want a revision of procedure on public projects. They are fed up with the usual routine of being permitted to "take a look" at a building or bridge after the engineering class has made the decisions—and when it is too late to effect changes in design or site.

Whether our lawmakers like the word or not, the key to the problem is "esthetics." Webster defines it as "the science of sensuous knowledge whose goal is beauty."

To the layman it is translated simply as anything that is pleasing to the eye and the senses. He may not know why a building or bridge is beautiful or ugly, but he knows that it is so.

He also may not know how easily ugliness could have been transformed into beauty. But he has elected officials who should know or find out.

The science of esthetics belongs in the beginning stages of public planning. Alongside the state and city engineer on every structure built from public funds should be an outside consultant on esthetics.

He may be an architect, a landscape architect or a designer in whatever field is appropriate to the project. In effect, he is the spokesman for beauty, the voice and conscience of the people who will have to look at and live with the resulting structure thereafter.

The state has an art commission and so has the city. They are accepted in too many quarters as pesky necessities, purveyors of "frills." This is so despite the fact that they have contributed more to beautification in this area than any other single organization.

They could do more, much more. Unfortunately, their lowly state as "advisers" gives them the status of last door on the right. When they are consulted, the damage is often irrevocable. They have salvaged a few monstrosities here and there, but they have been forced to do it with pulmotors instead of pencils.

Here's an example: At a Municipal Art Commission meeting 10 days ago, an official of Metro addressed the advisory agency with a sketch in hand. It was a drawing of the proposed sewage-pumping station at Matthews Beach.

The commissioners applauded the landscaping plan but described the building, particularly its accordion-like roof, as "grotesque."

The Metro official said: "We came to the city a year ago with our plan and were told to go through channels. It has taken us this long to get to you with a request for approval."

The request for approval wasn't granted. Instead, the commission's architectural members were asked to meet with Metro's designer to suggest revisions in the plans. They're at it now.

When and if the revisions are accepted, the project probably will have to start through channels again, all because esthetic principles were considered as an "after-thought."

In the meantime, the voice of the community at Matthews Beach has been lost in the scramble. Perhaps it would have been better if the pumping station hadn't been planned for Matthews Beach in the first place. At any rate, the residents there never had a chance to be heard.

Doesn't this example sound familiar? The state pushed the freeway through before the people of Seattle realized a concrete tornado was approaching. The Evergreen Point Floating Bridge was already under construction before a few probing citizens picked out the horrendous railroad-bridge trusses designed at each approach.

A competent architect was hired as a consultant on design and landscaping of interchanges only after several groups howled in protest over inadequate planning.

The battle of the ditch was over almost before it began. In that dispute, it became common practice to blame First Hill residents for the unreasonable delays in downtown freeway construction.

On the contrary, state engineers should be blamed for the delays. If they had hired that "spokesman for esthetics and the people" in the first place, they might have avoided the rhubarb that developed.

Conditions are considerably better on the municipal planning level, but the record isn't unblemished.

The proposed Westlake Mall, once envisaged as a relieving patch of green in a busy center, is darkened by steel girders. Will it ever be the downtown park Seattle needs?

A new City Hall was rammed through the council without benefit of competitive designs. How long before the city will build another?

Utilitarianism is the religion of the hurry-up practitioners. Get it up! Get it up! And cheaply.

The result is cheap, all right. But in the eyes of the citizens who must abide it forever, it is far too expensive. Every penny paid for an unwanted item is a penny wasted.

Can a governor or mayor take action to eliminate potential eyesores? He certainly can. Last year, a San Francisco Chronicle writer exposed the "brutal mediocrity" of a design for the projected San Mateo-Hayward bridge. When Californians reacted with a concerted shout, Gov. Edmund G. Brown ordered the State Toll Bridge Authority to scrap the design and start from scratch (see opposite page).

Governor Rosellini and Mayor Clinton, you have often expressed the need for esthetic planning. You have asked agencies within your governments to seek the advice of art commissions on public construction.

Now, please, take the big step and elevate the beautification expert to the level on which his services will bear fruit—at the top and in the beginning.

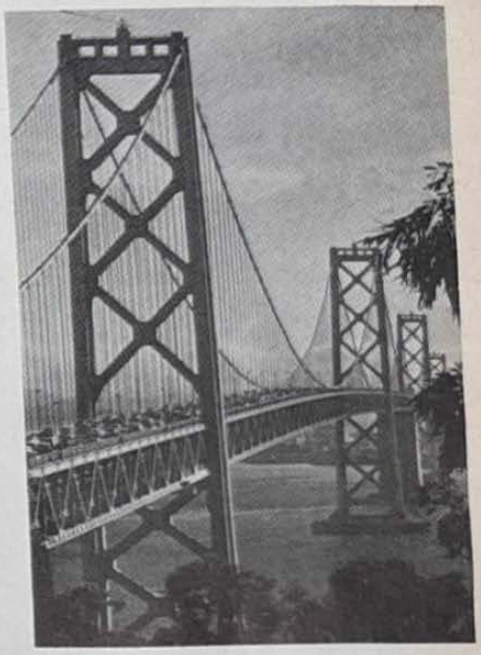
In a followup article to his open letter, Mr. Guzzo gave Mayor Clinton, the City Council and some other department heads, notably City Engineer Roy W. Morse, a pat on the back for taking steps in the right direction. "If state agencies—particularly the Highway Department and Toll Bridge Authority—would take a cue from Seattle, the running battle over esthetics would be terminated and the modern version of 'Beauty and the Beast' could have a happy ending," he wrote.

THREE BAY AREA BRIDGES: THEIR ESTHETICS SPAN A LOT OF WATER

Three bridges ring San Francisco Bay. Two of them, the Golden Gate Bridge and the San Francisco-Oakland Bay Bridge, are widely admired as among the most beautiful in the country. Both had leading architects as consultants: Irving Morrow on the former and a group of architects headed by Timothy Pflueger, on the latter. The third, the San Rafael-Richmond bridge, has been publicly deplored as an eyesore, dubbed "the roller-coaster" because of its peculiarly humpbacked appearance. It was unblessed by any architect's hand or eye.

With this stunning contrast constantly before them, Bay residents raised a howl of protest when a sketch of a massive, brutal design for a new San Mateo span was published recently. Their protests, and that of the press, led to the state's speedy withdrawal of the plans and to the subsequent appointment by Governor Brown of William Stephen Allen of San Francisco as architectural consultant for a new design. We congratulate California and its vigilant citizens and press for averting a visual misfortune. They deserve a bridge that will match in delicacy and grandeur the two fine ones that now grace San Francisco Bay. It encourages us in the hope that one day architects will be engaged as a matter of course to advise on the design of all bridges—and all highways and freeways as well.

Phil Palmer

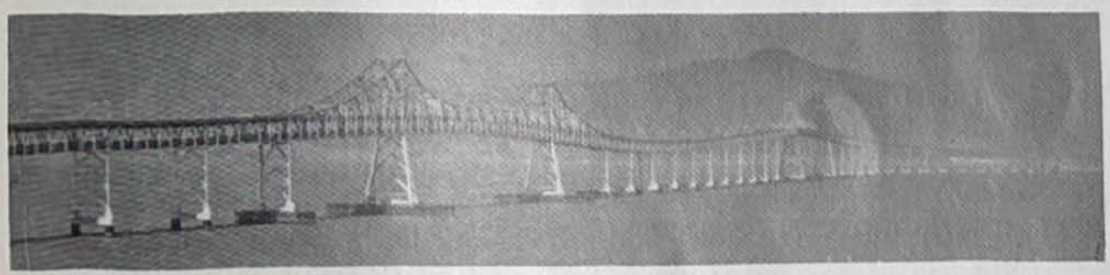


SAN FRANCISCO-
OAKLAND BAY BRIDGE

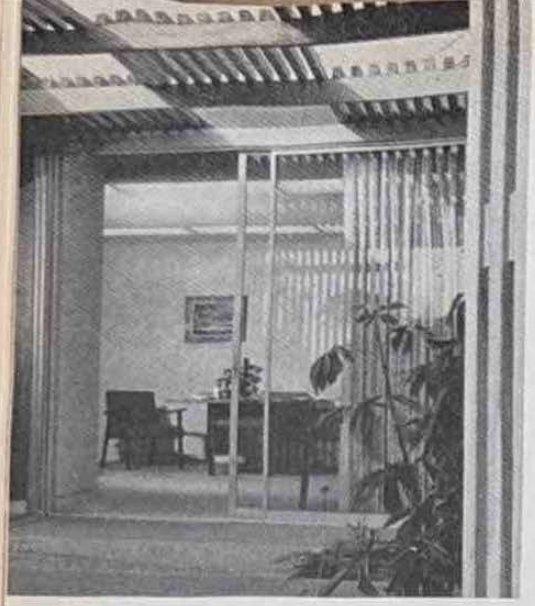
Phil Palmer



GOLDEN GATE BRIDGE



SAN RAFAEL-RICHMOND BRIDGE



Headquarters Building
H. Kaplan & Co.
Los Angeles, California

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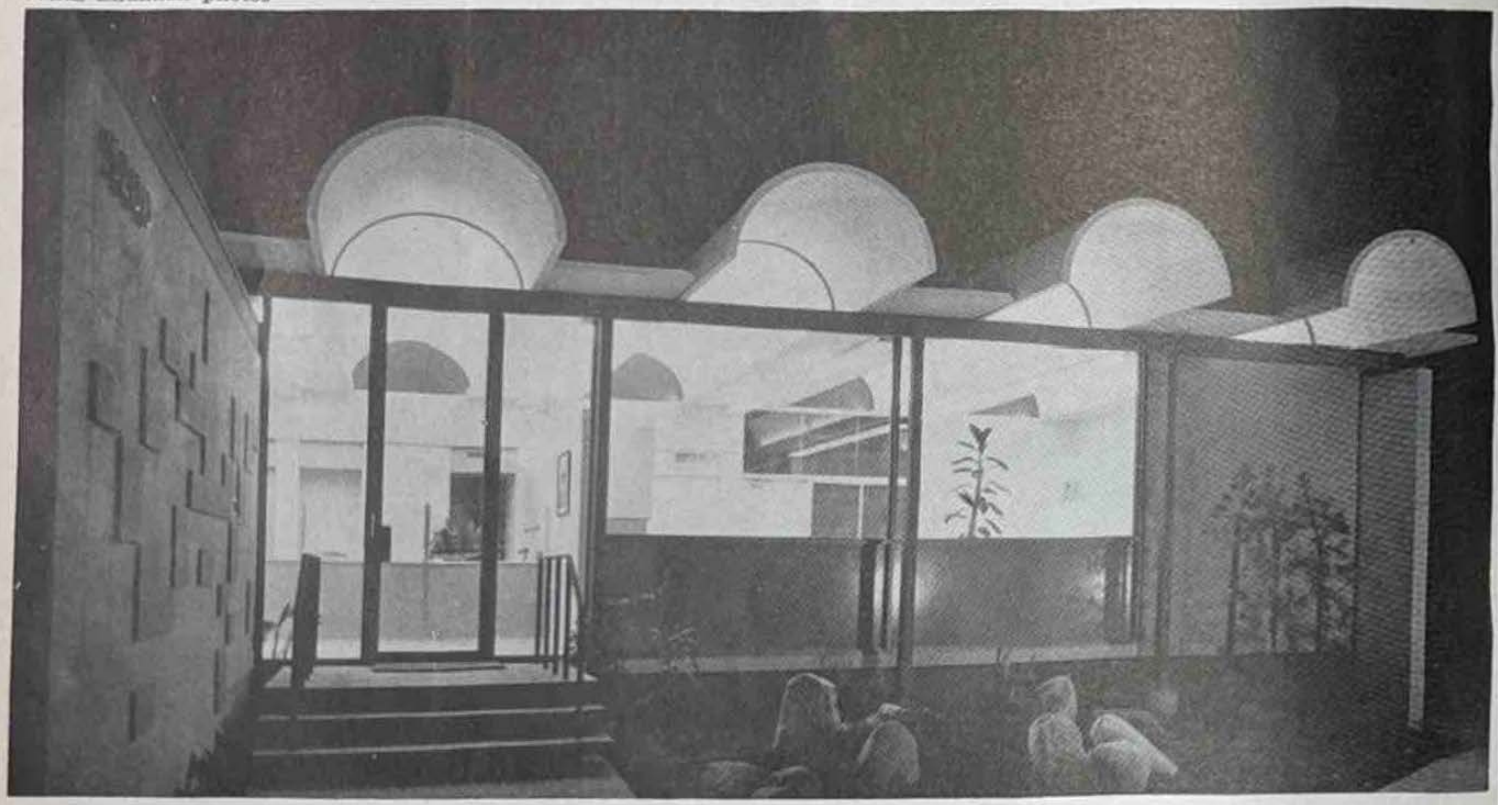
MAYER & KANNER
Architects

MORRIS GOLDSMITH
Consulting Engineer

H. KAPLAN & CO.
General Contractors

Julius Shulman photos

CONCRETE BLOCK MASONRY WALLS are laid to create abstract murals. Curtain wall facade has gray blue glass set in aluminum members. Executive offices are paneled with matched walnut and teak.



Roof design employs new techniques

CELEBRATING its 50th anniversary last year, this construction firm built a new one-story headquarters facility which introduced several new structural techniques and products.

The roof, consisting of five plywood vaults, 30 ft. long and half of a 5-ft. diameter circle, span the building without interior support. The vaults rest on a steel frame without the use of end beams, marking the first time this type of structure has been approved by the Los Angeles Department of Building and Safety.

The vaults were monolithically formed of six layers of 1/8-in. fir plywood veneers laminated and glued over a form employing top pressure for curing. They were raised in place by crane in a matter of minutes. Roofing compound is a cold spray membrane. Ends of the vaults are glazed with tinted glass.

Ceilings are of sprayed acoustical plaster and the drywall partitions have been covered with textured plastic wall covering.

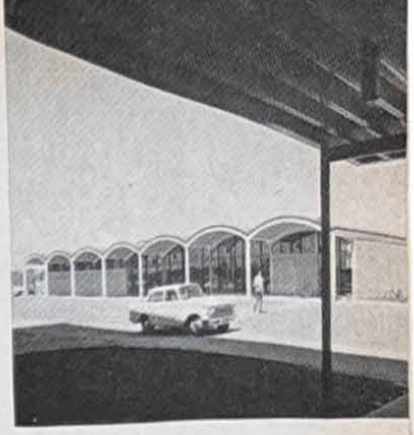
The air conditioned building includes an employees' snack bar and lounge and large storage facilities, with adequate parking for personnel, subcontractors and clients.

Cafeteria
University of California
Davis, California

KITCHEN & HUNT and JOHN FUNK
Associated Architects

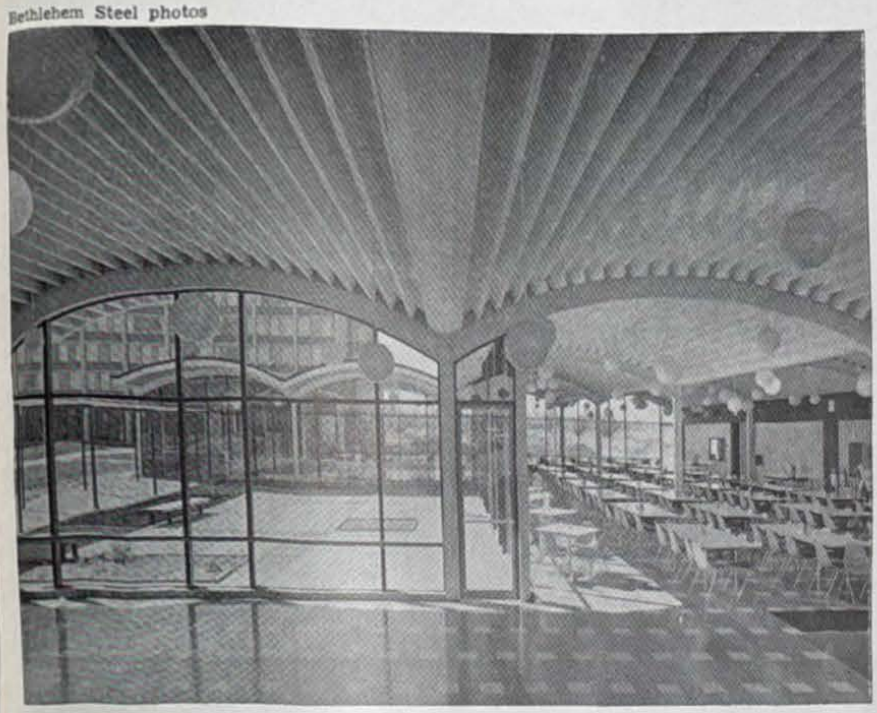
H. J. BRUNNER
Structural Engineer

CONTINENTAL—HELLER CONSTRUCTION CO.
General Contractor



STEEL COLUMNS rest on system of concrete caissons, set 20 ft. deep to prevent differential settlement of structure. Floor is concrete slab on gravel fill.

Bethlehem Steel photos



ARCHED BEAMS are connected by spandrels, forming series of bays 22 ft. 8 in. wide and 32 ft. 8 in. long. Steel decking is lined with fiberglass strips.



Sunlight adds dimension to dining facility

LONG CLEAR SPANS of steel decking and extensive use of glass introduce a maximum of openness and light to this one-story building situated in the center of a quadrangle of four residence halls. Arched roof enhances this feeling and provides a pleasant view from dormitory windows looking over the cafeteria.

Color is an important feature of the design. Structural steel outlining the arches is white; steel decking forming the roof is left exposed on the interior and painted light blue. White spherical lighting fixtures hang from the steel decking. Red brick curtain walls surround the kitchen area. Floor covering is vinyl asbestos tile in a blue, gold and white pattern. Serving lines are hidden and separated from tables by hardwood screens.

Cafeteria is designed to accommodate 600 students at one sitting and doubles as a meeting hall for summer conventions and campus organizations. It is in a U-shaped plan, bordering three sides of a central court. Recreation room will be constructed in the future at the open end, completely enclosing the court.

In addition to kitchen facilities and the cafeteria, the building contains offices for dormitory management and linen storage. Mechanical room is below the kitchen.

Where architects hang their hats

BURNETT C. TURNER
Los Angeles, California



Julius Shulman photos

NORTH SIDE also has auto access.

THIS ONE-STORY BUILDING is located on the fringe of the central business area within two miles of the City Hall. It fronts on a major traffic artery but is reached by tenants (three other architectural firms—Robert Trask Cox Associates, John J. Landon Associates and J. E. Stanton & William F. Stockwell—and artist Steve Madden) and clients from a quiet residential street at the higher level, which also has 12 covered parking spaces. Freeways are located nearby.

An old dwelling unusable for office purposes was demolished but much of the planting was retained so that the northerly outlook is framed by trees and the southerly entrances open on a landscaped court. The 5,200 sq. ft. is divided into three basic areas, each surrounding a core of toilets, a snack bar and air conditioning equipment. Entry doors from the court are interchangeable with glass panels, so it can be left in one tenancy or divided into from three to six bays, each with its own entrances, or even into 12 bays if joint entries are used. Six individual electric heat pumps are tenant controlled.

Says the architect-client: "We like it here with north light and a view above the boulevard and sunshine and flowers at our door."

RETAINING AND END WALLS are concrete block; stucco finish is painted gray and gray-green, with bright blue, orange and yellow panels and identification signs. Vertical louver blinds afford sun protection on south.



Urethane chemistry aids masonry walls

Textured coatings enable architects and builders to provide exteriors of their structures with long-lasting protection

New plastic coatings with a built-in granular texture are providing the solution to one of the oldest problems of architects and builders—the effective protection, decoration or restoration of concrete or masonry walls and foundations. Based on urethane, a resin that gives promise of proving to be one of the toughest materials yet developed, they are particularly suited for those concerned with designing and building structures whose exteriors demand long-lasting protection and beauty.

These new coatings are designed to be spray coated on poured, precast and prestressed concrete; masonry, brick and concrete block; asbestos board, masonite and overlay plywood panels.

Factory-trained and franchised applicators, using specially developed spraying equipment, spray the material from a three-nozzle gun. Two of the nozzles apply the clear or pigmented fluid, while the center nozzle emits a stream of dry aggregate, usually a grit of selected particle size and type.

This urethane compound, made by B. B. Chemical Co., is a two-package solution consisting of the vehicle and a catalyst. Mixed with the selected aggregates in mid-air, it becomes a conglomerate that adheres tenaciously to any rigid surface. The resultant coatings provide excellent weather resistance; they will not craze, wrinkle, peel or blister and retain their color indefinitely. The texture may be varied from that of fine, steel-floated concrete to a rough, pebbly surface.

Because of their excellent adhesion and efficient sealing properties, the coatings effectively stop spalling, flaking and other types of erosion caused by the elements. Where a new wall is tied into an old one or where a wall is constructed of different colored blocks or even of different materials, they provide a pleasingly uniform surface. In addition, drying time is faster than that of oil-based paints.

The new coatings are available in a wide range of colors and these may be custom mixed to yield virtually any hue in the rainbow. By choice of colors, by varying the grit size and type and by application technique, the user may express a versatility of texture and appearance unequaled by that of any conventional finishing material.

Among the chemical and physical characteristics is the remarkable ability to bridge or fill in small cracks, holes and other surface imperfections. This, together with their total opacity, make them a highly suitable covering for cement and cinder block walls, brick, stucco, cut stone and other types of masonry.

The material has been marketed commercially and observed under actual use by the manufacturer's affiliate in Sweden where the rugged climate has provided detailed test data on its performance. The coatings are currently enjoying a wide acceptance in Europe. Prior to being released in this country, the spraying equipment was improved and new standards of composition and application adopted.



MASONRY WALLS of relatively new building soon begin to reveal ravages of weathering if they remain unprotected, as indicated by 10-year-old plant in Burbank, Calif.



TEXTURED CHARCOAL COATING is accented by coral and yellow marquee. Building wins nomination as best overall plant improvement.

The textured coatings are expected to narrow the price gap between wood and composition materials and those of masonry veneers with acceptably attractive surfaces.

Possibilities of treatment using the coatings are limitless. One application involved a large concrete block supermarket wall that faced a residential area and a beautiful city park. In order to soften the effect of this commercial structure, the wall was treated wtih a white coating over which a black free-form design of the same material was sprayed. Metal scrolls and mobiles were hung from this design at various locations along the wall to provide an interesting effect to what otherwise would have been an eyesore.

A LIGHTWEIGHT CONCRETE—a mixture of cement, diatomite and wood shavings—under study at Washington State University's Division of Industrial Research, is attracting nationwide attention in the building industry. The waste wood in the combination replaces the conventional sand and rods, reducing the weight of the product to one-third that of regular concrete. "It is not intended to compete with structural concrete," explains Max Huffaker, division engineer in charge of the research. "However, it could partially replace masonry for walls, floor slabs and curtain walls."

—pa&b memo—

LUMINOUS CEILING MATERIALS of all types can be tested and evaluated under actual on-the-job conditions in a new laboratory installed at Hexcel Products plant in Berkeley, Calif. Ceiling height, beams and ductwork all can be simulated. Overhead components are adjustable to match actual conditions and lighting levels up to 500 foot-candles can be obtained.

—pa&b memo—

STUDLESS PARTITIONS of 2-in. solid plaster over metal lath are now recognized by the FHA. Specification details for complying with agency requirements for this type of construction are outlined in engineering bulletin (No. SE-278) available from the FHA or the Metal Lath Manufacturers Association, Engineers Building, Cleveland 14, Ohio. Partitions described in the bulletin are constructed of ⅜-in. rib metal lath located in the center of a 2-in. wall of plaster.

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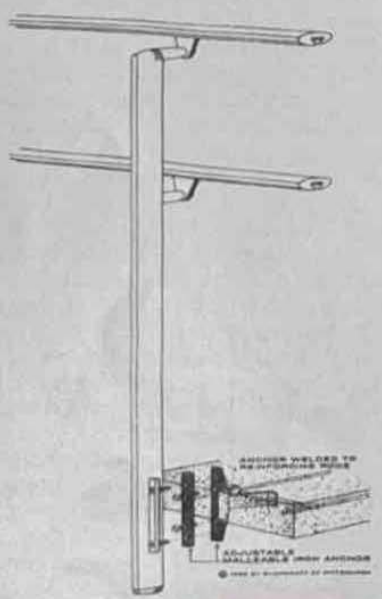
GROUNDING EQUIPMENT for use with static conductive linoleum is now available in a kit that comes with each roll of this type of linoleum produced by Congoleum-Nairn. Kit contains jumper connectors, ground clamps, grounding test plate and a technical data manual.

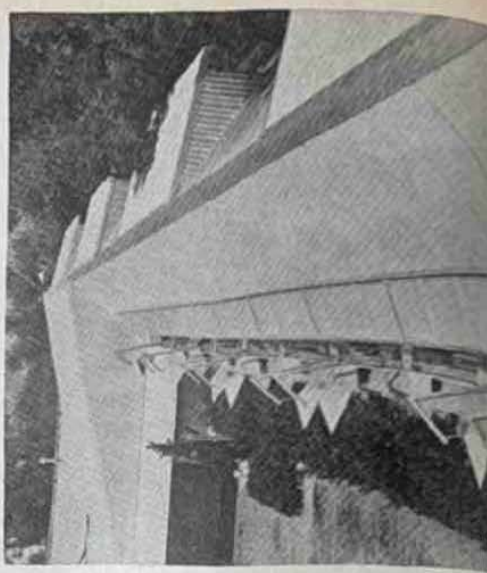
—pa&b memo—

IMPROVEMENTS IN STEEL have been reported by at least three manufacturers, following on the heels of the issuance of a new AISC specification (PA&B, Feb. '62). U.S. Steel has greatly extended the range of usefulness of its Cor-Ten by imparting the same high strength and full weldability in thicknesses three times as great as before. This means the steel now has a minumum yield point of 50,000 psi. and is weldable by all conventional techniques. Republic Steel has increased the physical properties of its tubing for structural use with a specification substantially exceeding ASTM A7 and A36 requirements for yield strength and yield point. And Bethlehem Steel has introduced a new series of five low-priced, high-strength steels which permit designers to select more precisely the proper grade to meet specific requirements.

—pa&b memo—

ADJUSTABLE ANCHORING SYSTEM developed by Blumcraft of Pittsburgh solves many of the problems of fastening metal railings to concrete stairs. Heretofore, the two conventional methods most frequently used have been 1) drilling into the concrete and inserting expansion shields and 2) building steel anchors into the concrete, drilling and tapping the steel anchors for fastening the posts. Among the advantages of Blumcraft's system: reduces costly field labor; permits adjustability for post alignment; eliminates breakage in masonry when drilling for expansion bolts; provides extreme rigidity through sound structural supports; allows prongs to be welded to reinforced steel in the concrete so that the anchors form an integral part of the stair; facilitates mounting of posts at the extreme edge of the stair; permits side mounting of posts to thin precast treads as narrow as 2 in., as well as to wood plank stairs and conventional concrete stairs.





ROOF DESIGN gets some changes in interest of economy but windows along upper edge can now be opened for improved ventilation.

A NEW ROOF was installed on the Municipal Art Gallery in Los Angeles' Barnsdall Park in a record time of 16 days, including demolition of the existing one. Apex Steel used 4-in. ribbed stucco-embossed aluminum decking for the pipe frame building designed by Frank Lloyd Wright in 1954. Insulation is a 1-in. layer of Fiberglas painted mat faceboard.

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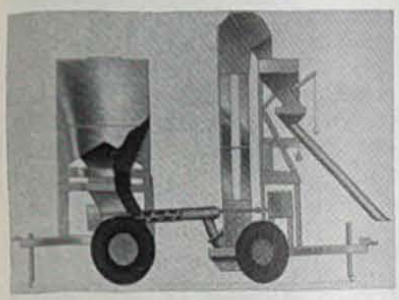
GLUED LAMINATED TIMBER now is being produced by members of the American Institute of Timber Construction under a quality control and inspection program. Under development for three years, it consists of three basic elements: the licensing of qualified laminators; the continual maintenance of an acceptable quality control system; and periodic inspection and verification of the system, procedures and production.

—pa&b memo—

THE PHYSICALLY HANDICAPPED will be better able to help themselves in education, recreation and employment, thanks to the coordinated efforts of architects, builders and therapeutic science in developing a new American Standards Association guide. Specific considerations are given to site development, conveniences within buildings and physical abilities and limitations to persons functioning in wheelchairs and on crutches, with provisions for walks and parking lots, ramps and gradients, entrances, doors, stairs, floors, toilet facilities, water fountains, public telephones, elevators, wall-controlled switches and warning signals.

CALIFORNIA REDWOOD could be dried to 10% moisture content in only eight days using a process called solvent seasoning, according to a report by University of California chemists who recently conducted experiments on the new method at the Forest Products Laboratory in Richmond. The process also removes considerable quantities of the chemical extractives that occasionally cause brown or black staining of redwood during air and kiln drying. Under the process green boards are stacked in a vapor-tight extraction chamber and a hot solvent, acetone heated to 130 deg., is circulated in the chamber, removing water and chemical extractives as it passes over the boards. The scientists, working under a grant from the California Redwood Association, have drawn plans for what they believe to be an economically feasible commercial solvent seasoning chamber.

—pa&b memo—



AUTOMATIC WEIGHING DEVICE is powered by battery starting gasoline engine, comes complete with scale, dump chute, bucket elevator and/or auger. Designer: Fabricated Metals, Inc.

LARGE VOLUME CEMENT DEALERS in the Los Angeles area can do a better job of servicing their customers—plastering, masonry and swimming pool contractors—by employing a device that contains the cement, automatically unloads it, weighs it and transfers it to mixing facilities set up on the job. The steel single-unit shipping and storage container, called a Flo-bin, and the material handling equipment is being leased by Riverside Cement Co. to its customers under an extensive field testing program. One Flo-bin holds the equivalent of 40 sacks of cement, while four on a self-dispensing trailer supply enough cement to gunite an average size swimming pool. The bins enable dealers to deliver cement either by self-dispensing trailers or by flat-bed truck and fork lift, according to job needs. The unit is constructed to be towed from job to job, to be totally independent of electric power and to receive its cement from a four- or a one-bin trailer on a ground-mounted unloader. In operation, the user starts the gasoline engine from the battery, which is maintained by the generator. He then throws a lever when he wishes to measure a batch of cement. A batch can be any number of pounds from zero to 300, or any number of sacks from zero to three or any portion thereof. The desired weight need only be set once and automatically resets until changed.

—pa&b memo—

FOUR EXPOSURE SITES for various kinds of wood products—lumber, plywood, laminated wood, particleboard —are being established by the U.S. Forest Products Laboratory. One is near Olympia, Wash., another near Fresno, Calif., the third near Gulfport, Miss., and the fourth in Madison, where the laboratory is maintained. The exposure experiments are designed to evaluate not only the wood but the glues, paints, natural finishes, binders and other materials used to make the products.

—pa&b memo—

CONCRETE SLUMP, as its name suggests, is an architectural double chin caused by the concrete not properly adhering to the form. Until recently the only way to insure an effective bond on a near vertical face was by double forming—supporting the concrete so it would not slip. However, this costly procedure appears to be less and less necessary judging from the experience with the nearly completed St. Louis Priory in St. Louis, Mo. The structure consists of three concentric tiers of concrete arches, with the outer ring, 21 ft. high, forming the walls. All sections of these arches have an acute vertical slope which demand exact controls over the mixture and water content of the concrete if it is to adhere perfectly. A True Gun-All machine was used to mix, convey and continuously place quality-controlled zero slump concrete. With this equipment, water under positive metered control is introduced into the material at the mixing chamber, following the rules of good concrete preparation.

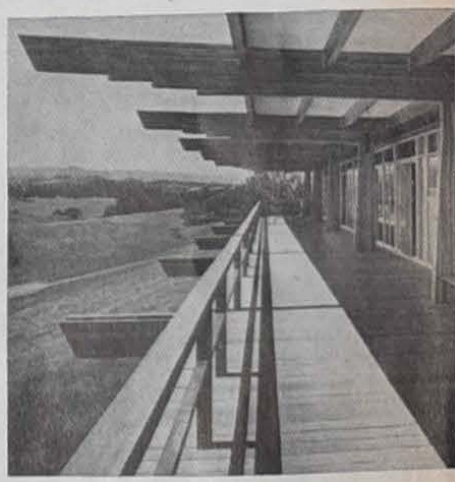
—pa&b memo—

A RESEARCH RESIDENCE has been established in San Jose, Calif., by the National Warm Air Heating & Air Conditioning Association, with studies being carried out by faculty members of San Jose State College to determine characteristics of a crawl-space home in a mild climate area. All tests will cover both heating and cooling.

EXTERIOR PARTICLEBOARD has now been accepted by the FHA for use as exterior siding. Minimum specifications are listed in the agency's Bulletin UM-32.

—pa&b memo—

A CANTILEVERED WEDGE or, as architect Goodwin B. Steinberg puts it, "an A-frame house with the peak cut off," describes the basic structure of a Los Altos, Calif., hillside residence. Built by Lloyd W. Paullus, it consists of 24 glued laminated wood beams manufactured in Santa Rosa by Fluor Corp. Six of these beams, each 2 ft. wide, 6 in. thick and 75 ft. long, provide full support for a 3,600-sq. ft. deck. Arched at one end and firmly anchored in the brow of the hill, these flying roof beams, in combination with six heavy glued laminated columns, eliminate the need for an expensive full foundation. Additional deck support is provided by 12 beams joined in pairs, which also support decks extending as much as 12 ft. beyond the building walls.





SIX ARCHED BEAMS are anchored in brow of hill and cantilevered over hillside as seen in front (top) and rear views.

safety-designed terrazzo

Durable and easy maintenance features of portland cement terrazzo have been combined with aesthetizing needs for hospital surgical and obstetrical floors. Called Conducive Terrazzo, it meets requirements of the U.S. Public Health Service and the National Fire Protection Association. It is composed of acetylene carbon black with about 70% Venetian marble chips and 30% portland cement matrix for use under severe service conditions. Many color combinations and designs are being offered.—The National Terrazzo and Mosaic Association, Inc., 2000 K St. N.W., Washington 6, D.C. (No. 1)

no-mix calking compound

A one-part calking compound that eliminates on-the-job mixing is ready for use as packaged. Easily applied by calking gun, putty knife or spatula, PRC Rubber Calk 5000 cures to a firm flexible rubber. It is available in white or gray and is packaged in 12-oz. cartridges for use with a standard calking gun, 1-gal. cans and 5-gal. lug cover pails. It is recommended for applications in masonry, metal and wood construction where expansion joints or similar openings must be calked. It is said to be especially desirable for use in place of mortar between dissimilar materials with different coefficients of expansion and contraction.—Products Research Co., Burbank, Calif. (No. 2)

combination thermostat

Decorator design is featured in the combination heating-cooling room thermostat introduced by Cam-Stat. The case is square with contoured corners that give the impression of hugging the wall. The combination control is a companion to the heating thermostat brought out last year. The



new unit has two adjustments for on-off heat control and automatic cooling. Desired temperature range is set by turning the lucite dial cover. Face is available in two colors: all-silver or gold and grey.—Cam-Stat, Inc., 11833 W. Olympic Blvd., Los Angeles, Calif. (No. 3)

photoelectronic switch

Automatic control of outdoor lighting has been introduced by Lightguard, whose Prescolite wall bracket is equipped with an on-at-dusk—off-at-dawn switch. The mechanism uses a hermetically sealed photocell to assure long life under conditions of moisture and extremes of temperature.—Lightguard Electronic Mfg. Co., Inc., 1213 Saint Emanuel, Houston, Tex. (No. 4)

serving windows

A series of stock vertical sliding pass windows for food service areas are being marketed with the Underwriters' Class B label. Peelle-Richmond windows are available in a variety of sizes and designs in two styles—Regular, with single slide-up door panel for normal applications, and Telco, designed primarily for use where ceiling height limits the room available. Windows have stainless steel construction throughout or are plain steel with prime finish. Optional factory-applied baked enamel finish also is offered.—The Richmond Fireproof Door Co., Box 911, Richmond, Ind. (No. 5)



sculptural wood panels

Suitable for interior or exterior decorative use, Sculpt-A-Grille's many patterns are made in 12-, 8- and 6-in. modules as well as continuous designs. Materials range from solid woods (mahogany, walnut) to particleboard, all types of plywoods and hardboards. In addition to conventional applications such as siding and pool enclosure, the manufacturer suggests use of panels in headboards, garage door panels and as attractive barricades for reception rooms.—Tree Products Co., 2055 Pioneer Court, San Mateo, Calif. (No. 6)

wallboard bonding cement

A bonding cement that does not require bracing or shoring until the adhesive sets has been developed as the key element in an insulated wallboard system. Cement is called Styrotac. It is used to bond insulation boards of Styrofoam directly to the masonry wall and to bond gypsum wallboard to the Styrofoam, creating a wall completely backed up and with no subsequent nail popping problems. No nails, furring strips or bracing are needed. Minimum of 24 hours' setting time is recommended. System is called the Miller System after G. D. Miller, company engineer who developed it for residential and light construction uses.—The Dow Chemical Co., Midland, Mich. (No. 7)

decorative light bulbs

For use in chandeliers and multi-arm wall brackets, GE has introduced a line of six flame shaped decorative light bulbs. The larger bulbs come in either 25 or 20 watts, the smaller ones in 15 watts. White and clear lamps are available in all wattages. Unlike GE's traditional flame shaped bulbs, the new ones are smooth sided and smaller in diameter.—General Electric Co., Nela Park, Cleveland, Ohio. (No. 8)



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Suburban Living. International Film Bureau, 332 S. Michigan Ave., Chicago 4, Ill. Sound, 16mm, 59 min.

Shows how six suburban neighborhoods—in London, Stockholm, Rotterdam, Marseille and North America—are designed to serve the needs of the whole man. "It is purely an educational film intended to stimulate original thinking about the environment in which we live," says Wesley H. Greene, a former University of Chicago educator who heads the distributing firm. (National Film Board of Canada is the producer.)

Brasilia. International Film Bureau, 332 S. Michigan Ave., Chicago, Ill. Sound, color, 16mm, 13 min.

Documents the building of the new capital of Brazil carved out of virgin jungle, 600 miles from the old capital of Rio de Janerio, in an effort to develop the country's vast interior. Lucio Costa's pilot plan and Oscar Niemayer's architectural direction have combined to give Brasilia a unique position among the cities of the world.

Concrete in the '60s: Report No. 1. Portland Cement Association, 33 W. Grand Ave., Chicago 10, Ill. Sound, color, 23½ min.

A continuation of the newsreel series issued annually since 1957, highlighting outstanding construction projects, news events and new applications of concrete during the past year.

Space Building for Man. Libbey-Owens-Ford Glass Co., 611 Madison Ave., Toledo 1, Ohio. Color, 16mm, 23½ min.

Portrays the story of glass as it applies to the building industry, particularly to curtain wall construction. Documentary subject of the film is the company's executive office building (Showcase of Glass) in Toledo and traces construction of the structure from its steel skeleton to completion.

Sound Control in Design. United States Gypsum Co., 300 W. Adams St., Chicago 6, Ill. Sound, color, 16mm, 21 min.

Deals with principles and solutions of sound-absorption and transmission problems in large buildings. Viewers also receive a 96-page manual prepared by Bolt, Bernake & Newman, acoustical consulting firm.

Forming Your Future: How to Build a Reinforced Concrete Shelter. Gates & Sons, Inc., 80 S. Galapago St., Denver 23, Colo. Sound, color, 16mm, 14 min.

Shows an actual shelter installation which is equipped with accessories (bed, shelf and table brackets) and a door especially designed by the manufacturer.

New Face on Capitol Hill. Modern Talking Picture Service, Inc., 3 E. 54th St., New York 22, N.Y. Sound, color, 16mm, 15 min.

Shows how refacing of the building's exterior was completed with Georgia marble. Renovation of the Capitol's East Front began in 1958 as preparations were made to move this section 32½ ft. to provide room for 75 additional offices.

The Changing Patterns of Education and the Contribution of Air Conditioning. John J. Nesbitt, Inc., State Road and Rhawn Street, Philadelphia 36, Pa. Sound, color, slide, 20 min. No charge.

Designed for showing to architects, school boards and administrators, the film covers the cost factor involved in air conditioning and how it can reduce both first and operating costs.

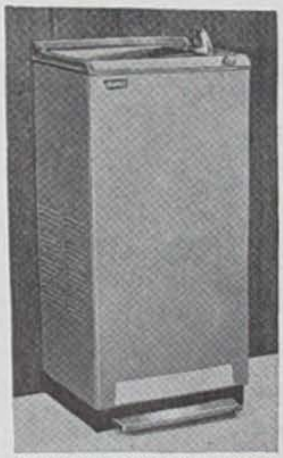
What Kind of Pipe Should I Buy? Plastics Division, Allied Chemical Corp., 40 Rector St., New York 6, N.Y. Sound, color, 16 mm, 14 min.

Answers common questions concerning polyethylene for cold water piping, covering such sources of confu-

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sion as density, standards, tests, costs and safe materials in understandable, nontechnical terms.

Timeless Terrazzo. National Terrazzo and Mosaic Association, 2000 K St. N.W., Washington 6, D.C. Sound, color, 35mm, 15 min.

Traces the history of this smooth-surface flooring, depicts methods of installation and illustrates installations in recent important buildings such as the Guggenheim Museum.

Story of Acrylic Paints. Rohm & Haas Co., Washington Square, Philadelphia 5, Pa. Sound, color, 16mm, 19 min.

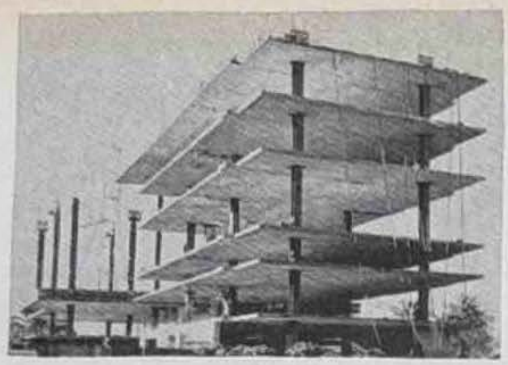
Revised version emphasizes important recent advances in acrylic emulsion coatings for exterior wood applications as well as on masonry.

Retirement Housing. Douglas Fir Plywood Association, 1119 A St., Tacoma 2, Wash. Sound, 16mm, 16 min.

How-to-do-it film for builders interested in entering the retirement home market.

Focus on Floodlighting. Floodlighting Institute, 55 Public Square, Cleveland 13, Ohio. Slide, printed narration, 20 min.

Covers schools; churches, monuments; and landmarks; public, industrial and civic buildings; business establishments; motels and gardens.



Concrete in Motion. Wilsey, Ham & Blair, 111 Rollins Road, Millbrae, Calif. Sound, color 16mm, 12 min.

Follows construction of a seven-story precast, prestressed lift slab apartment building (Everett House, Palo Alto, Calif.) and explains lifting phases. Film was photographed and produced by members of the firm which served as structural engineers on the project.

Marlite Paneling. Marsh Wall Products, Inc., Dover, Ohio. Sound, color, slide, 15 min.

Provides basic information on the various types of paneling shown in residential, public building, institutional, commercial and industrial installations.



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BOOKS

Planning Atomic Shelters: A Guidebook for Architects and Engineers. Edited by Clifford H. Albright. Pennsylvania State University Press, University Park, Pa. 1961. 196 pp. $[illegible]

Presents in the language of the planners information to enable such professionals to develop effective integrated shelter as part of the design of selected building types. Those engaged in identifying shelter spaces in existing structures also will find this book invaluable. Many drawings, diagrams, plans and building sections are included, as well as a 40-page unit illustrating shelters incorporated into these building types: barracks, training school, administration building, 100-bed hospital, subsistence building and communications building.

Frame Analysis. By A. S. Hall and R. W. Woodhead. John Wiley & Sons, Inc., 440 Park Ave. S., New York 16, N.Y. 1961. 247 pp. $8.50.

Offers principles of both flexibility analysis and stiffness analysis in one unifying treatment. Book is concerned with a discussion of frames in which the load displacement relationship is linear. Three dimensional frames containing curved members and members of varying sections are dealt with in detail.

Elementary Statics of Shells. By Alf Pfluger. F. W. Dodge Corp., 119 W. 40th St., New York 18. 1961. 122 pp. $8.75.

Newly translated by Erwin Galantay, this second edition by a German engineer-professor is essentially a visual presentation of the spatial interplay of forces in shells. After defining the basic terms of shell theory, he describes the basic assumptions which justify his visual approach to design.

Boilers: Types, Characteristics and Functions. By Carl D. Shields. F. W. Dodge Corp., 119 W. 40th St., New York 18, N.Y. 1961. 599 pp. $15.

A reference work for anyone concerned with designing, manufacturing, buying, specifying, selling, installing or operating such equipment, with more than 500 photographs and detail drawings.

Aluminum Data Book. Reynolds Metals Co., Richmond 18, Va. 1961. 194 pp. No charge.

Contains the latest information on the properties of aluminum and its many alloys, wrought and cast, with 207 tables or data covering the entire field, making it a valuable guide to the engineer and designer. A general section discusses the heat-treatable and the nonheat-treatable alloys, thermal practices, alloy selection, fabrication, joining and surface finishing.

• **Western Wood Components:** William E. Welch is the principal in a new firm organized to engage in the sale and manufacture of construction components, with offices in the Skyline Building, 2041 S.W. 58th Ave., Portland. Initially the company will market Trus-Joist, a combination wood and steel web structural member produced by Lumber Manufacturers, Inc. Future plans call for the manufacture of construction panels and a newly developed long wood decking.

• **Gladding, McBean & Co.:** The Los Angeles-based firm has been appointed exclusive distributor for Hoover Bathroom Accessories, Fowlerville, Mich., in 12 western states.

• **Cellular Concrete Products, Inc.:** The first plant in the U.S. to manufacture Ytong, a Swedish building product, will be constructed on 8½ acres of tidelands in Tacoma. Ytong has great compressive strength in relation to its weight and insulation properties, comments President Albert J. Lilygren, who maintains offices at 459 Colman Bldg., Seattle.

• **Kaiser Gypsum Co., Inc.:** Ron C. Savage has been appointed a sales representative in Portland and James W. Engels, formerly in the Eugene territory, has been transferred to become the Portland district technical service representative. Replacing Engels in Eugene is William E. Widerhold Jr., previously sales representative in Portland.

• **New Mexico Timber Industries:** A $350,000 plywood plant, believed to be the only one in the Southwest, will be constructed in Bernalillo, N. M., by a joint venture of New Mexico Timber Corp., Western Pine Corp. and Cascade Machine Works of Kalispell, Mont. The $350,000 facility will service an area which presently is supplied from plants in California and the Northwest.

• **Allison Steel Manufacturing Co.:** Moving up from vice president and general manager, Charles H. Hallett has been elected president of the Phoenix-headquartered firm.

• **United States Plywood Corp.:** In a swing through the West in January, President Gene C. Brewer stopped off in Seattle to present the company's last steam logging locomotive to the University of Washington. . . . Eugene McDonald, most recently Eugene branch manager, has been appointed to a similar post in Phoenix as part of the company's plans to expand sales and distribution facilities in that area.

• **Schlage Lock Co.:** A $1½ million addition now underway to its San Francisco factory will enlarge the company's plant by more than 50%.

• **Bestwall Certain-Teed Sales Corp.:** District sales appointments include this foursome: J. E. Brooks, Los Angeles; S. R. Bartlett and K. D. Raygor, Salt Lake City; and E. W. Watne, Seattle.

• **Georgia-Pacific Corp.:** A new forest industry research center will be constructed in the Western Industrial Research Park, just west of Beaverton, Ore., serving as headquarters for all company research operations in other areas.

• **American Art Metals Co.:** A California district covering five other states—Nevada, Arizona, Washington, Idaho and Oregon—will be opened in Los Angeles this spring by the Atlanta manufacturer of Armlite architectural aluminum products as part of a nationwide expansion program. Manager will be William M. Fee, who has served the Ohio district since its opening in 1960.

• **Johns-Manville Corp.:** Four new distribution centers have been established on the West Coast to handle the complete line of insulating board products at Tacoma, Wash.; Klamath Falls, Ore.; and Pittsburg and Long Beach, Calif.

• **Permanente Cement Co.:** Slated for completion early in 1963, a $9.6 million plant is now underway near Helena, Mont. Annual capacity will be 1.4 million barrels of cement.

• **Air Comfort Co., Inc.:** Arthur J. Hanna has been named chief design engineer, heading a new department set up to provide a complete service to the architect and builder from its South Gate, Calif., headquarters.

• **United States Steel Corp.:** M. H. Freedman, vice president-sales for the Northwest district, Columbia-Geneva Steel, has been transferred to San Francisco on special assignments in the general sales offices. Effective with this move, separate district sales offices have been established at Seattle and Portland, both of which previously were under Freedman's supervision. . . . Western capacity for production of galvanized steel sheets will be more than doubled by a new line scheduled to be in operation next year in Pittsburg, Calif.

ASSOCIATIONS

• **California Redwood Association:** Putnam S. Robbins, who had headed the market research program since 1960, now is field promotion manager.

• **National Association of Home Builders:** New assistant executive vice president is William H. Slemp Jr., formerly with Kaiser Aluminum & Chemical Sales, Inc., Oakland, as marketing manager of its building industry division.

• **Gypsum Drywall Contractors International:** Edward J. Fliegle of Stanton, Calif., is the new treasurer, elected at the 1962 convention in Miami Beach.

• **Unit Masonry Association:** One of of its co-founders and most ardent supporters, Paul L. Nutt of Smithwick Concrete Products, Portland, died unexpectedly January 2 of a heart attack.

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no 3: economic facts of publishing life

In discussing the why and wherefore of a regional last month, we concluded our column by touching on the subject of advertising, one phase of the publishing operation about which a good many readers are not very realistic.

The truth of the matter is that if Pacific Architect & Builder is to prosper and grow, and it is our intent to do both, then our advertising revenue must substantially increase. More advertising pages result in more editorial pages, but it's not simply a matter of quantity. Quality-wise too, more advertising provides for a bigger budget which in turn provides for more staff travel, more artwork and so down the line.

Perhaps we can better state our case with a specific. The cost of printing and mailing PA&B per reader adds up to $4 a year; this figure, we emphasize, includes printing and postage only, not to mention salaries, overhead, taxes, etc.

However, this does bring up another pertinent point. One of the advantages of a regional is that it is more compact than its national counterparts, its editorial material is easier to ferret out and its ads have better "visibility," as they say on Madison Avenue (and Wilshire Boulevard as well). If we are to grow, then how big? PA&B has adopted a policy which we are willing to publicly state at this time: our advertising volume will never exceed 40% of the total content of the magazine. Otherwise, we would be defeating our own purpose.

For we are well aware of the growing antagonism among professionals who are confronted with magazines so massive in format that they actually repel readership. As an architect in Napa, Calif., wrote us the other day: "Yes, I want you to prosper but not to grow. I now subscribe to the magazines . . . which have grown. I can't even lift them, let alone read them. They are worse than useless even though there may be worthwhile information hidden away somewhere."

In the same vein, a Portland architect made this comment: "I sincerely hope you can keep your publication to the present limited amount of ads. At least the meat of your magazine can be found. So many publications are 90% ads and 10% meat; this is profitable to the publisher but a mess to the reader."

But we hasten to add one final thought. Advertising can—and should—supply worthwhile information to the publication's readers, particularly a magazine which is tailored to a selective audience as in the case of PA&B. Furthermore, the regional, possessing the inherent characteristics that it does, can go one step beyond in allowing its advertising messages to be pinpointed to a well-defined geographical area.

Next month we'll take a look at editorial content and how it's selected.

R.E.K.

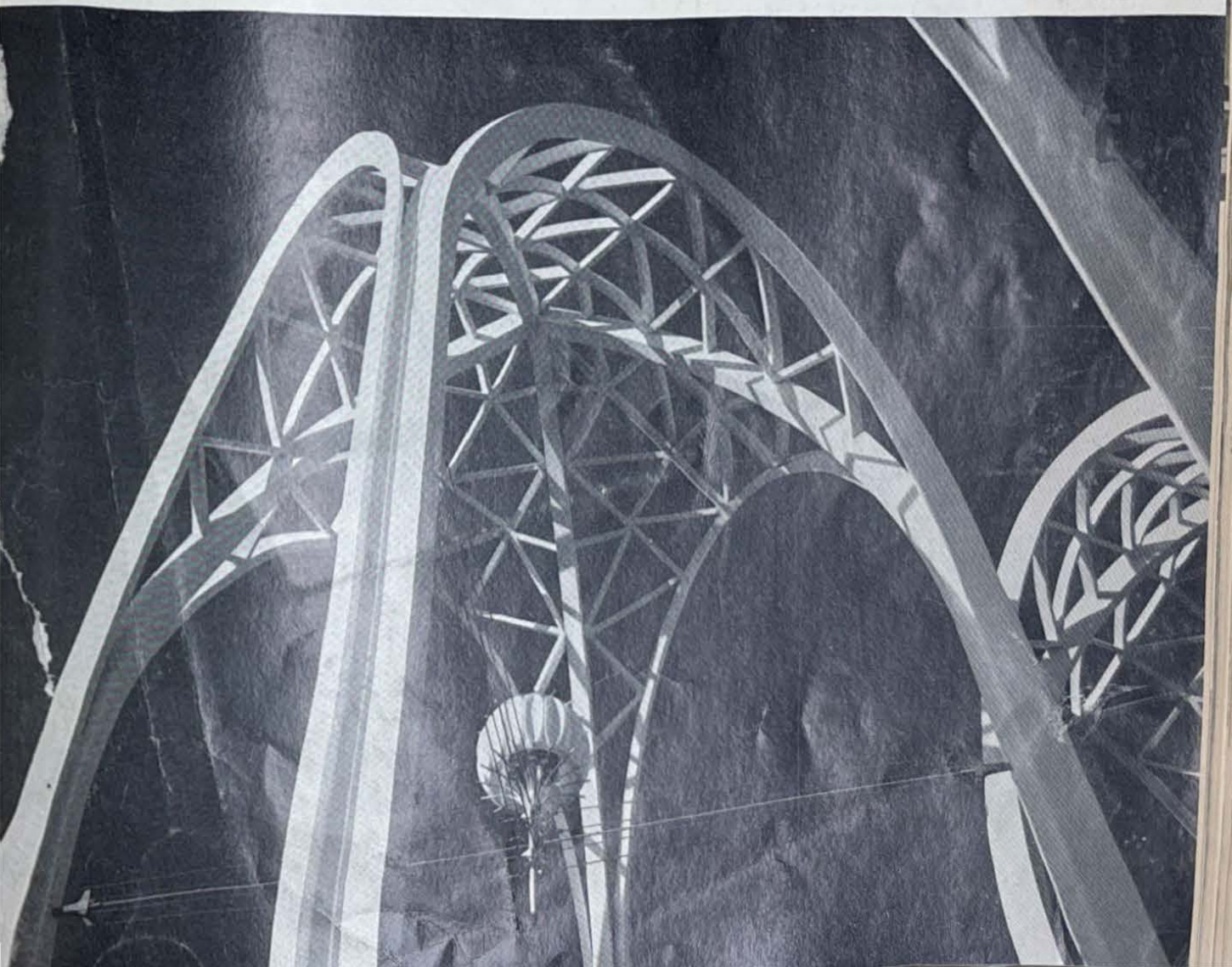
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Photos: Hawaii Visitors Bureau, Julius Shulman, Art Hupy (2), Karl H. Riek, Phil Palmer.



ARCHITECTURE/WEST: what's in a name?

There's a bold new name in architectural publishing this month.

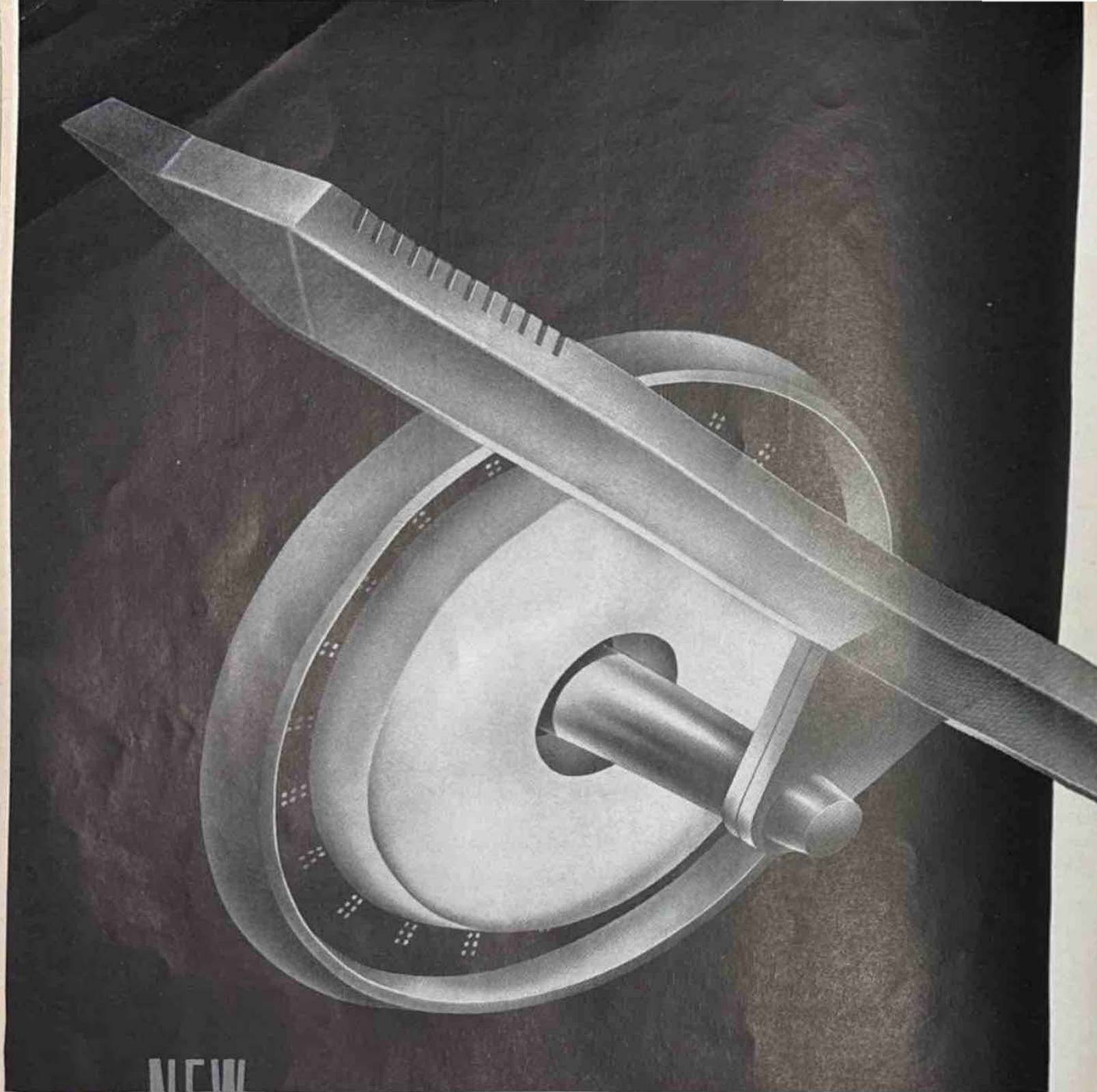
ARCHITECTURE/WEST has replaced the well-known Pacific Architect & Builder, giving an exciting, fresh approach to our publishing and promotional efforts.

We are particularly delighted to introduce the new title in our Seattle World's Fair issue—the first complete report on Century 21 design and construction. It better defines the magazine.

There is no major change in policy or content or readership because PA&B had already evolved over the last five years from a prosaic architect-builder book into the more professional and all-embracing service to architecture. We have always recognized the natural compatibility of the architect and builder in one editorial package and will continue to promote this bond of common interest. The "Pacific" in our old title was an embarrassing misnomer from the days when we covered only the Pacific Coast. We have since expanded our horizons to the 13 western states.

Hence, ARCHITECTURE/WEST, a name finalized at the suggestion of architect Barden G. Erickson. We'll be looking forward to your reaction and to serving your interests as "the regional voice of building."

—Robert E. Koehler



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Cover: Arches of Federal Science Pavilion, Seattle World's Fair (p. 28); staff photo.

FOR THE FIRST TIME since we inaugurated an architectural magazine in July 1954, we are devoting an entire edition to a single topic. Quite frankly, we feel that the so-called "special issues" have been overworked in publishing circles, but a world's fair does not come to the West every year—and particularly to our home base where we've had an opportunity to follow its development from right out our window as we look across Lake Union.

We would like to make it clear that we have made no attempt at a critical appraisal of the architecture, although in a couple of instances we have cited a project or a concept that deserves recognition even at this early date. We'll be returning to the fairgrounds a few months from now, possibly in July, to put the buildings in their proper perspective by showing them as they are viewed and used by the throngs of visitors (predictions go as high as 10 million).

The telescoping of multifarious projects in limited time has compounded the difficulties of accurate reporting. And while we have attempted a complete photographic coverage and proper crediting of the principal designers, engineers and contractors, we can only keep our fingers crossed and assure our readers that any error or omission was surely unintentional.

Finally, we editors would be remiss not to single out the contribution made by Roscoe Laing, general manager of our publishing firm who, in following the construction progress from the very beginning, supplied the majority of the photographs for our six month-to-month reports and a goodly number for this issue as well.



WHO'LL THREAD THE NEEDLE?

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THE BUILDING WEST—Permits issued during February in the 13 western states jumped 8% over the same month a year ago for a grand total of $447,973,083 (complete tabulation on pp. 68-69). Residential work accounted for $240 million, nonresidential for $207 million among the 500 agencies surveyed by Architecture/West. Pleasant weather and the impact of the Seattle World's Fair on the economy of Washington boosted that state into first place in dollar volume of increase over February 1961. Its gain: $13.7 million, largely in nonresidential work. Nevada, with a big home building boom in Reno, was second with a $11.4 million rise. The traditional leader, California, increased $7.9 million for third.

TOP TWENTY-FIVE—Hottest spots in the West for February (in millions): **1.** Los Angeles, $57.1; **2.** Los Angeles County, $24.9; **3.** Honolulu, $11.5; **4.** Seattle, $10.8; **5.** Reno, $10; **6.** Denver, $9.9; **7.** King County, Wash., $9.8; **8.** San Diego, $7.4; **9.** Phoenix, $6.8; **10.** Orange, Calif., $6.3; **11.** Seal Beach, Calif., $6.2; **12.** San Francisco, $5.5; **13.** Long Beach, $4.8; **14.** San Jose, $4.7; **15.** Oakland, $4.6; **16.** Las Vegas, $4.5; **17.** Torrance, Calif., $4.4; **18.** Fresno, $4.3; **19.** Portland, $4.3; **20.** Jefferson County, Colo., $4.2; **21.** Sacramento County, $4; **22.** Orange County, $3.9; **23.** San Bernardino County, $3.9; **24.** Riverside County, Calif., $3.7; **25.** Maricopa County, Ariz., $3.6. The spectacular rise of Washington County, Ore., to the No. 3 spot in January was due to an error. Dwelling permit volume at $11,268,775 and total permit volume at $11,730,425 reported for that month should be corrected to $1,268,775 and $1,730,425.

AIA AT AGC—Speaking before AGC's 43rd annual convention in Los Angeles at the end of February, AIA President Philip Will Jr. outlined a concept for expanding the architect's practice to provide all the services now rendered by the so-called package dealer, including purchase of land, financing, legal services and architecture. The Chicagoan said: "Unrestrained by professional ethics and with ample funds to promote his wares, the package dealer now prospers to the dismay of the architect and to you who still believe in the fundamental rightness of the traditional owner-architect-contractor relationship." Architects should undertake this responsibility since most of the services are already at his fingertips "and for construction, we can offer the well-known advantage of competitive bidding by qualified general contractors," Will told the group, which made official the election of a Belmont, Calif., building contractor, Frank F. Burrows, as its head for the next year.

REWARDING RENEWAL—The already well publicized 330-acre Diamond Heights project being developed under architectural guidance by the San Francisco Redevelopment Agency continues to pop up in the news. On June 6 the agency will auction 200,000 sq. ft. for a shopping center and another 33,000 sq. ft. for a view restaurant and service station, each offering marked by an unusual feature. In the case of the former, the land is sold subject to a predetermined neighborhood and site design; in the case of the latter, the buyer must conduct his own design competition under a program spelled out by SFRA.

Highlights & Sidelights

ADVANCEMENT IN DALLAS—Nine westerners—eight in California and one in Oregon—will be among the 34 members of the AIA advanced to the rank of fellow at the annual convention in Dallas May 7-11. The architects, their chapter affiliation and achievement: Robert S. Anshen, Northern California, design; William Glenn Balch, Southern California, service to the Institute; Theodore C. Bernardi, Northern California, design; Clarence Joseph Paderewski, San Diego, service to the Institute; Lisle Frederick Richards, Coast Valleys, service to the Institute; Raphael S. Soriano, Northern California, design; Donald J. Stewart, Oregon, public service; John Carl Warnecke, Northern California, design; Maynard Winthrop Woodard, Southern California, design. Theme of the 1962 sessions will be "New Dimensions of Architectural Practice," with Dean Charles R. Colbert of Columbia University's School of Architecture as the keynoter.

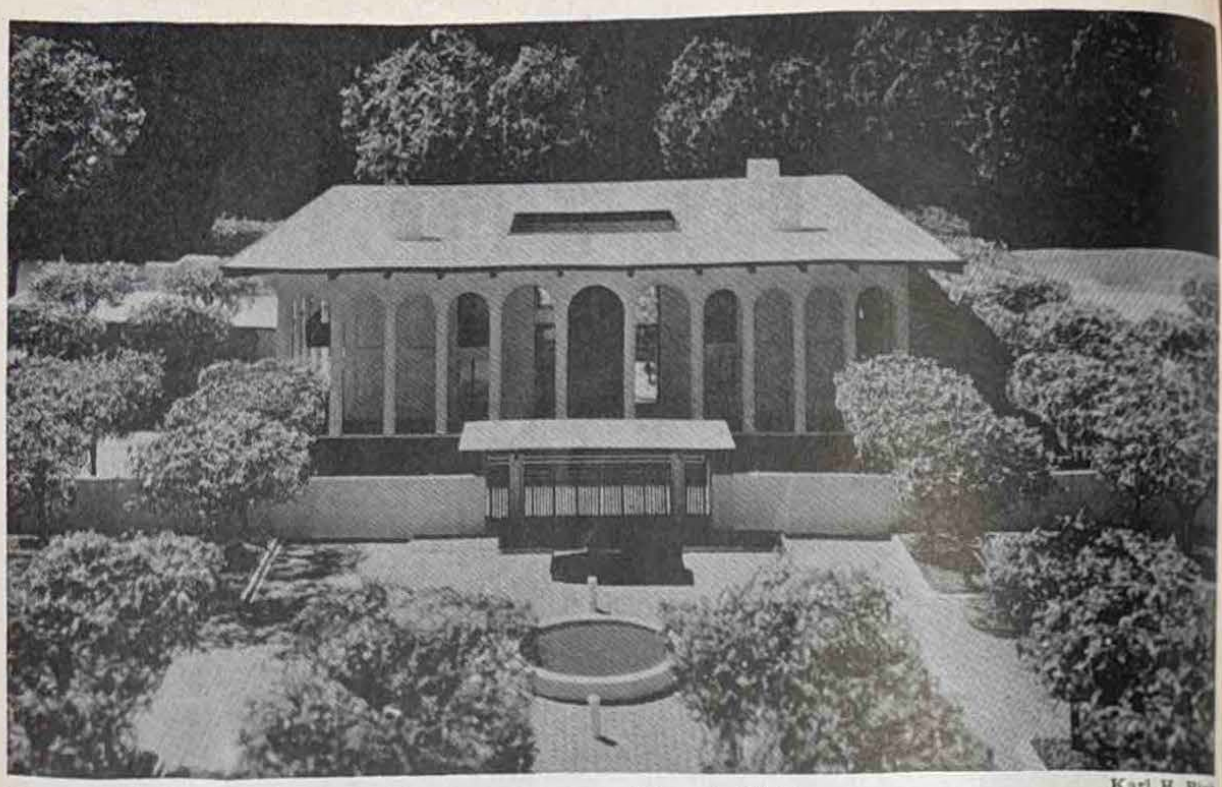
UPLIFTING THE ELDERLY—Martin Luther Homes, sponsor of the first and only senior citizens community under construction in New Mexico will have an age qualification of 62 or over (some California projects have entrance ages as low as 52). The apartments will rent from $65-75 per month, a scale generally in line for persons living on retirement incomes throughout the western states. Daniel, Mann, Johnson & Mendenhall are the architects-engineers.

SAVING SALT LAKE CITY—Eight architects whose professional practice totals nearly 140 years are contributing their services as a development team to plan the future of downtown Salt Lake City. As representatives of the Utah Chapter, AIA, they are working hand in hand with the Downtown Planning Association and expect to unveil a master scheme this summer. Dean L. Gustavson is team chairman.

CONCERNING COMPETITIONS—April 25 is the deadline for entries in the third annual Architectural Awards of Excellence program for steel-framed buildings. Open to all registered architects in the U.S., the competition is limited to structures completed or occupied during 1961. Further information is available through the sponsor, American Institute of Steel Construction, 101 Park Ave, New York 17, N.Y.

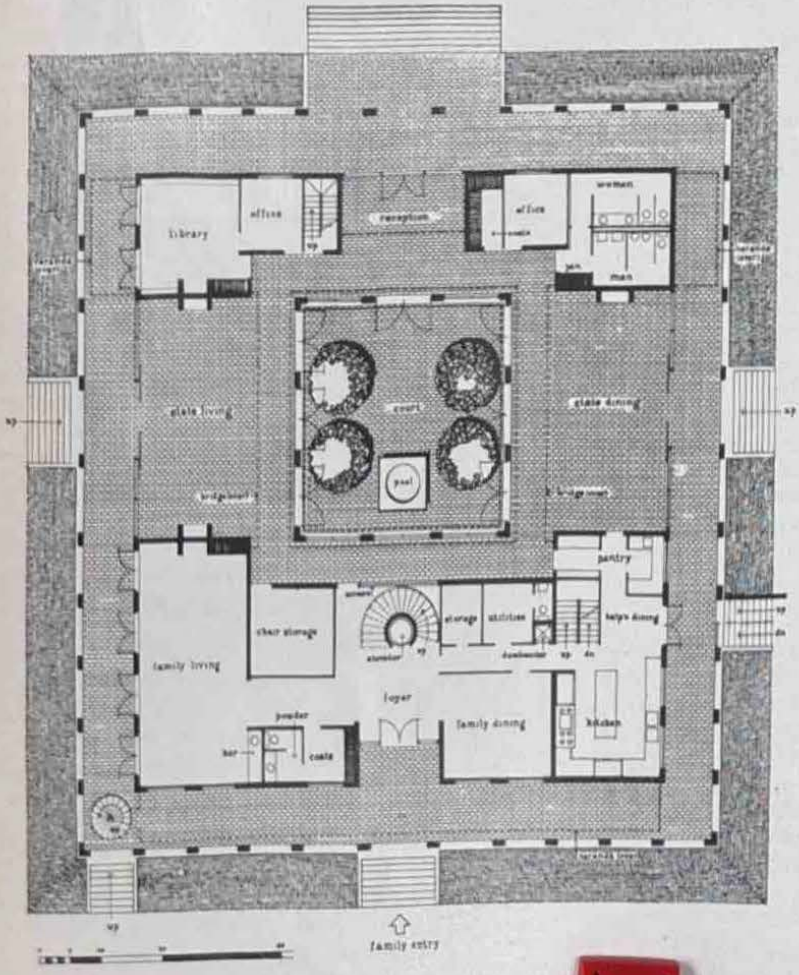
SPACE NEEDLE STAMP—A four-cent commemorative stamp displaying two notable projects of the Seattle World's Fair will be dedicated by Postmaster General J. Edward Day in ceremonies at the grounds April 25. Dominating the vertical design will be the Space Needle in white on a blue background, while the Alweg Monorail will appear at the bottom. All lettering will be in red on a white background. The stamp's design was based on artwork by Bob Mathiesen and William K. Schrage, which had been approved by officials of the exposition.





Karl H. Riet

Exterior walls of completely air conditioned structure are whitewashed brick. Roof and floors are of fireproof steel framed with concrete slabs over steel decking. Parking courts and exterior patios are treated as roofless exterior rooms, brick paved and brick walled for privacy. Two-story square plan centers around court.



Mansion design competition won by San Franciscans

Winner in the two-stage competition to design a new mansion for the governor of California in Sacramento are four architects—Worley K. Wong, Allen Don Fong, Harry W. Namitz and Terry Tong—of the San Francisco firm of Campbell & Wong & Associates.

Construction is expected to begin later this year for the building, which will be located adjacent to Capitol Park on the block bounded by 14th, 15th, N and O Streets. A total of $475,000 has been appropriated for the project.

Winning designs were selected from a group of 10 screened by the jury in December from among the 197 entries submitted in the first stage of the competition, open to all licensed architects in the state.

Jurors were Pietro Belluschi, dean of the School of Architecture and Planning, Massachusetts Institute of Technology, who served as chairman; Frank W. Kent, director of the Crocker Art Gallery, Sacramento; Stephen C. Pepper, professor of philosophy, emeritus, University of California; and Lutah Maria Riggs, Santa Barbara architect. William W. Wurster, dean of the College of Environmental Design, University of California, and Daniel J. Nacht, Sacramento architect, were provisional advisers. Both are members of the Capitol Building and

Planning Commission, sponsor of the competition.

Other finalists, in addition to the second, third and fourth award winners (see below): J. U. Clowdsley and Jack F. Whipple of Clowdsley & Whipple, Stockton; Martin Del Campo and Donald J. Clark of Del Campo & Clark and John K. Miller, San Francisco; Donald Goodhue and Addison Gordon Hall of Hall & Goodhue, Monterey; William K. Goodwin Jr., San Francisco; Raymond Kappe, Los Angeles; and Pierre Lafond, Santa Barbara.

Commented the architects about their winning plan: "In our conception of the governor's mansion we wanted to design a building of elegance and dignity to serve as a visible symbol of government, yet scaled and proportioned to serve the domestic function of a private residence. We wanted to recognize and respect the traditional planning and design elements of California architecture and incorporate into them our scheme without being eclectic.

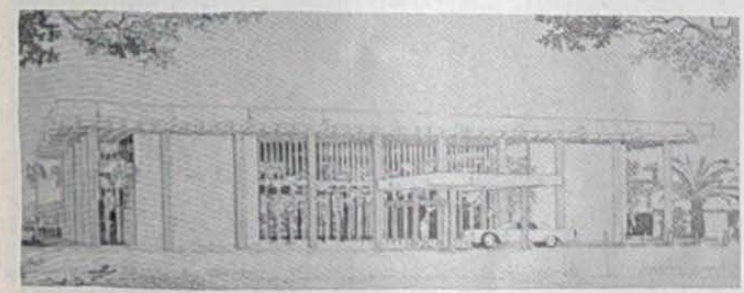
"The plan of the mansion is a simple two-story square with a court in its center. An arcade completely surrounding the perimeter offers shade and protection from climate. Respect for family privacy and various functions of state are clearly defined. Two separate parking courts and entrances are provided, one for the state and one for the family. The state areas are boldly scaled and integrated with the open court flowing into the state living and dining area, which have ceilings two stories in height. The family areas are intimately and domestically scaled. All major rooms are oriented toward the west and south, recognizing the future park and lagoon which will eventually encompass the mansion site."



Second award to Herbert D. Kosovitz of firm of Kosovitz & Knox, San Francisco.



Third award to William Guy Garwood, Palo Alto.



Fourth award to Louis Angelikis and Paul Bailly of firm of Angelikis & Bailly, Beverly Hills.

TO THE POINT

SOME STEPS IN TIME SAVE MORE THAN NINE

We're Going To Needle a few of those people who have serious misconceptions on fire doors with U/L labels. Fire doors are not installed to get by a local building code. And even if a particular opening does not technically require labeled fire doors, or cannot carry the U/L label because of frames or hardware arrangements, it still may be extremely important to install a labeled fire door.

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* * *

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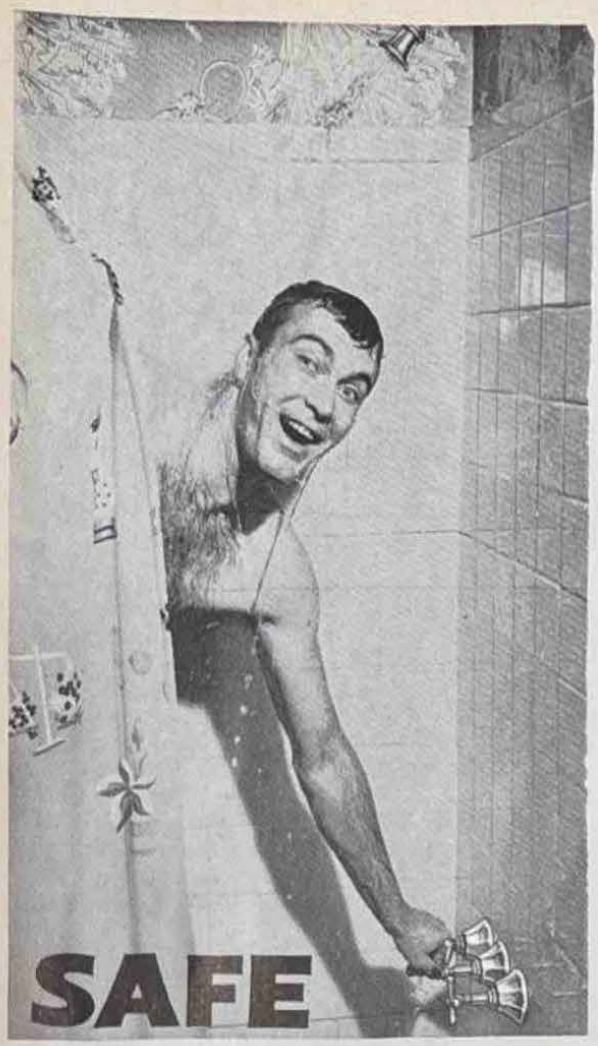
_____ 1962 Overly Convector Enclosures Catalog

_____ 1962 Door Catalog _____ 1962 Crosses & Spires Catalog

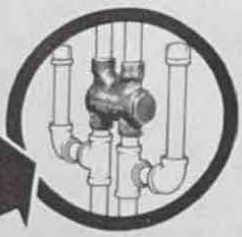
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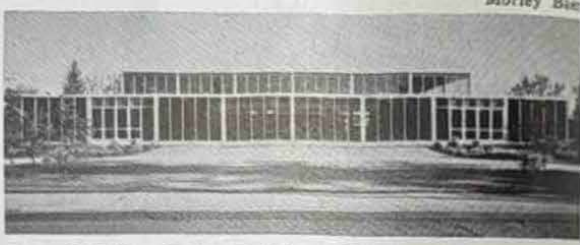
Oregon Chapter, AIA, cites three buildings, three individuals in awards program

A residence, a district sales office building and a dining hall in the Portland area won Honor Awards in the sixth annual program of the Oregon Chapter, AIA.

Also presented at the March 9 banquet in the Benson Hotel: a Special Award of Commendation to the United States National Bank of Portland and President E. J. Kolar for their recognition and encouragement of good architectural design in bank buildings constructed throughout the state; Citizen's Award to Edward M. Miller for his generous offering of wisdom and tireless effort on behalf of the community; and the Fine Arts Award to Thomas A. Hardy for his creative ability as a sculptor.

Serving on the Honor Awards jury were architects A. O. Bumgardner, Seattle, and Thornton Ladd, Pasadena; Mrs. L. J. (Betty) Feves, ceramist, Pendleton, Ore.; William Givler, dean, Museum Art School, Portland; and Thomas Vaughan, director, Oregon Historical Society, Portland.

Morley Bae

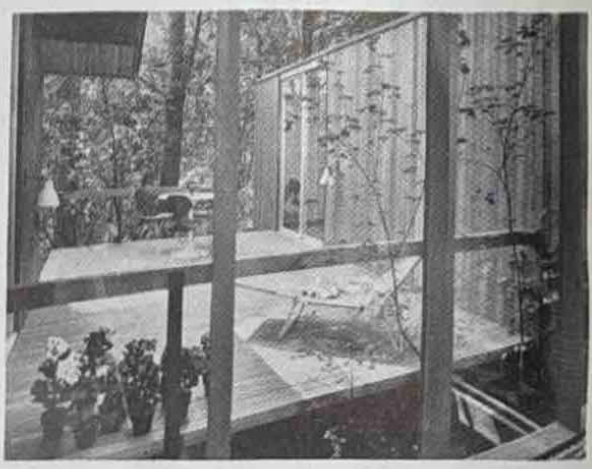


Linfield College Dining Hall by architects Skidmore, Owings & Merrill "masters a complex design problem with clearly expressed structural concepts simply executed."

Art Hupy



In ESCO Corp. Building, "clarity and proportion join with a superb combination of colors and a restrained, highly effective use of materials." Architects: Wolff & Zimmer.



Architect Saul Zaik's own house sited on wooded hillside "successfully combines sensitive integration, skillful treatment of the Pacific Northwest woodland idiom and care for simple details in a subtle and imaginative solution."

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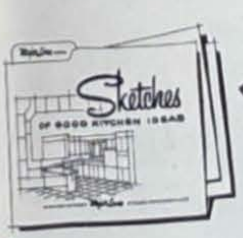


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Space-Saver Kitchens, installed in Bayview Manor, Seattle, Wash., specified by John Graham and Company, Architects-Engineers, Seattle-New York.



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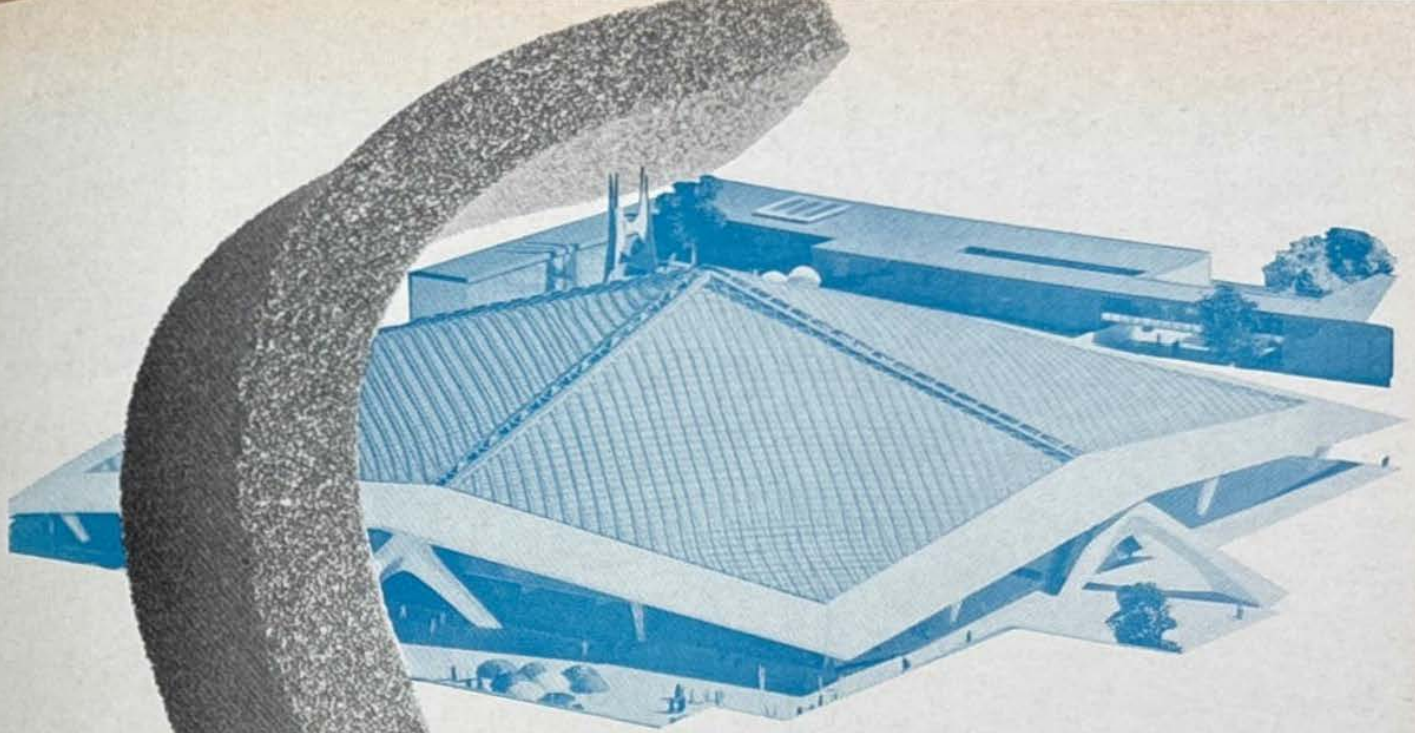
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The unique color, texture and dimension of genuine red cedar shingles – rebutted and rejointed, with machine-sanded faces – add warmth and character to exterior walls of the Forest Industries Building at the Seattle World's Fair.

Architect:
Robert B. Price, A. I. A.

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at Seattle's World Fair...

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Architects Select Titans and SCR Facebrick for The Playhouse, Fine Arts Exhibit Building, and Opera House at Seattle's Space Age World's Fair!

Amid Seattle's fabulous view of tomorrow, there are some solid thoughts for today. These buildings, for example, will become *permanent* units in Seattle's Civic Center. They are built with Gladding, McBean & Co.'s Facebrick.

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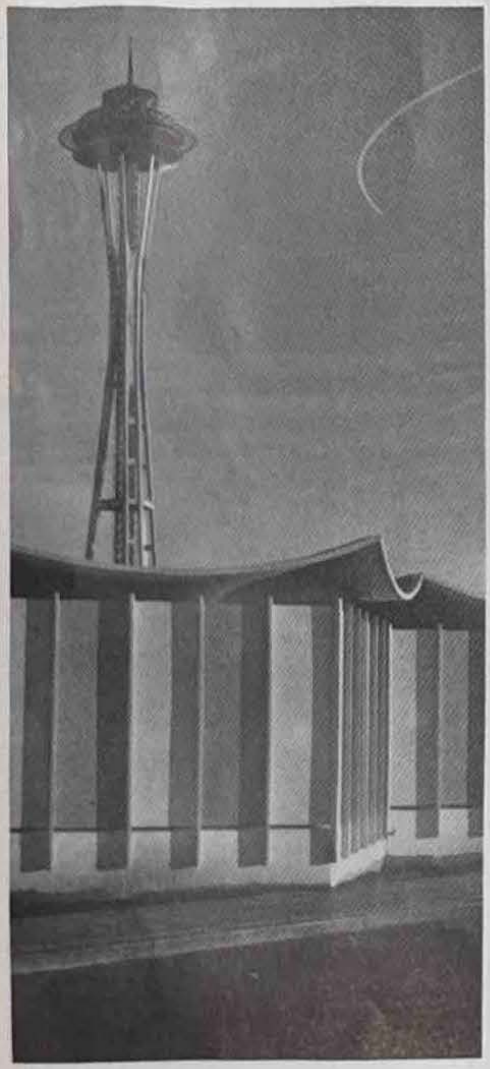
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STORE LIGHTING *(upper right)*

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OFFICE LIGHTING *(upper left)*

Here Power Groove PV lighting units have been arranged in patterns that complement the modern design of the Gallos Investment Co. office, Los Angeles. 250 footcandles delivered without glare or brightness contrast. True perfect vision lighting.

SCHOOL LIGHTING *(lower left)*

Here high quality lighting was achieved and power bills reduced with the Smoot-Holman Square System of lighting. Chalk boards receive 50 footcandles without glare or hot spots while desk surfaces register 85 footcandles. This re-lighting was done with a minimum of re-wiring.

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Whatever your requirements a Smoot-Holman Square System can be tailored to your specific needs. Contact a Smoot-Holman representative or write directly to the factory.

TOMORROW'S LIGHTING TODAY!

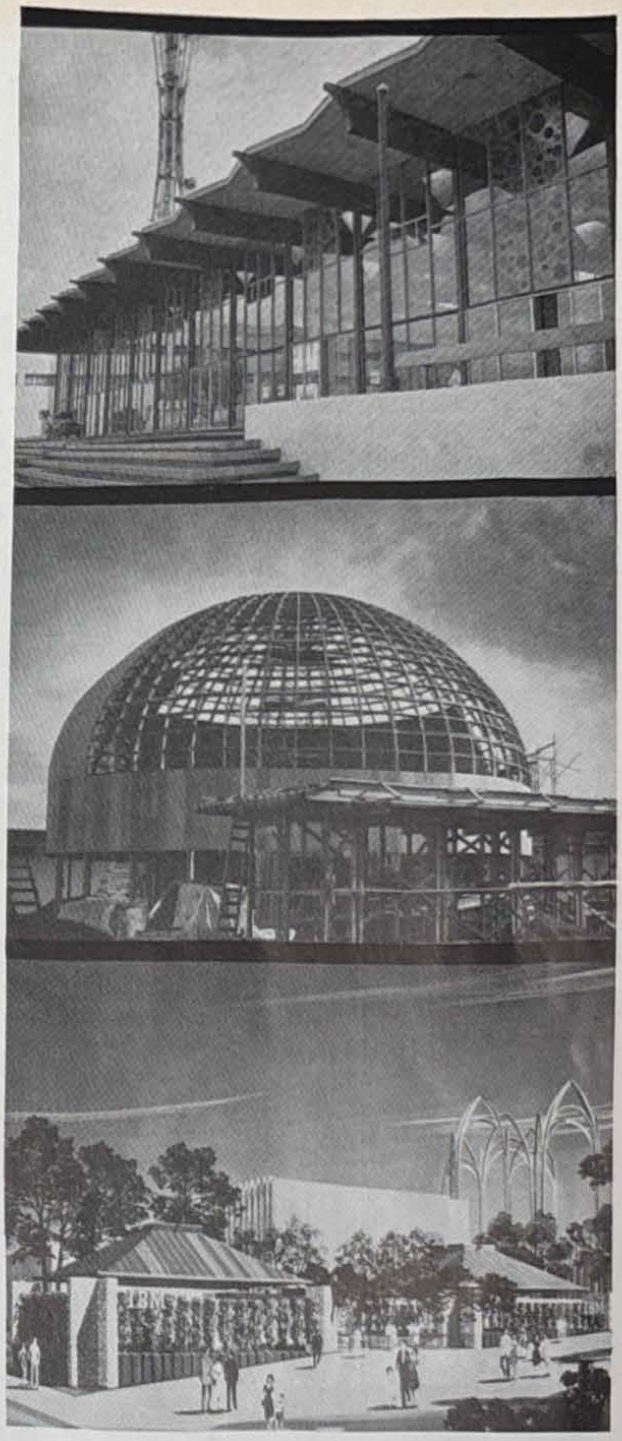
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SEATTLE WORLD'S FAIR

April 21 - October 21, 1962

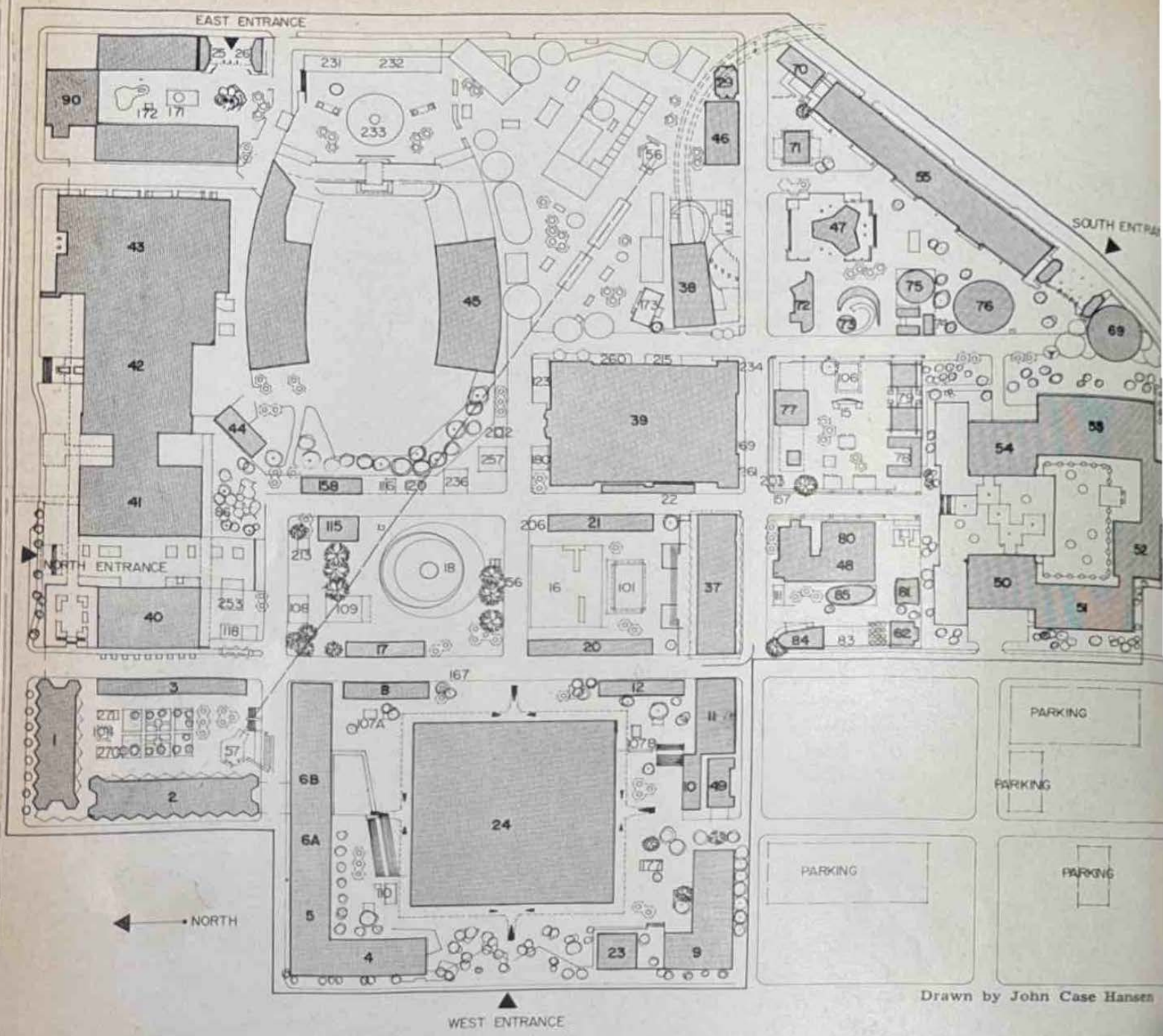
A message from the Primary Architect



World fairs, stimuli for new ideas and for probing the future, are places of education, wonderment, excitement and amusement. They invariably indicate the trends of the time. The fairs of Chicago, New York and San Francisco are things of the past. It is sad to read in the daily press: "Atomium last signs of Brussels Fair." This last vast exploitation of effort has vanished with no more than a memory and a remnant to recall its existence. From this we may conclude ideas once accomplished are no longer new. But by the same token, we can wonder whether accomplishments need disappear entirely. In contrast, Century 21 Exposition is designed not only for the excitement of the moment, but many of its structures and facilities are planned as a permanent adjunct to a projected Seattle Center of lasting significance. The termination of Century 21 Exposition will mark a beginning. Seattle World's Fair is a phoenix among fairs, for from it will emerge a new phenomenon of plazas and buildings destined to provide pleasure for present and future generations. —PAUL THIRY



Monorail winds its way past Space Needle at southern boundary of fair site toward downtown Seattle, 1.2 miles away. Harbor situated on bay of Puget Sound is at right, Mount Rainier looms in background. John Vallentyne



Drawn by John Case Hansen

Seattle World's Fair Site Plan Legend

1-12. *International Commerce & Industry Buildings*
15. *Century 21 Mural*
16. *Plaza of the States*
17. *Boulevards of the World*
18. *Seattle Center Fountain*
20-22. *Boulevards of the World*
23. *Century 21 Headquarters*
24. *Coliseum Century 21*
37. *Domestic Commerce & Industry Building*
38. *Monorail Terminal*
39. *Food Circus*
40. *Playhouse*
41. *Exhibition Hall*
42. *Opera House*
43. *Arena*
45. *Stadium*
47. *Space Needle*
48. *Club 21*
50-54. *Federal Science Pavilion*
55. *Domestic Commerce & Industry Building*
56-57. *Skyride Terminals*
69. *Ford Motor Co. Exhibit Building*
70. *Christian Science Exhibit Building*
71. *Forest Industries Display Theater*
72. *General Electric Pavilion*
73. *Pavilion of Electric Power*
74. *Transport 21*
75. *Alaska Exhibition in NB of C Building*
76. *Gas Industries Building*
77. *Bell Telephone Exhibit Building*
78. *Standard Oil Pavilion*
79. *IBM Pavilion*
80. *Christian Pavilion & Child Care Center*
81. *Information Center*
82. *Seattle-First National Bank*
84. *Sermons from Science*
85. *Nalley's Exhibit Building*
86. *Plywood Home of Living Light*
90. *Adult Amusement Area*
101. *Century Plaza Restaurant*
109. *La Fiesta Restaurant*
115. *Hofbrau Restaurant*
173. *Ivar's Fish Bar*
231. *Islands of Hawaii Pavilion*

The site

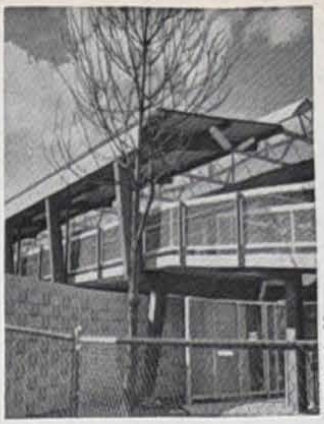
THE EXPOSITION occupies 74 acres 1.2 miles north of Seattle's downtown and a few hundred yards from its salt water port facilities. The site is small, relatively speaking, as world fairs go, but maximum utilization has been made of the land; furthermore, such buildings as the Federal Science Pavilion, Coliseum Century 21 and the Seattle Center complex even afford some breathing room and landscaped courts for rest and contemplation.

The site has been divided into five "worlds"—Century 21 (theme building), science, commerce and industry, art, entertainment—connected by a network of walkways, streets and plazas known as the Boulevards of the World. In all, the exposition provides 400,000 sq. ft. of exhibit space in permanent buildings, 350,000 sq. ft. in temporary structures and 550,000 sq. ft. of outdoor area for the construction of pavilions, restaurants, shops and amusement attractions.

As primary architect, Paul Thiry developed the master plan, working with these consultants: James B. Notkin, mechanical engineer; Beverly A. Travis, electrical engineer; O. E. Ohmdahl, landscape architect. The overall program has included such improvements as eliminating overhead utility wires in and around the exposition site and updating sewers and related service facilities.

While there are four official entrances, the Alweg Monorail is expected to bring an estimated 80% of the visitors to the fair, making the exposition terminal, in essence, the "main gate." The two four-car trains will shuttle back and forth on prestressed concrete beamways from the central shopping district at the Westlake Mall along tree-lined Fifth Avenue to the fairgrounds in less than a minute and a half.

ALWEG MONORAIL/Alweg Rapid Transit Systems of Washington State, Inc./*Howard S. Wright Construction Co.*, general contractor.



A/W staff

Monorail terminal with colorful metal roof will serve as main gate for many fair-goers.

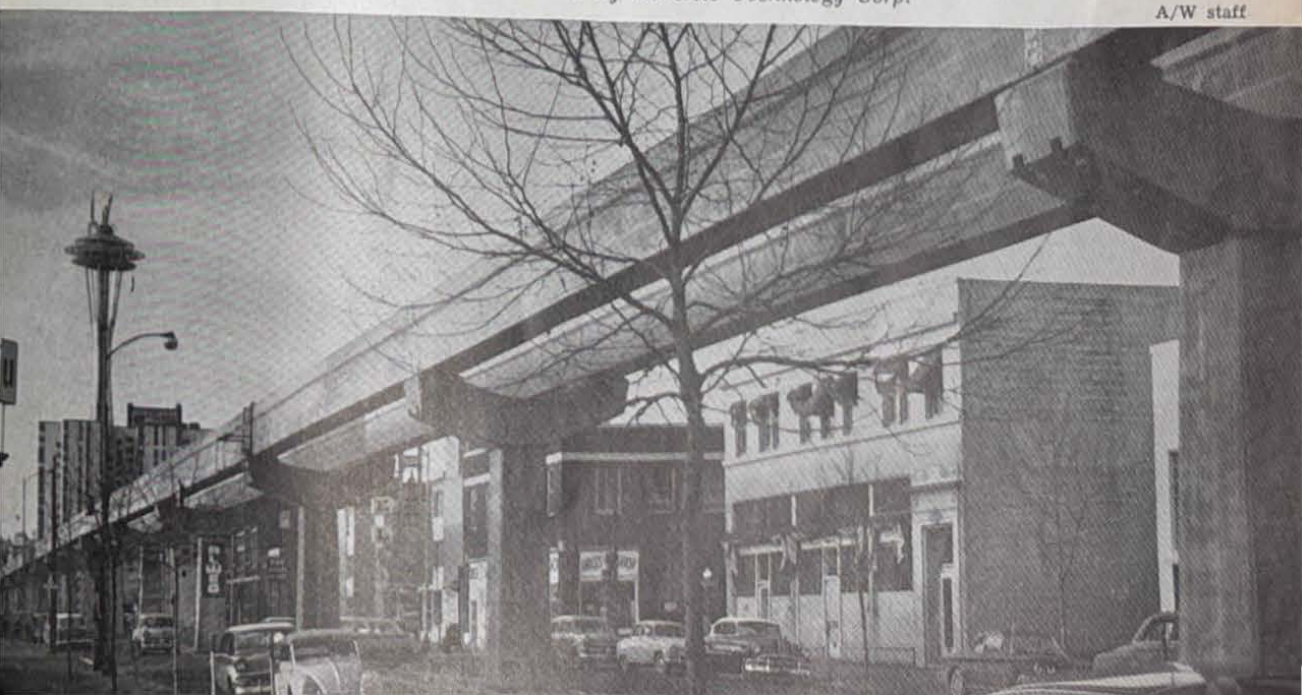
EXPOSITION STATION, No. 38/ *Adrian Wilson & Associates*, architects-engineers / *Howard S. Wright Construction Co.*, general contractor.

John Vallentyne



A/W staff

Beamway, 3 ft. wide and 5 ft. deep, is supported by T-shaped pylons placed about 85 ft. apart. Prestressed beams were fabricated in Tacoma by Concrete Technology Corp.



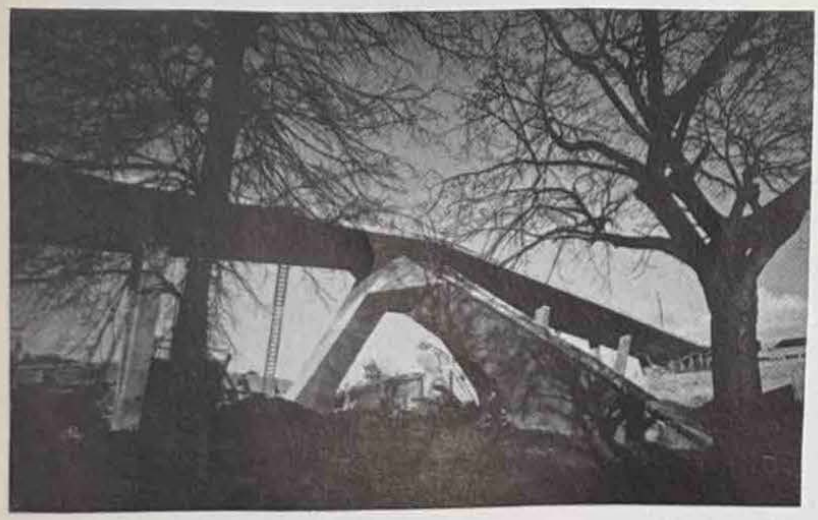
Principal projects



Steven C. Wh

COLISEUM CENTURY 21, No. 24/*Paul Thiry*, architect/*Peter H. Hostmark & Associates*, structural engineers/*Howard S. Wright Construction Co.*, general contractor.

Centered on each side like gigantic piece of sculpture, tripedal abutments support 30-ft. peripheral post-tensioned edge beam, to be coated with white plastic.

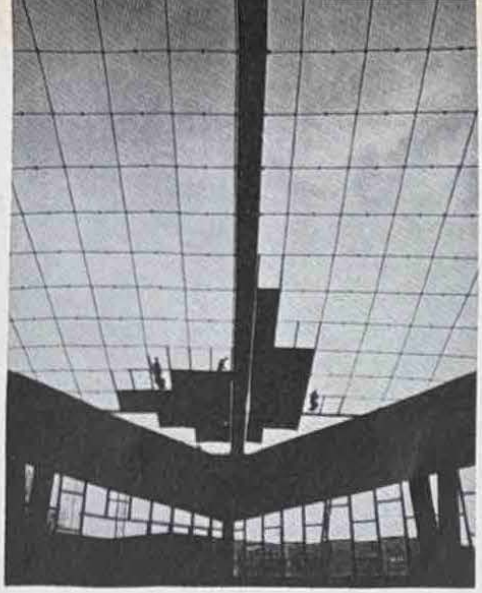


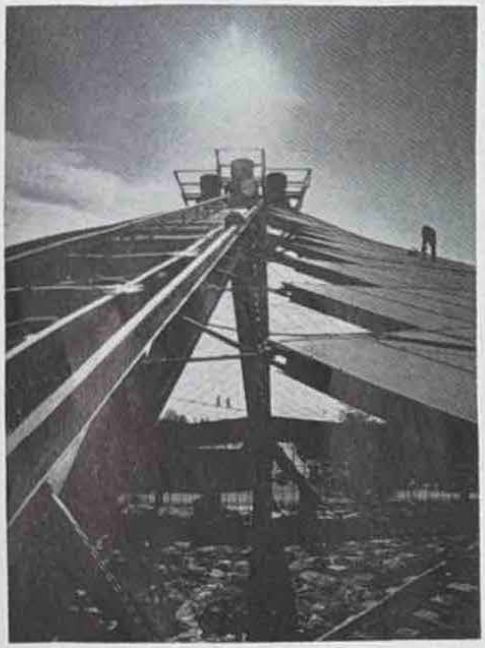


Looking down from Space Needle's restaurant level 600 ft. in sky, magnitude of 400-ft. square roof comes into proper perspective. Coliseum's scale is heightened by flat-roofed exhibit buildings which ring perimeter. Play of lights from Seattle Center Fountain in foreground will further dramatize structure as theme building now, as sports arena later.

SUPERLATIVES are helpful in describing the fair's $4 million theme building, for it is one of the largest clear span structures in the world; and the aluminum roof, the only one of its kind in existence, sweeps 110 ft. into the air at the apex, supported by steel compression trusses rising from massive concrete abutments.

When the State of Washington drew up its exposition plans, it decided to erect a building that could be converted to civic use at the end of the six-month run. After exploring many more conventional schemes, none of which seemed to fulfill the spirit of Century 21, the architect devised a plan that provides 129,000 sq. ft. of unobstructed exhibit space within glass walls—the equivalent of three football fields with some space left over—and eventually will seat from 7,000 to 12,000 spectators for such sporting events as ice hockey, basketball, boxing, wrestling and possibly indoor track. The structure also will double as a convention-exhibi-





Steven C. Wilson photos

tion facility, used in conjunction with the permanen perimeter display spaces.

But it is not sheer size that gives this building it architectural character; rather it is the grandness of the scale developed within what is essentially a simple form—although not necessarily simple in execution since the structure did involve some complicated components.

Securing the giant form, for example, required installation of 3,700 aluminum panels clamped to 51 miles of prestressed steel cables, held taut on 8-ft centers in a laced hyperbolic paraboloid formed by the trusses and prestressed concrete edge beams.

The architect believes the roof structure should have wide applications where large areas must be covered. "We have proved to our satisfaction that a building twice the size of Coliseum 21 can be constructed without basic design changes. We feel that the structure points the way to the possibility of roofing a square-mile area with the same design if necessary."

The building derives its decoration, as it were, from the structure itself. The sculptural quality of the buttresses, which dwarf the visitor as he passes through and frame the fairscape in every direction, are an art form in themselves. When viewed from such vantage points as the Space Needle and the surrounding hills, the silvery roof, accented by the red truss covers and topped by the gold-anodized monitor, is brilliant under the sun and shimmering under the moon, but always exciting in its variety of moods.

Aluminum panels, 4x8 ft., are set into grids of aluminum extrusions attached to steel cable network. Fabricated by Reynolds Metals Co., each is built like triple-decker sandwich with sound and heat insulation materials serving as two fillings. Upper metal is diamond-embossed aluminum, treated on outside with two coats of lacquer.

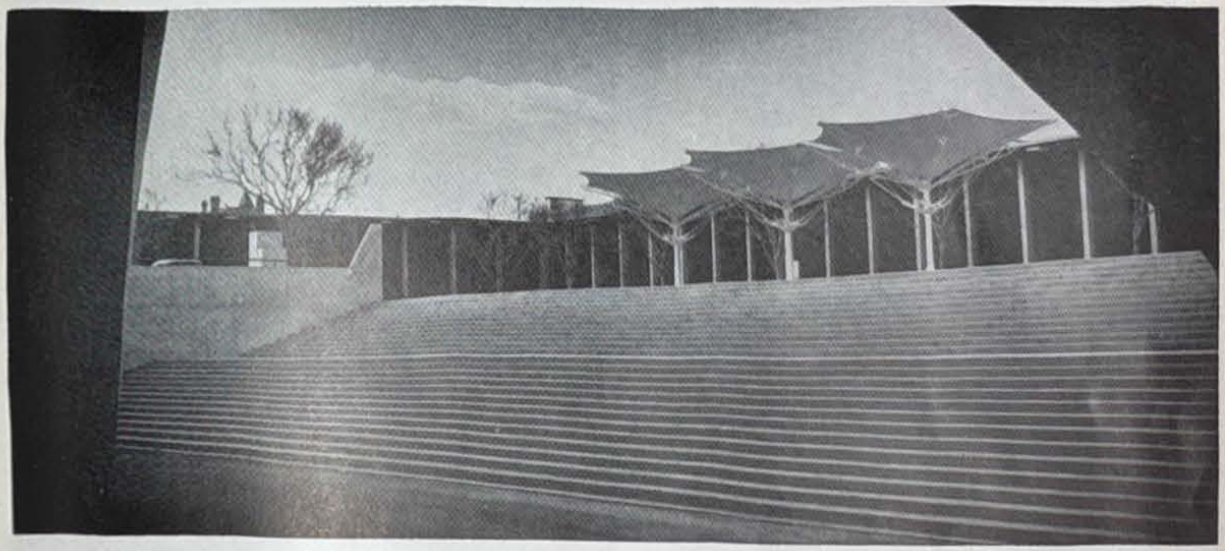




Steven C. Wilson

Coliseum is being filled with "cloud" of 3,250 multicolored aluminum cubes measuring 200 ft. across and 60 ft. high to enclose World of Tomorrow show, whose cost is expected to hit $1.2 million. Transparent elevator called Bubblelator will carry 100 persons at one time 28 ft. into honeycomb for 21-minute stay in Century 21. Some cubes will serve as projection screens.

A/W staff



Concrete buttress frames playful kiosks, rimmed by exhibit buildings.

INTERNATIONAL COMMERCE & INDUSTRY BUILDINGS, Nos. 4-12/*Paul Thiry*, architect/*Peter H. Hostmark & Associates*, structural engineers/*Dahlgren Construction Co.*, general contractor.

CONCESSION KIOSKS, located throughout site/*Wendell Lovett* and *Ted Bower*, associated architects/*Gerard Torrence*, structural engineer/*Arrow Iron & Machine Works*, contractor.

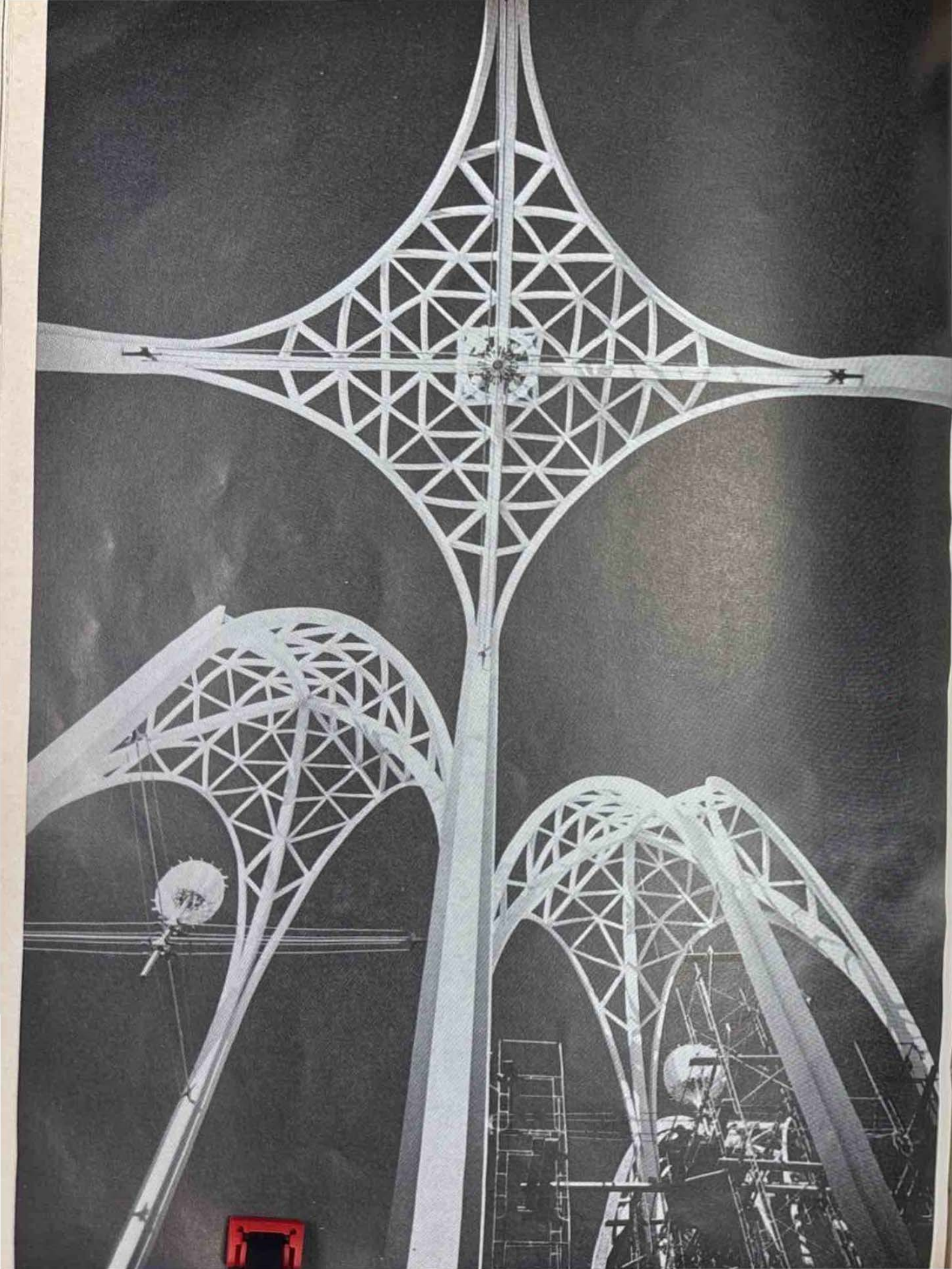
SURROUNDING THE COLISEUM is 94,200 sq. ft. of exhibit space in clear span structures of concrete columns and tilt-up walls with a steel joist roof system and metal decking and insulation. The concrete, laid out in a repetitive form which has become the architect's trademark, relieves what might otherwise have become a monotonous perimeter facade.

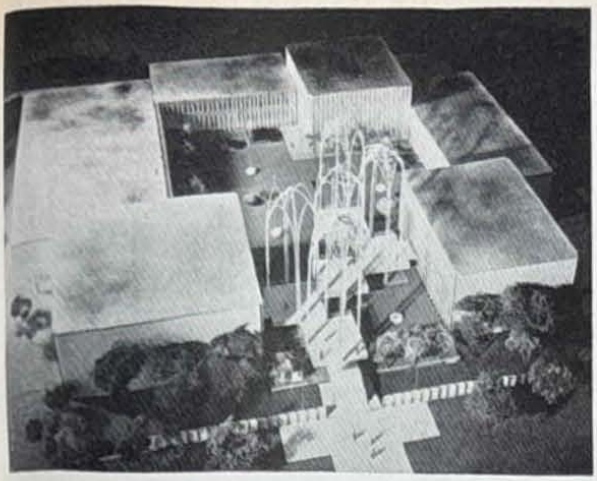
As its participation in the fair, King County has financed the buildings for the use of foreign nations who do not pay a rental fee. Thus the structures essentially are shells to allow for easy maintenance and to keep them open, since the exhibitors themselves are completing the projects according to their needs.

Two of the buildings will house shower rooms, lockers, etc., in basements which are connected by a tunnel to their big neighbor.

SHELTERS for some 80 concessions will be provided by these large inverted umbrellas arranged in gay clusters throughout the fairgrounds. When floodlighted from below at night, the fabric covers of vinyl-coated nylon in yellow, bright orange, light blue and white will produce a colorful pattern.

A repetitive hexagonal unit measuring 24 ft. from corner to corner was decided upon as the basic unit. It seemed adequate for the smaller kiosks (100-150 sq. ft. of sales area) and would lend itself to groupings for larger concessions (up to 500 sq. ft.). The stretched nylon is held in tension by a steel frame supported centrally by a 5-in. pipe sleeved into a 6-in. pipe which extends 4 ft. above the ground and 6 ft. below. Six radiating compression beams, each about 12 ft. long, are guyed to the central column by 12 tension rods.





Although six units are attached to convey illusion of single structure, they are designed so that they may be used separately after fair, each having its own entrance and mechanical system.

FEDERAL SCIENCE PAVILION, Nos. 50-54/*Minoru Yamasaki & Associates-Naramore, Bain, Brady & Johanson*, associated architects-engineers/*Worthington, Skilling, Helle & Jackson*, structural engineers/*Purvis Construction Co.*, general contractor.

THE LACY PATTERN of this six-unit complex placed around a central court with its 100-ft. high arches is in decided contrast to the forcefulness of Coliseum 21. In a sense, the pavilion is a salute to concrete, for it is believed to represent the largest single use of precast and prestressed structural components in the nation.

Designed to house the largest science exhibit ever assembled by the U.S. government (its $9 million participation includes the $3.5 million construction contract), the pavilion is expected to be turned over to the city at the close of the fair for a civic science and cultural center.

With 85,000 sq. ft. under one roof on a six-acre tract, the white buildings are marked by the five precast concrete open-ribbed vaults, neo-Gothic in style, symbolic of man's search for knowledge. They stand on 40x40-ft. concrete slabs, cast in place, in the spacious U-shaped courtyard that will hold a pool, fountain and flowers. There are 10 such slabs, five post-tensioned on the entry level and five on the lower exit area.

The Gothic architectural motif established by the vaults is continued throughout the pavilion. To provide maximum flexibility in arranging exhibits, the rectangular shaped buildings are windowless. The large areas of external wall space are given dramatic treatment through a repetitive scheme of vertical ribs and narrow arches. This rhythmic pattern is brought to a climax in the delicate soaring arches at the entrance.

A high degree of precision and quality workmanship was required in carrying out the design. Forms for casting the various beams, slabs, copings and other units were of fiberglass-reinforced plastic. In addition to allowing extensive reuse, this material worked out well in forming the curving arches and patterns needed. All wall components, 32 or 52 ft. long, are faced with an exposed white quartzite aggregate. High-early strength cement was employed in all structural members, giving the concrete a compressive strength of 5,000 psi. within 14 hours of placement.

Height of the six buildings varies, the lower ones being 32 ft. and the taller ones, 50 ft. The precisely cast, ribbed wall panels are load bearing, supporting single T-units that span up to 112 ft. Thickness of these panels is but 3 in. with vertical ribs or studs 6 in. wide and 18 or 21 in. in depth, strengthened by prestressing. They were alternately bolted and welded, attaining the "give" factor for temperature changes at the same time the necessary stiffness was achieved. The result is a single diaphragm structure which was insulated with fiberglass before applying a built-up roof. Erection of the pavilion presented no major problems. Components were handled at the construction site by cranes, working singly on panels and in pairs on the roof beams.

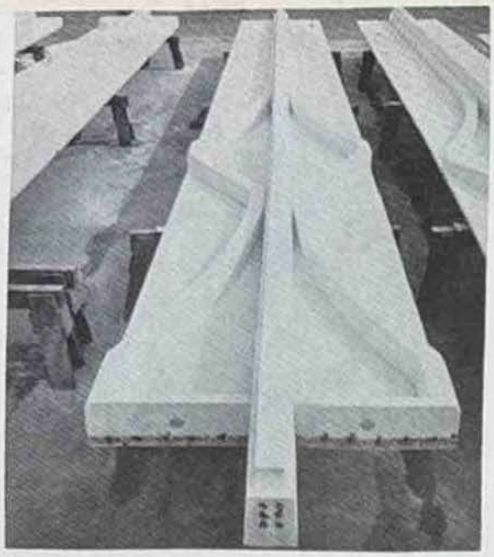
The exhibit itself is expected to become a real fair-stopper. As he enters, the spectator will be introduced to the broad science theme with the story produced by Charles Eames on a multiscreen theater. The other units will house such unique concepts as a "spacearium" or planetarium from which the solar system is viewed as if on a flight into space.

Arches will be illuminated at night by white Plexiglas "satellite" globes custom made by Seattle Lighting Fixture Co. to architects' specifications and suspended from stainless steel rods.

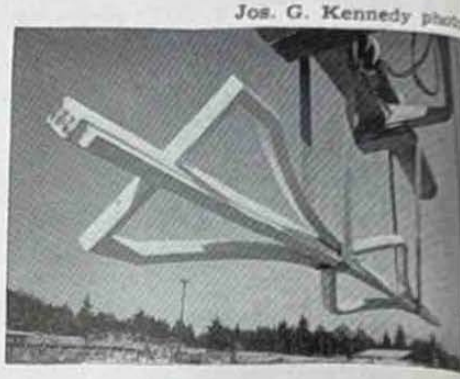


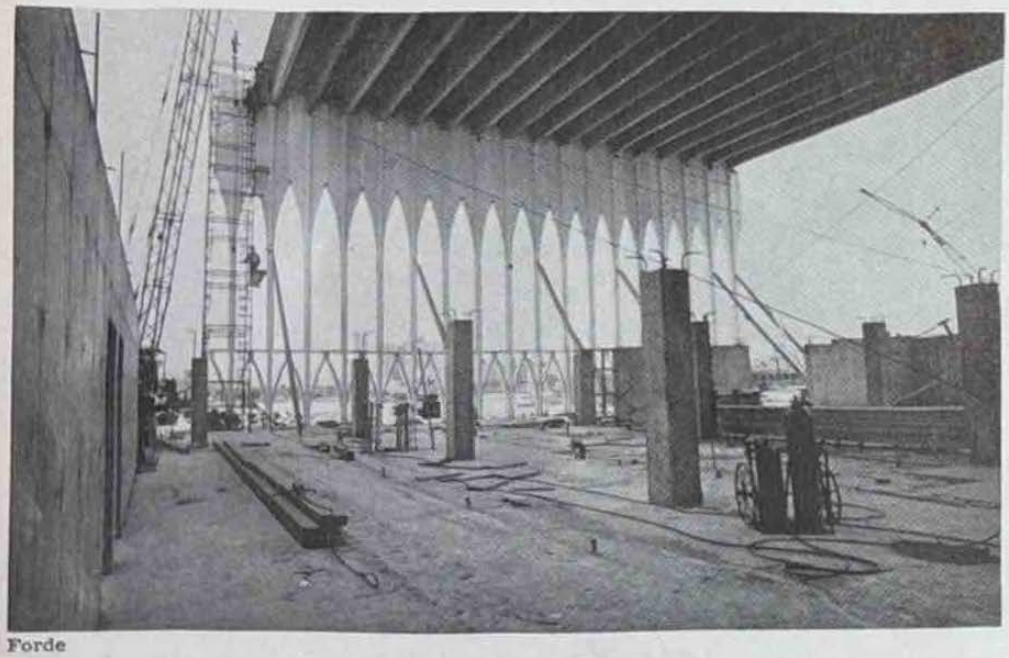
Photos: Steven C. Wilson (left), A/W staff (right).





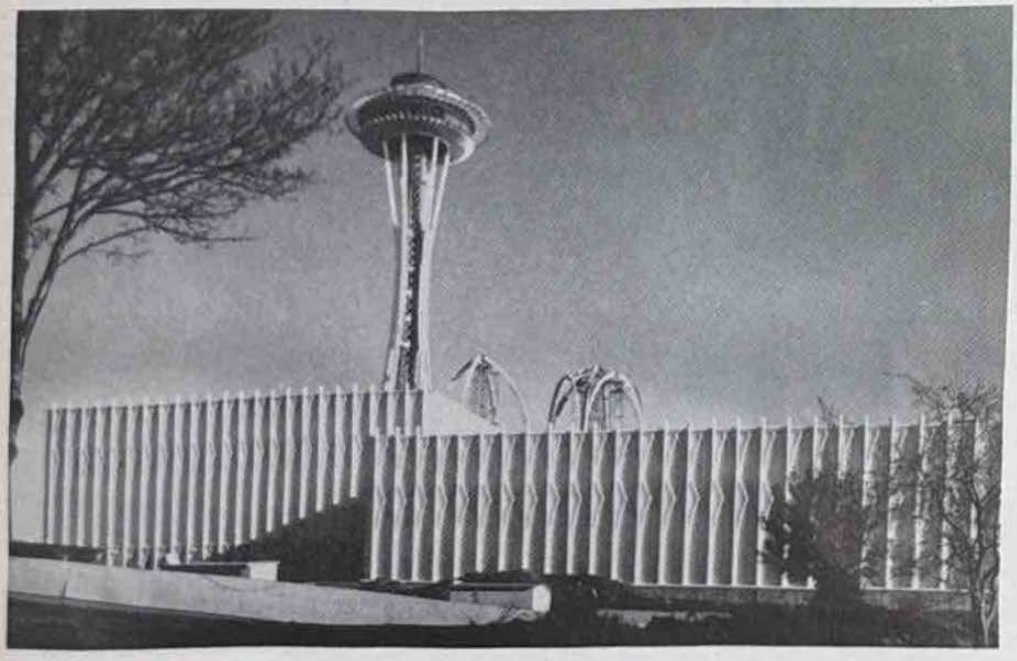
Jos. G. Kennedy photo





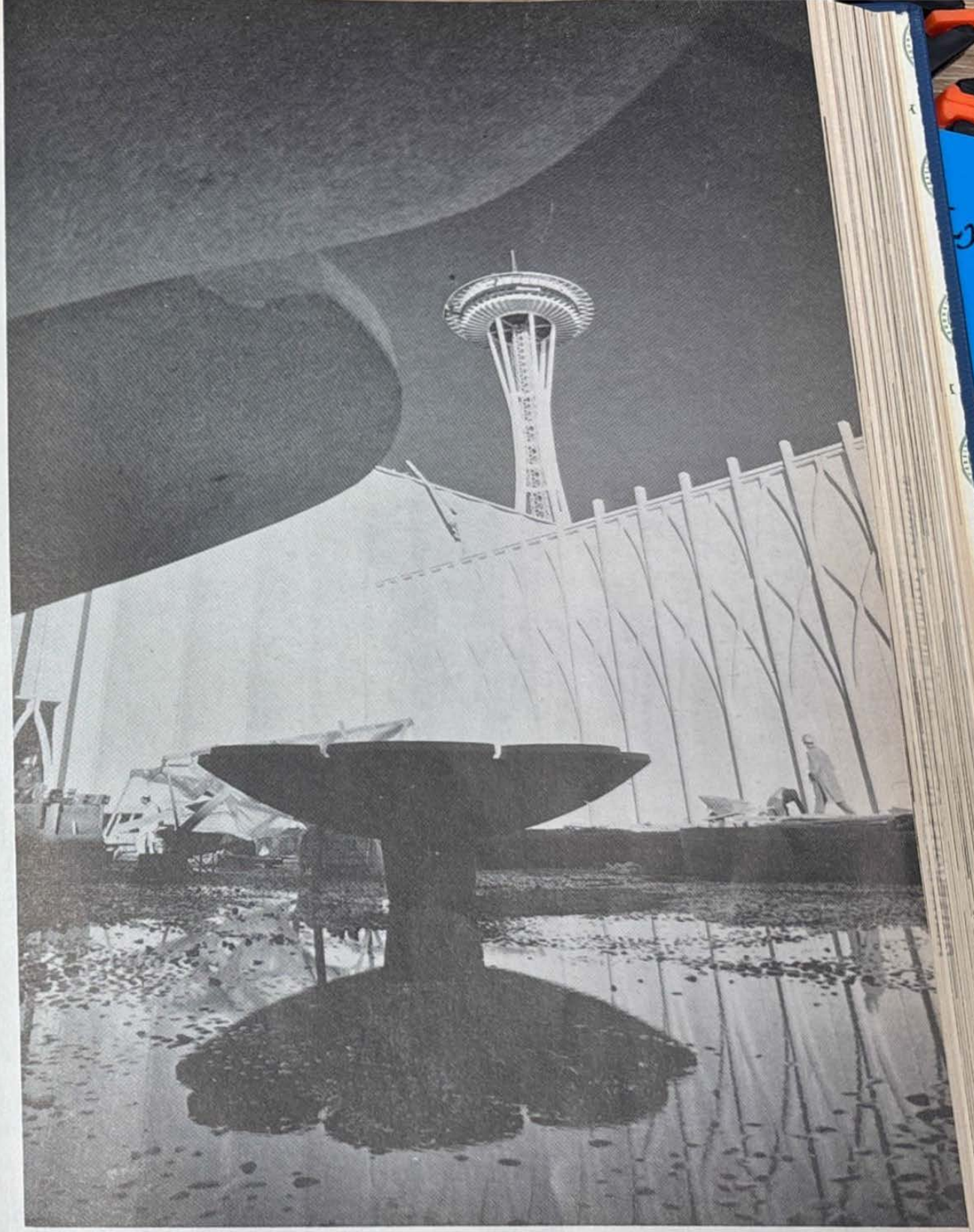
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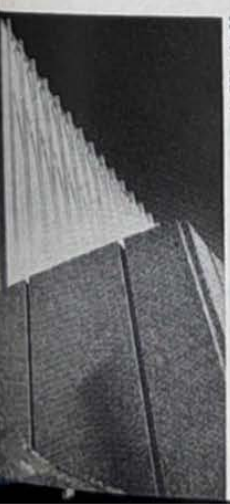
More than 11,000 tons of concrete members are cast by Associated Sand & Gravel Co., Inc., during five-month period, probably setting record. Reinforcing consists of No. 3, 4 and 5 bars, stressing strands 7/16- and 1/2-in. in diameter and galvanized mesh. Panels are air cured for week before being treated to obtain exposed aggregate surface, then given protective waterproofing coat and put in transparent plastic bags to prevent marring or soiling while being transported 25 miles to Seattle. Wall and roof members are set in place by large truck cranes and fastened together by bolting and welding of connections cast in units.

Steven C. Wilson



"No cost appears to have been spared to make this dazzling, decorated sanctuary a pleasure to behold as the visitor enters upon the scene through the skeletal Gothic 'theme' towers," comments architectural critic Victor Steinbrueck. "Boulder-lined reflecting pools with many large petal shaped fountains, delicate landscaping and terrazzo paving combine with the almost completely white walls to provide a handsome oasis within the busy hectic exposition."

Fortress-like retaining wall is of selected bank gravel.



A/W staff



Bob Peterson

Steel section is on way to upper level as five-story structure is assembled. Circle of fin girders is not completed until all steel has been hauled up.

SPACE NEEDLE, No. 47/*John Graham & Co.*, architects-engineers/*John K. Minasian*, consulting structural engineer/*Howard S. Wright Constructors, Inc.*; general contractor/*Pacific Car & Foundry Co.*, steel fabricator and erector.

A/W staff



SHAPED LIKE A SHEAF, the all-steel spire soars 500 ft. where it supports a circular glass-enclosed restaurant seating 280 diners and revolving 360 deg. every hour. Still higher is an observation deck, whose glass pavilion and outdoor promenade accommodate 350 persons.

Three elevators resembling space capsules with large vision ports handle 30 passengers each. Located outside the tower's central core, they make the trip in 43 seconds at a speed of 800 fpm. One of the elevators, which is used for service in off hours, travels 350 fpm.

Three pairs of slender steel legs in conjunction with a triangular core of steel lacework support the Space Needle's tophouse. Utilities and two screened-in stairways—832 steps each—are located in the central core. Legs are off-white; core, olive; tophouse, red and gold.

Prior to determining the height of the tophouse, "view soundings" were taken from a helicopter. The restaurant level finally selected is 150 ft. higher than nearby Queen Anne Hill, permitting an unobstructed view of the panorama. Since the tower is a private venture designed to make money, sound economics plus esthetics were the factors that prevailed in placing the Eye of the Needle at the 500-ft. level, particularly since additional height didn't provide an added view commensurate with the increased cost.

One of the prime considerations of the design was safety. Extensive soil tests on the site revealed the ground to be excellent. The foundation for the tower's six legs is buried in an excavation 30 ft. deep, requiring 250 tons of reinforcing steel and using 72 huge steel

anchor bolts 31½ ft. long and 4 in. in diameter to which the legs are attached. The core is anchored with 24 additional bolts 10 ft. long and 3 in. in diameter. Into this excavation 470 truckloads of concrete—some 5,600 tons—were poured.

As a result of this massive foundation, the Space Needle's center of gravity is very near the ground level. Wind tunnel tests with a 6-ft. architectural scale model at the University of Washington covering drag, air flow and other technical questions produced the basic criteria for the structural design. The model was tested in the equivalent of 100-mph. winds (the highest velocity recorded in Seattle was 67 mph.) and its resistance to earthquakes is almost twice that required by the city's building codes. At 53-mph. winds, the completed structure had less than ¼-in. deflection at the top.

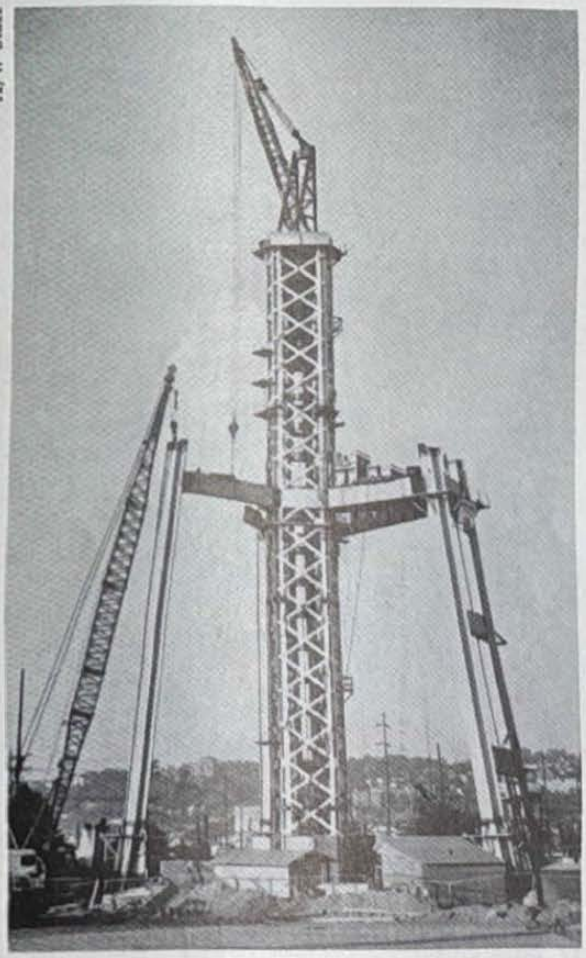
The project had its origin in a meeting held in May 1959 between John Graham and Century 21's top management. They were determined that the fair should have not only a spectacular structure to personify the theme, "Man in the Space Age," but an attraction that would have gate appeal. And they wanted a building that would serve as a permanent attraction to the city.

The architect's office at the time was designing a revolving restaurant atop a 25-story building in Honolulu's Ala Moana Shopping Center. With that idea as a starting point and with an analysis of the structure's economic feasibility, the first steps were taken to obtain financing and an appropriate site as the plans went from the schematic drawings to preliminary designs.

A single 500-ft. concrete shaft was developed, but as the architectural design advanced it became apparent that the requirements to resist wind and earthquake stresses would so thicken the shaft that it would lose its original elegance and grace. In order to maintain this concept, further design studies were necessary and at this time, Victor Steinbrueck, UW architectural professor, was engaged during his summer vacation to assist the Graham staff. The result was the addition of supporting legs to reinforce the center shaft and form a more adequate support for the restaurant and observation deck. When shown to Century 21 officials, they immediately agreed that this precisely was what Seattle needed: drama, imagination and grace combined with a sound commercial concept.

Then when it became apparent there would be no opportunity for municipal or public financing, five private investors, including Graham and contractor Howard S. Wright, formed the Space Needle Corp. The men guaranteed a loan, local banks provided the capital and everyone set to work. Almost two years to the day of the initial meeting, the first concrete was poured.

A/W staff

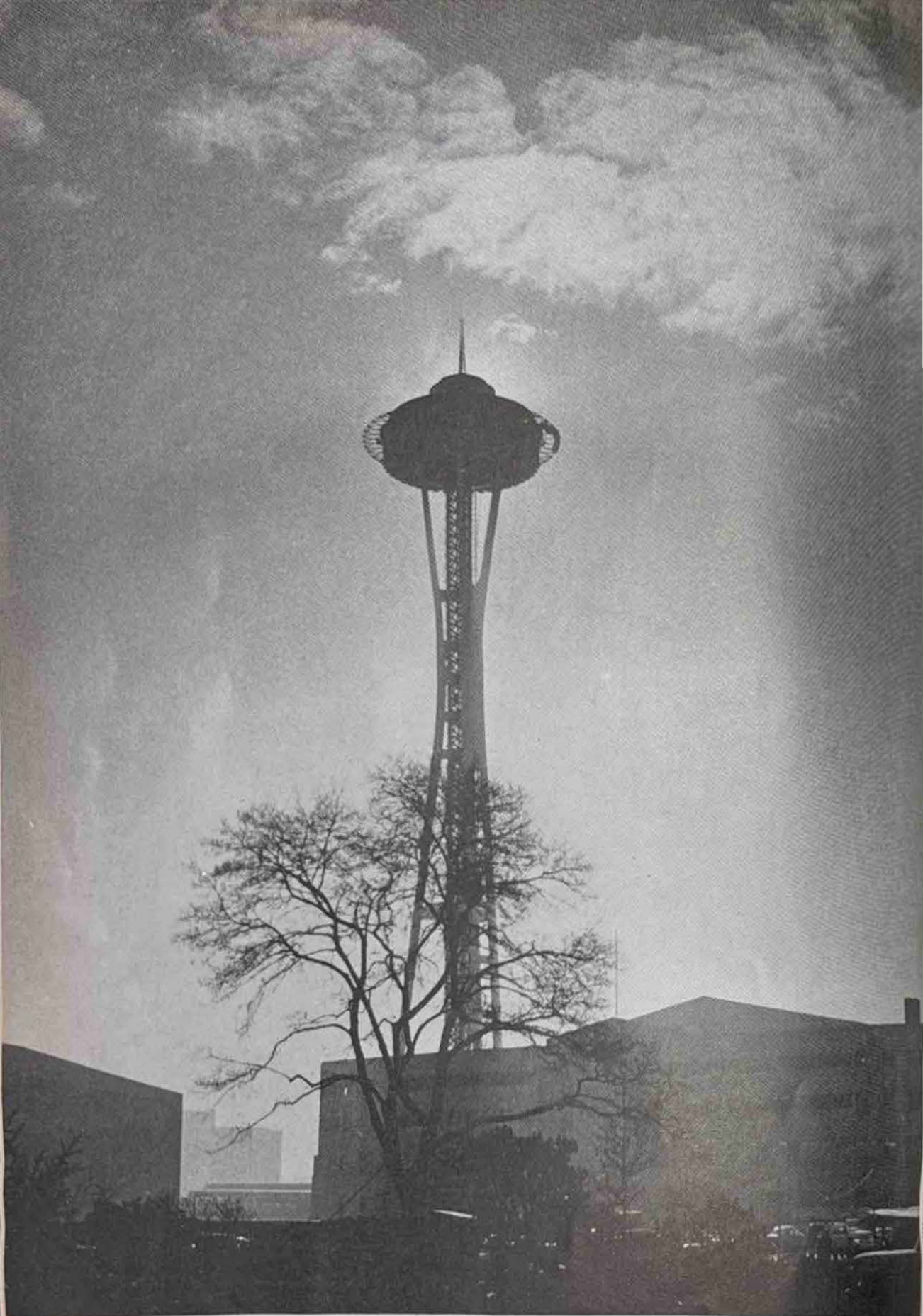


Derrick designed and constructed for this job pulls itself up by its own bootstraps through core of structure to height of 553 ft.

Bob Peterson



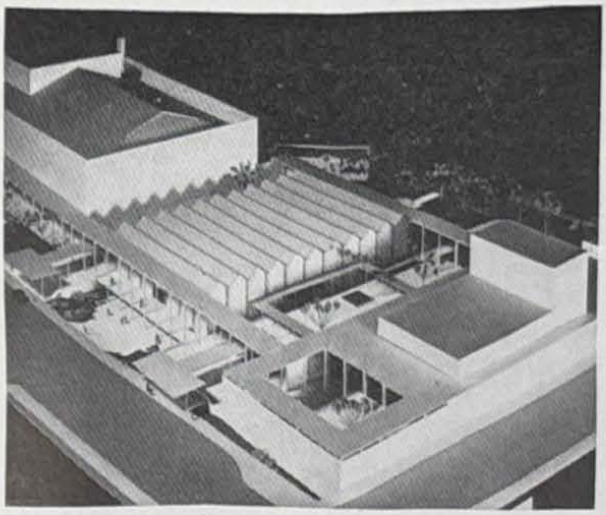
Last leg section, 80 ft. long, is gingerly lowered into place at 420-ft. level. Legs angle up until they almost meet at waist, then flare out.



While movement of 280-seat restaurant's perimeter will be almost imperceptible, diners in Eye of Needle will be able to start their meal with view of Cascade Range topped by Mount Rainier and in succession, as each course is served, be treated with panoramic vista of Puget Sound, Olympic Mountains, fairgrounds itself and metropolitan Seattle.

PLAYHOUSE, No. 40; EXHIBITION HALL, No. 41; ARENA (remodeling), No. 43/*Kirk, Wallace, McKinley & Associates*, architects/*Worthington, Skilling, Helle & Jackson*, structural engineers/*General Construction Co.*, general contractor.

OPERA HOUSE (remodeling), No. 42/*Priteca & Chiarelli*, architects/*Worthington, Skilling, Helle & Jackson*, structural engineers/*Brazier Construction Co.*, general contractor.



Courts and colonnades join Seattle Center's four elements: Playhouse (foreground), Exhibition Hall (center), Opera House (rear) and Arena (beyond). Overpass connects garage.

A/W staff



Over 750,000 6-in. SCR brick in colors especially developed by Gladding, McBean & Co. face entire complex—sepia on Opera House and pearl gray on other three structures.

TO SEATTLEITES, perhaps the most gratifying aspect of Century 21 Exposition has been the simultaneous evolution of a permanent civic center. For although this complex is not an official part of the fair's physical plant, it will play an integral role during the six-month run; afterwards, in addition to the $5.4 million facility which has taken shape, it will have over 70 acres of fully developed and landscaped area, with the Coliseum converted to a major sports and exhibition arena and the Federal Science Pavilion remaining for public use.

The Seattle Center, as it has been christened by the city fathers, incorporates the new Playhouse (800 seats) and the Exhibition Hall, the remodeled Opera House (3,058) and the refurbished Arena (5,500). The brick-faced complex is tied together visually with a colonnade 30 ft. high extending from the Arena past the other three structures, providing a continuity of design. A carefully executed traffic plan allows movement between the buildings with a minimum of change of level.

An adaptable proscenium which can adjust from 36 to 60 ft. has been designed for the stage of the small theater. A shell arrangement with movable reflectors permits the staging of music events which require an intimate setting. Lobby and foyer are carpeted and fully furnished.

A 100-ft. wide courtyard which opens a vista to the civic center's landscaped mall and mammoth fountain

connects the Playhouse and the Exhibition Hall. Here are benches, plantings and a Francois Stahly fountain sculpture 18 ft. high in a 20-ft. square lighted pool, along with a sculptured column from the Brussels World's Fair.

Providing 40,400 sq. ft. of flat floor space, the Exhibition Hall has offices, utilities and a kitchen on a lower floor, with catering equipment to be installed by the firm leasing the facility. For banquet purposes it will accommodate 3,500 diners.

Another courtyard, this one 60 ft., joins the Exhibition Hall to the Opera House. The main floor, which seats 1,704 persons, is reached by staircases rising 9 ft. Elevators on either side of the lobby transport visitors to the first and second balconies. What one sees upon entering these areas is Rosada marble from Massa, Italy. Cherry wood paneling and moldings are used extensively in the foyer and orchestra floor. Sculptured plaster is delineated in the auditorium ceiling and orchestra reflector over the proscenium. Handrails of the main staircase and hardware are bronze.

The entire concert hall has been constructed as a shell within the existing auditorium, providing for extra meeting rooms around the building's periphery.

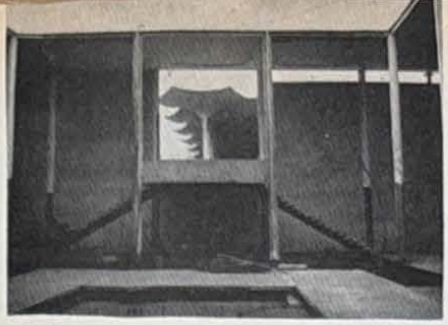
The lower level offers more exposition space with connecting stairways to the Exhibition Hall. Thus an exhibitor could combine the entire areas of the Arena, the Opera House exposition level and the Exhibition Hall into one large space totaling 100,000 sq. ft., ideal as a convention headquarters.

What the photographs cannot record at this time are the wonderfully integrated courtyards and the pieces of art that are to grace both the Playhouse and the Opera House. Even amidst the scaffolding and minus the plantings and sculpture, the visitor can sense the elegance and serenity that the courts contribute to the overall complex.

Likewise, the participation of the artists is astounding, as this rundown indicates: in the Playhouse—mural by Kenneth Callahan, wood and metal sculpture by Philip McCracken, oil painting by Margaret Tompkins, in the Opera House—free-standing sculpture at either end of the foyer by Ray Jensen and Hilda Morris, mural by Mark Tobey, custom-designed chandeliers by Irene McGowan, oil-on-mahagony mural by Guy Anderson, metal grills by Harold Balazs.

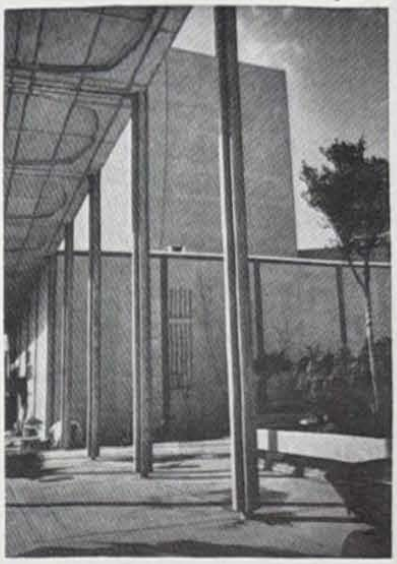


Exhibition Hall has structural support in columns, with louvered glass panels and brick panels between.



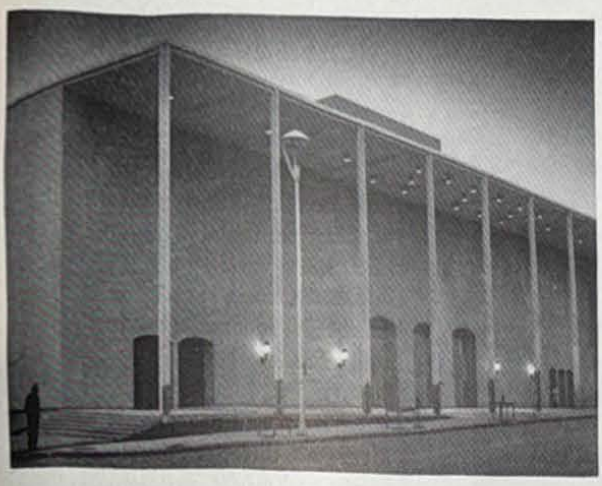
Playhouse's entrance court will be enhanced by James FitzGerald's 22-ft. high, four-piece abstract bronze fountain in center pool.

A/W staff photos

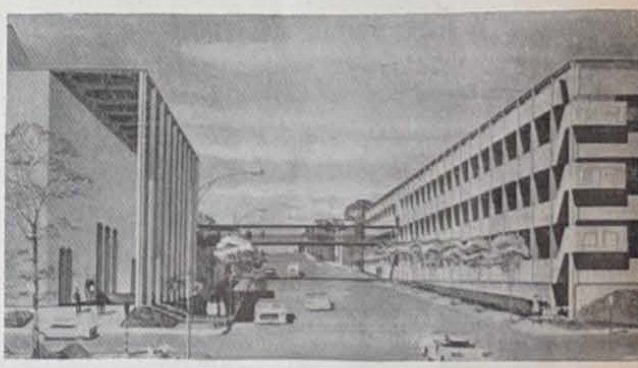


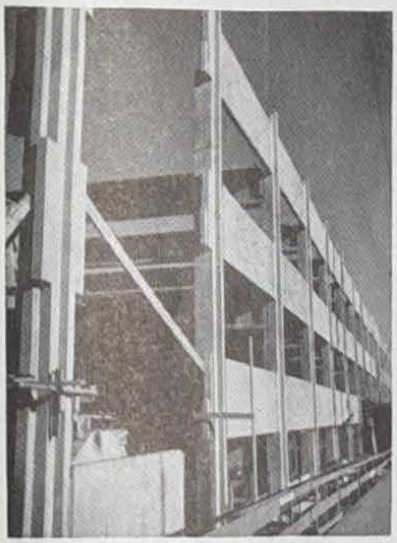
Walkway connects all buildings in complex. Two covered passenger unloading areas also are provided.

Arena, home of Seattle Totems hockey team, has been refurbished but inside remains to be done.



SEATTLE CENTER PARKING FACILITY/*N. G. Jacobson & Associates*, consulting structural engineers/*Kirk, Wallace, McKinley & Associates*, architectural consultants/*Howard S. Wright Construction Co.*, general contractor.

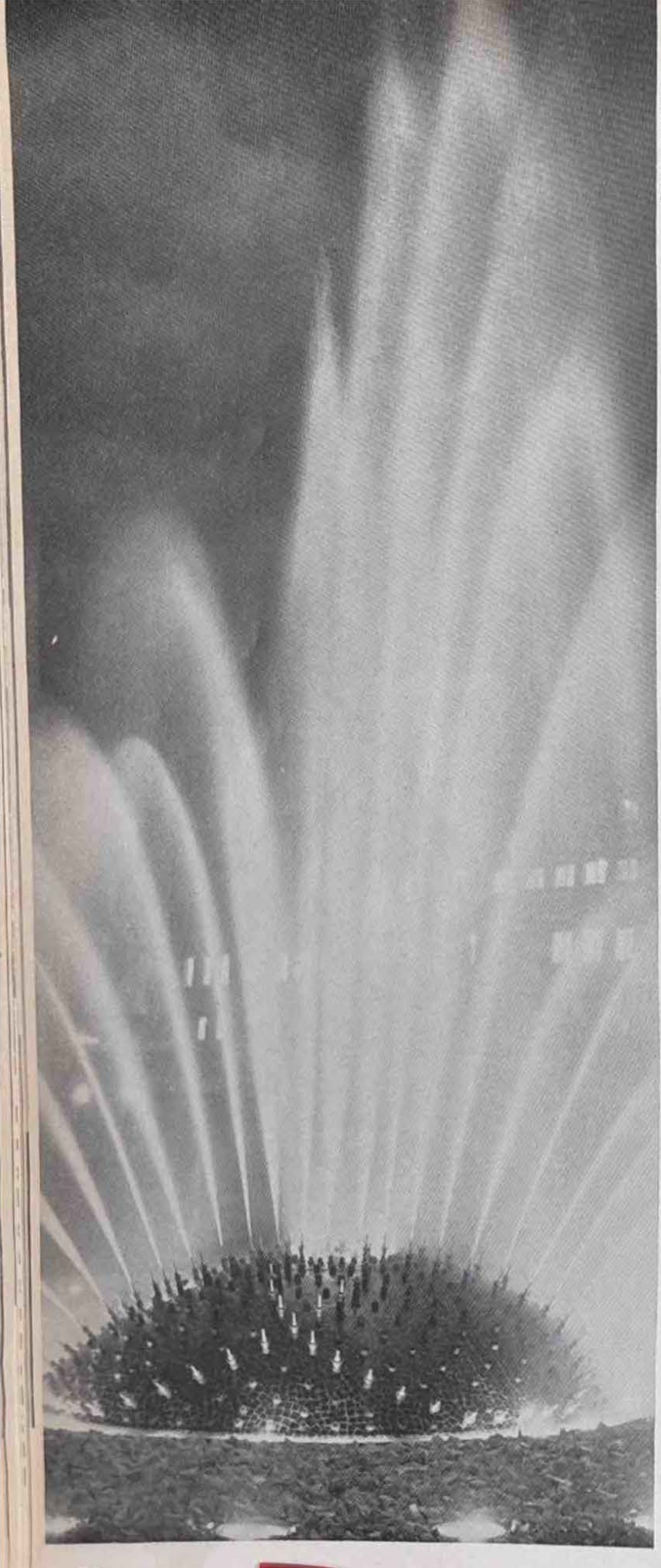




Garage is connected to civic center across street physically by covered footbridge and esthetically by sculptured precast panels 11x5 ft. in 1/2- or 3/4-in. relief by Charles Smith. Five-inch concrete slab affords composite action with 313 precast prestressed T-girders.

SELF-PARKING for 1,500 automobiles is available in the reinforced concrete structure, two blocks long and one block wide. The layout calls for one-way traffic throughout the garage, with angle parking on 60-ft. ramps and level areas by the use of four interlocked helices, two spirals up and two down. Maximum longitudinal grades do not exceed 6%. A 6-in. parabolic crown in the transverse ramp and level sections facilitates drainage and affords downgrade parking when in an uphill direction. Longitudinal column spacing of 18 ft. 6 in. conforms with the car parking module, eliminating columns in the travelways.

Total construction cost including fees, taxes, pedestrian bridge, etc., will amount to $1,070 per car as compared with the national average in excess of $1,500.



John Valentyne

SEATTLE CENTER FOUNDATION, 18/*Kazuyuki Matsushita & Hideki Shimizu*, architects; *John O. Phillips & Associate Harry B. Rich*, resident architects/*Albert A. Kelly*, structural engineer/*Valentine & Fisher*, mechanical-electrical engineers/*Sellen Construction Co., Inc.*, general contractor.

WINNERS in a $250,000 international competition sponsored by the City of Seattle, the two Tokyo architects have this to say about their scheme: "From the beginning we have set about this fountain design with a view to putting sole stress upon water itself—its shape and movement—without recourse to any sculpture or accessories.

"The water which springs up from each nozzle describes a primitive, ordinary parabola. But when the parabolas are varied and gathered methodically, they show a mighty and beautiful spectacle. Furthermore lively feeling can be expressed in the swelling curved phases of water by opening and shutting nozzle valves at different intervals. Such beauty and might are expressed only by means of water, which may be called, in its true sense of the word a fountain. Sunlight through the leaves in the daytime and floodlights at night are ample light. There is no need for outdoor lamps or sculpture."

A/W staff



Camera does not begin to indicate scale of fountain consisting of 185-ft. diameter reinforced concrete basin whose sloping walls are exposed aggregate scored in radial direction. Protruding through white quartz stone floor is 30 ft. high diameter dome or "sunflower" 6 ft. high, covered with dark amber glass and sleeved to accommodate 465 water jet nozzles, 117 of which are activated. Nozzles have 3-in. inlet.

Structure bounds fair site for 500 ft., at once barrier and enticement for spectators to come around and see what's in store.

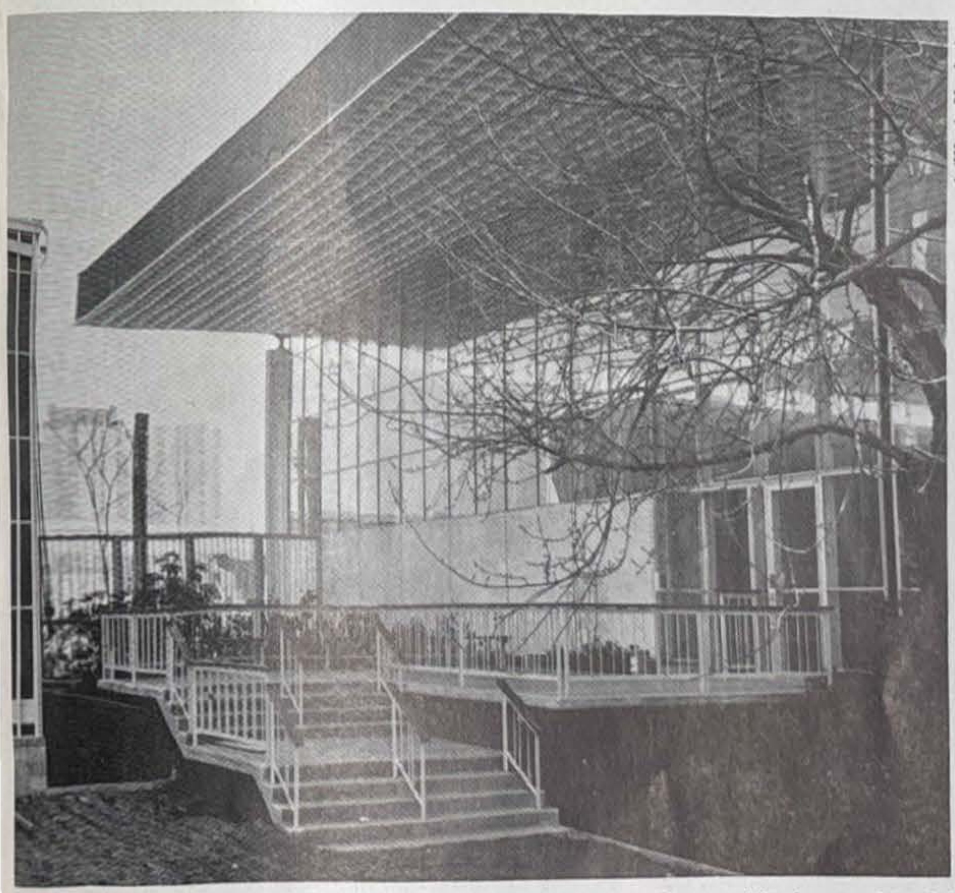


Domestic Commerce & Industry Building, No. 55 / *Waldron & Dietz*, Architects / *Olsen & Ratti*, structural engineers / *Sellen Construction Co., Inc.*, general contractor.

ARCHITECTURALLY SPEAKING, this exhibit building appears to be a candidate as one of the most successful on the fairgrounds. It is far from being spectacular, but as an understatement fulfills several objectives.

First and foremost, the structure in its simple form and neutral color scheme (white and shades of gray) provides an appropriate backdrop for the fashions, fabrics and other displays it will house, rather than competes with them. The long horizontal lines create an effective foil for the sharp vertical of the adjacent Space Needle; and the roof, in particular, helps to contain a triangular area which is rather disorganized in its plan. The sloping site permits three ceiling gradients by dropping the floor levels.

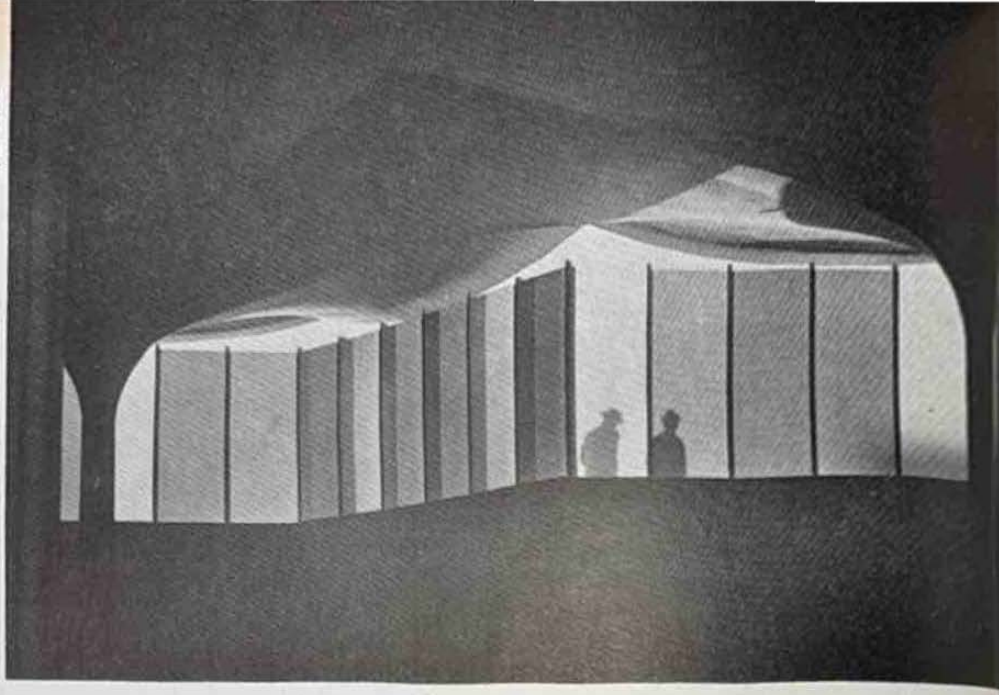
Precast concrete columns support prebuilt steel joists and girders. Cement stucco containing selected chips from an eastern Washington quarry make up the fascia and walls. The poured-in-place concrete bulkhead gets its pattern from the wood inserts used in the forming and provides the contraction jointing.



A/W staff photos

Court is pleasant interlude for rest and return to cityscape in what would otherwise be solid boundary created by exhibit building at right and Christian Science project at left.

A/W staff



Clear, white, yellow, lemon and orange Alsynite panels about 3/16 in. thick top concrete retaining wall to serve as perimeter for dual exhibit buildings.

INTERNATIONAL COMMERCE & INDUSTRY BUILDINGS, Nos. 1-3 */Walker & McGough,* architects/*Worthington, Skilling, Helle & Jackson,* structural engineers/*Sound Construction & Engineering Co.,* general contractor.

A/W staff



SIX HYPERBOLIC PARABOLOID SHELLS blending into a single fluted column make up two of the exhibit buildings; the third, not shown, is simply a box beam shelter. The twin structures actually are a collection of 52 of these shells and, with their classic Oriental overtones, seem to be particularly fitting for the foreign displays they contain.

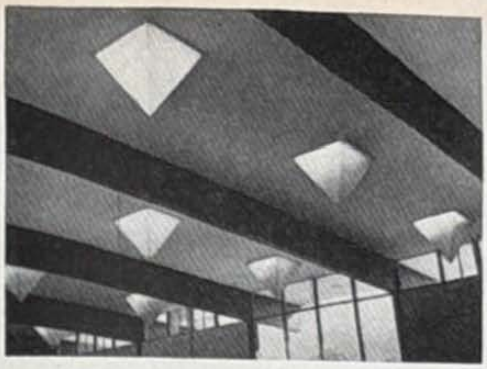
A fine, clean concrete surface was created by coating the four forms with fiberglass. High-early cement was used to cast the 1½-in. thick shells. With temperatures ranging from 35 to 65 deg., calcium chloride was added and cylinder strengths of over 3,000 lb. were obtained in 24 hours.

Located on the northwest corner of the exposition site, the inside-out umbrellas with their colorful fiberglass panels present an exciting boundary.



Robert J. Nixon

Each Proctor form, manufactured with rigid steel frames, is used 13 times, requiring no maintenance.



Rows of pyramid shaped skylights decorate roof and carry multitude of colors to interior of structure as well.

A/W staff photos



DOMESTIC COMMERCE & INDUSTRY BUILDING, No. 37/*Robert B. Price*, architect/ *Horace J. Whitacre & Associates*, structural engineers/*Sellen Construction Co., Inc.*, general contractor.

POST-FREE SPACE to display American exhibits pointing up new developments in commerce and industry for the space age is provided in this straightforward building, 277 ft. long, 70 ft. wide and 24 ft. high. A splash of color in coordinated end wall panels is disciplined by a solid roof structure of glued laminated beams. Principal facades are all glass with sliding doors leading to a landscaped approach enhanced by a fountain.

Serving as the southern boundary of the Seattle Center mall on a slightly higher grade than its neighbors, the structure occupies a commanding position on the site. It faces the Century Plaza Restaurant and is flanked by the Boulevards of the World which house the interesting foreign sidewalk cafes.

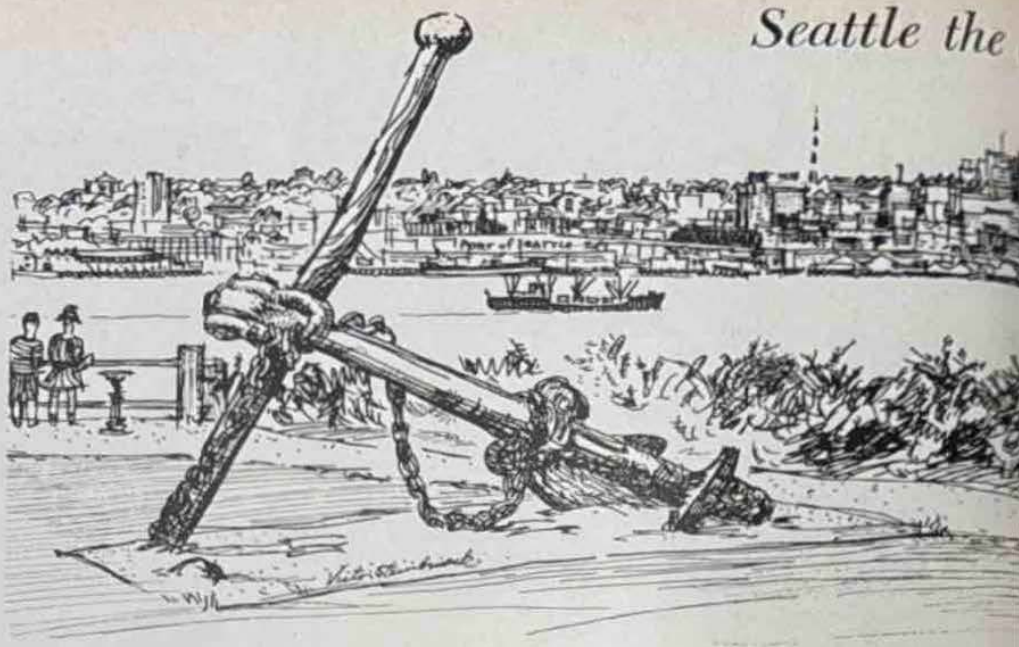


Visiting governors and other representatives of all 50 states will be honored on special days at ceremonial centerpiece.

PLAZA OF THE STATES, No. 16/*Richard Bouillon*, architect/ *H & H Construction Co.*, general contractor.

ON AN AXIS with the exhibit building above in the heart of the fairgrounds stands the state-financed plaza of exposed aggregate concrete divided into 10x20-ft. sections, with Washington's state seal forming a backdrop. Each state will be represented with its flag flying 33 ft. above the 130x160-ft. rectangle and a plaque. A gas fount will be lighted for the visit of each governor. The torch and the flagpoles will be spotlighted at night. Flags will be arranged in order of dates of statehood. There has been some discussion about the plaza remaining after the fair as a ceremonial gathering place for the Seattle Center. It will offer an excellent vantage point for viewing the permanent fountain.

Seattle the



THE SEATTLE WORLD'S FAIR presents a punctuation mark—probably an exclamation mark—in the city's progress at which it is timely to attempt to see its architecture in a broader perspective than usual.

The Century 21 exposition includes a fair sampling of the work of local architects as well as that of nationally known architectural and industrial design firms, although the most highly publicized architects are notable for their absence except for Minoru Yamasaki and Seattle's Paul Thiry and Paul Hayden Kirk. Thiry deserves recognition for creating a compact, orderly, flexible site plan utilizing the existing street grid pattern, which has proven to be exceptionally adaptable to the diversified demands of constantly changing exposition requirements and a variety of exhibition structures.

It would not be fair to compare or evaluate the work before completion or before the exposition is in progress, even though the publicists do not hesitate to do so. However, a prejudiced previous glimpse indicates the architecture of local origin will require no apologies for its sincerity, studied form and relationship to purpose; still there appears to be little imaginative experimentation in design or structure which would be appropriate for a temporary exhibition.

If there are to be unusually great architectural contributions, these surprises are still in store for the visitor. The most likely possibilities appear to be the dazzling white, exotically ornamented courtyard of the Federal Science Pavilion (architects Yamasaki with Naramore, Bain, Brady & Johanson) and the carefully detailed, pleasant, intimately scaled entrance court of the Playhouse (architects Kirk, Wallace & McKinley) with James FitzGerald's abstract bronze sculptured fountain. Competent architectural criticism will surely be forthcoming from all directions as the fair proceeds, which may help to place its architecture in its true perspective. After the exposition closes, the city will be enhanced by many fine facilities and works of art in the permanent Seattle Center. Specific use of many of the buildings is not yet determined at this writing.

In considering local architecture and its relation to the city, it seems apparent that the work of high quality for design and livability is mainly residential, small buildings and schools. Larger buildings, with a few exceptions, are consistently and almost traditionally unimpressive in esthetic quality, although of sound construction.

In moving about Seattle and its metropolitan region from Everett to Tacoma and around Lake Washington through Bothell, Kirkland, Bellevue and Renton, the observer, without the necessity of guidance, will find an abundance of good contemporary architecture. Often landscaping, generously endowed by nature, serves to help the building fit into its site while the present course, common to all American cities, of brilliant architecture not completely related to other buildings and to the urban scene exists here as well.

Locations such as Washington Park and Laurelhurst contain many fine older residence of times prior to World War II as well as a sprinkling of contemporary homes that often blend pleasantly into their neighborhoods with the help of tree-lined streets and landscaping. The latter are especially abundant in areas that have developed in the post-war years such as along West Mercer Way, Hidden Lake, the ravine above Matthew's Beach and, of course, Hilltop Community.

Much of the better residential work has been done by smaller architectural firms where the principal has been intimately involved with the entire project from programming, through design and detailing, to the actual construction and often including the furnishing, resulting in a personal quality to the work. Seattle has many such small architectural firms, often struggling both for



Coliseum court by Paul Thiry who "deserves recognition for creating a compact, orderly, flexible plan utilizing the existing street grid pattern."

architecture in perspective

by VICTOR STEINBRUECK



fine design and for a living for themselves. Elsewhere in the country, men such as these would be the employed designers and draftsmen in larger firms doing larger works. Local smaller offices appear to be existing on residential and remodeling work with an occasional small structure on the boards.

However, there is proportionately less residential architecture done by architects today than 10 or 15 years ago. Few, if any, speculative tract developments are being done with the benefit of independent architectural services, although some of the larger entrepreneurs have their own captive architects and the work is of good design quality as compared with that of other regions. Local architecture of quality has an apparently direct and beneficial influence upon the design of these homes. The neighborhood and tract planning is done with all the foresight and creative imagination that can be expected of an entrepreneur who builds to sell rather than to provide the best community for the future. Schools and community facilities attempt to follow into the expanding suburbs with the usual problems caused by lack of primary consideration for these essentials.

There has been a continuous thread of creative residential architecture appropriate to the region with examples still existing of the work of architects since the turn of the century when Ellsworth Storey designed imaginative but unpretentious homes which were both original and suitable to this region. Wood was well expressed both in the form of the houses and in detail. Kirtland Cutter produced fine residences of excellent design quality often traditionally influenced but original in concept and detail. Andrew Willatsen worked for Frank Lloyd Wright before coming to Seattle and his beautifully detailed residences demonstrate that influence but with a particular feeling for the region as well. These architects did much of their important work in the first two decades of the century.

Arthur Loveless carried through the period of the '20s with its extreme eclecticism, managing to create fine traditional residences of fresh and independent design. During the '30s, architects Paul Thiry, John T. Jacobsen and John R. Sproule were forerunners of the contemporary movement doing excellent original residential architecture which was derivative of their times. Since World War II there has been an explosion of fine contemporary residential work produced by many firms as attested by considerable local and national recognition. Many of these architects have gone on to develop more extensive practices engaged in larger buildings. Most of the presently successful firms began with residential architecture—there are some exceptions—and many still continue to do residences although much of it is in the higher priced class. Quite a few firms produce excellent work in a variety of building types.

Small commercial and professional buildings of impressive quality are to be seen on any drive about Seattle. Possibly the clients for smaller projects have been more responsive to cultural requirements and more imaginative than is possible for the more economically blinded entrepreneurs or boards responsible for large projects. Except for some recent buildings, there are few outstanding large structures in the area, although during the '20s and '30s architect R. C. Reamer produced many refined and original buildings.

In school architecure there has been a great deal of truly excellent work in recent years, some of which has received widespread recognition. Considerable civic pride in public schools exists partially because of the inspirational quality of the school facilities. Often the work has made a contribution as a progressive educational facility, for appropriateness to site and to region, and for originality and high esthetic



"Ellsworth Storey designed imaginative but unpretentious homes which were both original and suitable to this region."

Sketches by the author, professor in the College of Architecture and Urban Planning, University of Washington, will appear in his forthcoming book, "Seattle Cityscape," to be published by the University of Washington Press. Those shown here originally appeared in the Argus.



"Often the work has made a contribution as a progressive educational facility, for appropriateness to site and to region, such as Dan F. Miller & Earl D. Morris have done at Westgate Elementary School in Edmonds.



"St. Joseph Church, which was designed by Joseph Wilson in the early '30s, is an exposed concrete building worthy of commendation as a creative and advanced expression of its function."

quality suitable to the children. There has been considerable variety in form and concept often favorably effecting educational methods.

In church design there has been architecture of all sorts. Some of it has been excellent, original, imaginative and expressive of its function and spirit, while other work can be described as wild in concept and form. An observer can only wonder as to the forces that have shaped some of the houses of worship. Both the congregation and the architect must assume responsibility for some of these curiosities perpetrated on undeserving neighborhoods. The complex needs of the community church of today present difficulties for the architect requiring thoughtful study and sensitive designing in collaboration with a sympathetic client. Possibly some church building committees vary considerably in their understanding of architectural potentials so the resulting buildings may express uncertainties, prejudices and insensitivities rather than the true purpose for which the church is created.

However, many interesting and successful churches are to be found in both the newer and older sections of the city. Catholic St. Joseph Church, which was designed by architect Joseph Wilson in the early '30s, is an exposed concrete building worthy of commendation as a creative and progressive expression of its function. There are a great many recent works of fine quality which have received recognition and awards along with some less noticeable which have perhaps only been appreciated by the parishioners.

There is still a pioneering attitude in this century-old city, toward itself and toward the buildings that it builds. No part of the city is far from the woods or water and usually there is a view available. There has been a ruthlessness and callousness concerning destruction of older buildings to such an extent that there are very few early residences remaining, and no old mansions, and only in the Pioneer Square and Skid Road area are there any buildings of historical interest still extant. The Seattle Freeway has been the latest holocaust to destroy older, interesting places. Others have fallen to progress in order to provide space for new apartments and buildings in recent years. The Seattle Municipal Art Commission is attempting to develop procedures for surveying and identifying buildings of historical interest and value in order to preserve something of the past for the future.

In the heyday of the city's past growth at the turn of the century, heavy construction of bridges, roadways, retaining walls and other civic works were of high quality designed with the collaboration of both architects and engineers. Presently the limite access roadway and bridge constructi is equal to that produced anywhe for its monumental brutality and u imaginative design coupled with ruth less destruction of natural setting an adjacent neighborhood, even thoug citizen groups are making a valia effort to soften the impact upon th city. Fair visitors will be impressed b the freeway, the Portage Bay-Arbore tum-Evergreen Point Floating Bridg and Viaduct and the Alaskan Way Via duct and by their devastating effec upon the landscape and cityscape. Con struction of the bridge and the freeway will be noticeably underway during th exposition.

To describe Seattle architecture briefly it must be emphasized that the outstanding work which has met the challenge of the region is that of residential and smaller buildings. Its general characteristics: adaptation to varied site and views; a livable and sincere quality

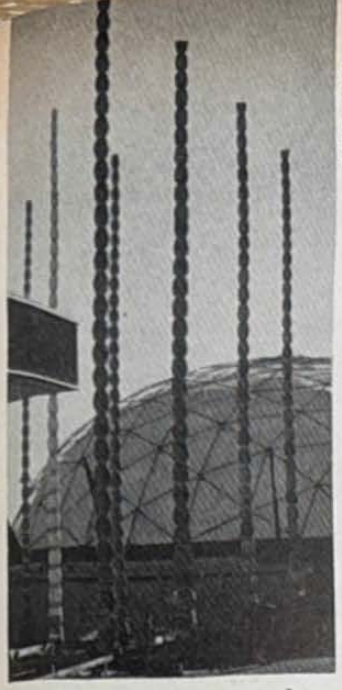


"Lush natural growth often dominating the architecture; skilled and imaginative use of wood; and freedom of design with traditional influences minimal" are among characteristics of residential work, as expressed by Gene Zema in William Holm Residence.

although usually not exotic or colorful; sound construction with sheltering forms; lush natural growth often dominating the architecture; skilled and imaginative use of wood; and freedom of design with traditional influence minimal.

The factors which have influenced the architecture appear to be: relatively young and unsophisticated country; mild climate and soft rainfall; hilly topography with many waterways; availability and early dominance of lumber industry; trade with the Orient; and the presence of the University of Washington both as a source of culture and for the training of architects and planners.

Private projects



A/W staff

Douglas fir logs turned on giant lathe by Cascade Pole Co. and painted rainbow of colors, greet visitors on south side. Architect-designed lighting fixtures are yet to be installed between 60-ft. poles.

SOUTH ENTRANCE/*Bassetti & Morse*, architects/*Wick Construction Co.*, general contractor.

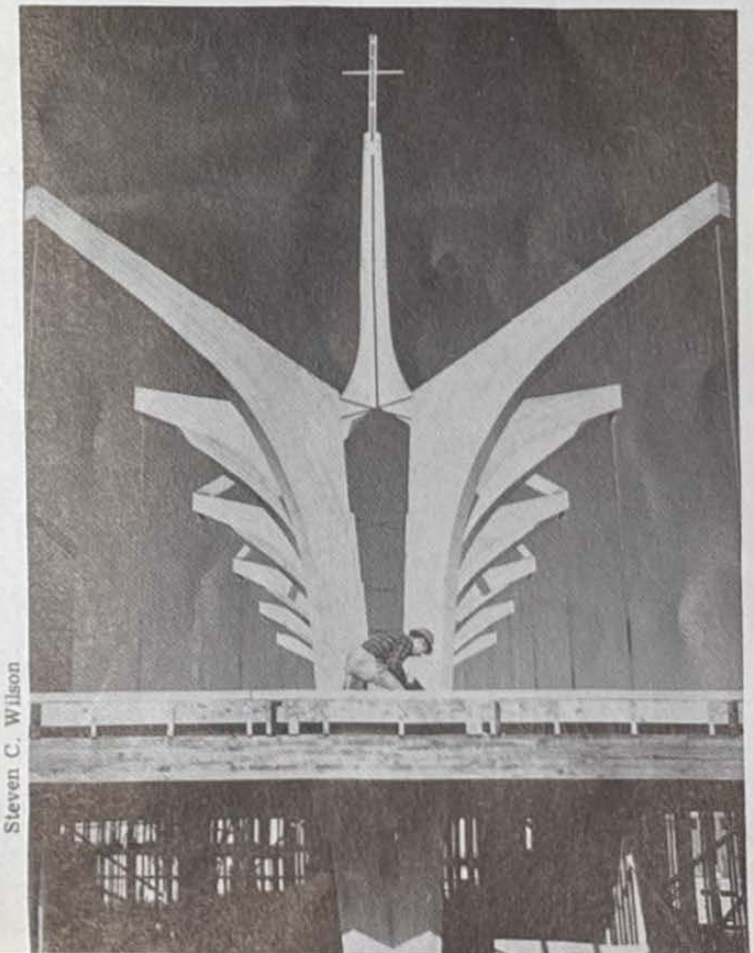
SEATTLE-FIRST NATIONAL BANK, No. 82/*Paul Thiry*, architect/*Peter H. Hostmark & Associates*, structural engineers/*Northland Constructors, Inc.*, general contractor.

Flags of many nations decorate complete banking facility housed in 5,000-sq. ft. steel-framed structure.

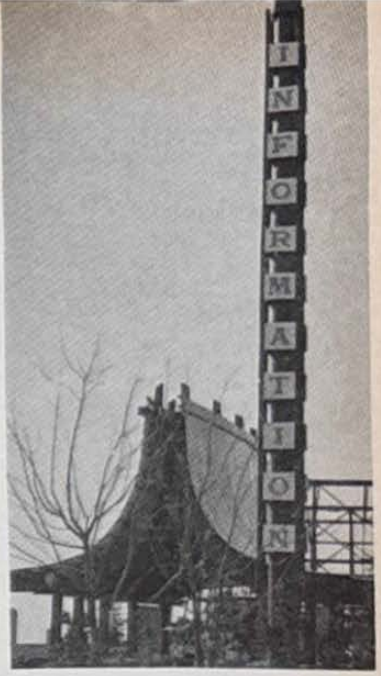


CHRISTIAN PAVILION & CHILD CARE CENTER, No. 80/*Durham, Anderson & Freed*, architects/*Hal Roe*, structural engineer/*Elling Halvorson*, general contractor.

Laminated wood arches, reaching 50 ft. in height and arranged in series of umbrellas, support suspended ceiling.



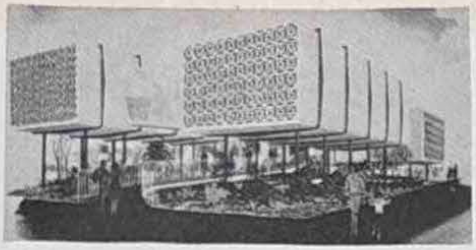
Steven C. Wilson



A/W staff

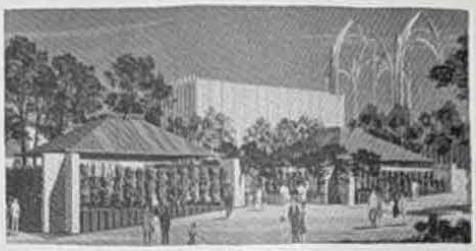
Coral-colored vinyl-impregnated nylon fabric is stretched over Douglas fir laminated beams in project sponsored by General Insurance Co. Pole that holds sign is 50 ft. high for easy visibility.

INFORMATION CENTER, No. 81/*Austin Associates*, architects - engineers / *McCann Construction Co., Inc.*, general contractor.



Three connected units are raised on steel columns for Northwest terminal railroads.

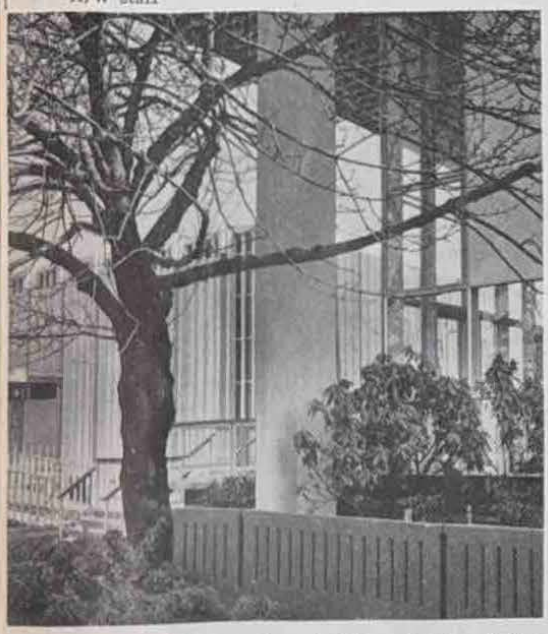
TRANSPORT 21, No. 74/*Mandeville & Berge*, architects-engineers/*Howard S. Wright Construction Co.*, general contractor.



"New Paths to Knowledge" is being developed within two copper-roofed areas supported by L-shaped columns of native stone and open section with walls of growing trees.

INTERNATIONAL BUSINESS MACHINES CORP. PAVILION, No. 79/*Carreiro Sklaroff Design Associates*, designers; *Charles Broudy*, consulting architect/*Cawdrey & Vemo*, general contractors.

A/W staff



Stressed skin panels and blue plastic glazing surface two-story building, with interior central ramp leading to lower level where rest area is located near landscaped court and pool.

CHRISTIAN SCIENCE EXHIBIT BUILDING, No. 70/*Young, Richardson & Carleton*, architects-engineers/*Mowat Bros. Construction Co.*, general contractor.

Gunited free-form structure contains 3,000-sq. ft. theater to show area's scenic beauties.

NALLEY'S EXHIBIT BUILDING, No. 85/*Paul Thiry*, architect/*Peter H. Hostmark & Associates*, structural engineers/*Hallidie Builders*, general contractors.





FORD MOTOR CO. EXHIBIT BUILDING, No. 69/*Paul Thiry*, architect/*Peter H. Hostmark & Associates*, structural engineers / *Strand, Inc.*, general contractor.

Geodesic dome which exhibitor moves about country is surrounded by projecting glued laminated columns and set on interlocking terraces.

PAVILION OF ELECTRIC POWER, No. 73/ *Hartwig Displays*, designer; *Jack N. Bryant*, architect/*Harvey H. Johnson*, structural engineer/*Harvey H. Johnson Co.*, general contractor.

Main entrance to 40-ft. dam with six spillways is via 9-ft. diameter "penstock" tube, one of more interesting uses of plaster on exposition site.

A/W staff





History of communications unfolds in main amphitheater more than two stories high and two elevated wings covered with native red cedar and white masonry veneer.

BELL TELEPHONE EXHIBIT BUILDING, No. 77/*Raymond Loewy-William Snaith, Inc.*, designers; *John Graham & Co.*, architects-engineers/*Jentoft & Forbes*, general contractors.

A/W staff



ISLANDS OF HAWAII PAVILION, No. 231/*John Graham & Co.*, architects-engineers; *James E. Fox*, design consultant/ *Baugh Construction Co.*, general contractor.

All-wood structure is 12-sided "circle" 100 ft. in diameter with post-free 600-seat theater for Polynesian entertainment.



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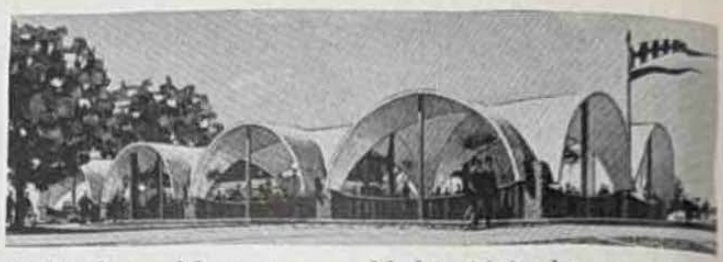
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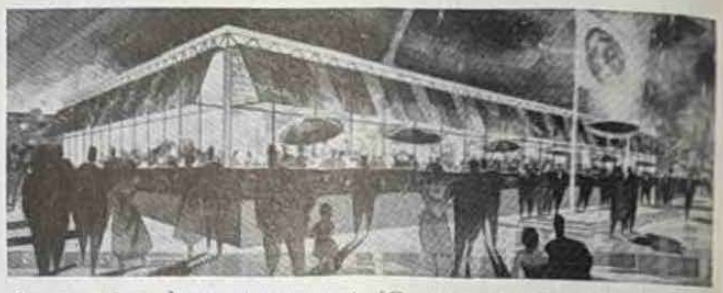
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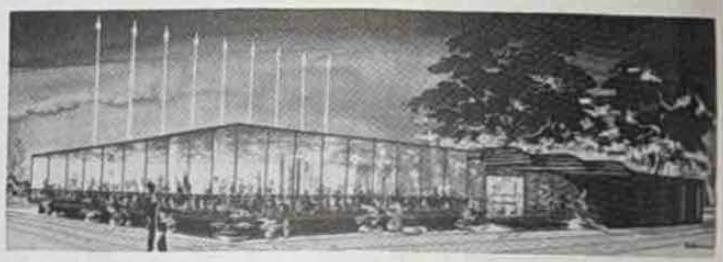
Eight plywood bays are assembled in 20-ft. diameter vaults, one of largest thin shell spans in this configuration.

HOFBRAU RESTAURANT, No. 115/*John Graham & Co.*, architects-engineers/*John M. Anderson*, general contractor.



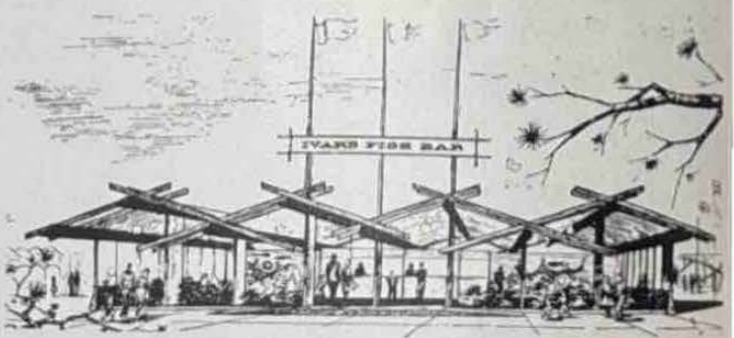
Automation—large restaurant (Century Inn) plus six food service operations (Centurymatics)—is featured in this V-Lok steel frame fabricated by Taft Structurals, Inc., and assembled without nuts or bolts.

CENTURY PLAZA RESTAURANT, No. 101/*Bouillon & Williams*, architects/*Olsen & Ratti*, structural engineers/*Simone Construction Co.*, general contractor.



Cantilevered 2 ft. from ground level, wood-framed structure makes most of view of nearby fountain and mall area.

LA FIESTA RESTAURANT, No. 109/*Burhans Design Associates, Inc.*, designer/*Earley Construction Co.*, general contractor.

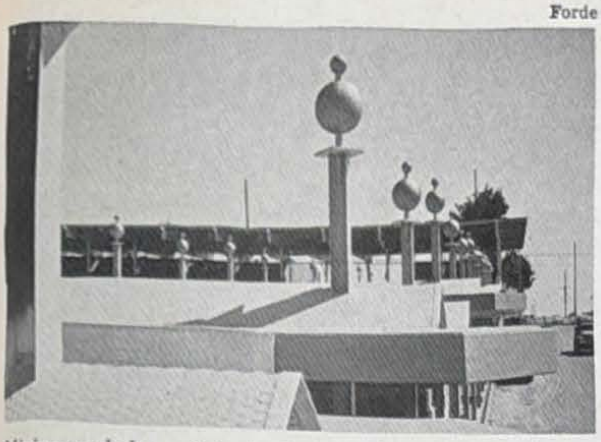


Roof purlins of exposed timber structure extend down to support decorative bamboo trellises.

IVAR'S FISH BAR, No. 173/*Howard A. Kinney*, architect/*Hux Construction Co.*, general contractor.

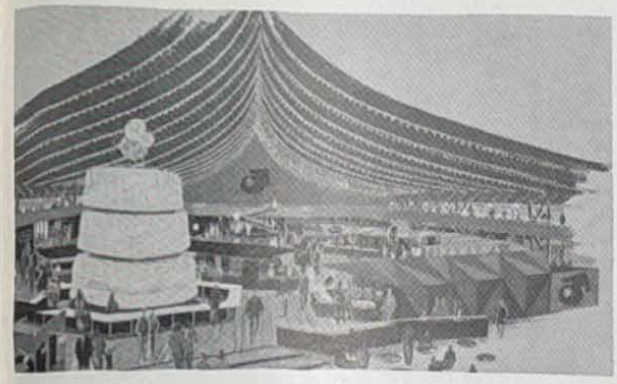
...d frolic

Forde



Minimum shelters of steel columns and stressed skin plywood roof sections with sprayed pigmented plastic provide bazaar-like atmosphere for cafes of many lands.

BOULEVARDS OF THE WORLD, Nos. 17, 20-22/*Naramore, Bain, Brady & Johanson,* architects-engineers/*Collins-Hunt Construction Co., Sellen Construction Co., Inc.,* general contractors.



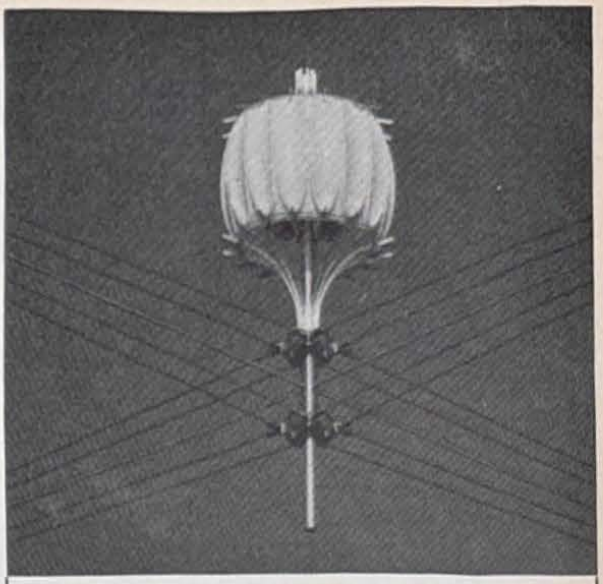
Variety of concessions in spruced-up existing Armory should please most discriminating palate.

FOOD CIRCUS, No. 39/*Durham, Anderson & Freed,* architects/*Sellen Construction Co., Inc.,* general contractor.



Colorful sunbursts of half-cone shaped plastic panels roof exposed steel framework of identical stations from which visitors ride in three-passenger cars 60 ft. above grounds.

SKYRIDE TERMINALS, Nos. 56-57/*Tucker & Shields,* architects/*John H. Stevenson Sr.,* structural engineer/*Howard S. Wright Construction Co.,* general contractor.



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Art in Century 21

To the newcomer who still envisions Seattle as a cultural dustbin, the amount of art on the exposition site, much of it in the Seattle Center complex, will come as a big surprise. The pieces shown here are only a token of what is in store for the visitor.

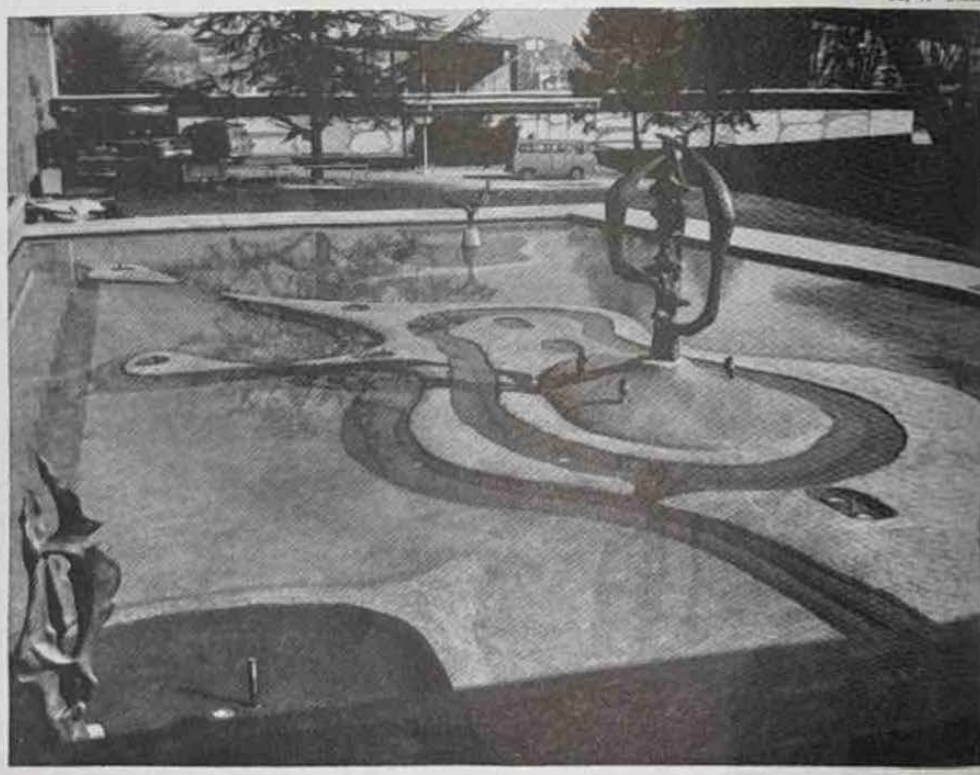
To Seattleites, however, this is not an unusual situation, for a genuine integration of the art and architecture probably is rooted as firmly in the Pacific Northwest as in any other section of the country. In too many areas art is merely an afterthought—a mural to fill a blank wall—or is used as a crutch to cover up what is essentially a poorly designed building. Not that this doesn't happen here on occasion but the basic approach to the architect-artist relationship seems to be more compatible and sympathetic.

As further evidence of this, the Northwest's regional representative for the American Craftsmen's Council, Anne Todd, a year ago compiled the first illustrated directory of more than 70 area artists who have executed, or are interested in securing, architectural commissions. Supplements will be issued from time to time (the first already has been published), with a jury reviewing proposed additions.



Stained glass of faceted "chinks" of marble chip aggregate highlights facade of Christian Pavilion & Child Care Center. Designed by John W. Winterich & Associates, winner of competition sponsored by Stained Glass Association of America, 40x10-ft. window is entitled "Continuity of Life."

A/W staff

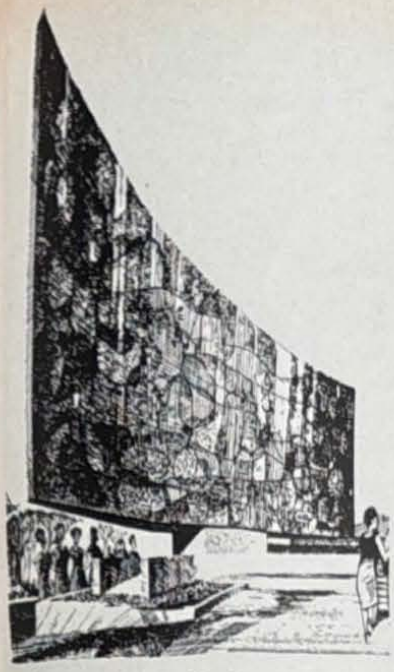


Undulating basin on north side of Coliseum contains three-piece bronze fountain sculpture by Everett DuPen, who calls his work "Evolution of Life." Tree of life casting, 10½ ft. tall, is in center of pool. Second figure is abstract treatment of gulls in flight; third is artist's interpretation of flowing seaweed.

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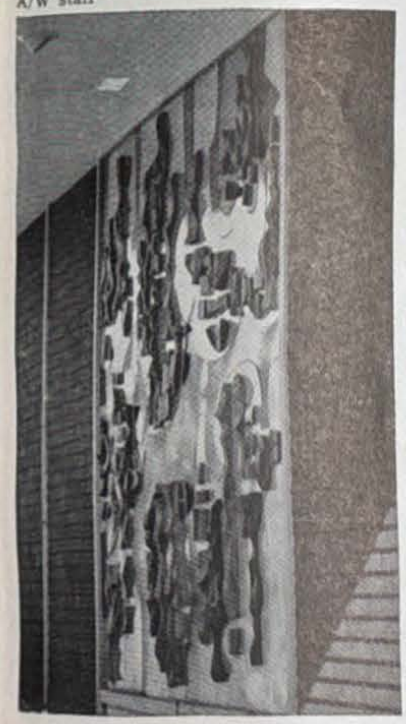
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Largest single work of art in Pacific Northwest, Paul Horiuchi's mural, 17 ft. high and 60 ft. long, has been executed in 160 shades of glass mosaic on 54 concrete slabs in Venice. It is being erected by Hainsworth Construction Co. on wall designed by Paul Thiry at end of open plaza adjacent to Federal Science Pavilion and Space Needle. Paid for by funds which are designated for development of grounds, mural will be donated by fair's corporate officers as gift to city at close of exposition.

A/W staff



Wood sculpture by Harold Balazs decorates wall of Forest Industries Display Theater, designed by Robert B. Price and built by Standard Construction Co.

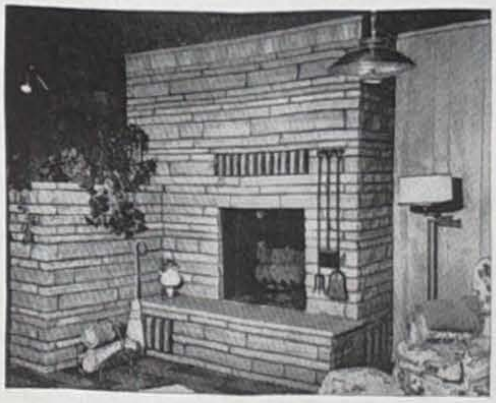
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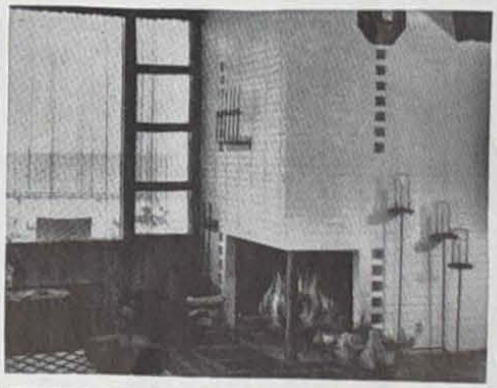
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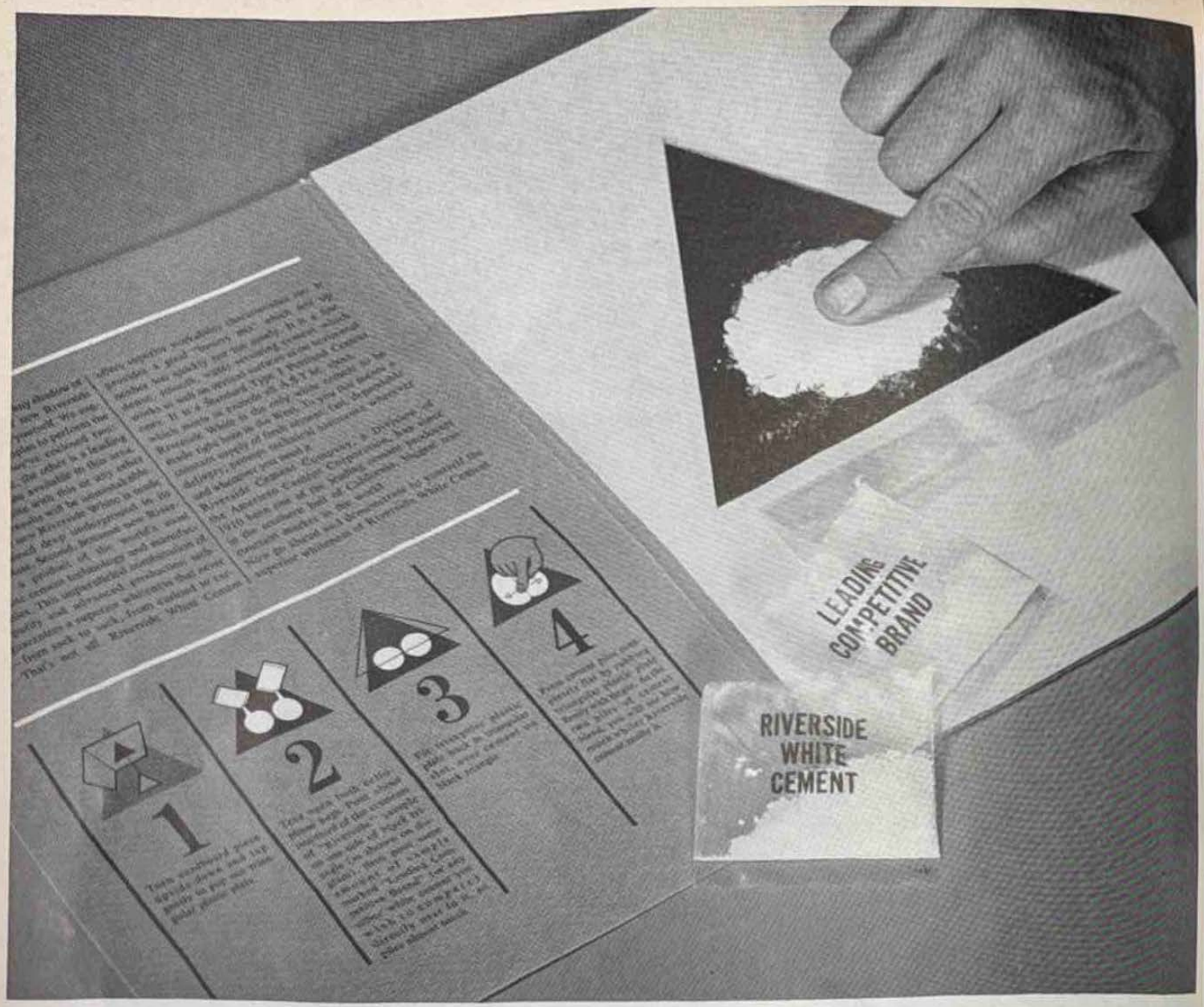
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1 OPERA HOUSE
Architect: *Priteca and Chiarelli*
General Contractor: *Brazier Construction Co.*
Zonolite Mono-Kote fireproofing. Zonolite Plaster aggregate used for construction of the proscenium wall.

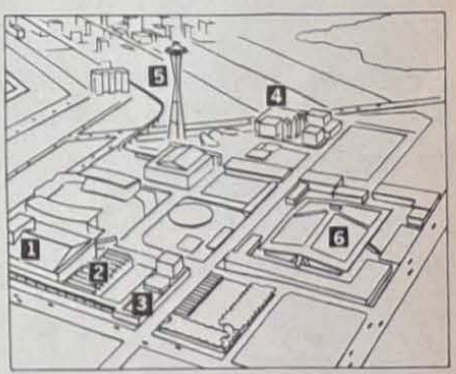
2 EXHIBITION HALL
Architect: *Kirk, Wallace, McKinley & Associates*
General Contractor: *General Construction Co.*
Zono-Coustic acoustical plaster applied directly to the folded plate concrete roof.

3 PLAYHOUSE
Architect: *Kirk, Wallace, McKinley & Associates*
General Contractor: *General Construction Co.*
Zono-Coustic applied to gypsum lath and sand plaster.

4 FEDERAL SCIENCE PAVILION
Architect: *Minoru Yamasaki & Associates*
Associate Arch. & Eng.: *Naramore, Bain, Brady & Johanson*
General Contractor: *Purvis Construction Co.*
In the left hand front corner, there is a spiralling wall made of wood frame with metal lath, Zonolite plaster base coat and Zono-Coustic acoustical plastic.

5 SPACE NEEDLE
Architect: *John Graham & Company*
General Contractor: *Howard S. Wright Construction Co.*
Zonolite Mono-Kote, Zono-Coustic and Zonolite vermiculite plaster are all used on the fair's Space Needle.

6 PERIMETER EXHIBIT BUILDINGS
Architect: *Paul Thiry*
General Contractor: *Dahlgren Construction Co.*
Zonolite vermiculite concrete roof decks used for their lightweight insulating qualities on the Commerce & Industry complex.



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PRODUCTS

This month's department is devoted to new products and unusual applications employed in projects at the fair, although it is by no means complete.

lofty air conditioning

A unique system that permits frequent changeovers between cooling and heating to meet load requirements at various times of day has been installed in the revolving restaurant atop the Space Needle. This includes the ability to cool the sunny side and heat the shady side at the same time, particularly at the peak late-afternoon dinner hour. Two Arkla Model DF-3000 25-ton units were selected because they are relatively quiet and vibration free; they represent a comparatively compact and lightweight package where space is a premium; and they are in line with the project's all-gas theme, climaxed by a 50-ft. torch at its apex.—Arkla Air Conditioning Co., 812 Main St., Little Rock, Ark. **(No. 1)**

brainy control system

Heating effect of the sun's rays on the revolving Eye of the Needle is electronically measured by solar-compensating Honeywell thermostats. A DataCenter "brain" integrates these readings with indoor and outdoor temperatures and humidities—even the wind velocity—and automatically makes changes in the air conditioning system. DataCenter includes a Purple Peeper which senses the ultraviolet light from the 50-ft. gas flame at the top of the tower. It automatically restarts the flame if it goes out or shuts off the gas to the jet and turns on an alarm at the center.—Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave., Minneapolis 8, Minn. **(No. 2)**

instant brick walls

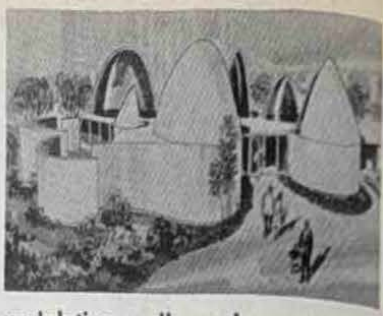
True brick panels, without any backing and weighing up to a ton, were attached to steel H-Columns to provide the finish interior and exterior



walls of the Sermons from Science Building (architects: Johnson, Nesland & Sibold; general contractor: Gwinn Construction Co.). The panels, up to 5x9 ft. each, are made of Inca ceramic brick with holes for the placement of reinforcing steel. Exterior sides for one portion of the structure were glazed and fired in a cobalt-blue finish. The bricks were laid at the manufacturer's Newcastle plant and installed by the brickmasons on the building site, where the 2,000-lb. panels were lifted by a special suction cup device.—Builders Brick Co., 3900 Ninth S., Seattle. **(No. 3)**

fastening tools

Ramset powder-actuated fastening tools, including the new Pow-R-Set low velocity piston model, have been named the major maintenance line by the fair's general superintendent and purchasing agent. Introduced after three years of field testing, Pow-R-Set features automatic extraction and ejection of spent cartridges. Interchangeable muzzle bushings can be easily attached to the end of the barrel for special fastening applications.—Ramset Fastening System, 289 Winchester, New Haven 4, Conn. **(No. 4)**



undulating wall panel

A series of plywood sandwich walls forming an abstract free-flowing plan based on interlocking ovals and circles is featured in the Home of Living Light co-sponsored by the Douglas Fir Plywood Association and Practical Builder magazine. The house is topped by four huge cone shaped revolving skylights from which the project gets its promotional label. Architects Liddle & Jones have utilized a new approach to building components that involves a continuous wall panel so flexible in one direction that it can be bent to sharp undulating curves on the foundation and yet so rigid in the vertical dimension it can carry any required roof load. Robinson & Stewart are erecting the house in cooperation with the Home Builders Association of Greater Seattle.—Douglas Fir Plywood Association, 1119 St., Tacoma 2, Wash. **(No.**

security system

Because it is interchangeable, the Be official lock core at the exposition site can be removed and replaced by another combination in less than seconds per unit. If security reasons necessitate a total change of all the hundreds of lock cores on the fair grounds, this entire operation can be completed overnight. Control system records the exact possession of every key at all times.—Best Universal Lock Co., 1415 W. Garfield St., Seattle 9 Wash. **(No.**

high bond mortar

The Gas Pavilion utilizes unique thin and unsupported walls of 4-i brick that have at least four times the strength of a conventional wa This strength is Sarabond, a hig bond mortar under joint developme by Dow Chemical and Structural Cla Products Research Foundation. Th experimental mortar may be stron enough to permit load bearing, stru tural masonry walls having one-ha the thickness or twice the height cu rently possible. The pavilion was de signed by Near & Associates with De sign & Production, Inc., and built b Cawdrey & Vemo. — Dow Chemic Co., Midland, Mich. **(No.**

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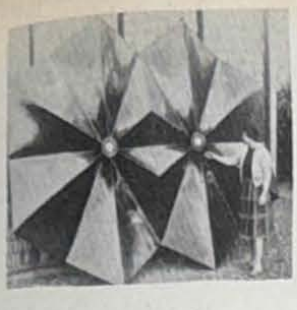
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molded plastic roofs

Colorful translucent roofs, molded in one large piece of reinforced plastic, cover ticket booths and guard stations (architects: Bassetti & Morse) for Century 21 Exposition. The sections are simple converging hyperbolic paraboloids with a built-in gutter and small gargoyle at every valley. A built-in standard electrical fixture box occurs at each central point. Oriented reinforcement is specifically engineered at areas of maximum tension and compression. Exterior roof surface is protected with a 15-mil acrylic gel coat.—Architectural Plastics Corp., 1355 River Road, Eugene, Ore. (No. 8)

machine-applied plaster

Used for the ceiling of the restaurant atop the Space Needle, Zono-Coustic acoustical plaster was applied by machine, permitting plasterers to complete sizable ceiling areas under tight deadlines imposed for completion of construction. The lightweight, fast-drying vermiculite material offers high sound absorption (NRC 0.60) and is free from shrinkage or fissuring.—Zonolite Co., 135 S. La Salle St., Chicago 3, Ill. (No. 9)

giant turntable

Visitors to the U.S. Department of Commerce science exhibit (designers: Walter Dorwin Teague Associates) will enter via a ramp, stepping off onto an 82-ft. diameter turntable. This then will transport them around the inside of the pavilion at a rate of 10 revolutions an hour until they reach the exit ramp. During their visit, the fair-goers will be able to concentrate on the exhibits while they enjoy a leisurely ride on the turntable which is bordered on its 45-ft. inside diameter by a pool.—Macton Machinery Co., Inc., Stamford, Conn. (No. 10)





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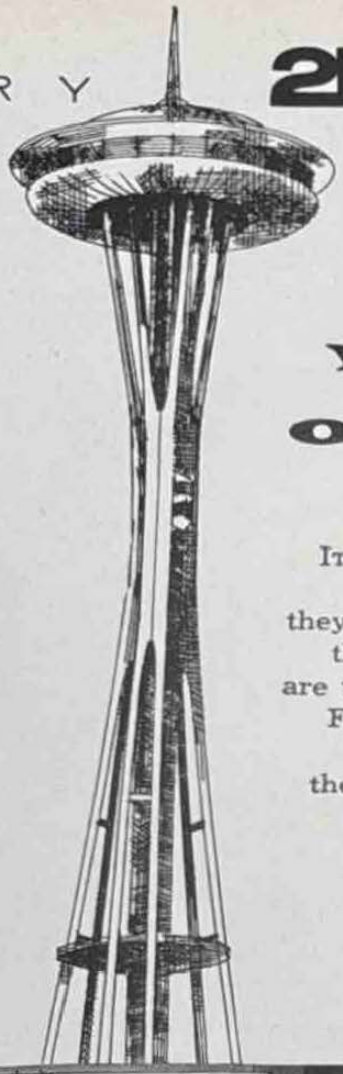
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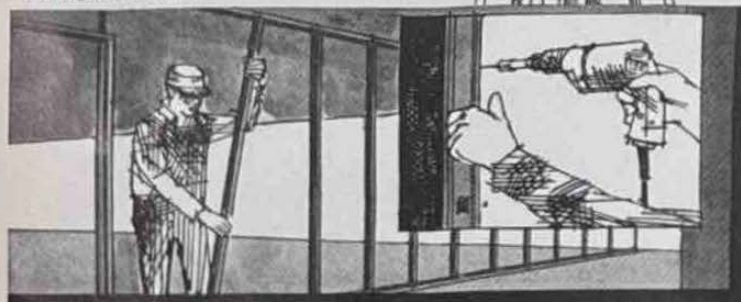
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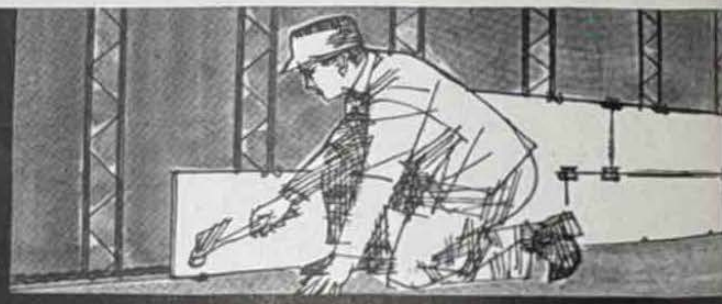
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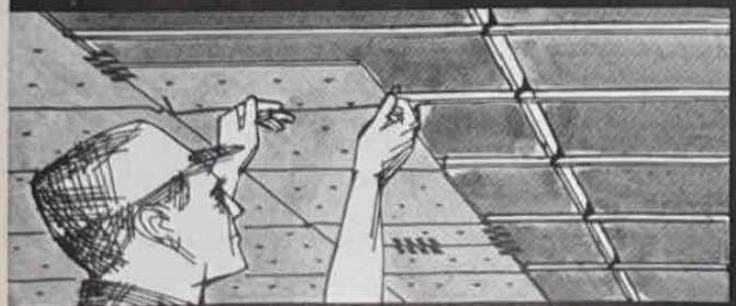
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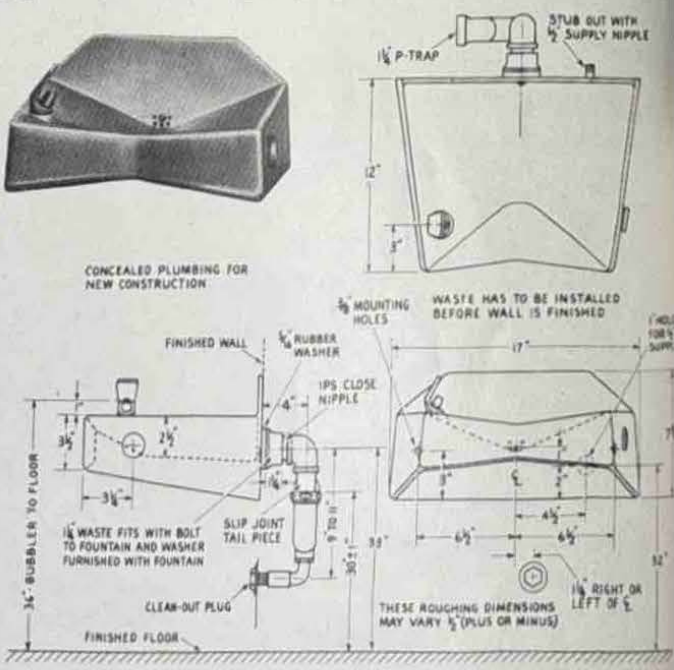
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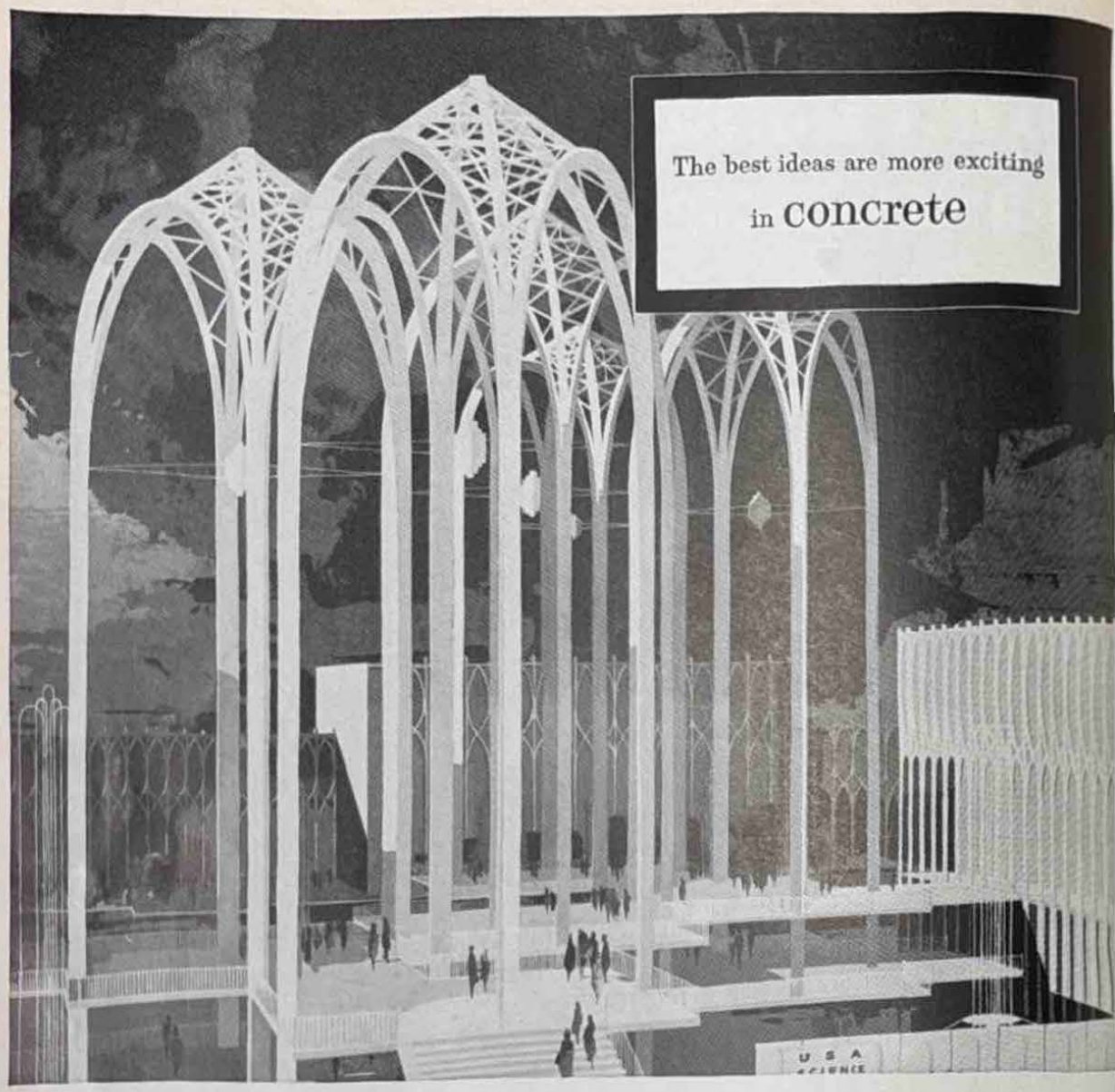
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Concrete was chosen for most of the Exposition's pe manent buildings . . . added recognition of its practica ity and design versatility.

U.S. Science Pavilion comprises 6 buildings. Architects: Min Yamasaki & Associates, Detroit, Mich., with Naramore, Bain, Br & Johanson, Seattle, Wash. Engineers: Worthington, Skilling, He & Jackson, Seattle, Wash. Precast and prestressed concrete: Associa Sand & Gravel Co., Inc., Everett, Wash. General contractor: Pu Construction Co., Spokane, Wash.

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A national organization to improve and extend the uses of concrete

DESIGN OF TOMORROW

AT CENTURY 21



The millions of visitors to the Seattle World's Fair will find American-Standard "Design-of-Tomorrow" products featured in three spectacular structures—the Federal Exhibition Building, the Exhibition Hall and Playhouse, and the Perimeter Building. People who admire these products in the Fair's glamour setting (including the New Lucerne, pictured, with Heritage fittings), will recognize their quality when they see them again...in buildings you may design or construct in 1962.

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AMERICAN-Standard

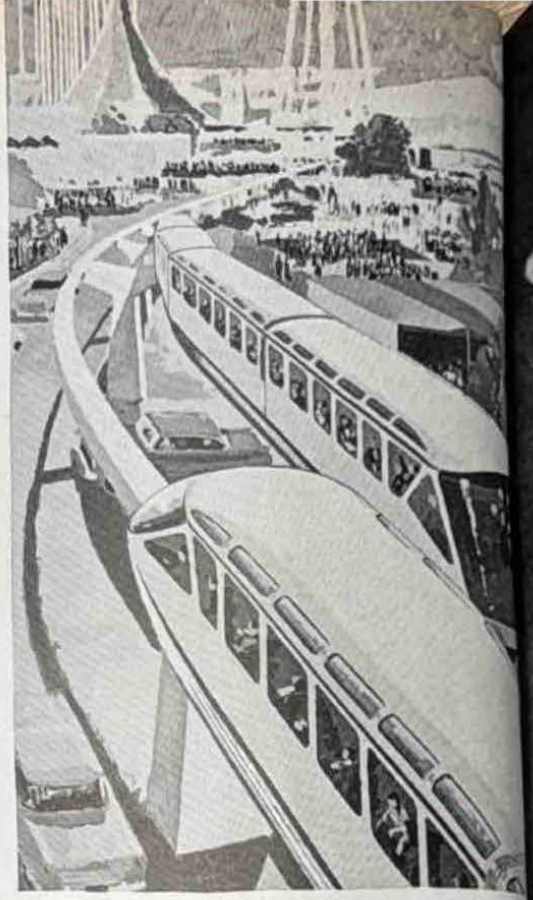
PLUMBING AND HEATING DIVISION

RIDE IN THE SKY...ON CONCRETE – This first full-scale public transit Monorail will transport visitors from the heart of Seattle out to the Fair grounds in only 95 seconds. Two four-car trains will run in pneumatic-tired smoothness and silence while straddling precast, prestressed concrete beams made with 'Incor' 24-hour cement.

DESIGN: Alweg Rapid Transit Systems; CONSTRUCTION: Howard S. Wright Construction Co.; 'INCOR' PRECAST, PRESTRESSED BEAMS: Concrete Technology Corp.

WORLD'S LARGEST SCIENCE EXHIBIT IS HOUSED IN CONCRETE–The Fair's Federal Science Pavilion, containing the most extensive science exhibit ever assembled for public viewing, is constructed entirely of precast, prestressed concrete components made with 'Incor' 24-hour cement. 'Incor' enabled the fabricator to attain strengths of 5000 psi in 12 to 14 hours.

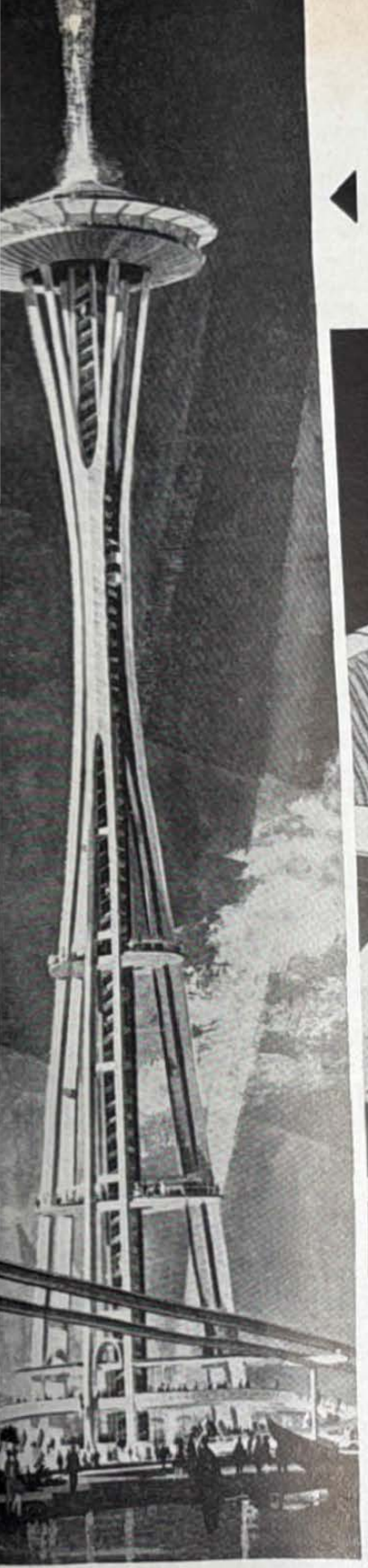
ARCHITECTS: Minoru Yamasaki & Associates; ASSOCIATED ARCHITECTS-ENGINEERS: Naramore, Bain, Brady & Johanson; STRUCTURAL ENGINEERS: Worthington, Skilling, Helle & Jackson; GENERAL CONTRACTOR: Purvis Construction Co.; 'INCOR' PRECAST, PRESTRESSED COMPONENTS: Associated Sand & Gravel Co., Inc.





new ideas take concrete form at Seattle World's Fair

When Seattle's Century 21 Exposition
April 21, visitors will have the opportu
viewing some of the most spectacular an
inative uses yet made of concrete. ¶ Co
used to support and to suspend...to sup
ged strength and delicate beauty...all
mony with the futuristic theme of the Ex
¶ Since many of the buildings are destined



CONCRETE STABILITY FOR A 60-STORY NEEDLE—Securely anchoring the Fair's 600-ft. Space Needle—tallest building west of the Mississippi—are 2820 cubic yards of Lone Star cement concrete placed in a 40-ft deep Y-shaped excavation. Decks and diaphragm bracing at the 100-ft, 200-ft and top levels are also Lone Star cement concrete.

ARCHITECT: John Graham and Co.; GENERAL CONTRACTOR: Howard S. Wright Construction Co.; LONE STAR READY-MIX CONCRETE: Pioneer Sand & Gravel Co.



TOMORROW RESTS ON CONCRETE—Century 21's Coliseum provides nearly four acres of unrestricted viewing space under a roof suspended by cables from trusses secured with massive tripods and edge beams made with Lone Star cement. Column-less construction gives full play for the imaginative "World of Tomorrow" exhibit contained therein.

ARCHITECT: Paul Thiry; STRUCTURAL ENGINEERS: Peter H. Hostmark and Associates; GENERAL CONTRACTOR: Howard S. Wright Construction Co.; LONE STAR READY-MIX CONCRETE: Pioneer Sand & Gravel Co.

e nucleus of a new Seattle Center when the Fair
ses, integrity of construction materials and
thods was a prime consideration. It is note-
rthy, therefore, that Lone Star cements were
ected for the vast concrete needs of the major
eme" structures of Century 21, as well as at
ast eight other Fair structures and for remodel-
g the largest buildings already on the site.

Lone Star Cement Corporation

100 PARK AVENUE, NEW YORK 17, N.Y.

new offices, partnerships

Joe Davis Allen has opened an architectural office at Suite 20, 680 Beach St., San Francisco.

Milton Stricker has established his own office for the practice of architecture at 3601 S. McClellan, Seattle, after being associated with two other firms for the past nine years.

Kenneth C. Maetzold has opened his own office for the practice of architecture at Suite 201, Emerson Bldg., 900 E. Louisiana Ave., Denver, under the name of Kenneth C. Maetzold & Associates.

Douglas Garber has opened an architectural office at 1301 First Ave. S., Great Falls, Mont.

James Waldowski has opened an architectural office in Room 863, Dexter-Horton Bldg., Seattle, coming from Spokane.

Richard Bouillon and Joseph L. Williams have formed the architectural partnership of Bouillon & Williams with offices at 570 Skinner Bldg., Seattle.

Neal Kolbo and Harold Thompson have formed an architectural partnership with offices in both Boise and Nampa, Idaho.

Sverdrup & Parcel & Associates, Inc., a St. Louis-based engineering firm, has opened a consulting engineering office in Denver in the new Aurora Professional Center.

new partners, associates

Wilsey, Ham & Blair, Millbrae, Calif., have named William B. Wright and George W. Potter as principals. Wright, chief surveyor, has been associated with the engineering-planning firm since 1947. Potter is manager of the Los Angeles office and joined the company in 1959. Gilman G. Hoskins has been appointed head of the enlarged architectural department which includes Paul Bosholm, formerly associated with the University of California.

William M. Brooks, civil-structural engineer and architect, has been named an associate in the Fresno firm of Walter Wagner & Partners, who he joined in 1953.

firm changes

Jim S. Burns is now a principal in the Pasadena architectural firm of Nyberg & Bissner, now known as Nyberg, Bissner & Burns, Inc.

The Phoenix firm of John E. Stephens & Associates has changed its name to Stephens, Walsh, Emmons, Stauffer & Shanks, Engineers and Architects, Inc.

Hummel, Hummel & Jones, Boise architectural firm, has become Hummel, Hummel, Jones & Shawver. Principals are Frederick C. Hummel, Charles F. Hummel, Jedd Jones and Chester L. Shawver.

The Modesto, Calif. architectural firm of Bomberger & Abst has been dissolved. John W. Bomberger continues his practice at 1505 10th St. Ray C. Abst is located at 1022 McHenry Ave.

deaths

William Clement Ambrose, 73, who had his first on-the-job training with the late Willis Polk helping to rebuild San Francisco after the fire and earthquake, died March 4 after a brief illness. Former president of the State Board of Architectural Examiners, he was associated with Eldridge T. Spencer from 1931 until retiring in 1958.



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new addresses

Leach, Cleveland & Associates, architects, to 8900 Melrose Ave., Los Angeles.

Katzman Associates (Phoenix branch), architects, to 1807 N. Central, Phoenix.

Kruger/Bensen, architects, to 1323½ State St., Santa Barbara.

Howard Schroder, architect, to 1284 Wishon Ave., Fresno, Calif.

J. G. Link & Co., architects-engineers, to 2303 Ottawa St., Butte, Mont.

Hunter & Benedict, architects, to 3670 Wilshire Blvd., Los Angeles.

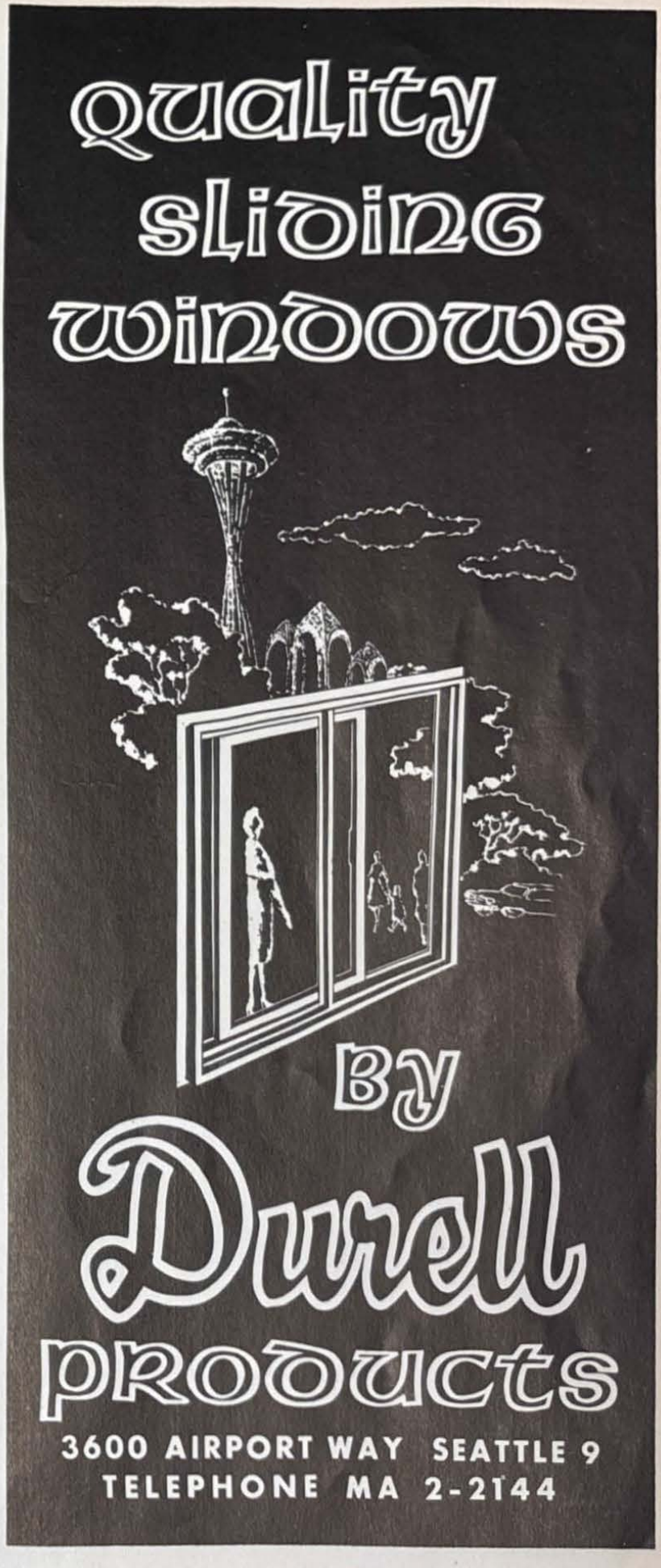
honors

Civil engineer D. Lee Narver was presented with Southern California's Construction Industries Achievement Award for 1962 at the 27th annual Gridiron Banquet in the Palladium. He is chairman of the board of Holmes & Narver, Los Angeles engineering firm.

Southern California Chapter, AIA, honored John C. Austin, a past president and member since 1902, at its meeting on February 13, which happened to be his 92nd birthday.

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Building Permit Totals f

First Column Figures in Parentheses are Number of Residential Units • Second Column is Do

CALIFORNIA

	# Res.	$ Value	Total $
Alameda	(4)	$ 76,770	$ 157,742
Alameda Co.	(137)	1,089,240	1,281,315
Albany	(1)	16,690	47,686
Alhambra	(24)	233,500	335,398
Anaheim	(194)	2,193,900	2,886,368
Antioch	(4)	51,485	131,346
Arcadia	(59)	918,259	1,172,077
Arroyo Grnde	(21)	141,000	158,450
Artesia	(72)	934,700	965,900
Atherton	(1)	85,000	120,076
Atwater	( )	Nil	85,881
Auburn	( )	Nil	250,071
Avalon	( )	Nil	Nil
Azusa	(2)	24,300	88,050
Bakersfield	(47)	579,300	1,011,320
Baldwin Park	(11)	103,600	132,480
Banning	(26)	206,816	225,636
Barstow	( )	Nil	27,190
Bell	(15)	118,000	138,120
Bellflower	(30)	282,800	604,370
Bell Gardens	(24)	187,000	219,920
Belmont	(10)	197,000	216,350
Benicia	(1)	6,912	6,912
Berkeley	(266)	2,218,041	2,683,399
Beverly Hills	(7)	617,000	1,000,047
Bradbury	(5)	170,650	170,650
Brawley	( )	Nil	17,815
Brea	(2)	35,360	237,539
Buena Park	(9)	92,167	484,125
Burbank	(32)	250,000	603,969
Burlingame	( )	Nil	464,080
Butte Co.	(6)	64,769	144,769
Calexico	(5)	21,000	77,200
Campbell	(43)	490,150	758,024
Carlsbad	(12)	182,748	289,633
Carmel	(2)	29,000	31,500
Chico	(16)	287,186	366,704
Chino	(5)	68,651	155,091
Chula Vista	(59)	424,000	775,010
Claremont	(45)	440,000	508,350
Coalinga	(6)	93,267	101,917
Colton	(2)	26,854	124,065
Commerce	(5)	35,400	348,225
Compton	(58)	294,000	564,025
Concord	(39)	551,150	992,894
Cntra Csta Co.	(96)	1,594,339	2,865,866
Corona	(3)	56,748	87,259
Coronado	( )	No Reply	No Reply
Corte Madera	( )	Nil	4,500
Costa Mesa	(81)	1,205,216	1,455,926
Covina	(9)	102,850	265,685
Cudahy	(23)	197,000	218,760
Culver City	(15)	172,600	1,430,449
Dairy Valley	( )	Nil	5,300
Daly City	(72)	1,100,515	1,139,100
Davis	(11)	167,000	174,000
Delano	(16)	171,000	194,900
Downey	(22)	480,740	796,449
Duarte	( )	Nil	120,390
El Cajon	(4)	73,300	185,100
El Centro	(1)	7,000	230,360
El Cerrito	(12)	160,234	197,678
El Dorado Co.	(14)	172,298	373,800
*El Monte	( )		924,281
El Segundo	(13)	123,000	453,031
Emeryville	( )	Nil	44,880
Escondido	(8)	90,860	235,156
Eureka	(7)	89,800	181,993
Fairfield	(75)	785,423	799,837
Fillmore	(1)	14,000	20,130
Fontana	(2)	32,366	59,301
Fremont	(113)	1,404,600	1,654,391
Fresno	(58)	603,175	4,387,291
Fresno Co.	(42)	532,230	1,013,616
Fullerton	(21)	545,811	1,967,336
Glendale	(121)	1,268,140	2,281,431
Glendora	(49)	724,600	1,306,700
*Hlf Moon By	(1)	14,000	
Hanford	(2)	27,000	114,545
Hawthorne	( )	No Reply	No Reply
Hayward	(37)	254,730	609,635
Hemet	(8)	78,500	407,809
Hermosa Bech	(9)	172,042	201,487
Hidden Hills	( )	Nil	4,100
Hillsborough	(1)	44,000	80,250
Holtville	( )	Nil	2,540
Humboldt Co.	( )	Nil	16,680
Huntingtn Bch	(271)	3,398,312	3,517,430
Huntington Pk	(9)	70,000	170,150
*Imperial Co.	( )		17,500
Indio	(10)	59,000	141,457
Industry	( )	Nil	798,077
Inglewood	(5)	81,000	381,704
Irwindale	( )	Nil	1,875
Kern Co.	(75)	972,302	1,294,656
Laguna Beach	(27)	545,250	754,770
La Habra	(162)	1,461,216	1,694,809
Lakewood	(4)	89,000	265,000
*La Mesa	(19)	468,507	
La Mirada	(1)	24,000	88,740
La Puente	(22)	284,950	453,100
La Verne	(1)	12,000	14,565
Lawndale	(27)	245,600	266,475
Lindsay	(1)	6,000	14,534
Livermore	(12)	119,000	199,360
Lodi	(9)	134,400	335,030
Lompoc	(75)	457,756	527,377
Long Beach	(110)	791,560	4,806,175
Los Altos	(22)	470,400	519,760
Los Angeles	(682)	13,522,331	57,138,509
Ls Angles Co.	(1077)	20,130,495	24,995,046
Los Gatos	(16)	270,500	275,250
Lynwood	(8)	78,200	163,182
Madera	(8)	80,500	88,748
Madera Co.	(5)	35,400	92,570
Manhattn Bch	(8)	157,750	274,269
Manteca	(11)	106,000	173,490
Marin Co.	(26)	458,610	585,382
Martinez	(2)	34,430	137,765
Marysville	( )	Nil	142,440
Maywood	(1)	5,000	11,995
Menlo Park	(8)	213,000	797,875
Merced	( )	Nil	24,017
Merced Co.	(18)	172,920	276,850
Millbrae	(47)	431,000	540,115
Mill Valley	(10)	183,500	294,700
Modesto	(54)	730,500	970,373
Monrovia	(30)	274,988	306,764
Montclair	(13)	115,410	98,314
Montebello	(180)	2,748,198	3,312,550
Monterey	(9)	133,000	796,250
Monterey Co.	(41)	618,060	1,034,285
Monterey Park	(20)	235,950	426,754
Mountain Vew	(98)	534,395	1,013,497
Napa	(10)	136,153	201,578
Napa Co.	(14)	202,155	323,871
National City	(20)	147,958	346,567
Newport Bech	(64)	1,110,700	1,585,436
N. Sacramento	(27)	181,710	189,401
Norwalk	(6)	27,000	1,205,680
Novato	(2)	40,400	268,750
Oakdale	(8)	100,929	105,577
Oakland	(386)	3,571,093	4,632,793
Oceanside	(6)	44,500	533,596
Ojai	( )	Nil	3,300
Ontario	(65)	765,271	978,380
Orange	(114)	1,640,730	6,330,217
Orange Co.	(210)	3,229,787	3,968,864
Oroville	( )	Nil	62,725
Oxnard	(255)	2,568,420	2,826,844
Pacifica	(32)	356,200	413,285
Pacific Grove	(14)	173,500	213,420
Palm Springs	(5)	130,000	317,120
Palo Alto	(46)	461,800	1,588,242
Pls Vrds Ests	(8)	342,130	353,195
Paramount	(53)	331,885	369,585
Pasadena	(76)	536,975	1,244,132
Paso Robles	(34)	459,000	526,190
Pico Rivera	(9)	528,000	670,850
Piedmont	(1)	39,000	78,160
Pinole	( )	Nil	6,470
Pittsburg	(1)	13,572	27,016
*Placentia	( )	Nil	695,030
Placer Co.	(29)	390,000	425,552
Pleasanton	(3)	46,750	54,791
Pomona	(8)	89,501	1,199,622
Porterville	(1)	15,000	40,472
Port Hueneme	(26)	171,000	173,500
Red Bluff	(3)	41,469	44,874
Redding	(5)	59,000	127,190
Redlands	(50)	517,150	576,153
Redondo Bech	(20)	198,410	421,873
Redwood City	(80)	563,755	920,630
Richmond	(46)	458,859	644,361
Riverside	(8)	108,000	3,424,932
Riverside Co.	(258)	2,899,018	3,754,020
Rolling Hills	(2)	88,000	108,200
Rlng Hls Ests	(10)	285,700	586,900
Rosemead	( )	Nil	37,125
Roseville	(5)	102,990	203,992
Sacramento	(105)	1,135,300	2,556,700
Sacramnto Co.	(207)	2,467,849	4,096,466
St. Helena	( )	Nil	300
Salinas	(23)	291,000	741,661
Sn Bernardino	(28)	267,282	571,510
S. Brnrdno Co.	(283)	2,314,872	3,943,805
San Bruno	(14)	226,200	
San Carlos	(7)	144,219	
San Clemente	(5)	74,221	
San Diego	(185)	3,234,562	
San Diego Co.	(105)	1,734,000	
San Dimas	(2)	23,400	
San Fernando	(4)	60,800	
San Francisco	(168)	1,947,367	
San Gabriel	(119)	1,111,748	
Sanger	(3)	50,500	
San Jacinto	(4)	33,780	
San Joaqin Co.	(35)	258,998	
San Jose	(248)	2,774,815	
San Leandro	(84)	619,500	
San Lis Obispo	( )	Nil	
S. Ls Obsp Co.	(34)	452,560	
San Marino	(1)	62,500	
San Mateo	(47)	493,000	
San Mateo Co.	(27)	442,100	
San Pablo	(18)	133,303	
San Rafael	(20)	387,619	
Santa Ana	(171)	2,602,752	
Santa Barbara	(118)	753,260	
Snt. Brbr. Co.	(209)	3,125,300	
Santa Clara	(45)	495,000	
Santa Clra Co.	(29)	563,200	
Santa Cruz	(13)	158,037	
Santa Crz Co.	(131)	1,100,369	
Snta Fe Spngs	( )	Nil	
Santa Maria	(92)	1,215,607	
Santa Monica	(97)	799,619	
Santa Paula	(4)	55,802	
Santa Rosa	(28)	362,800	
Sausalito	(12)	172,000	
Seal Beach	(869)	6,256,310	
Seaside	(10)	112,000	
Selma	(3)	42,413	
Shasta Co.	(52)	463,234	
Sierra Madre	(9)	210,750	
Solano Co.	(5)	63,217	
Sonoma Co.	(57)	628,528	
South Gate	(7)	53,000	
South El Mnte	( )	Nil	
So. Pasadena	(8)	137,880	
So. Sn Frncsco	(10)	96,050	
Stanislaus Co.	(24)	270,700	
Stockton	(10)	167,375	
Sunnyvale	(177)	2,826,420	
Temple City	(25)	351,300	
Torrance	(273)	3,421,675	
Tracy	(3)	31,000	
Tulare	(3)	31,800	
Tulare Co.	(10)	109,079	
Turlock	(4)	70,224	
Ukiah	( )	Nil	
Upland	(68)	1,010,200	
Vacaville	(31)	287,775	
Vallejo	(59)	600,350	
Ventura	(16)	152,000	
Ventura Co.	(267)	2,906,400	
Visalia	(32)	322,718	
Walnut	( )	Nil	
Walnut Creek	(10)	179,730	
Wasco	(3)	21,000	
Watsonville	( )	Nil	
West Covina	(5)	111,840	
Whittier	(12)	136,000	
Woodlands	(21)	241,510	
Woodside	( )	No Reply	
Yolo Co.	(8)	126,135	
Yreka	(2)	23,500	
Yuba City	(8)	119,290	
Yuba Co.	( )	Nil	
Total	**(12,334)**	**$154,263,286**	

OREGON

Albany	(3)	$ 30,500	$
Ashland	(4)	33,750	
Astoria	(4)	32,160	
Baker	( )	Nil	
Beaverton	(27)	445,518	
Bend	(3)	36,000	
Central Point	(5)	46,000	
Clackamas Co.	(26)	421,940	
Coos Bay	(1)	10,000	
Corvallis	(7)	77,000	
Dallas	(2)	29,000	
Douglas Co.	(5)	64,500	
Eugene	(25)	286,700	
Forest Grove	(2)	31,500	
Grants Pass	(11)	136,750	
Gresham	(4)	55,500	
Hermiston	(1)	13,552	

*Complete figures not available

estern States for February

ential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
illsboro	(6)	84,000	125,450
ood River	( )	Nil	98,215
lamath Falls	(1)	16,000	72,400
a Grande	(1)	6,600	20,100
ake Oswego	(7)	110,800	140,165
ane Co.	(93)	906,904	1,221,549
ebanon	( )	Nil	15,210
arion Co.	(44)	504,450	586,280
cMinnville	(9)	106,000	195,350
edford	(17)	197,800	550,558
lton-Freewtr	( )	Nil	33,800
ilwaukie	(6)	116,075	476,475
ultnomh Co.	(89)	1,325,700	3,430,908
ewberg	(1)	11,000	25,142
ewport	(2)	23,000	58,850
orth Bend	(6)	134,300	147,750
ntario	(1)	13,000	29,465
regon City	( )	Nil	15,630
swego	(7)	110,800	140,165
endleton	( )	Nil	24,445
ortland	(41)	548,645	4,302,795
oseburg	(6)	74,900	203,961
t. Helens	(1)	14,000	17,350
alem	(11)	130,300	180,229
easide	(1)	11,000	27,890
pringfield	(6)	76,890	132,084
he Dalles	(3)	58,000	93,390
ashingtn Co.	(74)	1,424,100	1,688,840
Total	**(563)**	**$ 7,754,634**	**$ 17,862,259**
ASHINGTON			
berdeen	(2)	$ 32,900	$ 56,670
nacortes	(1)	14,000	24,139
uburn	(14)	149,000	1,493,194
ellevue	(2)	86,500	171,310
ellingham	(5)	71,000	146,288
remerton	(21)	110,000	147,215
amas	(3)	38,000	42,800
entralia	( )	Nil	26,086
hehalis	( )		26,291
lark Co.	(39)	503,625	768,575
larkston	( )	Nil	8,425
dmonds	(32)	479,000	637,010
lensburg	( )	Nil	31,925
numclaw	(4)	39,000	52,000
phrata	( )	Nil	100,750
verett	(6)	95,060	191,043
rys Hrbr Co.	(4)	53,000	67,930
oquiam	( )	Nil	7,425
land Co.	(20)	156,404	206,655
elso	(2)	34,000	38,780
ennewick	(4)	63,500	370,150
ent	(1)	20,000	82,650
ing Co.	(559)	7,890,080	9,838,460
irkland	(6)	43,400	48,900
ongview	(7)	102,000	262,292
ynnwood	(3)	47,250	163,800
ercer Island	(12)	283,320	386,883
oses Lake	(3)	35,500	112,336
ntlike Trrace	(18)	197,500	204,466
lympia	(12)	160,300	235,026
asco	(9)	115,000	257,145
ierce Co.	(205)	1,954,950	2,366,426
ort Angeles	(4)	29,000	83,900
ullman	( )	Nil	40,600
uyallup	(9)	93,500	152,750
enton	(16)	216,250	2,314,455
ichland	(12)	212,500	968,530
eattle	(66)	1,300,060	10,826,591
helton	(2)	23,000	25,150
nohomish Co.	( )	No Reply	No Reply
pokane	(50)	793,250	1,402,967
pokane Co.	(39)	674,167	920,610
unnyside	(2)	24,000	35,700
acoma	(90)	859,575	2,934,026
hurston Co.	(24)	314,500	419,125
ancouver	(10)	152,750	755,544
alla Walla	(2)	26,000	44,521
alla Wlla Co.	(3)	41,000	61,400
enatchee	(3)	41,500	59,215
akima	(20)	245,500	518,279
Total	**(1,346)**	**$ 17,820,841**	**$ 40,146,408**
LASKA			
nchorage	( )	Nil	$ 1,413,163
airbanks	( )	Nil	19,540
neau	( )	Nil	96,930
etchikan	( )	Nil	109,132
Total	**( )**	**Nil**	**$ 1,638,765**

	# Res.	$ Value	Total $
IDAHO			
Alameda	(8)	$ 98,900	$ 107,450
Blackfoot	(1)	21,000	21,000
Boise	(16)	169,900	472,177
Burley	( )	No Reply	No Reply
Caldwell	(6)	96,300	475,350
Coeur d'Alene	(2)	34,440	109,289
Idaho Falls	(7)	96,600	147,656
Jerome	( )	Nil	6,350
Lewiston	(2)	34,000	83,625
Moscow	(1)	15,000	42,175
Nampa	(6)	58,000	92,085
Payette	( )	Nil	8,300
Pocatello	(5)	71,000	112,820
Sandpoint	( )	Nil	3,500
St. Maries	( )	Nil	Nil
Twin Falls	(6)	50,000	83,500
Total	**(60)**	**$ 745,140**	**$ 1,765,277**
MONTANA			
Anaconda	( )	Nil	6,300
Billings	(28)	444,900	486,890
Bozeman	( )	Nil	1,642
Butte	( )	Nil	51,000
Cut Bank	( )	Nil	Nil
Glasgow	(6)	70,000	74,500
Glendive	( )	Nil	1,500
Great Falls	(28)	268,234	365,748
Havre	( )	Nil	6,500
Helena	(8)	110,000	196,582
Kalispell	( )	Nil	4,500
Lewistown	( )	Nil	Nil
Livingston	( )	Nil	700
Malta	( )	Nil	Nil
Miles City	( )	No Reply	No Reply
Missoula	(1)	7,460	68,831
Total	**(71)**	**$ 900,594**	**$ 1,264,693**
WYOMING			
Casper	(33)	$ 427,000	$ 515,780
Cheyenne	(58)	647,500	712,200
Cody	( )	No Reply	No Reply
Laramie	(1)	13,000	21,561
*Rawlins	( )		29,000
Riverton	(2)	22,200	36,200
Rock Springs	( )	Nil	3,000
Sheridan	(1)	42,000	48,645
Total	**(95)**	**$ 1,151,700**	**$ 1,366,386**
COLORADO			
Adams Co.	(47)	$ 539,000	$ 776,833
Alamosa	(5)	51,000	53,978
Arapahoe Co.	(94)	1,711,000	2,041,685
Arvada	( )	No Reply	No Reply
Aspen	( )	Nil	32,000
Aurora	(142)	1,562,155	1,633,023
Boulder	(122)	970,035	56,570
Boulder Co.	(26)	273,900	306,380
Colrdo Sprngs	(130)	1,532,570	1,631,330
Cortez	( )	Nil	12,200
Denver	(611)	4,266,790	9,869,008
Durango	( )	No Reply	No Reply
El Paso Co.	(45)	656,350	1,653,654
Englewood	(82)	283,400	438,924
Estes Park	(2)	27,146	47,996
Fort Collins	(25)	334,500	597,429
Fort Morgan	( )	Nil	8,242
Golden	(1)	11,360	202,400
Grnd Junction	(1)	13,500	87,680
Greeley	(26)	263,003	299,881
Jefferson Co.	(278)	3,882,813	4,252,238
La Junta	(2)	23,000	29,156
Lamar	( )	No Reply	No Reply
Littleton	(5)	99,000	362,764
Longmont	(30)	328,700	812,823
Loveland	(6)	69,300	71,850
Monte Vista	(1)	8,000	4,800
Montrose	( )	Nil	175,115
Pitkin Co.	( )	Nil	Nil
Pueblo	(17)	174,253	595,763
Pueblo Co.	(4)	46,000	23,900
Sterling	(2)	14,000	277,000
Trinidad	( )	Nil	30,965
*Walsenburg			2,700
Westminster	(54)	416,788	563,097
Total	**(1,758)**	**$ 17,557,503**	**$ 26,951,384**

	# Res.	$ Value	Total $
UTAH			
American Frk	(1)	$ 18,000	$ 23,200
Bountiful	(20)	317,900	317,900
Brigham City	(21)	244,000	415,000
Cedar City	(2)	22,000	132,700
Clearfield	(5)	49,000	63,400
Davis Co.	(10)	143,666	1,467,194
Kaysville	( )	Nil	Nil
Layton	(5)	69,000	223,700
Logan	(1)	11,616	20,091
Murray	(9)	94,000	116,100
Ogden	(59)	852,500	915,500
Orem	(5)	39,151	40,551
Price	(2)	36,000	73,500
Provo	(6)	91,000	746,430
Salt Lake City	(8)	150,140	1,521,465
Salt Lake Co.	(193)	2,252,650	2,417,700
So. Slt Lk Cty	( )	Nil	38,500
*Spanish Fork	( )		1,650
Tooele	(61)	651,037	691,712
Utah Co.	(1)	13,750	19,850
Weber Co.	(3)	32,000	37,244
Total	**(412)**	**$ 5,087,410**	**$ 9,292,387**
NEVADA			
*Boulder City	( )		9,091
Clark Co.	(207)	$ 3,008,395	$ 3,008,395
Elko	( )	No Reply	No Reply
Las Vegas	(337)	3,030,525	4,507,063
No. Las Vegas	(59)	520,914	597,361
Reno	(504)	5,819,156	10,159,477
Sparks	(56)	581,200	617,972
Washoe Co.	(15)	227,850	274,842
Total	**(1,178)**	**$ 13,188,040**	**$ 19,174,201**
ARIZONA			
Buckeye	( )	$ Nil	$ 18,220
*Casa Grande	( )	13,200	22,850
Chandler	(18)	180,459	321,349
Douglas	(4)	21,900	36,272
Flagstaff	(11)	42,494	115,843
Florence	(2)	10,000	11,000
Glendale	(2)	25,000	470,955
Maricopa Co.	(331)	3,134,075	3,640,158
Mesa	(53)	537,504	1,351,662
Phoenix	(517)	4,073,491	6,876,866
Pima Co.	(160)	1,646,890	1,934,103
Prescott	(4)	55,000	112,165
Scottsdale	(18)	245,200	384,864
Tempe	(85)	803,200	1,153,090
Tucson	(280)	2,285,818	3,355,422
Wickenburg	(1)	5,500	10,000
Winslow	( )	No Reply	No Reply
Yuma	(8)	48,000	103,650
Total	**(1,494)**	**$ 13,127,731**	**$ 19,918,469**
NEW MEXICO			
Alamogordo	( )	$ Nil	$ 6,560
Albuquerque	(119)	1,682,962	3,507,528
Artesia	(13)	28,000	65,745
Carlsbad	(12)	179,000	278,360
Clovis	(47)	437,687	487,279
Deming	(7)	59,650	80,890
*Farmington	( )		58,083
Gallup	(1)	18,000	41,500
Hobbs	(14)	225,051	473,180
Las Cruces	(8)	108,000	309,069
Las Vegas	( )	Nil	9,000
Lovington	(4)	58,000	1,010,234
Raton	(1)	22,500	87,750
Roswell	(141)	1,323,400	1,548,323
Santa Fe	(12)	82,800	110,925
Silver City	(2)	23,250	41,250
Truth or Consequences	( )	No Reply	No Reply
Tucumcari	(1)	12,000	25,800
Tularosa	( )	Nil	Nil
Total	**(382)**	**$ 4,260,300**	**$ 8,141,476**
HAWAII			
Hawaii Co.	(23)	$ 254,717	$ 624,891
Honolulu	(402)	4,382,484	11,539,198
Maui Co.	(16)	152,972	212,331
Total	**(441)**	**$ 4,790,173**	**$ 12,376,420**
GRAND TOTAL	**(20,134)**	**$240,647,325**	**$447,973,083**

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a magazine

no. 4: editorial content and how it's selected

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Of all the inquiries we receive about our editorial p tices, the most often asked is: how do you select y material or, in a similar vein, how does one go ab getting his work published? It must be apparent to e the most casual reader that the content of Architect West is gathered and channeled into three main ca gories, but perhaps a quick rundown is in order:

1. News—This includes a roundup of the build industry in the 13 western states; tabulation of 500 building permit agencies; reports on important meeti and conventions with occasional digests of signific papers; sketches of projects to be built; brief items ab architects and related professionals, contractors a manufacturers-suppliers. Some of these items are o departmental variety, several of which are not carr this month, April being a special kind of issue.

2. Design—Here we are talking about comple projects for the most part and an attempt is made feature a wide range of building types and the work younger, promising architects as well as the better-kn firms. Whenever feasible, we incorporate outline sp fications pinpointing the major materials used and data.

3. Methods and Materials—At least one article e month gives a quick understanding of a new method material or a new use of an established product. Build are shown in this regard irrespective of their de attributes. Then there's the regular department devo to the cream of the crop of new or improved produc all distributed in the West unless otherwise noted—a about which readers can write for additional data. best of the literature also is reviewed, with one p designated "Pick of the Month."

Most readers seem to be interested in the mas of selecting completed buildings. Each month an infor board headed by A. O. Bumgardner, AIA, reviews material which has been assembled from a number sources: architects or their public relations represe tives; free-lance photographers; clients, particularly the case of corporations or institutions. However, majority of the projects finally published are those w the editors themselves have scouted and developed. effort is made in each case to have a staff member p sonally visit the building, but economics and travel do always permit this to be done.

First and foremost, a competent design approach sought in our selection of material. We may not alw agree with the solution, or at least have reservations, it may be worthy of study because of an interest possibly a controversial, concept. Perhaps the pro merits publication because of the nature of the prob itself or the site. Other considerations of necessity c into play such as geographical representation and ava bility of suitable prints (some areas simply do not h qualified architectural photographers).

We deem it essential to publish first, of course. we explained in our column on the why and where of a regional, our job is to complement the national pi We see no reason in presenting a building that has b thoroughly explored in another architectural magaz Once in a while we are beaten to the draw and it is l late to turn back; sometimes the treatment given a proj elsewhere is such as to warrant further coverage in o pages.

And we welcome contributions from our readers professional photographs are not available, snapsh should be submitted so that we can determine whet to pursue the subject further. This also brings up t matter of "commitments," about which we'll have mo to say next month.

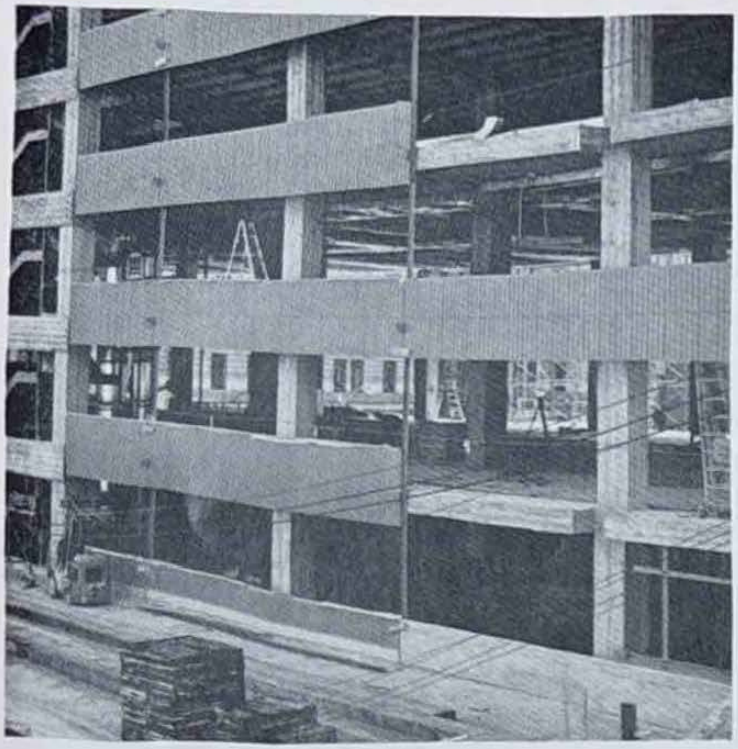
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Architecture / West

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Up Fast! Spandrels Of New Panelized Ceramic Veneer

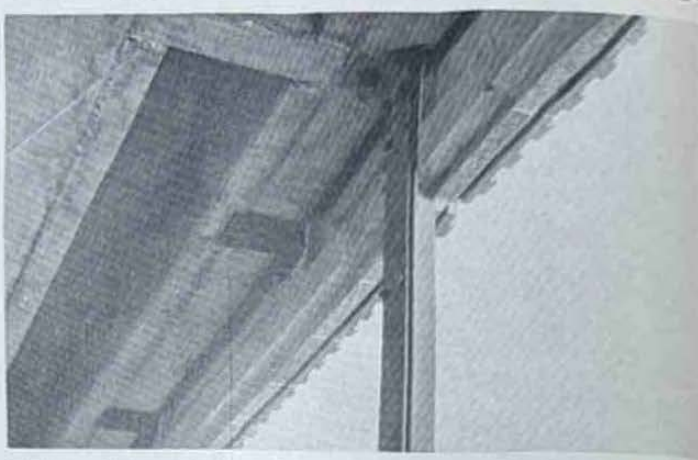
A new, faster type of spandrel construction, by Gladding, McBean & Co., was employed by architects J. N. MacCammon & Theodore H. Damm, A.I.A., for Seattle's recently completed Municipal Office Building. By using the new technique, both construction time and weight were substantially reduced, while obtaining the advantages of GMcB Ceramic Veneer facing: freedom from staining and efflorescence, minimum maintenance, wide choice of colors and many available textures.

Lightweight Panels, CV-Faced Spandrel panels were formed off the job. Gray-blue triple spot GMcB Ceramic Veneer, with a pronounced vertically ribbed design, was laid face down in special molds, then backed with reinforced concrete in which were cast angle irons and stud bolts for attaching panels to bearing surfaces.



Panels were designed to provide adequate strength while minimizing weight. (The depressed areas seen in the picture were filled with expanded polystyrene.) This in turn permitted a reduction in the size of bearing wall members. Also seen in the picture are the angle irons (near panel center) to which stud bolts in the sill's upper side were fastened.

Quickly Bolted In Place Installation require merely hoisting a panel into position and boltin it in place. The angle irons previously mentione secured panel centers to sill tops. With other angl

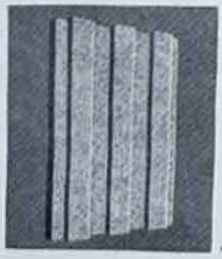


irons—here pictured—stud bolts near the bottom o the panels were secured to stud bolts in sill bottom Installation thus was fast, firm, and effective.

Facing Finished Faster Over 28,000 sq. ft. facing was installed in record time with a minimu crew. Mr. R. B. Miles, superintendent for gener contractors Patti-MacDonald-Mybur, Inc., report that "this 'panel construction' was an importan factor in enabling us to close in the building muc faster than normally is possible."



For engineering and other data regarding this ne construction method, see your GMcB Architectur Products representative. Or write Architectur Products Division; Gladding, McBean & Co., L Angeles 39, Calif.



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Ceramic Veneer

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Cover: Green-Johnston Residence, Mill Valley, Calif; Karl H. Riek photo

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Business data on page 34

ABOUT THIS ISSUE: It seems appropriate in the merry month of May to feature five houses in four different states and all with a common denominator—what we call livable decks and courts. Now these residential elements are nothing new to the West, to be sure, but the key word is "livable." Too often a deck or court is simply something tacked on, pleasing to the eye perhaps, but really not very functional in the clients' day-to-day living. The outdoor areas in each of the houses shown here are carefully integrated into the total scheme; furthermore, the majority have more than one such area so that sun and wind can be enjoyed or avoided as the case may be.

We announced last month that our new name would not entail any major change in policy, but we have made some minor ones. And the grouping of the five houses is part of this pattern. Each issue we'll present several structures of the same building type (or at least related in some way) or fully explore one particularly strong or significant project.

Our methods article on three schools at different educational levels is just the beginning of an editorial program which will see stepped-up coverage in this portion of the magazine.

COMING IN JUNE: Three straightforward approaches to buildings for industry as executed by a Portland architectural firm will lead off our feature section for June. Nor are they stereotyped in any sense of the word. We will also review the seven educational plants in the West which won citations from the American Association of School Administrators to show that this group, like so many others which sponsor annual architectural exhibits, is upgrading its design standards year by year.

How to tear a page from

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THE BUILDING WEST—In much of the nation, building volume this year has been trailing 1961, but not in the 13 western states. Here, permits issued by 500 leading cities and counties surveyed by Architecture/West have totaled $1,573,269,298 during the first quarter of 1962, up 16% over the same period last year. The increase is noticeable in all parts of the West, particularly in California (up $149 million), Nevada (up $25 million) and Washington (up $23 million). Similarly, all phases of the industry have benefited. Of the total, residential permits account for $836,197,566, a 20% increase over last year. Industrial-commercial-public buildings total $737,071,732, a 10½% gain. California, Nevada and Washington share especially in the residential increases; California, Nevada and Oregon show the largest industrial-commercial gains.

MONTH OF MARCH—When January and February revealed important and unseasonal gains, the industry questioned whether this was a bubble that would burst or an actual trend. This question seemed answered by a study of March figures (complete tabulation on pp. 32-33). The total was $616,670,042, an increase of 17% over the same month last year. Residential work accounted for $331 million of the March permits (up 20%) and nonresidential totaled $285 million (up 8%).

TOP TWENTY-FIVE—Hottest spots in the West for March (in millions): **1.** Los Angeles, $65; **2.** San Jose, $33; **3.** Los Angeles County, $19.2; **4.** San Diego, $13.5; **5.** King County, Wash., $12.9; **6.** Phoenix, $11.2; **7.** San Bernardino County, $10.4; **8.** Sunnyvale, Calif., $10.1; **9.** Clark County, Nev., $9.9; **10.** Seattle, $9.5; **11.** Denver, $9.4; **12.** Sacramento County ,$8.5; **13.** Long Beach, $8.3; **14.** Honolulu, $8; **15.** Anaheim, Calif., $7.4; **16.** Jefferson County, Colo., $7; **17.** Santa Ana, Calif., $6.6; **18.** Santa Barbara County, $6.4; **19.** Orange County, $6.3; **20.** Oakland, $6.2; **21.** San Francisco, $6.2; **22.** Glendale, Calif., $6; **23.** Riverside County, Calif., $5.8; **24.** Santa Clara, $5.7; **25.** Orange, Calif., $4.9.

CONCERNING COMPETITIONS—A five-man architectural jury headed by John Carl Warnecke of San Francisco has awarded the 1962 R. S. Reynolds Memorial Award to a team of French architects—Guy Lagneau, Michel Weill and Jean Dimitrijevic—for design of the Museum Cultural Center in Le Havre.

DELIGHTFUL DEDICATIONS—The Richard J. Neutra Elementary School, bearing the name of the Los Angeles architect who observed his 70th birthday in April, was dedicated at California's Lemoore Naval Air Station March 25. The school in question is one he wanted to build since 1927 when he initially conceived the idea of a ring shaped, open-air classroom. It is the first of several schools planned by the firm of Neutra & Alexander and Haines Associates, according to an insert in the dedication program. . . . Extensive additional facilities for engineering at Washington State University became available with the dedication April 27 of Sloan Hall. The five-story structure honors Royal D. Sloan, professor emeritus of electrical engineering who maintains advisory professional activity from his home on Indiana Street near the Pullman campus he so long actively served.

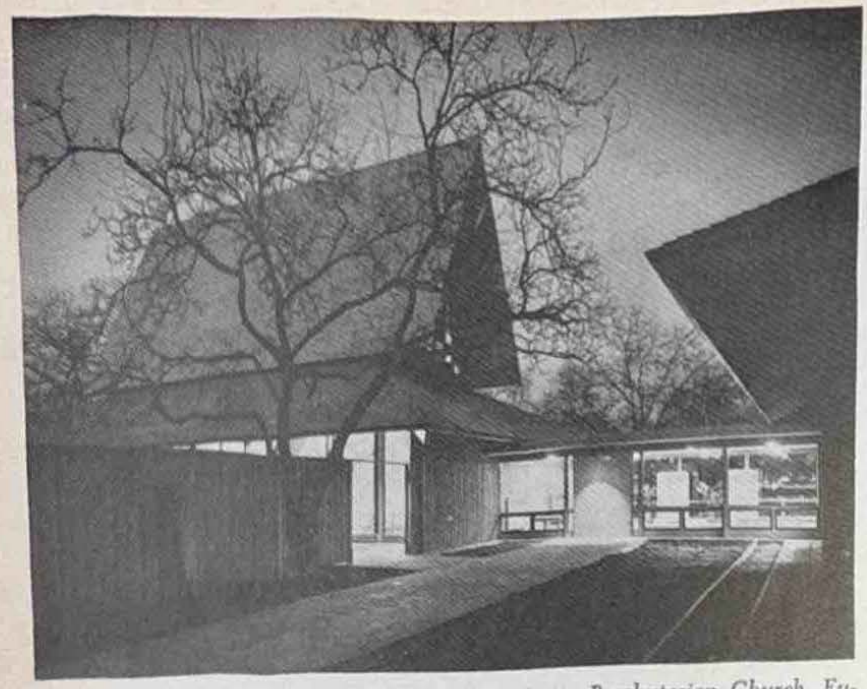
Highlights & Sidelights

HI HO, COME TO THE FAIR—Century 21 reached its countdown Saturday, April 21, and just about everybody, it seemed, got into the act—even Robert Moses arrived unannounced from "that other fair" on the East Coast. President Kennedy started the ball rolling officially at 12 noon when he pressed the same nugget-studded telegraph key that opened the Alaskan-Yukon-Pacific Exposition in the Queen City back in 1909. Since the Seattle World's Fair has not had an appropriate shakedown as this issue goes to press (some finishing touches remained to be done), editorial comment has been withheld until next month. . . . The name of O. E. Holmdahl, consulting landscape architect for the exposition, was misspelled in the April edition.

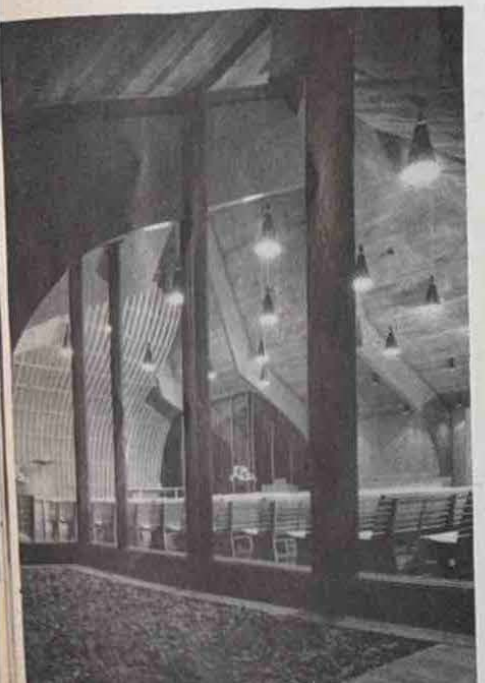
REGARDING RAPID TRANSIT—The Alweg Monorail, both of its four-car trains in operation as the Seattle World's Fair got underway, was getting a big play and there was much speculation as to what its fate would be come the October 21 closing. . . . Meanwhile, revised plans for a 75-mile network of fast rail lines connecting San Francisco and East Bay communities was being readied. The plans, altered to eliminate San Mateo and Marin Counties from first-stage construction, must be completed by early May to qualify a transit bond proposal for the November election ballot. . . . Still further south, C. M. Gilliss, executive director of the Metropolitan Transit Authority, sought support for a backbone route extending for 22.7 miles from west of Beverly Hills through downtown Los Angeles to El Monte, including 12 miles of subway. The Transit Revenue Bond Guarantee Bill (S-2390) now pending in Congress would enable MTA to proceed with issuance of private revenue bonds to finance construction of the $192 million route.

SURVEYING SHELTERS—Washington is one of the first states in the nation to complete the initial phase of the National Community Shelter Survey and Marketing Program. Eleven architectural-engineering firms, or combination of firms, have been at work throughout the state since December and January in gathering data pertaining to possible shelter spaces in buildings and other places such as mines, caves and tunnels. Nearly 6,000 potential shelters were identified, providing fallout protection for a minimum of 300,000 persons.

CONSULTING THE CALENDAR—A conference devoted to "Modern Trends in Specification Writing" will be held simultaneously at UCLA and at Scripps Institute in San Diego June 8-9. Among the seminar titles: "Legal Problems in Specifications," "Modern Specifications for Large-Scale Projects," "Modern Specifications Covering Soil Conditions," "The Contractor Looks at Specifications" and "The State and Specifications." For further information write Department K, University of California Extension, Los Angeles 24. . . . National Association of Women in Construction will hold its second Pacific regional forum at the Hollyhock House, Barnsdall Park, Los Angeles, June 9. Reservations can be made with Florence Barbour, 2053 Meadow Valley Terrace, Los Angeles 39.

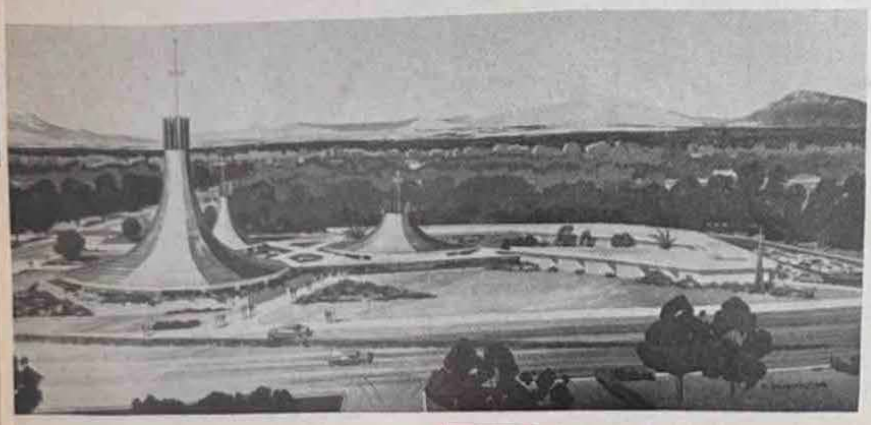


Westminster Presbyterian Church, Eugene: Stewart & Richardson, architects. "A fine simplicity of regional materials achieving both dignity and quiet. Excellent use of the site, preserving an existing walnut orchard."



Tom Burns Jr. photos

Scottsdale Congregational Church (United Church of Christ), Scottsdale, Ariz.: Weaver & Drover, architects, "An instance of ingenious regional expression which meets the symbolic requirement as well. A pleasant human scale and a good organization of the necessary complex structure."



Oregon, Arizona churches win design citations

Two western religious plants—one i Eugene and the other in Scottsdal Ariz. — are among eight projec which have won the annual architec tural awards at the exhibit of th National Conference on Church Ar chitecture held in Cleveland late i March.

But the three-member jury, whic included Seattle architect Paul Hay den Kirk, asserted that the majority of the 152 entries suffered "from bot the indecision of the statement of th problem and the lack of honest inter pretation and use of forms and mate rials by the architects."

No first, second and third prize were designated, each of the eight being cited on the same basis. Three of the winning designs are of Roman Catholic churches, two of which are in New Orleans. Three winners are in Ohio and the remaining one in Michi gan.

Advice but not consent

"The complete disregard for sim plicity and the obvious quest for the sensational were most apparent," the jury pointed out in its written critique. Other members: the Rev. Dr. Hugh T. Kerr, professor of systematic the ology, Princeton University, and Dr. Robert Iglehart, chairman of the de partment of art, University of Michi gan.

The jurors "felt the need for solu tions of more intimate scale and rela tionship to the religious needs of the individuals. In the majority of sub missions, the church did not present the unified architectural picture in the community that its religious, so cial and educational programs would indicate. The recurring theme was the overly emphasized and overly dra matic nave, with social and educa tional spaces tacked on, poorly inte grated to the whole. The lack of regionalism reflecting climate and orientation control was ever wi dened."

The big problem, as yet unsolved in an enlightened and economic man ner, is the 200-to-400 student educa tional unit, whose average occupancy is for one hour, one day a week, the jury declared. It suggested that "the resulting cost and confusion of this part of the program might well indi cate the necessity of a complete re analysis of religious education by our churches."

The jury had words of praise for the architects' concern with the vary ing problems and activities of the urban church as against the suburban and the suburban as against the rural

The members also noted with pleasure the frequency with which artists are engaged to enrich the church, but they pointed out that "it seems clear that the problem of integration is not typically well solved."

Goal: 'religious affirmation'

The church building today must not compete with the office skyscraper, the factory or the high-rise apartment building, the jurors emphasized. They noted that denominational symbolism has also tended to disappear so that it is not always easy to distinguish an Episcopal from a Baptist church, or even a Roman Catholic from a Protestant church, "which is as it should be."

They agreed that both architects and churchmen are confronted with staggering problems of definition, but abjured that simplicity and integrity of design be demanded and resistance to flamboyant loudness be encouraged. They pointed out that many of the difficulties are due to the fact that "religion and the church partake of our contemporary confusion and tend to add to the churches' perplexity instead of acting as a beacon of light in the midst of so much anguish and darkness."

In presenting the jury findings, Kenneth Richardson of Portland, co-chairman of the architectural exhibit committee, stressed that the awards program this year marks a sharp departure in that the entries were judged from the standpoint of their success in creating a "contemporary religious affirmation." Through this program, the two sponsoring organizations of the exhibits and conference —the Church Architectural Guild of America and the National Council of Churches—have attempted to define some of the problems confronting church builders and some means of achieving solutions.

Among a score of speakers who addressed the three-day conference was the Rev. Lars Ridderstedt, director of the department of church architecture and art for the official Church of Sweden, who blames the ubiquitous building committee for the "bad church architecture" dotting the American landscape.

The widely discussed Air Force Chapel (A/W, Mar. '62) is magnificent as to design, Dr. Ridderstedt said. "It is new Gothic and the first church built of modern materials where everything is playing in one symphony. It is a perfect example of the theme and spirit of this architectural conference: 'One Church, One Architecture.' Further, this chapel will help flyers, for whom it is designed, to understand that God is also in the airplane even when they have passed the sound barrier," he added.

In the ecclesiastical crafts exhibit, a special award was given to the Stained Glass Association of America for sponsoring a 40x10-ft. faceted glass panel wall for the Christian Pavilion at the Seattle World's Fair (A/W for Apr., '62) after the design had been selected from among 40 member studios. The competition was held on request of the pavilion's architect, Robert L. Durham of Seattle, who was reelected regional vice president.

Northwest in '63

Seattle will host the 1963 conference, with Aaron Freed as local arrangements chairman. The site was singled out as "of particular interest to architects because of the construction of modern nontraditional churches and the extensive use of wood."

A preconvention trip to Portland is being planned so that Pietro Belluschi's and other noteworthy churches can be visited.

International growing pains accompany Hawaiian center

Construction is in varying stages on the first phase—the buildings shown in the model below plus low- and high-rise dormitories, transient quarters and laboratory classrooms — of the East-West Cultural Center and the Hawaii-sponsored gateway to the giant project.

Architects are McAuliffe, Young & Associates with I. M. Pei, Associates; structural engineer: Donald Lo; general contractor: McKee-Nordic.

U.S. congressional delays concerning land title and jurisdiction have delayed the physical plant and local disagreement over appointments have further disconcerted the formulation of a coordinated plan for the struggling idea which stepped out of the egg into the boiling cauldron of politics two years ago. Since then, the center has been attempting to and presently is educating 249 Asian, South Pacific and mainland students in the double-shift, overcrowded University of Hawaii campus without adequate housing, classrooms, dining or parking facilities for its own enrollment or faculty.

Disgruntled foreign students complained, were interviewed and their criticisms added to the growing stack of subcommittee hearings, surveys and investigations which revolve about the appropriation of federal funds, especially one which is having international growing pains in the public stare.

Meanwhile, the newborn of democratic cultural exchange has attracted worldwide attention, civic hospitality and impatience from its youth, plus the many frustrations of being a new specie to education in the U.S.

Beatrice M. Howell



Prestressed and poured-in-place concrete are being used in $942,000 administration - food service buildings (foreground) and $1.4 million theater - auditorium, now 30 and 35% complete and due to open this fall in Honolulu.

T-SQUARE TALK

new offices

William James Mangino has opened an architectural office at 1111 W. Lawrence Lane, Phoenix.

David D. Fisher has opened his own office for the practice of architecture at 902 Jefferson St., Oregon City, Ore.

Austin R. Siegfried has opened an architectural office in Builder's Showcase, 2127 W. Sixth Ave., Denver.

Edward Durell Stone has opened a Los Angeles office at 3305 Wilshire Blvd. In charge of the operation is Edwin B. Woodrich, formerly associated with Austin, Field & Fry and George Vernon Russell.

The John S. Bolles architectural firm has formed an interior design group called Store Planning Associates. The independent corporation will specialize in contract market operations, with offices at 14 Gold St., San Francisco, and 206 E. 50th St., New York.

new partners, associates

The Seattle firm of Harstad Associates has made two executive level additions: Kenneth E. Bates as senior architect and partner and Ronald Thompson as principal planner.

Charles H. Byerly has joined Sherwood F. Ritz Jr., architect, as an associate. New address of the Colorado Springs, Colo., firm is 722 N. Tejon St.

C. James Bellamy, architect, has been named an associate in the Spokane firm of Kenneth W. Brooks.

Naramore, Bain, Brady & Johanson, Seattle architectural firm, has named Donald A. Winkelmann as an associate.

firm changes

Ashton, Evans, Brazier & Associates is the new name of the Salt Lake City firm of Ashton, Evans & Brazier. Frederick Montmorency, who has been associated with the architects for seven years, has been named a partner.

new addresses

Oregon State Board of Architect Examiners, formerly in Portland, to Suite 304, Labor & Industries Bldg., Salem.

Culler, Gale & Martell, architects, and Norrie & Davis, engineers, to 707 Peyton Bldg., Spokane.

H. W. Underhill, architect, to 2020 Paseo Gracia, Palm Springs, Calif.

Stafford, Morin & Longwood, architects, to 70 E. 14th, Eugene.

Leach, Cleveland & Associates, architects, to 8900 Melrose Ave., Los Angeles.

retirements

Harland Bartholomew and Harry Alexander are retiring as full partners of Harland Bartholomew & Associates, Honolulu city planners-architects.

More AIA officers in West

AIA organizations in Arizona, California, Colorado, Nevada, Oregon and Utah were among the latest to pick new slates of officers. They include:

Central Arizona: Lester H. Laraway, president; John Schotanus Jr., secretary; Henry M. Arnold, treasurer.

Arizona Society of Architects: D. S. Swanson, Tuscon, president; Kemper Goodwin, Tempe, vice president; James Wares, Tuscon, secretary; Henry M. Arnold, Phoenix, treasurer.

Southern California: Edward H. Fickett, president; Howard Morgridge, vice president; Cassatt D. Griffin, secretary; MacDonald Becket, treasurer.

Inland District (Southern California): Jack Burg, president; Arthur Evans, vice president; Clinton Marr, secretary-treasurer.

Colorado: Jerome K. Nagle, president; Rodney Davis, vice president; T. J. Moore Jr., secretary; James Johnson, treasurer.

Reno: John Hale Calef, president; Theodore E. Selden, vice president; Allen J. Stewart, secretary; George O'Brien, treasurer.

Las Vegas: Howard Brandis, president; Jack Miller, vice president; George G. Tate, secretary-treasurer.

Oregon: Robert Martin, president; Joseph Rudd, vice president; John Reese, secretary; George Whittier, treasurer.

Southwest Oregon: Russell E. Ellis, president; DeNorval Unthank, vice president; Allen L. Greene, secretary; B. King Martin, treasurer.

Utah: M. E. Harris Jr., president; Nathan Wolley, vice president; Bruce R. Dixon, Provo, secretary; Peter M. A. Moyes, treasurer.

deaths

Frank Griffith Williams, 53, Sacamento architect, died after a lo illness. He had been in private arch tectural practice in the city for eig years.

appointments

Architect Kenneth F. Brown ha been appointed a commissioner of th Honolulu Redevelopment Agency t serve out the unexpired term of Her bert K. Keppeler, who resigned.

Richard B. Taylor of Santa Barba has been named to a four-year term o the California State Board of Land scape Architects.

Andre H. Morilhat has been pro moted to the post of director of archi tecture and engineering services fo Oakland Public Schools.

Philip Faulconer has joined th office of architects and engineers o the University of California at Sa Diego as a project architect.

Thomas A. McKenzie has been pro moted to assistant manager, economi and engineering planning departmen of Tracey, Brunstrom & Dudley, Inc Seattle consulting engineers.

John Dyckman, former faculty member at the University of Pennsyl vania, has joined the San Francisc staff of Arthur D. Little, Inc., researc and engineering consultants.

honors

Beverly A. Travis, professional en gineer, who served as electrical con sultant for the Seattle World's Fa has received the 1961 award of th National Electrical Contractors' Asso ciation.

A John Brenner Memorial Librar has been established by Alpha Rh Chi fraternity at Arizona State Un versity to honor the late architect wh was prime mover in the establishme of the ASU chapter.

competitions

The five-man jury for the four annual $25,000 competition sponsore by The Ruberoid Co. will inclu Vernon DeMars, chairman of the de partment of architecture at the Un versity of California. This year theme: "Improved Human Environ ment through Urban Renewal." Com petition is open to all registered ar chitects, architectural assistants an students of schools which are mem bers of the Association of Collegiat Schools of Architecture.



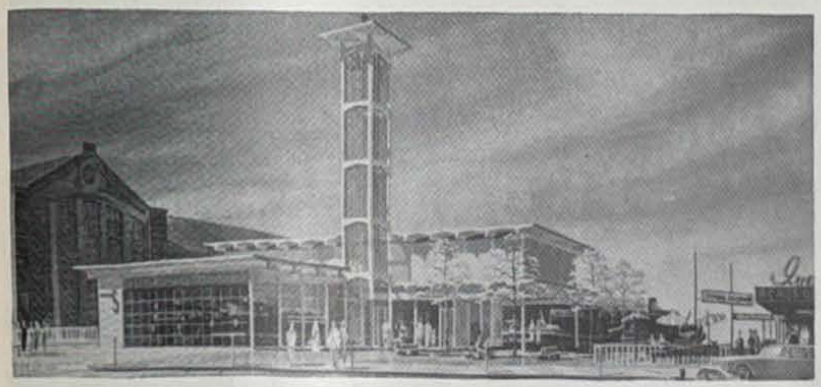
CALIFORNIA: APARTMENTS

for Jones Methodist Church will house senior citizens in San Francisco's Western Addition at rentals between $82 and $92. Open corridor will serve eight units on each floor arranged back to back for economy of structure and equipment. Concrete bearing walls will terminate at roof where they give form to series of gardens. Architects: Chan-Rader & Associates; structural engineer: Stefan Medwadowski.



MONTANA: PROPOSED PLANT

for West Senior High School in Great Falls (April bond issue failed by 260 votes, but another election is anticipated soon) incorporates two polygon shaped units—two-story gymnasium at left and one-story auditorium at right. Main building is three-story reinforced concrete structure; smaller building houses industrial arts and heating plant. Architects: Page-Werner & Associates.



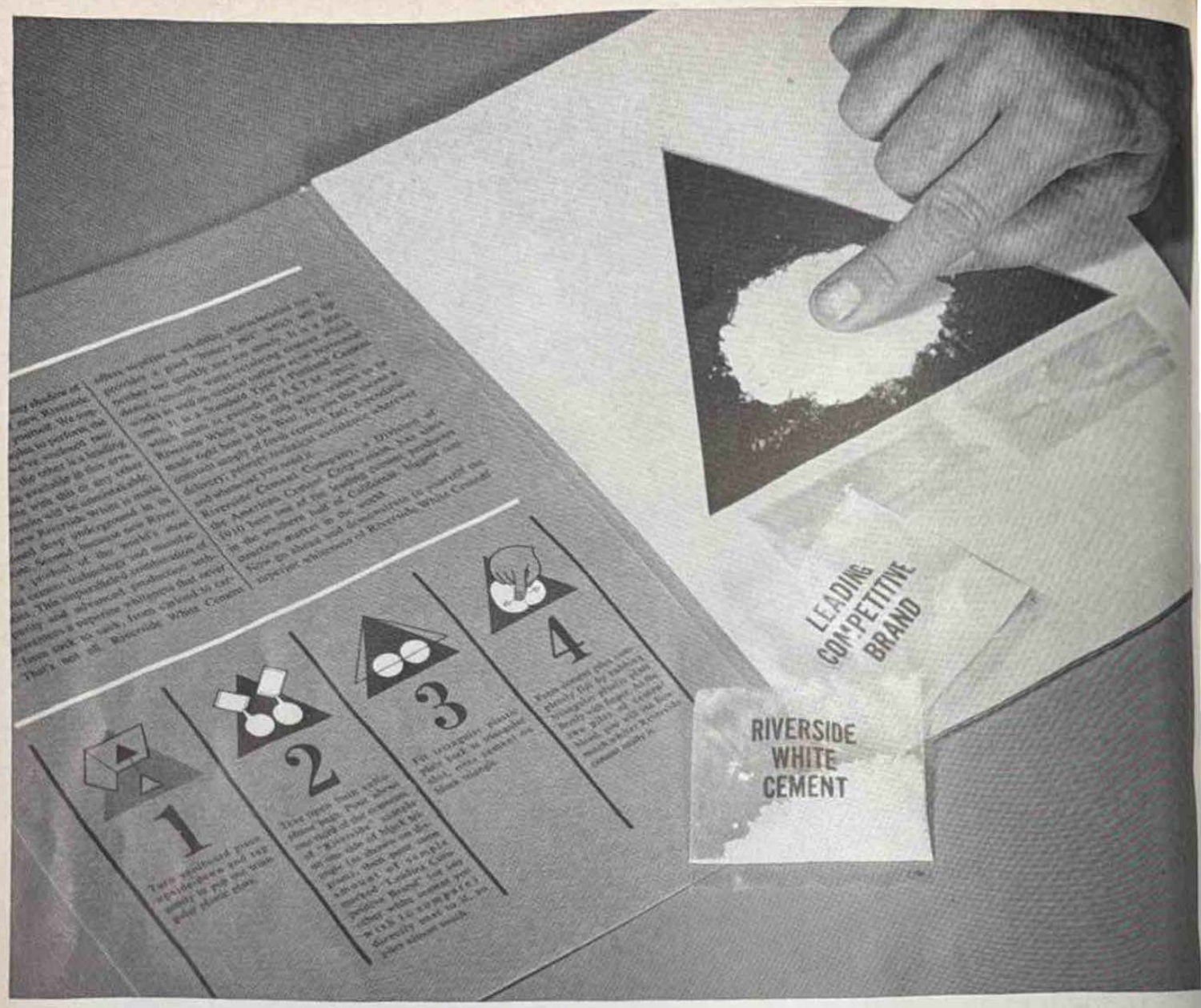
WASHINGTON: FIRE STATION

for Seattle's waterfront will provide glassed area on north side of apparatus room to dramatize fire equipment from both Alaska Way and public plaza with benches, plantings, trees and suitable lighting. "It could be considered a demonstration fire house," the designers comment. Plans call for 50-ft. glass-enclosed tower to dry 100-ft. hoses from fireboats or two fire trucks at station. Architects: Durham, Anderson & Freed.



CALIFORNIA: 38-BED HOSPITAL

to be built in Tahoe Valley, five miles from Nevada state line, suggests non-institutional design indigenous to mountain resort environment. Community-owned Barton Memorial Hospital will have pentagonal shaped roof formed by heavy timber decking and supported by glued laminated beams and steel columns. Exterior plaster is decorated with exposed granite aggregate. Architect: John Badgley.



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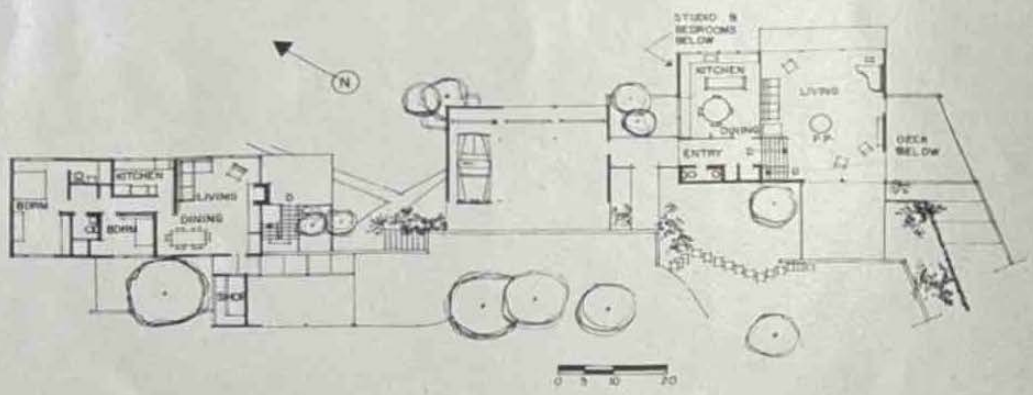
Karl H. Rick

QUINTET OF HOUSES: DECKS AND COURTS



Karl H. Riek photos

Entry shares kitchen-dining level which opens to living room and deck below.



Decking repeats redwood used for exterior siding, fascia and trim.



Hillside twins at home among the trees

AN UNUSUAL COMBINATION turned out surprisingly well in this complex consisting of a three-level house for two artists and a smaller one-level residence for a retired couple.

Site is steep and heavily wooded, originally part of a large well-tended estate. To minimize disturbance of trees and foliage, the houses were designed to sit up high and jut out over the slope. Structural form and common driveway and parking facility tie the two together into a unified whole.

Larger of the two houses has a studio on the lowest of the three levels, providing a pleasant workroom for the owners' avocation—sculpture and crafts. Spaces on the three different levels flow together, affording a variety of views and vistas and adding a feeling of spaciousness. The living room is open to the kitchen-dining-entry level along its entire length above and the studio below. Window sections form continuous patterns that enhance this feeling.

Interior paneling is 3/8-in. mahogany vertical t&g boards. Floors are oak. One laminated beam extends across the ceiling, doubling as a base for lights in both dining and living areas. Fireplace is stucco with small metal channel surrounding it. Hearth is exposed aggregate concrete. This motif is repeated in the stepping stones and landscape work outside.

Exterior is narrow redwood drop siding similar to that used on old New England houses. Two pipes on the outside are cement asbestos flues required for the furnace and frankly expressed. Corner boards and trim are painted white. Landscape architects: Royston, Hanamoto & Mayes.

VIRGINIA GREEN & LEILA JOHNSTON-ELIOT GREEN RESIDENCES, Mill Valley, Calif./*Marquis & Stoller*, architects/*Guy Baldwin*, contractor.



One-level house at right is reminiscent of three-level structure. They share common driveway.

OUTLINE SPECIFICATIONS

Structure: footings and foundation: reinforced concrete; frame: wood stud; roof: laminated ridge beam.

Exterior Finish: narrow horizontal redwood drop siding; redwood fascia and trim, painted white.

Roof Surfacing: tar and gravel.

Windows: sugar pine sash.

Floor Surfacing: oak strip; vinyl tile; ceramic tile for sunken tub.

Interior Finish: 3/8-in. mahogany vertical t&g in entry, living room and dining area; gypsum board on lower level; mahogany cabinetry.

Ceilings: gypsum board.

Heating: gas-fired forced air system.

Total Area: three-level: 3,000 sq. ft.; one-level: 1,000 sq. ft.

Date of Completion: July 1961.

Built-in expansion for young family of five

WITH A GROWING FAMILY of three children, the clients could see that they would be moving into larger quarters on a regular basis. To avoid this problem, they purchased a 3½-acre hillside site.

The architect developed a design that would permit gradual expansion, yet not make the house appear as though it were partially completed. The result is a two-level, cruciform structure of 2,300 sq. ft. with 1,600 sq. ft. of open deck and a potential deck expansion of another 2,300 sq. ft.

Structural steel was chosen not only to solve the site problems but to provide the greatest amount of interior flexibility. Thus, the clients were enabled to build the entire framework of the house and then enclose only the portions they would use for the first few years.

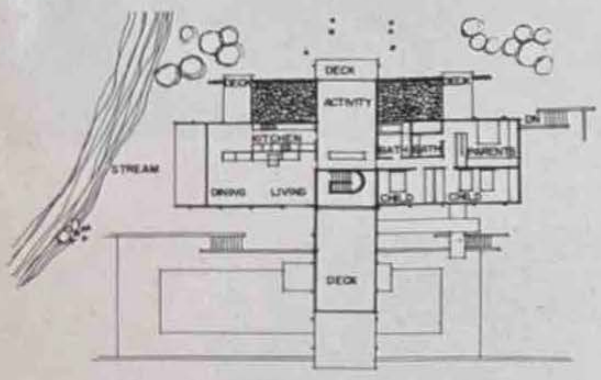
Presently, living areas are located in that part of the house parallel with the slope. Upper level contains the living-dining area, kitchen, activity room, three bedrooms and two baths. Lower level has storage, laundry and carport. The portion of the house which extends from the present living area over the downslope is utilized as deck space for outdoor living.

Expansion plans call for the glazing of the top deck space for use as a living room and the development of the lower deck for use as an enclosed play area, a bath and three more bedrooms. A swimming pool will be located beneath this lower deck, parallel to the present living area.

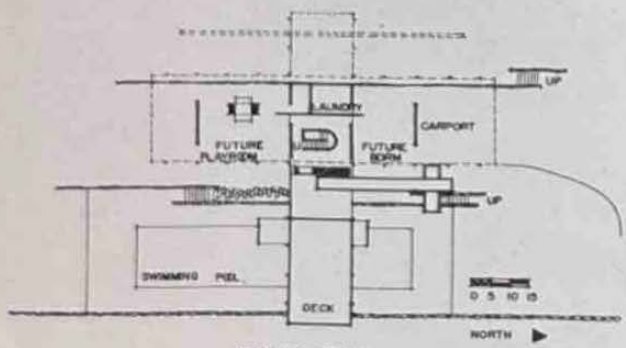
Entrance to the house is via a semicircular staircase at the center, leading from the lower level. Skylights highlight the bright red staircase which stands in contrast to the neutral shades of the house's exterior.

Construction consists of 4-in. steel columns 8 ft. o.c. for the length of the structure and 24 ft. o.c. for the depth. Seismic loads are accommodated by X-bracing composed of steel rods installed between decks on the two end bays. An eggcrate system of 2x12-in. joists is employed for underflooring on the lower deck, while standard wood floor joists are found elsewhere.

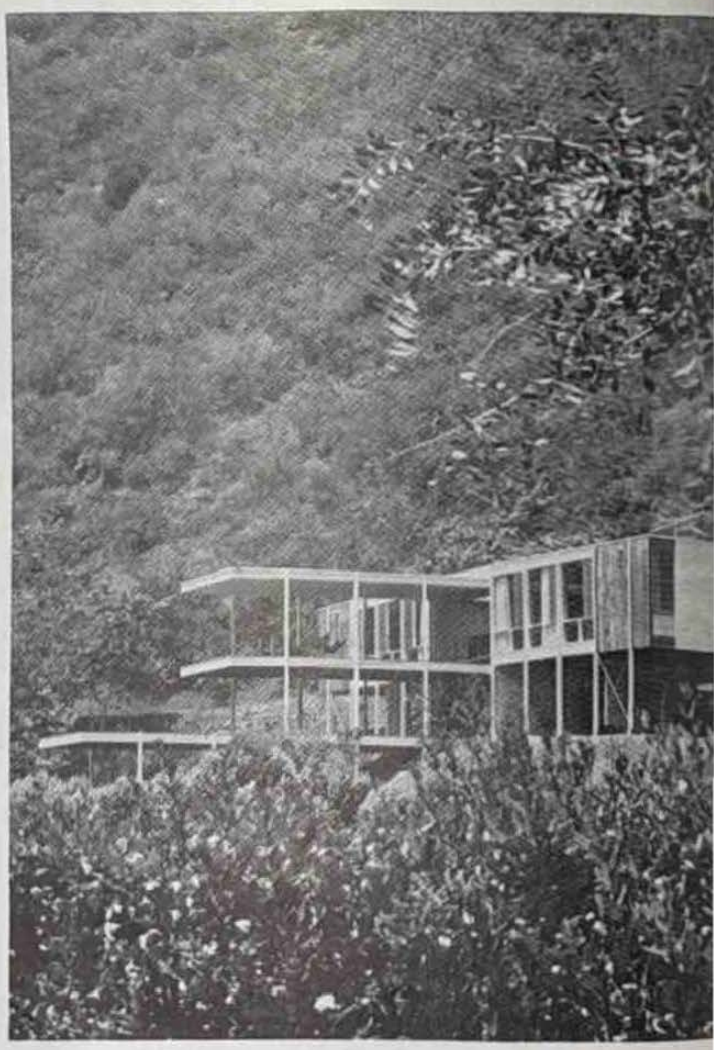
LELAND ZEIDLER RESIDENCE, Los Angeles/*Bernard Zimmerman*, architect/*Robert Marks*, structural engineer/*Pat Hamilton*, contractor.



UPPER LEVEL



LOWER LEVEL



Portions of steel framework which will be enclosed later now make suitable decks for outdoor living.

Sunken activity room is located in center of house. Stairway from carport area is hidden by cabinets containing TV and hi-fi equipment in entry hall.



Marvin Rand photos

OUTLINE SPECIFICATIONS

Structure: foundation: reinforced concrete; frame: exposed structural steel columns supporting wood beams and joists—Bethlehem Steel Co.

Exterior Finish: Douglas fir siding with 4-in. shiplap joint; plaster with panel filters; glass.

Roof Surfacing: built-up composition and white gravel.

Windows: louvered.

Doors: exterior: aluminum sliding—Bellevue Metal Products; interior: flush hollow-core birch.

Floor Surfacing: Douglas fir in family room and on decks; vinyl tile in kitchen and bathrooms—Goodyear Tire and Rubber Co.; carpeting elsewhere.

Interior Finish: Douglas fir siding; plaster; birch finish cabinetry.

Ceilings: simulated acoustical plaster.

Lighting: recessed fixtures—Halo Lighting of California, Inc.

Heating: forced air system, day and night unit.

Plumbing: lavoratories—American-Standard; toilets—W. A. Case & Son Mfg. Co.

Total Area: enclosed: 2,300 sq. ft.; future expansion structure: 1,500 sq. ft.

Cost per Square Foot: $15 for enclosed area; $7 for future expansion structure; $5 for decks.

Date of Completion: January 1961.

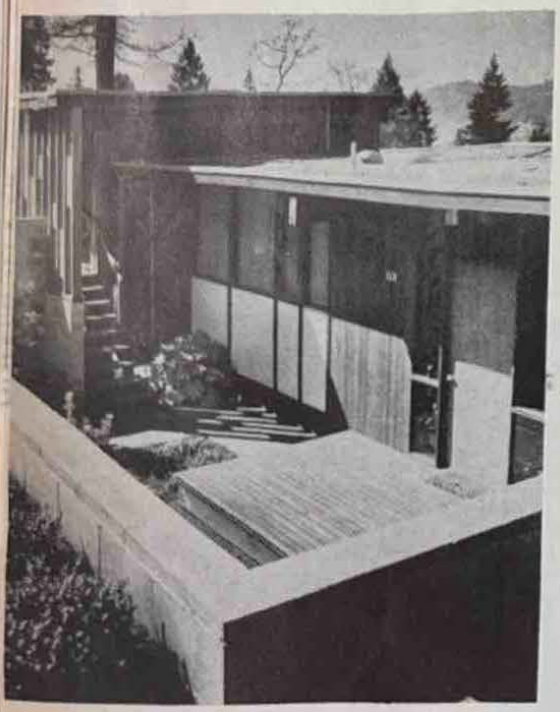


Kitchen separates dining area in foreground with view of wooded slope and main entrance and activity area in rear.

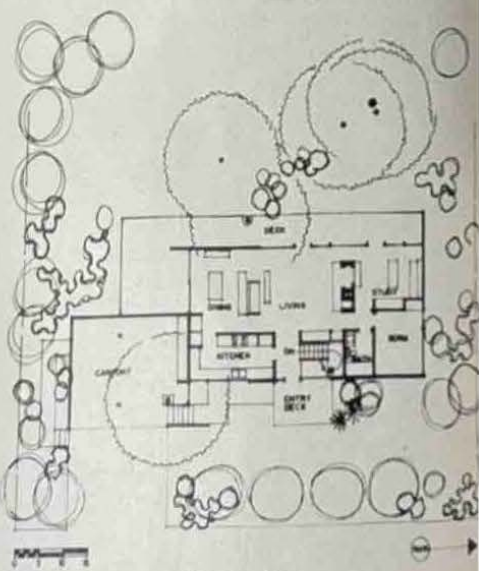


Tom Burns Jr. photo

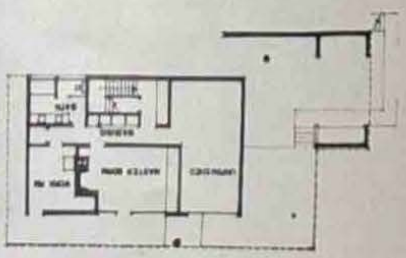
Deck area enclosed by resawn cedar fence at right can be reached from street above.



Lowered entry deck is arranged to arouse excitement in house itself and view on other side. Carport screen of 1/16-in. cathedral glass in white, blue, amber and red adds interest.



UPPER LEVEL



LOWER LEVEL

Decks maximize outdoor living in Northwest

THIS HILLSIDE RESIDENCE developed for a university professor and his wife faces west overlooking the city. Site has several large oaks around which the wood frame structure was oriented to provide natural control from the sun.

Design considerations include areas for study, hobbies, guests and informal entertaining as well as provision for the clients' paintings, other art objects and books. An interest in the outdoors in general and gardening in particular called for integration of the site and the house.

A study of the floor plans reveals what the photographs can only suggest: the variety of decks—open and protected—available on both levels, thus insuring maximum use of these spaces in almost any kind of weather.

Upper level living area flows from one space to another. Fireplace divider serves the study and the living room. A second fireplace is found in the master bedroom.

Woodsy materials dominate outside and in—Douglas fir framing, cedar roof decking, siding and interior panels, tempered hardwood panels, stained birch veneer doors and cabinets. Landscape architect: George Jette.

BERND CRASEMANN RESIDENCE, Eugene/*DeNorval Unthank*, architect/*R. A. Chambers & Associates*, contractor.



Dining-living areas and study adjoin deck on view side.



Fireplace is basalt stone, dividing study from living area.

OUTLINE SPECIFICATIONS

Structure: foundation: concrete footings; reinforced concrete block basement and retaining walls; frame: Douglas fir post and beam with 2x4 laminated cedar roof decking.

Exterior Finish: 1x6 t&g resawn cedar siding enameled hardboard panels; concrete block.

Roof Surfacing: 4-ply built-up with gravel topping, rigid insulation.

Windows: fixed glass and Douglas fir operating sash.

Doors: stained birch veneer.

Floor Surfacing: cocoa matting in living areas; vinyl tile elsewhere.

Interior Finish: stained 1x4 t&g cedar paneling; gypsum wallboard; tempered hardboard; some concrete block on lower level; birch veneer cabinetry.

Heating: oil-fired forced air system.

Total Area: 3,376 sq. ft. (upper level, 1,104 sq. ft.; lower level, 1,008 sq. ft.; decks, 784 sq. ft.; carport, 480 sq ft.).

Total Cost: $28,000, including decks, fences, etc., but excluding plant materials.

Date of Completion: summer 1959.

Central court is answer to viewless site

THE THREEFOLD PROBLEM was to provide a house for a family of five in a small viewless lot surrounded by neighbors' garages; maximum outdoor living in a region of short summers and high altitude where it is cool as soon as the sun goes down; and ample space for two favorite pastimes—invigorating play by the children and "guests for dinner" by the grownups.

The solution, in the words of the architect-owner, is "a house with a hole in the middle, which looks in. The hole—a courtyard—affords the family with a private outdoor living room. It is a sun pocket which stores up the heat of the day and keeps out the too-cool breezes in the evening."

In citing the house for an Award of Merit in the design program of the Spokane Chapter, AIA, the jurors said the courtyard "is one of the most satisfying elements" because of its view toward the heavens. Most houses, they pointed out "have horizontal values involved and interrupted by roof lines, overhangs and neighboring properties." This one emphasizes the sky.

The window wall panels around the courtyard were experimental. They slide completely out of single sill and soffit slots and store in a cabinet. The individual panels are lightweight, 30x93 in., single glass, with a 1x2 redwood frame. Weatherstripping is mohair, with two nylon bottom rollers per door. The entire group of panels can be taken out or replaced in 15 minutes.

Among other convenient features: a flush kitchen cabinet cantilevering outside the house; wall-hung steel tube bunk frames in the children's bedroom; side panels of a wall cabinet hinging down to form a pillow support for reading in the master bedroom.

And the backyard is a children's paradise incorporating a play pad with "stump" bleachers, a "rock house" and a "skyscraper" with movable floors. Mechanical engineer: Kendall M. Wood.

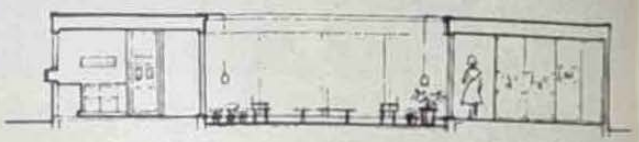
KENNETH W. BROOKS RESIDENCE, Spokane/*Kenneth W. Brooks*, architect/*Gilbert D. Bauer*, contractor.



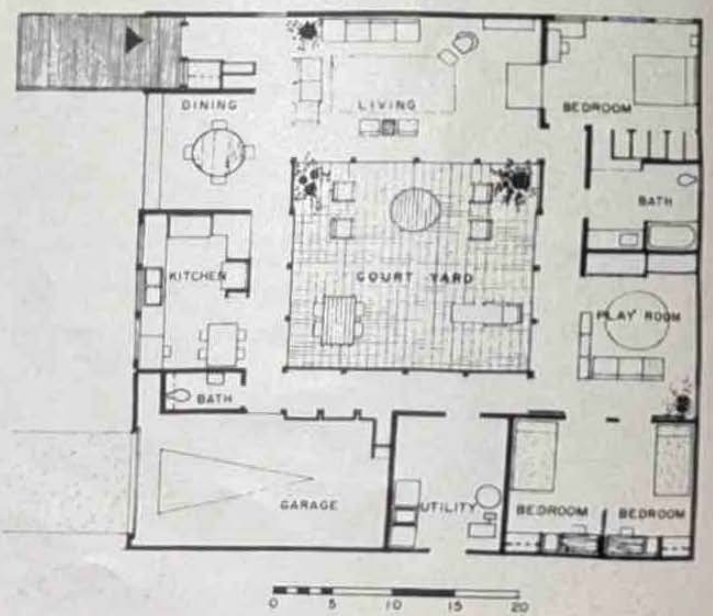
Entry garden combines ground cover and gravel. Panel screen lights front door and coat closet behind.

Roof drain doubles as bird bath.





COURT SECTION



Salt-glazed brick floors of courtyard extend into dining and living rooms, are laid flat and need no wax.

Charles R. Pearson photos

OUTLINE SPECIFICATIONS

Structure: frame: 2x4 studs 48 in. o.c., with horizontal girts 24 in. o.c. for nail anchorage of vertical wood finish on both sides; roof: wood joists laid dead flat; floors: slab on grade.

Exterior Finish: redwood, 1x4 t&g with eased edge and resawn surface finish; window wall sliding panels around courtyard.

Roof Surfacing: coat tar pitch and gravel.

Floor Surfacing: salt-glazed brick laid flat in living room, dining room and courtyard; cork tile elsewhere.

Interior Finish: Aberdeen clear cedar, 1x5 t&g with V-joint, clear dull lacquer finish; white burlap in corridors and bathroom.

Ceilings: unpainted vermiculite acoustical plaster.

Heating: radiant heat system, hot water in floor slab; natural gas-fired boiler.

Total Area: 2,200 sq. ft., including garage and inner courtyard.

Total Cost: $30,000, including landscaping.

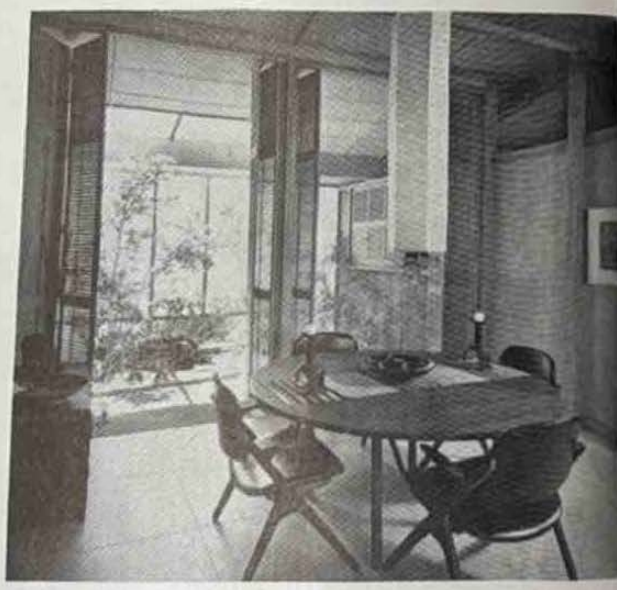
Date of Completion: summer 1957.



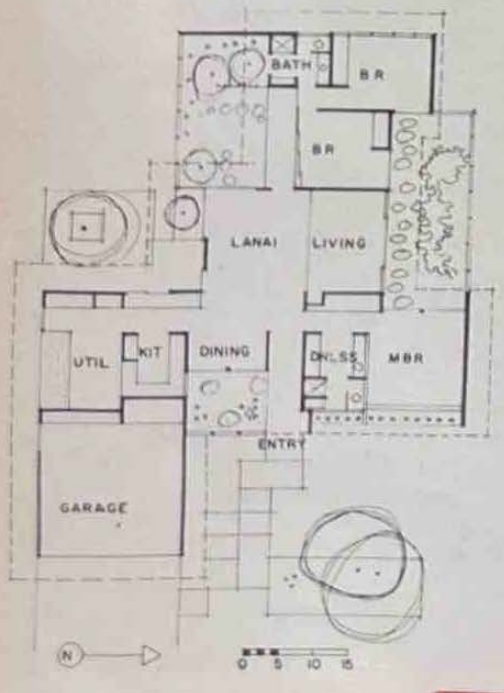


Camera Hawaii photo

Vent slots at base of special window along street side permits air to come in from below, allowing cross ventilation in master bedroom and bath.



Total effect is similar to contentment achieved b complete privacy of Spanish interior patio, but wit greater emphasis upon easily maintained garde within house, watered by rain through screens.



Western variation on an Oriental theme

IN DESIGNING a residence for his own family (since sold to another owner), the architect set out "to achieve the tranquil simplicity and uncluttered look of the traditional Japanese house, with consideration for western comfort and privacy from neighbors."

Located on a small arterial in a fine area beyond busy Waikiki and Diamond Head, but surrounded by other homes, this one-story structure presents an interesting vertical effect with its regularly placed redwood strips covering a translucent plastic. This wall does not extend to the ground, allowing ventilation to enter at the sill level. Fold-up wood panels control the vent slots at the base, where provision also is made for plants.

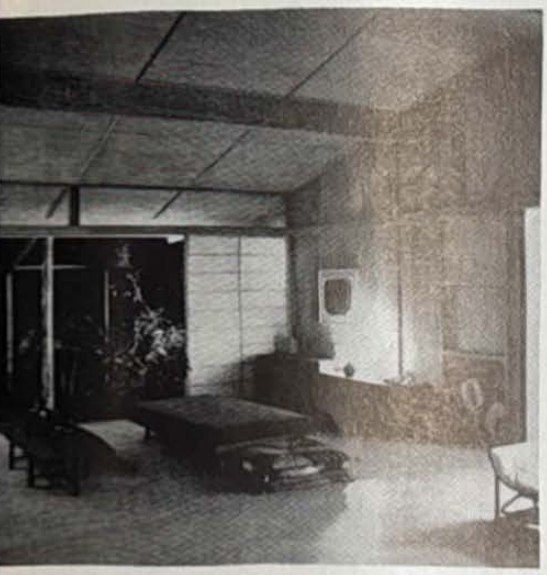
The tranquility is immediately established at the entry garden, whose bamboo leaves cast a pattern upon the plastic screen enclosing it from the street. The large living area, which incorporates lanai and dining, reaches out to related graveled gardens sprinkled with Oriental grasses and palms and partly covered by the extended roof. Here again, screens provide insect protection. An outdoor grass patio has a partial flooring of bricks laid in a ragged pattern to provide a sheltered, but open, barbecue area if desired. A pebbled-insert concrete walk surrounds a hau shade tree. Existent tropical species have been preserved in the other gardens as well.

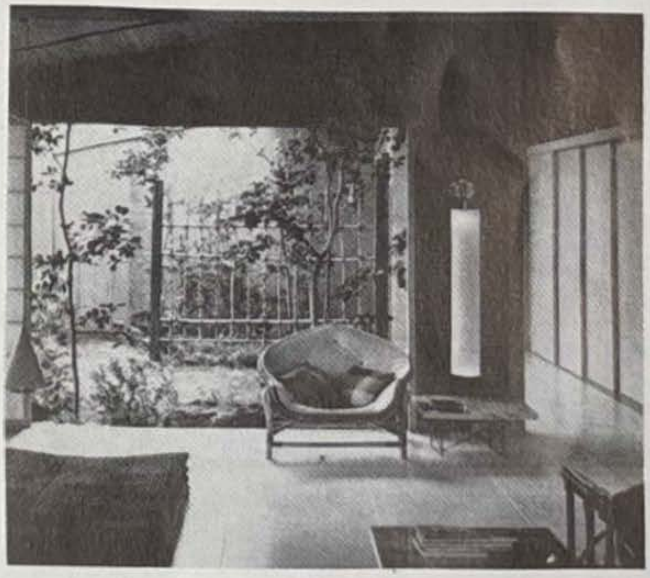
Master bedroom looks out onto one of the gardens off the living area. Silhouetted potted plants behind bed bookcases create a living mural, utilizing light from the front wall of the house. This same effect is found in the bathroom, where the green leaves line the shower on the street side.

Kitchen work area is increased by a screened extension and a sideboard overlooking the outdoor patio. A view is obtained through pull-back louvered doors to the left of the stove, permitting cross ventilation into the garden.

Shoji doors and fusuma allow the various spaces to be opened or enclosed at will throughout the house, which won an Honor Award from the Hawaii Chapter, AIA. Landscape architect: George Walters.

FRANK SLAVSKY RESIDENCE, Waialae-Kahala, Hawaii/*Design Associates: Frank Slavsky,* architect: *L. Harold Whitaker,* designer/*T. Igawa,* contractor.





OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: Douglas fir post beam.

Exterior Finish: bleached redwood.

Roof Surfacing: 3-ply built-up tar and gravel with coral chips.

Windows: specially designed "sill-vent" with translucent plastic and redwood grills; aluminum jalousie; glass sliding at kitchen snack bar.

Doors: exterior: shoji; interior: hardwood fusuma.

Floor Surfacing: terrazzo vinyl tile; cork; wall-to-wall carpeting.

Insulation: aluminum foil in ceiling rafters.

Interior Finish: bleached redwood; hardwood.

Ceilings: lapped Philippine mahogany panels with Japanese-styled battens.

Plumbing: custom-made mosaic Japanese furo tub; marble dressing table, basin with gold-painted fittings.

Total Area: 828 sq. ft., including screen-enclosed gardens, but excluding garage and storage.

Date of Completion: June 1958.

A commentary on today's architect

by EDWARD H. FICKETT upon assuming the presidency of Southern California Chapter, AIA

The modern miracle of man is today's architect.

Admired by many,

blessed by some

and cursed by a few,

he is king of today's professionals.

In spite of having one hand tied behind him, he has forged his way through a maze of obsolete zoning ordinances, restrictive codes and old-fashioned building techniques to produce some of the world's outstanding structures.

California's competent architect has had unmeasured success. Our own chapter members have been honored with commissions in all parts of the world: a university in New Delhi . . . a city in Jerusalem . . . a race track in Caracas . . . a hotel on the Nile . . . a college in Alaska —all bear the proud signature of architects of the Golden West.

We have in our backyard probably the greatest collection of professional talent in the world. Great names are today among us, but what will the future bring? I recall in my memories of early days as a draftsman the names of Sumner Spaulding, Pierpont Davis and Gordon Kaufman. You were not working for them, but with them. They were instructors as well as master draftsmen. They were always available for advice to stimulate and promote the young architects individual growth and expression.

They were architects' architects.

As a student sitting cross-legged on the floor listening to a Neutra lecture, the ability to convey an understanding of a new approach to architecture was always evident. In today's fast professional pace, I wonder if the stimulation and excitement of the professional approach of the past is not partially lost. Certainly I hope not.

I think it's time that today's masters of architecture should reevaluate and rededicate themselves toward the advancement of our profession, especially with respect to the young practitioners. They represent the future of our profession.

Opportunities are many and certain to come with growth. Today's architect, however, cannot maintain his position solely by prestige, privilege or tradition. He must not only keep up with the trends, but must lead in planning and technique. He is required to be a coordinator, but unless he masters and invents he will not remain captain of the building team.

A strong profession is essential if our inherent responsibilities are to be met with maximum effectiveness.

Now is the time to make our stand. There is new evidence of an air of architectural open-mindedness all around us. Things are really looking up for architects and allied professionals.

The flowering of modern science and technology has begun to fuse the new materials, structural systems, equipment and erection methods into one sensible building solution. What remains is for the solution to be acceptable by the permissive practices of government. This is where the architect should recognize and fulfill his professional responsibilities. What is really needed is a professional presentation to prove the validity of our thoughts and ideas. For the moment we have too few "orators and warriors;" too few who will speak out and fight for their professional rights.

In the quickened pace of practice we have somehow forgotten that we must be heard from!

In the advancement of the profession more public awareness of the architect is needed. The public is becoming aware that we react to the environment around us. Beautiful buildings possess a magical quality that is refreshing, stimulating and lifts our morale and spirit. A creation of beauty is not an accident. It must arise from the public awareness of the profession.

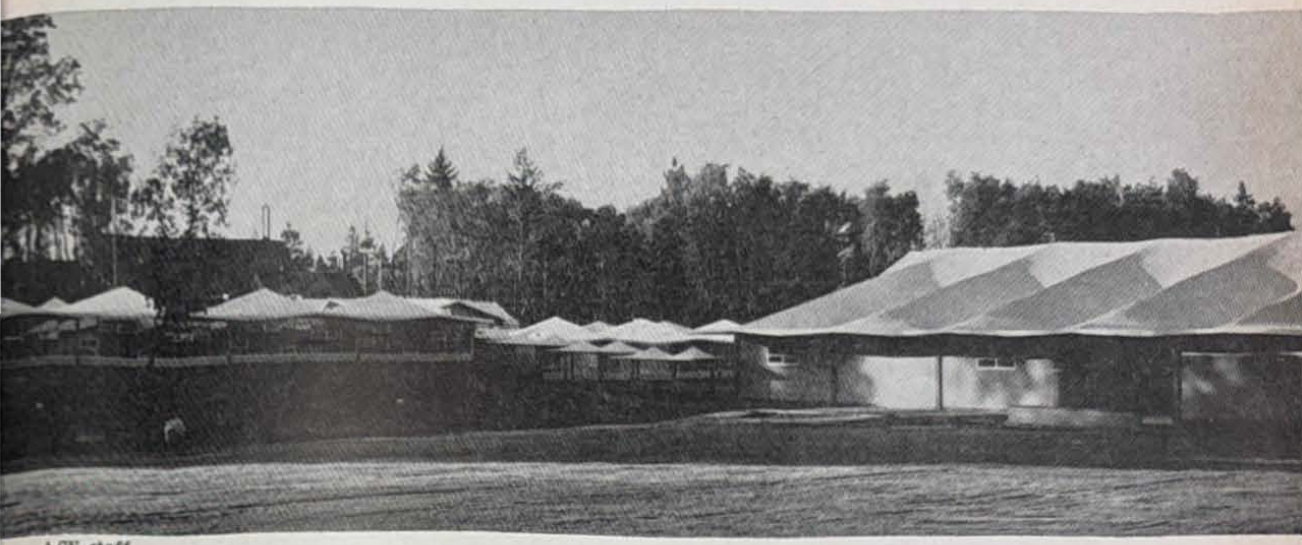
Today, as architects, we are on review. We are being challenged to provide an architecture representative of American capability and spirit.

Now is the time to

accept the challenge of today,

reap the rewards of tomorrow and

wear the crown of architectural achievement.



A/W staff

North Mercer Junior High School makes extensive use of parabs.

Three schools, three solutions with hyperbolic paraboloids

LESS THAN FIVE YEARS AGO the hyperbolic paraboloid was still a novelty item in roof construction. As such it has found application in the West in a number of spectacular structures. More recently, novelty has given way to practicality and the concrete hyperbolic paraboloid shell roof has proved itself to be not only attractive, but both functional and economical in everyday conventional construction.

One important area in which the parab shell roof is making a place for itself is in the construction of schools. Three projects at three different educational levels helped prove this point in the Seattle area during the past year. The three schools—North Mercer Junior High School, Auburn High School and Cedar Valley Elementary School—offer an interesting study in contrast of requirements, but with a similarity of solutions.

Each is in a different school district and each was designed by a different architectural firm. In every case, however, the selection of a concrete shell roof was based in the school district's demand for attractive buildings of Class-A construction and for a cost within the limits of the allowable state matching funds. As it turned out, both goals were achieved in all three instances.

Architects Bassetti & Morse were commissioned by Mercer Island School District 400 to provide 25-teaching stations for 625 students. Their solution called for a plant of 62,333 sq. ft. roofed almost entirely by hyperbolic paraboloid concrete shells. The imaginative scheme conceived by the architects in conjunction with structural engineers Worthington, Skilling, Helle & Jackson was bid at a total cost of $903,402 including tax and fees—low enough to meet the state matching fund limit of $14.61 per square foot.

George T. Drummond Construction Co. chose to subcontract the forming of the shells to Shell Forms, Inc., a subsidiary of Proctor Products Co., Inc. Availability and use of portable forms such as those used on this project have contributed much to the economy of shell construction. For this school, classrooms are 28x32 ft. in plan and each is covered by a single umbrella type hyperbolic paraboloid 2-in. thick. The library is covered by two hyperbolic paraboloid shells 28x32 1/2 ft. with an average thickness of 2 in.

The long spans and high roof of the gymnasium-multipurpose building posed special problems for the designers and contractors alike. Again the solution was a hyperbolic paraboloid used with a striking and structurally efficient result.

When Hayes Holman, superintendent of schools for Auburn School District 408, was faced with the need for an ex-



Portable Proctor forms have contributed much to economy of school building.



Interconnecting shells give school's gymnasium ceiling clean shape.

tensive addition to the high school, he decided to try to improve on the type of construction used in the existing plant. Architects Sullam & Aehle were commissioned to provide an addition of 28 new teaching stations in addition to extensive remodeling of the existing building.

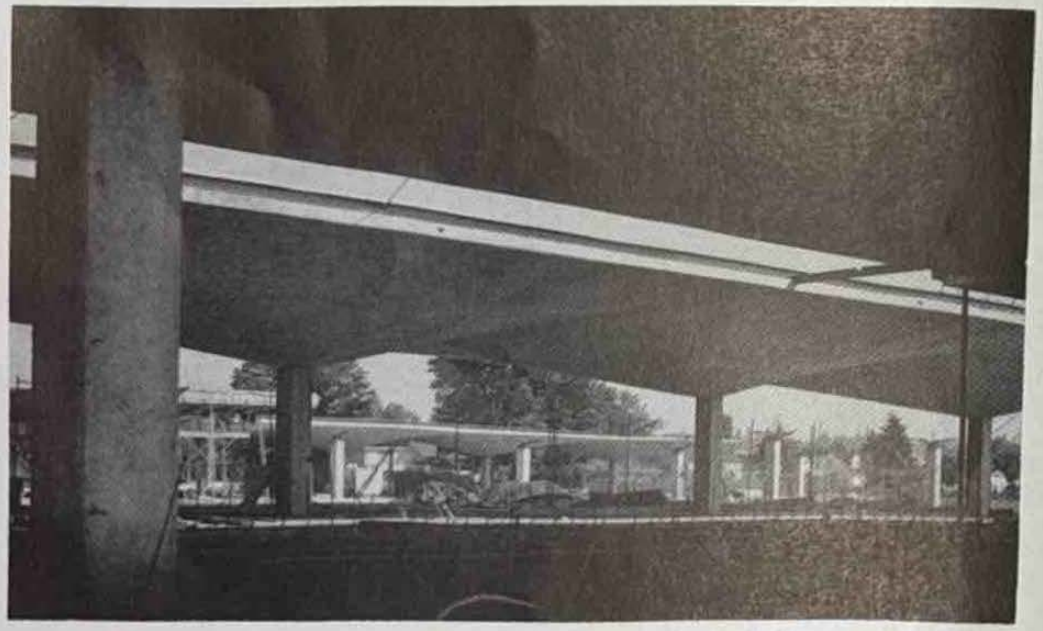
Construction in the Auburn area is generally hampered by a very poor soil-bearing condition, which had to be considered in plans for the addition. A minimum number of structural supports on piling seemed essential. With this in mind and with the desire to achieve Class-A construction, the architects, working with structural engineers Gray & Evans, selected a roof system composed of 39 concrete hyperbolic paraboloid shell units. Each shell is 28x36 ft. in plan and of the inverted umbrella type, supported at the center. Using this arrangement it was possible to roof the entire new area of over 45,000 sq. ft. with only 51 supports, each on a cluster of four piles.

A contract for construction was awarded to C. E. Skinner, Inc., at a basic cost of $798,136 or $14.90 per square foot—below the prevailing state limit of $14.96. This was far enough below the school district's budget to permit acceptance of virtually all additive alternates.

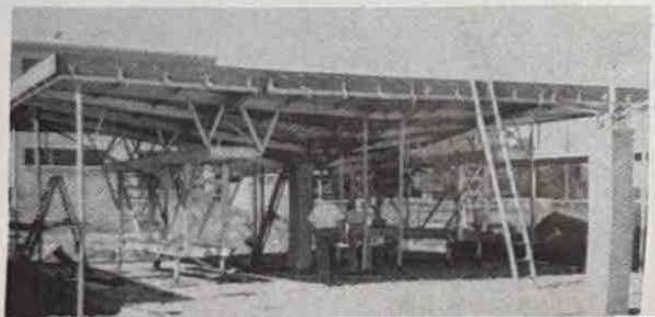
The contractor again obtained forms for the shell units from Shell Forms. Using three form units and high-early strength concrete, a placement schedule of four shells per week was achieved. Again, the portability and ease of erection of this type of form paid off. Shell units were built in rows of two, separated by a skylight. The single, center column supports resulted in extremely clean, open areas. The lack of need for bearing walls minimized the soil-bearing problem.

Edmonds School District 15 has started construction of a 38,468-sq. ft. plant calling for 20 teaching stations to accommodate 600 elementary pupils. Here too, hyperbolic paraboloid shells were chosen to roof the entire school area.

In this case, however, a combination of inverted and regular umbrella types was devised by architects Dan F. Miller & Associates. Selection of a 1 1/2-in thick, 15 1/2-ft. square shell unit permitted four center supported shells to act in turn as supports for a fifth interior shell, creating a classroom bay

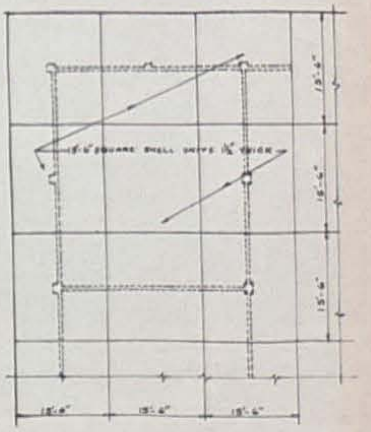


By employing three portable form units and high-early concrete, placement schedule of four shells per week is achieved on construction of Auburn High School. Single center column support for each shell produces open areas, minimizes soil-bearing problem.





Columns and walls indicated by dotted lines in diagram below show center shell of classroom unit supported by surrounding shells to roof Edmonds Cedar Valley Elementary School.



PARTIAL CLASSROOM WING ROOF PLAN

31-ft. square. A unique method of providing roof insulation for these shells will consist of filling the depressed areas on top with dry expanded shale particles and covering with a thin layer of concrete to act as a base for roofing.

Use of relatively small shell units over the 64-ft. clear span of the multipurpose building was made possible by integrating shells with other structural elements to act as a truss. This scheme, designed by Miller and structural engineers Worthington, Skilling, Helle & Jackson, is surely a unique application of shell design.

A different method of forming the shell units for this school has been chosen by Edmonds Construction Co. The forms will again be prefabricated for reuse on the job but, instead of wood, will be made of ribbed sheet metal.

Costs on this project again offer testimony to the satisfactory economy of this type of school construction. Even including several additive alternates, total cost came to $14.75 per square foot, just equaling the state matching fund limit.

Architects, engineers and contractors indeed have transformed the hyperbolic paraboloid shell from the exotic to the practical and have made it work to everyone's advantage.

Use of relatively small shell units over 64-ft. clear span of multipurpose building is made possible by integrating them with other structural elements.

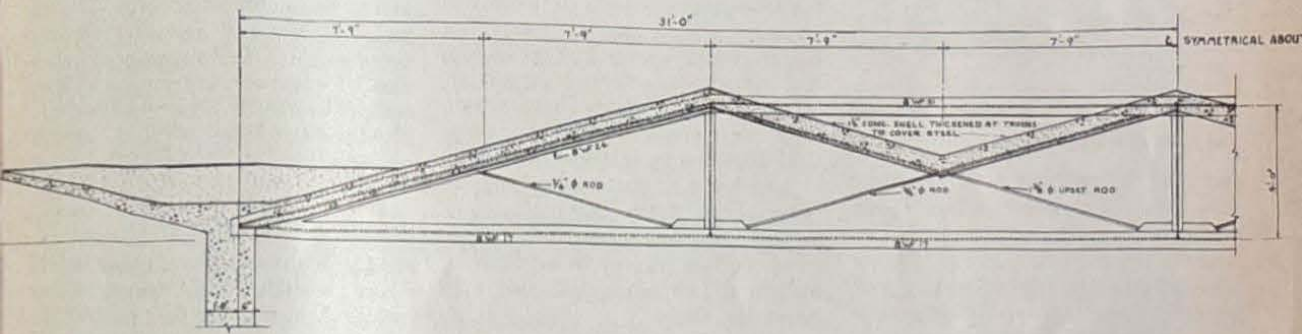


DIAGRAM OF TRUSS FOR MULTI-PURPOSE ROOM INTEGRATING SHELL WITH WF BEAMS

Erector-set approach to school construction studied at Stanford

A standardized system of school construction in which every component down to the bookcases is flexible and interchangeable is on the drawing boards at Stanford University's School Planning Laboratory (SPL).

The modular plan is expected to be fast and easy to build from a variety of top-quality products and much more economical because it cuts on-site labor costs and waste of materials.

The SPL's plans must be in the blue print stage by 1964 because that date marks the start of construction of California's first modular school. In the spotlight will be San Jose's East Side High School District where the initial project is scheduled for occupancy in 1966, with the next two to follow one and three years later. Each of the three modular schools will be designed by a different architect.

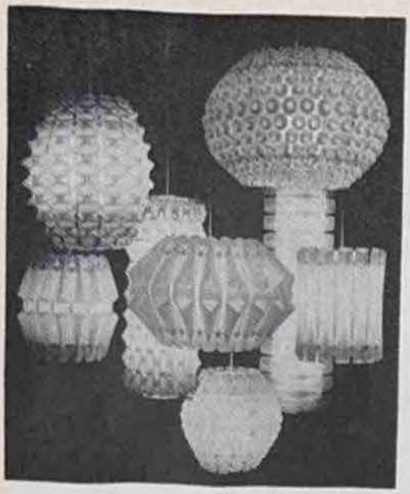
SPL's project is supported by a $50,000 grant from the Educational Facilities Laboratories, Inc., a nonprofit corporation established by the Ford Foundation to help American high schools and colleges develop their physical plants.

"The modular design must have both space and flexibility to meet today's school needs," says Dr. James Laurits, project coordinator. He is resigning his position as principal of Palo Alto's Cubberly High School to join SPL full time in June.

"With the institution of team teaching, independent study plans and other new teaching ideas, the whole concept of public education is changing and the use of school space must change with it," Dr. Laurits points out.

Ezra Ehrenkrantz of the University of California's School of Architecture is project architect. He has spent much time in England studying the British modular system.

The advisory committee for the modular design study includes architect John Lyon Reid of Reid, Rockwell, Banwell & Tarics, San Francisco.



sculptured lanterns

Based on a new usage of man-made materials, the Lantern Collection designed by George Nelson consists of completely glare-free, direct-indirect lighting devices. They filter light through an extruded plastic cylinder, then allow it to pass through sculptured segments of molded vinyl. The shades are open, permitting unobstructed light flow from areas above and below eye level. Individual elements can be detached for cleaning, repair or replacement. The fixtures are available with brackets, floor stands, and table bases.—Howard Miller Clock Co., Zeeland, Mich. (No. 1)

inexpensive steel forms

Suitable for concrete roof and floor slabs, the Curoco concrete form comes in three types: Long, designed to achieve the greatest economy of labor and material for relatively close joist spacing; Super, a deep-ribbed section for greater loads or wider spacing of joists; and Flat-Form, for long spans and heavy loads. All three types come in lengths from 3 to 42 ft. Each 42-ft. panel represents 100 sq. ft. of concrete centering which can be placed in minutes, eliminating expensive staging. Electrical and mechanical inserts can be easily installed through the centering and concrete can be poured and finished in one sequence of operations. —Curoco, 536 Cleveland Ave., Albany, Calif. (No. 2)

studless movable wall

Designed primarily for non-residential use, the partition is called "the lowest cost movable gypsum partition on the market." It can easily be erected, dismantled, moved and re-erected, requiring no special clips or tools.—Pabco Gypsum Division, Fibreboard Paper Products Corp., 475 Brannan St., San Francisco 19, Calif. (No. 3)

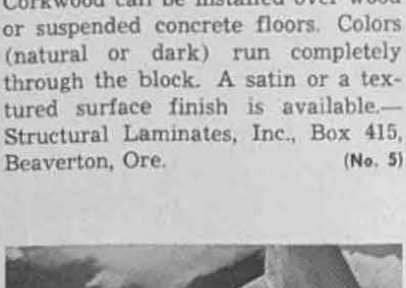
fully prestressed slabs

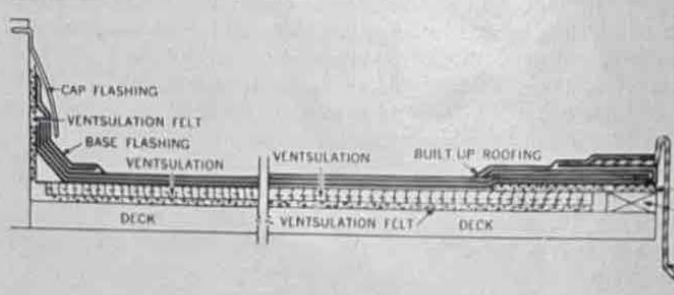
Clear spans up to 32 ft. for roofs and 26 ft. for floors now are possible with Flexicore prestressed precast concrete slabs introduced after eight years of research and testing. When erected and grouted, the Hi-Stress 8x16-ft. sections (also available in lengths up to 32 ft.) form a rigid deck with smooth hollow cells for use as utility ducts or raceways. Underside of the deck may be calked and painted as a finished ceiling.—The Flexicore Co., Inc., Box 825, Dayton 1, Ohio. (No. 4)

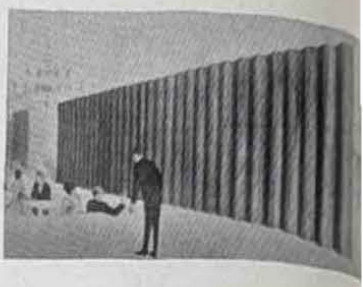


wood block flooring

Combining the natural warmth and beauty of wood with a striking resemblance to cork, prefinished 9x9-in. t&g blocks are manufactured from specially graded wood chips impregnated with permanent synthetic resins. Corkwood can be installed over wood or suspended concrete floors. Colors (natural or dark) run completely through the block. A satin or a textured surface finish is available.—Structural Laminates, Inc., Box 415, Beaverton, Ore. (No. 5)







lightweight folding partition

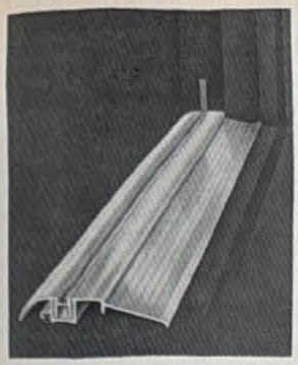
Available up to 50 ft. wide and 16 ft high, the hollow core Woodmanse 1200 operates as easily as the smalle folding door. It weighs only 2 po Panels of the folding partition are li in. wide hardwood, faced with Philip pine mahogany, birch, walnut or o veneers. Opaque vinyl connectors jo the panels.—New Castle Product Inc., New Castle, Ind. (No.

'strongest' stock door

Slammed more than 750,000 times factory and field tests, the Narro Stile 190 is claimed to be the strongest stock door in the industry. It is metal door, welded at meeting ra and at its reinforced corners. The a justable astragal assures weathe proof closing. The 190 also comes part of automatic entrance and co cealed overhead closer packages.— Kawneer Co., Niles, Mich. (No.

moistureproof roof

Air and moisture are ventilated out a roof assembly both during construc tion and throughout its life—yet t completed roof is weathertight. Th is accomplished with the use of ne Ventsulation Felt and Ventsulation, modified version of J-M's Roofinsul Fesco Board. The felt is a heavy a bestos material, asphalt saturated a coated, with large mineral granul embedded on the surface of its unde side. These granules separate the f from the deck and provide millions tiny passages allowing free motion air and moisture. Both products c be applied over nailable and non-na able deck surfaces.—Johns-Manvil 22 East 40th St., N. Y. 16, N. Y. (No

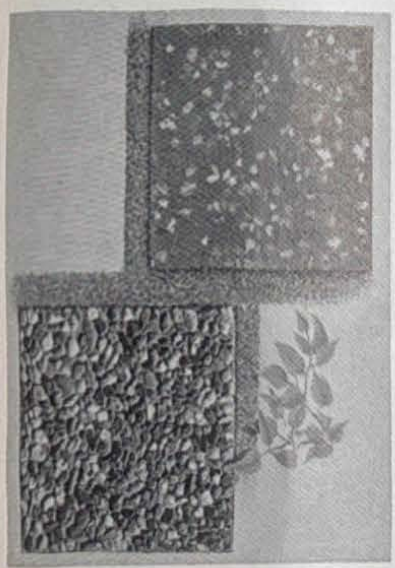


waterproofing threshold

A combination threshold and automatic door bottom features a patented lift-bar. Simple lever action raises the lift-bar automatically when the door is closed to seal out drafts, moisture wind and sand. As the door opens, the bar retracts flush to the threshold. Drafstop Magic-Seal threshold prevents the loss of heat and air conditioning cooling and does not require removal or alteration of existing doors. Available in both 32- and 36-in. lengths, it is offered in two styles: one for use with wood, tile linoleum or medium-pile carpeting and the other with deep-pile carpeting.—The Roberts Co., 600 N. Baldwin Park Blvd., City of Industry, Calif. **(No. 9)**

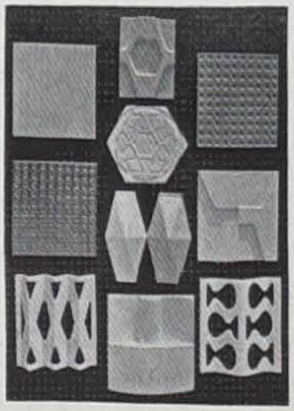
garden-patio tile

Suitable for outdoor patios, pathways, curb-border planting areas and other exterior flooring or facing projects, Patio-Traz is priced comparably with ordinary cement tile. A matrix of rock chips and a formulated binder is hydraulically compressed to give strength not unlike prestressed concrete. The tile is offered in 16-in. squares, a variety of colors and in either a smooth or exposed aggregate surface.—Trevi-Tile of California, Box 846, Pittsburg, Calif. **(No. 10)**



creative ceramic facade

One-of-a-kind walls can be created with Metalframe's ceramic modules. The clay sculptured tile is made to the architect's design in actual three dimensions. All edges and surfaces are covered with a heavy ceramic glaze coating to prevent moisture entering the clay core. The finished tiles are held by aluminum or stainless steel members.—Metalframe, 5832 E. 61st St., Los Angeles 22, Calif. **(No. 11)**

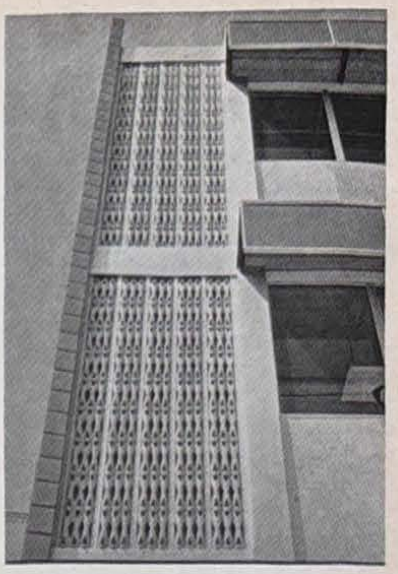


absorbent glass

An architectural glass which soaks up sound and cuts down heat transmission and glare from the sun's rays is being produced by Amerada. Grey Acousta-Pane allows softened daylight inside without color distortion. A special interlayer contained in the laminated safety-glass construction absorbs the excess portion of light energy that produces heat-carrying glare. —Amerada Glass Corp., 3301 South Prairie Ave., Chicago 16, Ill. **(No. 12)**

remote control system

Called "the first convenient switching method designed for complete instantaneous control of the increased number of electrical devices demanded by modern living," the Swepe system is being previewed in several home shows in the Southern California area this spring. Among the features being shown are a portable plug-in unit for armchair or bedside use, pancake-thin- surface-mounted switches and wiring raceways that can be attached to any material—even a pane of glass —and electro-manual switches that can be installed in any existing buildings by placement in conventional outlets or switchbox locations. Architect-styled by John Lautner, the system consists of low voltage units interconnected to form decorative control strips and attached by means of tiny wire to high voltage switches energized by a simple power pack.—Reiner Industries, Inc., 4811 Telegraph Road, Los Angeles 22, Calif. **(No. 13)**



modular movable wall

Space-dividing problems are handled by Design 104, a modular partition for interior use. The same panels can be used in any design, permitting easy reshuffling of office space when desired. Electrical switches and receptacles are available in post and base sections of the partitions. The panel's space-saving 1¾-in. thinness is continued through the post without sacrificing the facilities available in thicker systems. Domestic and exotic hardwood, steel or Glasweld are available. —United States Plywood Corp., 55 W. 44th St., New York, N.Y. **(No. 14)**

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LITERATURE

Lighting Design: tells how to provide a long-lasting, low-level electroluminescent light source for many applications; 12 pp.—Special Products Operation, Sylvania Electric Products Inc., 60 Boston St., Salem, Mass.

School Heating and Cooling (AIA 30-C): covers all aspects of hydronic (hot water and steam) systems; 12 pp. —Better Heating-Cooling Council, 250 Park Ave., New York 17, N. Y.

Metal Buildings: explains money-saving advantages of modern metal building for industrial and commercial use; 14 pp.—Metal Building Manufacturer's Association, 2130 Keith Bldg., Cleveland 15, Ohio.

Fasteners in Concrete: reports on holding power of Ramset and Shureset fasteners; contains photographs and charts; 98 pp.—Ramset Fastening System, 289 Winchester, New Haven 4, Conn.

Walls of Light: illustrates Kalwall translucent fiberglass wall system and its application to school, church, commercial and residential construction; 8 pp.—Kalwall Corp., 43 Union St., Manchester, N. H.

Store Lighting: emphasizes the importance of quality lighting as a selling tool; special attention given to general, display and perimeter lighting; 20 pp.—Inquiry Bureau, General Electric Co., Nela Park, Cleveland 12, Ohio.

Vents and Hoods: presents Fasco's complete line of range hoods, bath, utility and kitchen ventilators; 20 pp. —Fasco Industries, Inc., Augusta at North Union, Rochester 2, N. Y.

Moving Sidewalks and Ramps: describes and illustrates Speedwalk and Speedramp high-capacity transportation for pedestrians; Bulletin 1060; 16 pp.—Stephens-Adamson Mfg. Co., Aurora, Ill.

Where to Buy Directory: furnishes source contacts for West Coast Douglas fir, West Coast hemlock, western red cedar, Sitka spruce and white fir; 52 pp.—West Coast Lumbermen's Association, 1410 S.W. Morrison, Portland 5, Ore.

Architectural Aluminum (AIA 15-J): summarizes design considerations and engineering data important to architects working with aluminum for structural and decorative uses; 24 pp. —Metals Division, Olin Mathieson Chemical Corp., 400 Park Ave., New York 22, N. Y.

Recessed Incandescent Fixtures: presents the Marco Illumiline collection of unobtrusive architectural lighting fixtures; Catalog 131; 42 pp.—Marvin Electric Manufacturing Co., 648 Santa Fe Ave., Los Angeles 21, Calif.

Plastic Handrail (AIA 14-D-4): shows colors and sizes in flexible extruded plastic handrails; 4 pp.—Julius Blum & Co., Inc., Carlstadt, N. J.

Colorful Panels: features architectural applications, from residences to refineries, of asbestos-cement panels; many color illustrations; 36 pp.—United States Plywood Corp., 55 W. 44th St., New York 36, N. Y.

Plastic-Finished Paneling: shows colors and patterns of washable Marlite wall and ceiling paneling; 8 pp.— Marsh Wall Products, Inc., Dover, Ohio.

pick of the month

"The Pleasure of Planning Your Home with Mosaic Tile" is the title of a 24-page brochure produced by The Mosaic Tile Co., illustrating in color many unusual uses of ceramic tile and its lifetime advantages to the homeowner. The brochure takes the reader from tiled front steps, through entry hallways, past tiled fireplaces, kitchens and bathrooms out to patios and swimming pools, showing the versatility and wide color choices as well as low maintenance costs of ceramic tile.—The Mosaic Tile Co., 131 N. Robertson Blvd., Beverly Hills, Calif.



The Cross: handsomely traces and illustrates evolution of the cross from earliest times to the present with some 140 illustrations of basic cross designs; 40 pp. (free to church architects, clergy and church building committee members; charge of $1 to others). — Overly Manufacturing Co., Greensburg, Pa.

Panelcoil Technical Data (AIA 30-C): provides tables, graphs and other information for determining type and size of heat exchange installation (Bulletin 356); 24 pp. — Dean Products, Inc., 1042 Dean St., Brooklyn 38, N.Y.

Foamglas Building Insulation (AIA 37-B): presents latest data on this material's use in various types of installations with application procedures; (Catalog FB-108); 20 pp. — Pittsburgh Corning Corp., 1 Gateway Center, Pittsburgh 22, Pa.

Redwood Homes: shows architect-designed homes using redwood for interiors and exteriors in a variety of finishes; 20 pp.—California Redwood Association, 576 Sacramento St., San Francisco 11, Calif.

Lumber Technical Manual (AIA 19-A): includes a product selection guide and detailed information about lumber sizes, grades and special products; 28 pp.—Western Pine Association, Yeon Bldg., Portland 4, Ore.

Vertical Transportation: describes passenger and freight elevator systems, escalators and dumbwaiters; 32 pp.—Otis Elevator Co., 260 11th Ave., New York 1, N. Y.

New School Stages for Old: presents suggestions for modified proscenium stage plan design; with foldout floor plans; 24 pp.—Hub Electric Co., Inc., 2255 W. Grand Ave., Chicago 12, Ill.

Duct System Fabrication and Installation: contains more than 150 illustrations and covers steps necessary to fabricate any shape Fiberglas duct system or component; 52 pp.—Owens-Corning Fiberglas Corp., Box 901, Toledo 1, Ohio.

Nylon in Contract Carpets (AIA 28-E): provides information required to specify carpets of nylon for commercial use; cost experience and maintenance are included; nine-page folder—E. I. du Pont de Nemours & Co., 2512 Nemours Bldg., Wilmington 98, Del.

Twenty-three steps on the way back to profits

As the result of a nine-month field and office study of the contracting industry, the San Franicsco management consultant firm, William B. Logan & Associates, Inc. has come up with some recommendations for action to put profits back into the industry. The study included the review of over 1,200 bid abstracts and personal interviews with and analyses of over 100 contracting firms.

A two-part questionnaire brought response from 314 contractors. The first: What do you feel are the reasons for low profits in the industry?

Cut-throat competition	23%
Too many contractors	13
Easy credit from supply houses	15
Chiseling tactics	19
Productivity of labor	18
Other	12

The second question: Which of the above reasons do you feel is the main cause? Percentages varied only slightly.

About 80 contractors volunteered their own views as to what they feel is wrong with the industry. Some of the comments:

"Won't sell up" . . . "Lack of business ability" . . . "Contractors don't know costs and can't read a P&L" . . . "Too many don't know what overhead is" . . . "Won't follow sound business principles" . . . "Lack of understanding of costs, by job management" . . . "Inadequate cost records."

The consultants make these recommendations for action:

1. Provide current and accurate data for all costs for both management and estimators.

2. Develop all estimates at actual probable costs. Take discounts and short-cut labor when methods changes can be known in advance.

3. Act intelligently when setting a bid price. With total net cost down, you can raise or lower or refuse to bid on any job.

4. Give estimators enough time to do a proper job. Estimating time cost is less than low bid cost errors. Keep estimators informed of bid prices and actual costs. Result: better morale and better work.

5. Compare constantly actual with estimated labor costs. Most estimates are too low. Supervision is a major factor, too.

6. Plan and sequence the job mentally before listing supervision costs. The characteristics of the job and the man are major factors.

7. List all nonproductive labor items separately for each job on a summary sheet. Don't forget travel time, season of the year, etc.

8. Check accuracy of formulas used in estimating taxes and insurance on labor at least quarterly. Keep estimators informed.

9. Keep actual labor costs. Keep all costs on an actual estimated basis so overhead and profit markups can be applied equally to all costs.

10. Keep all actual material costs. List at net discounted costs including freight.

11. List job expense items separately for each job. Every cost which would not be incurred unless job is performed should be included (not left out on the supposition that overhead markup will cover it).

12. Include subcontract, fees and such items in total prime costs before overhead markup is taken.

13. Take an adequate overhead markup on total prime costs. To adjust bid price you must know your total net costs (prime plus overhead).

14. Use an adequate overhead markup formula. Check quarterly against actual overhead costs.

15. Apply separate profit markup on total net costs. You are entitled to a profit on all costs—not just some costs.

16. Set your bid against a realistic evaluation of true estimated costs.

17. Use a preprinted summary sheet with a heading for each cost element. You won't omit items and it will help in cost comparisons.

18. Compare actual vs. estimated costs—progressive and at job end. This helps supervision control costs and estimators can figure new jobs accurately. It insures management control.

19. Sell! Sell up! Let them know that you are capable and experienced. Not just the lowest bidder.

20. Do a good job of supervision. Give training, frequent contacts, understanding of policy and assistance in labor relations to your supervisors.

21. Don't be misled by "bid peddling." Your pressure for fair profits can correct this evil.

22. Analyze the profitability of each type of work performed and direct sales emphasis accordingly.

23. Beware of "easy credit" offered by some suppliers. Plan your finances in advance. Keep close check on receivables.

Ed. note: William B. Logan & Associates, Inc., welcomes comments, pro and con, regarding this study. Address correspondence to 400 Montgomery St., San Francisco 4, or 429 S. Western Ave., Los Angeles 5.

Industry turns to labs for jobsite control

For a testing fee of $100, an independent laboratory proved to a contractor that he was safe in snapping up a bargain of used railroad ties for a retaining wall, instead of paying out far more for new timber.

This is one of the examples cited by the Western Division, American Council of Independent Laboratories, of the service laboratories provide for the construction industry.

Charles C. Wright of Oilwell Research, Inc., Long Beach, Calif., the western division chairman, reports an increase of 7% in independent testing is looked for this year. His forecast is based on a prospective additional work load of 42,000 man-hours in 1962 for the 18 laboratories in the West.

Council membership is restricted to laboratories that are entirely free from outside ownership or control. In addition to this assurance of impartiality, they are pledged to reliability, thoroughness and prompt and confidential service at a competitive cost.

Workmanship rather than materials is the main cause of trouble, the laboratories find, and for that reason they are urging greater use by contractors of jobsite control.

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• **Gladding, McBean & Co.:** The Los Angeles firm has named Dr. F. T. Haner to the new position of director of corporate development.

• **Mosaic Tile Co.:** A seventh service center and showroom, serving Orange County, has been opened in Santa Ana. Dick Pratt is manager; Daniel P. Connolly, sales representative.

• **W. P. Fuller & Co.:** Stockholders recently approved a merger with Hunt Foods and Industries, Inc. The Fuller name will continue to be used to identify the division's operations in San Francisco.

• **Builders Brick Co.:** Ray F. Wimer has been appointed distributor sales representative for the general area of Vancouver, Wash., and Portland.

• **Soule' Steel Co.:** C. L. Hegtvedt has been named director of marketing of the San Francisco company.

• **Riverside Cement Co.:** Robert E. Vanderlip has joined the Los Angeles firm as assistant to the president. He will work in the industrial and personnel relations field.

• **Vermiculite-Northwest, Inc.:** New officers of the Seattle firm are William V. Culver, president; J. J. Pfeiffer, vice president-treasurer; A. C. Tressl, secretary.

• **Simpson Timber Co.:** C. Henry Bacon Jr. has been elected president of the Seattle firm, succeeding Thomas F. Gleed who continues to serve on the board.

• **General Electric Co.:** Arizona Plastics, Inc., newly organized in Phoenix, has been named state distributor for its line of Textolite decorative products.

• **Kaiser Steel Corp.:** James R. McCaughey has been appointed sales representative in Albuquerque.

• **Calaveras Cement Co.:** New Portland sales representative is Kent Vickery, as the firm has expanded its shipments into the entire state of Oregon. . . . First deliveries have been made from a new highly automated $15 million installation 10 miles north of Redding, Calif.

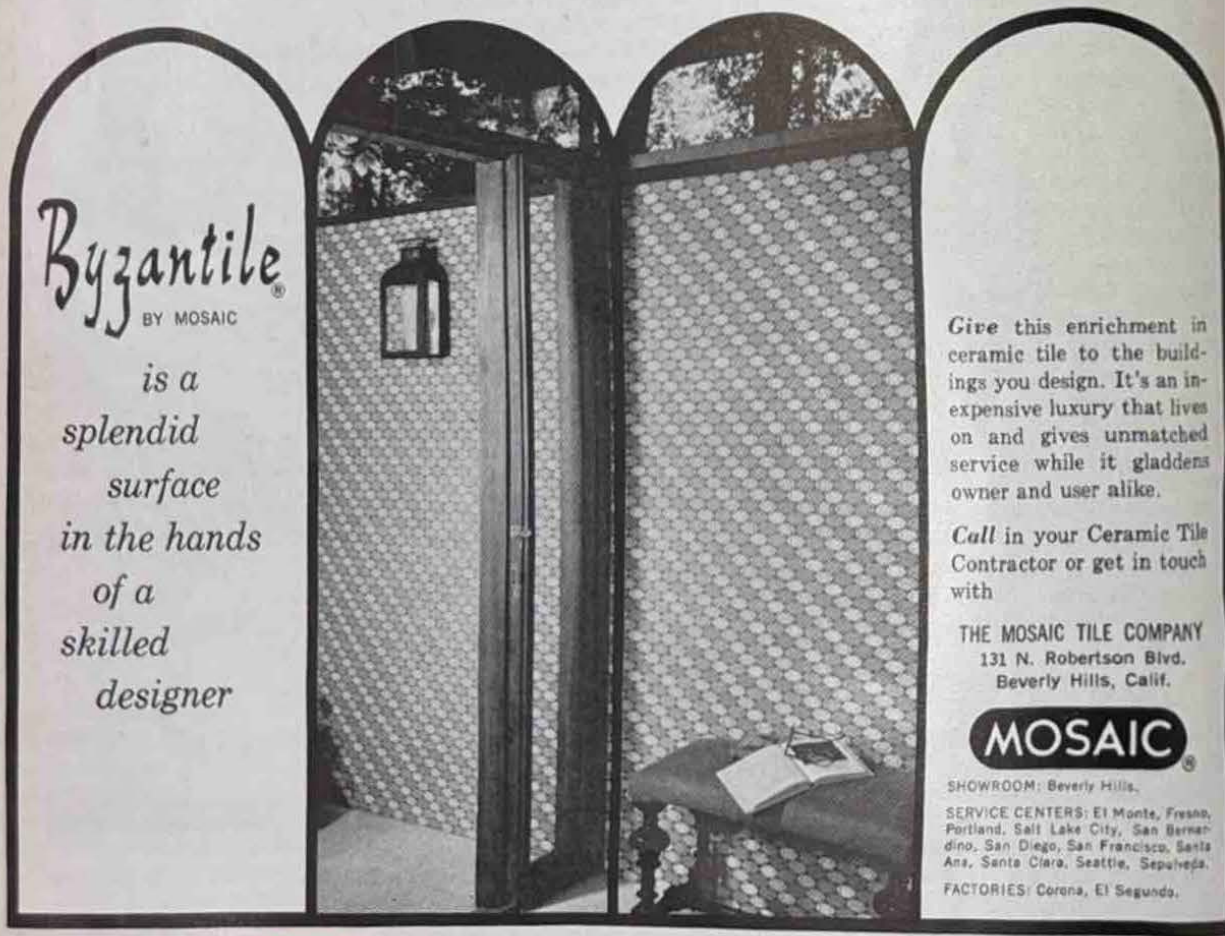
• **American Latex Products Corp.:** R. F. (Bud) Andrews has been named manager of adhesive sales and D. G. Hatala, adhesive sales specialists.

• **Plan Hold Corp.:** A 30,000-sq. ft. plant is going up in Torrance, Calif.

• **Sani-Top, Inc.:** Walter E. Lord has been named sales manager of the Los Angeles office, coinciding with completion of a tooling program which will expand the manufacturer's output.

• **The Tappan Co.:** Truman B. Clark has been promoted from manager of the Mansfield division to executive vice president and general manager of O'Keefe & Merrit Co., Los Angeles subsidiary.

• **Anadite, Inc.:** The South Gate, Calif., firm will accelerate its research and marketing program for its architectural stabilized color anodizing process.



• **E. A. Thompson Co., Inc.:** Robert L. Pierce has been appointed chemist in charge of technical sales in northern California.

• **United States Plywood Corp.:** With the acquisition of Cascades Plywood Corp., Portland, the firm has for the first time extensive hardboard production facilities. Cascades President C. W. Fox has become a vice president of U. S. Plywood, responsible for manufacturing in Oregon. . . . Robert J. Blind has been named manager of the Eugene branch.

• **Siegler Corp.:** A 200,000-sq. ft. plant in South Gate, Calif., has been purchased from Rheem Mfg. Co., enabling the Holly Division to expand its production of heating and air conditioning equipment.

• **Marvin Electric Manufacturing Corp.:** Howard Brinton has been appointed vice president of the Los Angeles company.

• **Weyerhaeuser Co.:** Richard J. Levin has been appointed industrial market manager of the wood products division in Tacoma.

• **Carnes Corp.:** Kenneth H. Watts as western regional sales manager will open an office in Los Angeles.

• **Interior Systems, Inc.:** The Los Angeles firm has entered into a reciprocal marketing and manufacturing agreement with Olympia Enterprises, Compton, Calif. Interior will market ceiling grids made by Olympia who, in return, will produce component parts for use in Interior's line.

• **Universal Form Clamp Co.:** Joseph Sansoe has been appointed manager of the San Leandro, Calif., office.

• **Gibson-Homans Co.:** New West Coast managers are Donald L. McKelvey, operations, and James E. Covert, sales. James D. Zogg is heading the Richmond, Calif., division sales.

• **Warren Webster & Co., Inc.:** New sales representative in the Salt Lake City territory is George T. Sonntag.

• **Westinghouse Electric Corp.:** Roy F. Carter has been appointed sales manager of the air conditioning division for the Pacific Coast region, working out of Los Angeles. . . . The Sturtevant division, which manufactures air handling equipment, has a new regional manager in its Pacific Coast San Francisco headquarters, Clayton C. Lang.

ASSOCIATIONS

• **American Hardboard Association:** Semi-annual meeting will be held in Portland's Hotel Benson May 8-10.

• **Northwest Brick Association:** Richard C. Houlahan, Seattle, has been elected president of the reorganized promotional group which combines the Structural Clay Products Institute and the Pacific Northwest Brick & Tile Association. Rod M. Hungerford, Vancouver, B.C., is vice president; John Gorin, Everett, Wash., secretary-treasurer.

• **Stucco Manufacturers Association:** Reelected officers of the California group are Fritz Wagner, Paramount; president; William J. Fulton, Culver City, vice president; Merle VerBurg, Anaheim, secretary.

• **Western Wood Preserving Operators Association:** New president is R. A. Thurston, Seattle; chairman, Marx Hyatt, and assistant chairman, James F. Engle, both of San Francisco. Theme of the annual meeting in the latter city was expanding markets through quality control and effective promotion.

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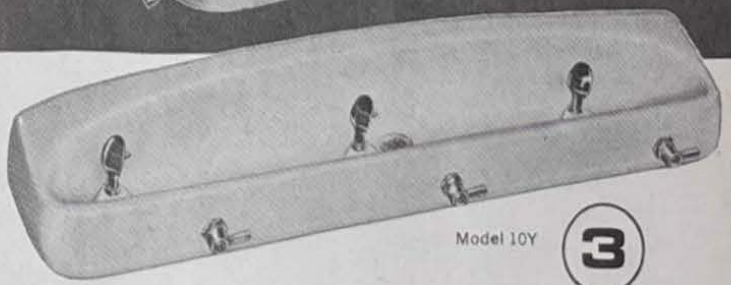
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	# Res.	$ Value	Total $
Alameda	(70)	$ 621,223	$ 791,392
Alameda Co.	(89)	910,700	1,199,532
Albany	(63)	580,147	657,600
Alhambra	(20)	205,300	329,620
Anaheim	(321)	3,007,623	7,431,288
Antioch	(36)	449,677	1,193,552
Arcadia	(53)	692,200	1,106,295
Arroyo Grnde	(2)	32,189	37,009
Artesia	(134)	1,178,100	1,203,000
Atherton	(1)	32,000	122,985
Atwater	(3)	32,000	80,225
Auburn	(4)	51,000	86,268
Avalon	( )	Nil	26,625
Azusa	(31)	204,000	474,903
Bakersfield	(89)	1,064,900	482,418
Baldwin Park	(95)	880,900	935,586
Banning	(6)	65,902	110,154
Barstow	(51)	356,300	380,443
Bell	(13)	92,500	187,935
Bellflower	(47)	333,800	577,575
Bell Gardens	(12)	77,000	103,240
Belmont	(5)	94,000	154,510
Benicia	(1)	7,920	26,310
Berkeley	(91)	676,600	1,522,889
Beverly Hills	(1)	85,000	630,944
Bradbury	(2)	66,000	81,275
Brawley	(20)	231,500	288,057
Brea	(65)	933,647	1,006,022
Buena Park	(106)	1,135,853	1,512,293
Burbank	(78)	581,000	1,912,953
Burlingame	(6)	135,000	762,181
Butte Co.	(108)	1,051,950	1,146,350
Calexico	(14)	6,379	42,379
Campbell	(115)	951,550	1,023,650
Carlsbad	(34)	552,328	720,873
Carmel	(2)	60,000	133,150
Chico	(10)	151,841	353,873
Chino	(12)	190,494	311,050
Chula Vista	(34)	266,000	840,856
Claremont	(58)	593,200	877,570
Coalinga	(3)	47,000	59,000
Colton	(28)	208,832	266,390
Commerce	(1)	9,500	541,675
Compton	(3)	26,600	322,290
Concord	(76)	997,180	1,213,105
Cntra Csta Co.	(139)	2,368,538	3,173,829
Corona	(34)	226,506	1,604,243
Coronado	(21)	465,743	465,743
Corte Madera	(108)	1,110,323	1,166,779
*Costa Mesa	(307)	4,802,941	No Reply
Covina	(66)	854,350	1,334,475
Cudahy	(46)	380,000	441,900
Culver City	(33)	167,000	167,000
Dairy Valley	(1)	23,800	48,850
Daly City	(51)	501,650	579,771
Davis	(19)	201,000	214,850
Delano	(7)	64,500	87,690
Downey	(60)	534,145	1,127,368
Duarte	(1)	9,000	38,146
El Cajon	(21)	243,109	433,705
El Centro	(22)	244,000	297,680
El Cerrito	(13)	169,806	524,882
El Dorado Co.	(44)	587,690	1,319,279
El Monte	( )	1,257,306	1,376,483
El Segundo	(11)	119,000	229,198
Emeryville	( )	Nil	313,650
Escondido	(39)	410,474	511,917
Eureka	(8)	168,000	568,207
Fairfield	(59)	421,459	567,833
Fillmore	(15)	137,440	167,028
Fontana	(32)	417,133	460,366
Fremont	(269)	3,375,812	4,480,162
Fresno	(179)	1,851,595	3,038,542
Fresno Co.	(68)	844,021	1,562,279
Fullerton	(30)	721,501	2,503,686
Glendale	(407)	3,262,383	6,072,262
Glendora	(73)	1,011,300	1,231,572
Half Moon Bay	(2)	24,000	30,500
Hanford	(13)	135,170	160,900
Hawthorne	( )	No Reply	No Reply
Hayward	(56)	428,459	769,967
Hemet	(15)	184,393	255,809
Hermosa Bech	(19)	229,138	283,449
Hidden Hills	( )	Nil	18,700
Hillsborough	(4)	199,000	303,850
Holtville	(2)	23,000	30,720
Humboldt Co.	( )	Nil	120,964
Hntingtn Bech	(311)	4,302,451	4,730,760
Hntingtn Park	(51)	374,200	862,325
Imperial Co.	( )	Nil	5,000
Indio	(67)	421,000	508,090
Industry	( )	Nil	9,650
Inglewood	(3)	30,700	168,029
Irwindale	( )	Nil	10,000
Kern Co.	(155)	1,910,480	2,782,315
Laguna Beach	(8)	202,500	358,699
La Habra	(131)	1,898,984	2,166,775
Lakewood	(4)	94,500	293,750
La Mesa	(11)	206,780	331,451
La Mirada	(85)	1,315,900	1,579,770
La Puente	( )	Nil	59,900
La Verne	( )	Nil	4,415
Lawndale	(24)	241,550	296,387
Lindsay	(1)	2,000	13,700
Livermore	(29)	293,200	318,667
Lodi	(28)	327,350	656,450
Lompoc	(134)	1,348,412	1,516,987
Long Beach	(400)	2,561,205	8,338,275
Los Altos	(20)	446,000	969,350
Los Angeles	(550)	11,735,679	64,988,185
Ls Angles Co.	(1,056)	11,996,960	19,153,360
Los Gatos	(22)	380,500	394,550
Lynwood	(49)	324,660	656,933
Madera	(11)	121,250	153,648
Madera Co.	(17)	128,500	3,257,000
Mnhattan Bch	(19)	311,450	692,013
Manteca	(18)	138,600	931,705
Marin Co.	(89)	1,263,735	1,702,943
Martinez	(3)	43,650	67,659
Marysville	(5)	55,200	157,936
Maywood	(4)	36,780	70,775
Menlo Park	(20)	438,000	2,447,045
Merced	(19)	152,856	216,528
Merced Co.	(29)	312,600	416,370
Millbrae	(61)	610,500	692,182
Mill Valley	(10)	211,500	300,550
Modesto	(88)	1,106,500	1,792,785
Monrovia	(13)	142,198	308,856
Montclair	(235)	2,295,560	2,380,527
Montebello	(59)	603,105	1,031,765
Monterey	(15)	222,000	388,700
Monterey Co.	(56)	633,108	809,424
Monterey Prk	(75)	684,160	941,397
Mountin View	(140)	1,034,161	4,064,162
Napa	(49)	711,699	1,251,174
Napa Co.	(20)	320,554	430,354
National City	(105)	480,200	965,208
Newport Bech	(70)	1,218,745	1,759,291
N. Sacramento	(60)	306,612	430,405
Norwalk	(7)	79,000	328,949
Novato	( )	No Reply	No Reply
Oakdale	(5)	52,209	70,605
Oakland	(319)	2,706,890	6,252,213
Oceanside	(12)	183,000	541,380
Ojai	( )	Nil	12,509
Ontario	(86)	1,003,730	1,205,342
Orange	(336)	4,357,250	4,892,597
Orange Co.	(284)	4,652,655	6,303,807
Oroville	(8)	306,330	373,431
Oxnard	(251)	2,975,520	3,285,968
Pacifica	(18)	192,000	772,620
Pacific Grove	(18)	149,000	175,360
Palm Springs	(18)	372,000	933,812
Palo Alto	(7)	159,074	2,630,258
Pls Vrds Estts	(15)	686,520	711,075
Paramount	(43)	275,100	353,850
Pasadena	(153)	1,379,679	2,508,813
Paso Robles	( )	Nil	14,304
Pico Rivera	(3)	38,000	178,978
Piedmont	(3)	131,577	172,579
Pinole	(12)	160,333	175,228
Pittsburg	(6)	78,772	106,798
Placentia	(29)	331,488	358,023
Placer Co.	( )	No Reply	No Reply
Pleasanton	(6)	75,250	131,392
Pomona	(173)	1,948,498	3,504,862
Porterville	(1)	12,000	22,708
Port Hueneme	(41)	207,000	220,150
Red Bluff	(4)	47,492	83,872
Redding	(3)	31,000	127,925
Redlands	(12)	99,050	329,935
Redondo Bech	(49)	439,660	1,368,087
Redwood City	(66)	543,088	995,363
Richmond	(81)	648,601	1,010,450
Riverside	(174)	1,271,900	1,664,062
Riverside Co.	(238)	2,592,560	5,772,095
Rolling Hills	( )	Nil	12,900
Rlng Hls Ests	(7)	235,600	400,900
Rosemead	(3)	38,000	72,790
Roseville	(33)	287,198	412,436
Sacramento	(106)	1,192,400	2,687,300
Sacramento Co.	(429)	5,315,402	8,541,981
St. Helena	(5)	69,181	74,833
Salinas	(37)	470,500	906,193
Sn Bernardino	(96)	997,995	1,488,257
S Brnrdno Co.	(369)	3,204,215	10,369,538
San Bruno	(37)	552,000	
San Carlos	(53)	596,028	
San Clemente	(18)	229,507	
San Diego	(428)	5,421,167	
San Diego Co.	(148)	2,908,500	
San Dimas	( )	Nil	
San Fernando	(20)	138,600	
San Francisco	(217)	3,079,807	
San Gabriel	(5)	93,360	
Sanger	(8)	93,960	
San Jacinto	(22)	131,780	
San Joaqin Co.	(33)	337,507	
San Jose	(477)	6,812,906	
San Leandro	(89)	775,472	
Sn Luis Obspo	(10)	125,781	
S Ls Obspo Co.	(43)	516,223	
San Marino	(1)	45,000	
San Mateo	(73)	609,500	
San Mateo Co.	(55)	715,300	
San Pablo	(48)	382,246	
San Rafael	(130)	1,256,033	
Santa Ana	(261)	3,365,650	
Santa Barbara	(90)	1,237,040	
Snt Brbara Co.	(313)	5,903,400	
Santa Clara	(187)	1,488,000	
Snta Clara Co.	( )	No Reply	
Santa Cruz	(51)	406,242	
Santa Cruz Co.	(140)	1,704,858	
Snt Fe Springs	( )	Nil	
Santa Maria	(148)	1,390,791	
Santa Monica	(154)	1,443,968	
Santa Paula	(6)	86,535	
Santa Rosa	(36)	493,350	
Sausalito	(36)	360,000	
Seal Beach	(72)	600,012	
Seaside	(18)	129,500	
Selma	(2)	34,986	
Shasta Co.	(83)	810,626	
Sierra Madre	(6)	96,000	
Solano Co.	(3)	44,156	
Sonoma Co.	( )	No Reply	
South Gate	(4)	26,000	
So. El Monte	( )	Nil	
So. Pasadena	(1)	16,460	
S. Sn Frncisco	(24)	272,900	
Stanislaus Co.	(44)	543,990	
Stockton	(48)	805,818	
Sunnyvale	(240)	3,204,965	
Temple City	(16)	209,200	
Torrance	(33)	405,730	
Tracy	(27)	316,691	
Tulare	(4)	32,800	
Tulare Co.	(53)	458,499	
Turlock	(5)	82,928	
Ukiah	( )	Nil	
Upland	(110)	1,679,200	
Vacaville	(8)	142,320	
Vallejo	( )	Nil	
Ventura	(61)	768,702	
Ventura Co.	(192)	2,230,550	
Visalia	(29)	436,330	
Walnut	(104)	1,413,000	
Walnut Creek	(140)	1,480,210	
Wasco	( )	No Reply	
Watsonville	(5)	54,486	
West Covina	(49)	949,610	
Whittier	(93)	1,121,600	
Woodland	(30)	375,160	
Woodside	( )	No Reply	
Yolo Co.	(16)	237,289	
Yreka	( )	Nil	
Yuba City	(14)	73,407	
Yuba Co.	(11)	99,386	
Total	**(17,180)**	**$230,496,607**	**$415,645,**

OREGON

Albany	(4)	$ 42,660	$ 1,026,
Ashland	(6)	88,000	100,
Astoria	(2)	27,760	36,
Baker	(4)	32,600	44,
Beaverton	(15)	264,230	692,
Bend	(2)	26,000	88,
Central Point	(6)	56,000	71,
Clackamas Co.	(55)	638,159	781,
Coos Bay	( )	Nil	38,
Corvallis	(5)	57,000	218,
Dallas	(1)	7,500	24,
Douglas Co.	(6)	50,788	84,
Eugene	(40)	398,730	2,479,
Forest Grove	(3)	40,500	562,
Grants Pass	(9)	111,750	136,
Gresham	(4)	50,000	86,
Hermiston	(2)	40,065	67,

*Complete figures not available

Western States for March

idential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hillsboro	(50)	843,450	938,850
Hood River	(2)	30,000	98,605
Klamath Falls	(3)	40,000	103,300
La Grande	(3)	38,400	42,260
Lake Oswego	( )	No Reply	No Reply
Lane Co.	(96)	996,863	1,271,655
Lebanon	(2)	27,000	80,489
Marion Co.	(80)	654,248	846,148
McMinnville	(5)	69,000	85,776
Medford	(23)	283,500	1,055,745
Milln-Freewtr	(1)	7,000	13,410
Milwaukie	(12)	128,550	362,950
Multnomh Co.	(119)	2,040,520	2,939,030
Newberg	(2)	17,000	19,500
Newport	(2)	25,400	81,850
North Bend	(1)	17,400	82,135
Ontario	(5)	66,500	134,635
Oregon City	(5)	43,250	233,430
Oswego	(14)	304,777	1,079,577
Pendleton	(2)	22,000	215,391
Portland	(71)	714,450	3,771,255
Roseburg	(8)	110,537	157,374
St. Helens	(2)	27,000	43,700
Salem	(51)	476,225	561,880
Seaside	(3)	33,500	45,315
Springfield	(11)	109,364	185,760
The Dalles	(5)	74,481	1,111,521
Washingtn Co.	(78)	1,460,910	2,070,455
Total	**(820)**	**$ 10,593,067**	**$ 23,958,786**

WASHINGTON

Aberdeen	(1)	$ 20,000	$ 128,285
Anacortes	( )	Nil	54,720
Auburn	(31)	293,800	349,695
Bellevue	(5)	159,000	449,900
Bellingham	(6)	80,000	300,993
Bremerton	(2)	35,000	417,260
Camas	(2)	29,500	38,850
Centralia	( )	Nil	33,700
Chehalis	( )	Nil	59,144
Clark Co.	(51)	676,900	724,173
Clarkston	( )	Nil	8,625
Edmonds	(20)	349,000	529,801
Ellensburg	(1)	16,000	75,928
Enumclaw	( )	Nil	950
Ephrata	( )	Nil	24,920
Everett	(18)	207,943	691,943
Grys Hrbr Co.	(13)	105,500	180,380
Hoquiam	(1)	2,500	20,707
Island Co.	(10)	61,300	83,075
Kelso	(1)	9,000	24,451
Kennewick	(8)	130,700	1,357,130
Kent	(15)	255,100	940,120
King Co.	(548)	8,387,876	12,877,262
Kirkland	(16)	175,000	395,350
Longview	(14)	167,300	282,891
Lynnwood	(21)	201,785	716,649
Mercer Island	(24)	658,225	764,830
Moses Lake	(26)	211,400	253,156
Mntlk Terrace	(54)	657,540	663,792
Olympia	(7)	113,750	364,584
Pasco	(6)	102,500	315,379
Pierce Co.	(168)	1,848,725	2,093,365
Port Angeles	(3)	37,600	189,725
Pullman	(2)	34,100	56,600
Puyallup	(20)	142,000	151,950
Renton	(52)	787,500	1,107,110
Richland	(18)	334,500	539,890
Seattle	(290)	1,236,600	9,548,676
Shelton	(3)	48,000	73,700
Snohomish Co.	( )	No Reply	No Reply
Spokane	(39)	548,900	2,364,475
Spokane Co.	(47)	813,725	1,659,969
Sunnyside	( )	Nil	123,737
Tacoma	(66)	909,150	4,096,430
Thurston Co.	(26)	228,000	294,950
Vancouver	(13)	193,350	701,729
Walla Walla	(10)	112,000	197,012
Walla Wlla Co.	(4)	50,700	69,925
Wenatchee	(3)	59,000	191,875
Yakima	(12)	164,500	636,055
Total	**(1,677)**	**$ 20,654,969**	**$ 47,425,796**

ALASKA

Anchorage	(2)	$ 55,000	1,200,990
Fairbanks	( )	Nil	200,500
Juneau	( )	Nil	138,000
Ketchikan	( )	Nil	1,945,300
Total	**(2)**	**$ 55,000**	**$ 3,484,790**

IDAHO

Alameda	(19)	$ 217,400	$ 510,900
Blackfoot	(2)	21,000	86,900
Boise	(24)	220,600	548,998
Burley	(4)	50,500	410,650
Caldwell	(17)	275,800	334,950
Coeur d'Alene	(3)	36,268	54,804
Idaho Falls	(22)	285,837	483,490
Jerome	( )	Nil	1,500
Lewiston	(3)	48,700	96,645
Moscow	(3)	47,000	9,684
Nampa	(14)	183,500	241,685
Payette	(3)	45,800	45,800
Pocatello	(5)	83,400	481,585
Sandpoint	(1)	13,500	43,000
St. Maries	( )	Nil	Nil
Twin Falls	(13)	145,000	247,300
Total	**(133)**	**$ 1,674,305**	**$ 3,597,891**

MONTANA

Anaconda	( )	$ Nil	$ Nil
Billings	(53)	761,600	1,031,260
Bozeman	(1)	17,000	103,051
Butte	( )	Nil	15,600
Cut Bank	( )	Nil	5,500
Glasgow	(4)	50,000	79,000
Glendive	(3)	40,000	520,000
Great Falls	(28)	247,369	440,042
Havre	(1)	7,000	72,410
Helena	(15)	212,150	277,950
Kalispell	( )	Nil	21,750
Lewistown	(1)	7,000	10,000
Livingston	(1)	3,000	60,100
Malta	( )	Nil	Nil
Miles City	( )	No Reply	No Reply
Missoula	(2)	36,500	105,425
Total	**(109)**	**$ 1,381,619**	**$ 2,742,088**

WYOMING

Casper	(18)	$ 250,400	$ 460,079
Cheyenne	(10)	262,750	501,655
Cody	(2)	28,000	38,650
Laramie	(9)	121,500	140,680
Rawlins	(2)	68,000	157,800
Riverton	( )	No Reply	No Reply
Rock Springs	(24)	136,000	138,000
Sheridan	(1)	20,000	60,563
Total	**(66)**	**$ 651,450**	**$ 1,497,427**

COLORADO

Adams Co.	(287)	$ 3,724,790	$ 4,910,785
Alamosa	(3)	30,400	89,250
Arapahae Co.	(175)	3,059,100	4,856,043
Arvada	(88)	1,124,500	1,375,878
Aspen	( )	Nil	20,000
Aurora	(64)	665,900	757,210
Boulder	(67)	749,600	458,740
Boulder Co.	(44)	468,720	507,220
Clrdo Springs	(86)	1,122,160	1,735,599
Cortez	( )	Nil	3,500
Denver	(330)	2,821,675	9,396,399
Durango	(1)	13,000	109,798
El Paso Co.	(68)	1,055,900	1,509,196
Englewood	(4)	47,500	224,565
Estes Park	( )	Nil	34,810
Fort Collins	(41)	503,000	563,804
Fort Morgan	(4)	41,526	73,727
Golden	(5)	58,780	772,550
Grnd Junction	(1)	12,000	84,471
Greeley	(24)	275,597	409,449
Jefferson Co.	(346)	3,569,135	6,976,293
La Junta	(2)	25,800	17,835
Lamar	( )	No Reply	No Reply
Littleton	(32)	591,820	640,223
Longmont	(34)	513,800	668,069
Loveland	(14)	168,000	451,675
Monte Vista	(2)	21,500	16,300
Montrose	(5)	68,121	133,678
Pitkin Co.	( )	Nil	8,000
Pueblo	(33)	338,809	1,080,717
Pueblo Co.	(5)	25,000	44,200
Sterling	(1)	28,000	35,110
Trinidad	( )	Nil	12,078
Walsenburg	( )	Nil	6,000
Westminster	(12)	119,400	365,885
Total	**(1,778)**	**$ 21,243,533**	**$ 38,349,057**

UTAH

American Frk	(6)	$ 64,500	$ 75,875
Bountiful	(16)	265,900	343,742
Brigham City	(46)	565,250	1,353,300
Cedar City	( )	Nil	49,600
Clearfield	(2)	26,000	35,400
Davis Co.	(1)	13,400	56,320
Kaysville	( )	Nil	2,000
Layton	( )	No Reply	No Reply
Logan	(15)	215,000	260,000
Murray	(16)	176,400	273,313
Ogden	(22)	667,250	1,626,350
Orem	(21)	227,145	272,015
Price	(3)	20,000	20,000
Provo	(21)	233,600	289,440
Salt Lake City	(40)	399,978	992,615
Salt Lake Co.	(251)	2,981,500	3,454,025
S. Salt Lk City	(18)	148,240	410,720
Spanish Fork	(1)	12,000	16,820
Tooele	(45)	518,036	561,596
Utah Co.	(4)	65,620	75,920
Weber Co.	(6)	84,000	407,400
Total	**(534)**	**$ 6,683,819**	**$ 10,576,451**

NEVADA

Boulder City	(2)	$ 33,604	$ 53,331
Clark Co.	(22)	338,758	9,878,930
Elko	(5)	62,500	78,400
Las Vegas	(282)	3,129,342	4,348,616
N. Las Vegas	(47)	418,050	509,319
Reno	(59)	757,554	1,849,118
Sparks	(87)	1,133,000	1,711,923
Washoe Co.	(24)	396,876	1,536,031
Total	**(528)**	**$ 6,269,684**	**$ 19,965,668**

ARIZONA

Buckeye	(1)	$ 8,000	$ 10,951
Casa Grande	( )	Nil	35,280
Chandler	(8)	67,523	121,663
Douglas	(8)	66,100	124,907
Flagstaff	(10)	61,949	96,850
Florence	(1)	9,600	9,600
Glendale	(6)	40,500	222,778
Maricopa Co.	(262)	2,541,464	3,192,430
Mesa	(53)	526,626	1,297,509
Phoenix	(1,110)	7,477,237	11,163,266
Pima Co.	(196)	2,159,983	4,241,142
Prescott	(8)	71,800	157,499
Scottsdale	(124)	1,161,450	1,764,253
Tempe	(100)	831,552	910,506
Tucson	(165)	1,155,295	2,465,693
Wickenburg	( )	Nil	3,770
Winslow	( )	No Reply	No Reply
Yuma	(65)	479,000	839,981
Total	**(2,117)**	**$ 16,658,079**	**$ 26,658,078**

NEW MEXICO

Alamogordo	( )	$ Nil	$ 10,207
Albuquerque	(148)	2,158,345	4,828,577
Artesia	(5)	46,000	70,345
Carlsbad	(14)	144,000	340,100
Clovis	(17)	164,335	335,727
Deming	(8)	55,600	77,700
Farmington	(7)	126,960	160,005
Gallup	(4)	46,200	75,650
Hobbs	(8)	82,489	178,189
Las Cruces	(17)	183,500	273,750
Las Vegas	(1)	5,500	24,944
Lovington	(4)	45,000	74,450
Raton	( )	No Reply	No Reply
Roswell	(125)	1,259,000	1,642,873
Santa Fe	(24)	188,250	403,340
Silver City	(2)	14,500	57,551
Truth Or Consequencs	( )	No Reply	No Reply
Tucumcari	(4)	51,800	60,500
Tularosa	( )	Nil	7,232
Total	**(388)**	**$ 6,729,824**	**$ 13,449,717**

HAWAII

Hawaii Co.	(32)	$ 376,114	$ 1,007,022
Honolulu	(371)	7,989,277	7,989,277
Maui Co.	(19)	191,618	322,225
Total	**(422)**	**$ 8,577,459**	**$ 9,318,524**

GRAND TOTAL	**(25,754)**	**$331,649,415**	**$616,670,042**

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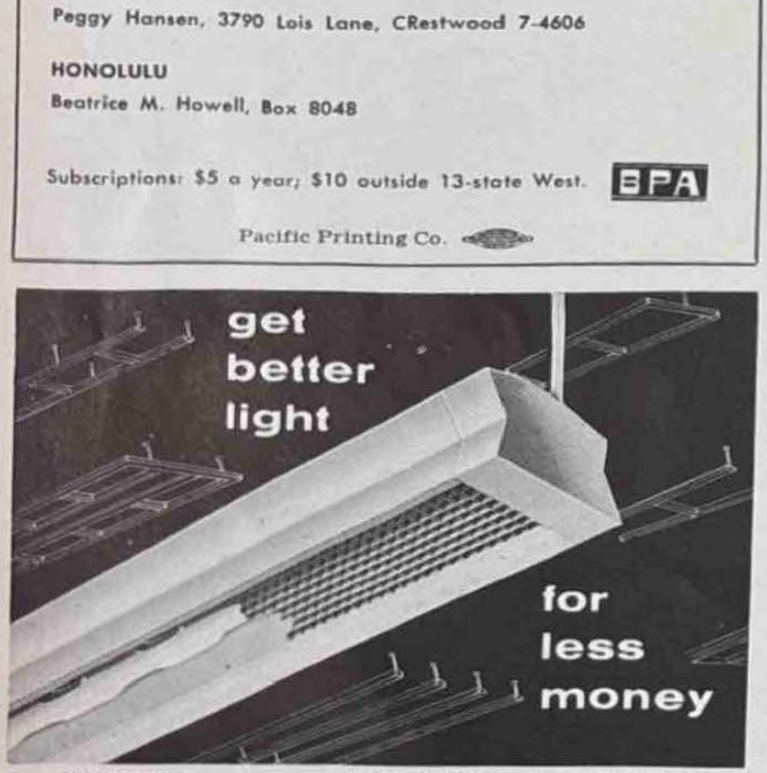
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no. 5: some straight about commitm

Any discussion of editorial content and its selec which we entered into last month, is not complete out reference to the matter of commitments or "e sives," if you please. It is a subject which has greatly misconstrued and certainly misused by all pa involved—architects, clients, photographers and yes, editors.

Now this arrangement whereby an architect or cl or photographer makes an agreement with a partic magazine for publication of a particular building se simple enough on the surface. But journalism by its nature is a highly competitive thing and the commitm —at least as it has been practiced in the past—has ra some serious and disturbing problems from the edito point of view.

Most editors—even of technical and professional m azines—are journalists by training and in training th learned about "scoops." They have the basic desire scoop other publications in news coverage and even feature coverage. They hesitate, and often refuse, to r material that a competitor has used ahead of them, e- if they could give it a much better treatment.

Since preparation of a major feature is time-consu ing and expensive, they prefer to insure that they wo be scooped by attempting to gain a commitment.

There is some justification for this. The editor c work at his leisure, the architect can anticipate public tion in the magazine of his choice. There is some justi cation even though it does seem to violate the ba principles of freedom of the press, tends to stifle init tive, outrages the sensibilities of a rugged individual and almost verges on restraint of trade!

Probably it's not the commitment that causes troub but the abuses of the practice.

Take the case of the editor who gets a building co mitted before it has been completed; even when it h just come from the drafting room! What he is saying actuality is that he would like to have first chance reviewing the photographs when they are availab Under such circumstances, a "committed" project do not necessarily become a "published" one.

This is one of the dark pitfalls of commitments. T building becomes "tied up" so far as competing mag zines are concerned while the picture proofs sit in editorial file for months, sometimes even a year or mo

There is justification for commitments, but the should be honorable commitments and the architec should know exactly what he is doing before he become involved in this embroglio of editors, writers, photograph ers and clients (take public buildings, for example, whi every taxpayer has the right to photograph and publi as he pleases).

An informal code of cooperation is slowly bei worked out and we hope to hear more from architec and from other editors on this subject before we wri about Common-Sense Commitments next month. R.E.K.

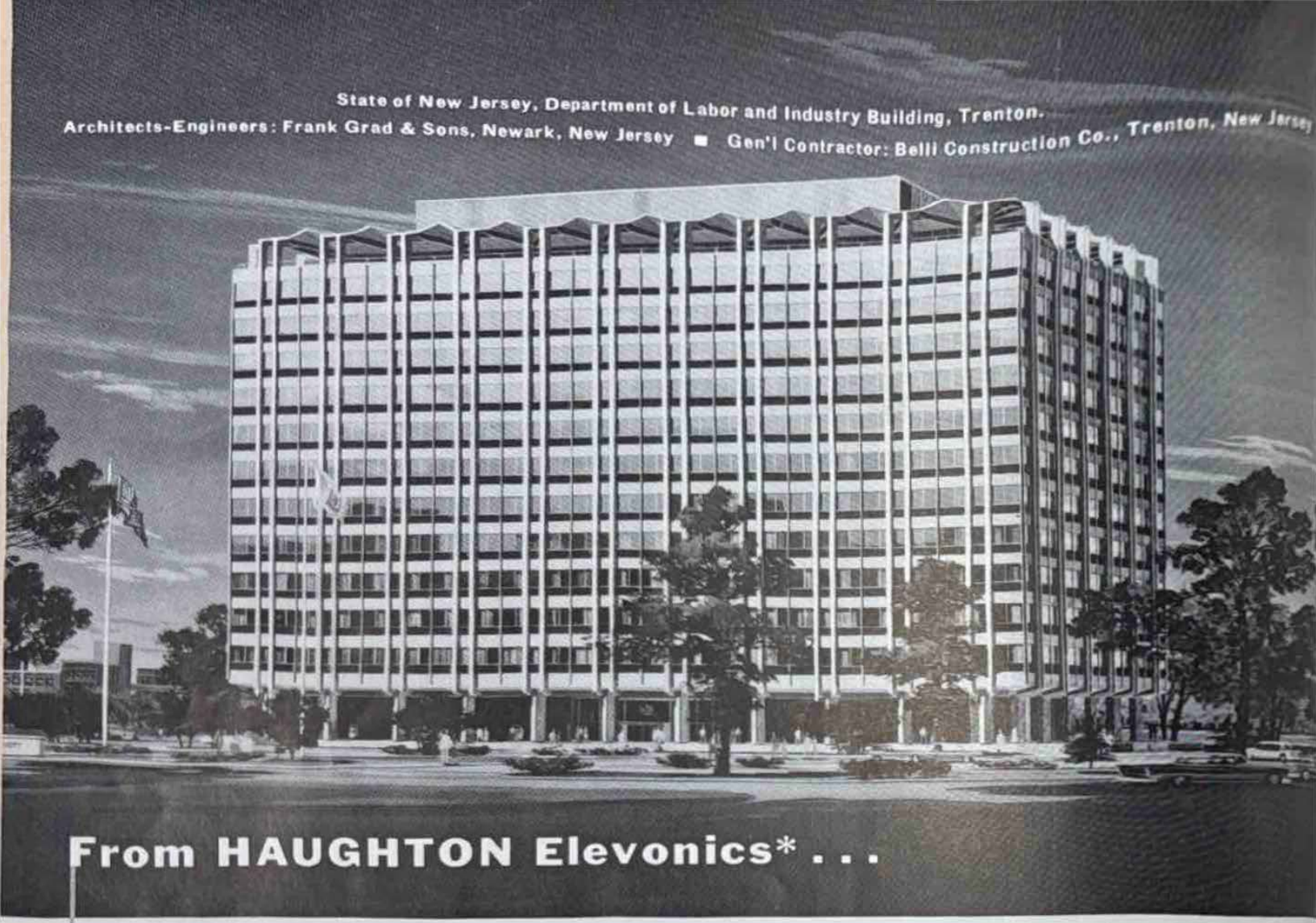
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ABOUT THIS ISSUE: In making the presentations for the 1962 Honor Awards program of the Oregon Chapter, AIA, the jury conferred a special commendation outside the designated class upon a project indicating a very interesting and worthy trend: Tektronix, Inc., "for the gradual realization and development of the industrial park complex far surpassing ordinary industrial requirements." Portland architects Wolff & Zimmer also received an Honor Award on behalf of another industrial client, although in this case the building is a sales office. Then the editors of Architecture/West discovered that the same firm had designed the office headquarters for the parent firm of the award winner. We think the three, since they all involve buildings for industry, make a fine editorial package.

Architectural competitions have been much in the news in recent months, particularly in the West. Last spring Eugene staged one for its new city hall that developed into a bitter controversy which only now is beginning to simmer down; more recently California employed the same method for the design of its governor's mansion. This month we can show the results of the statewide competition held in Washington by the Bureau of Prisons for a chapel on McNeil Island.

COMING IN JULY: As far as western architects are concerned, at least, Joseph Eichler is the biggest name in homebuilding and it's about time the whole story were put together now that his firm has branched out into two major experiments: redevelopment and community housing. Our Northern California editor, May B. Hipshman, has done just that in the major feature to appear next month.

THE BUILDING MONTH

THE BUILDING WEST—Permits issued during April in the 13 western states leaped up 24% over the same month a year ago, with a whopping total of $614,822,-112. Among the 500 leading cities and counties surveyed by Architecture/West, residential work accounted for $369.7 million; nonresidential, $245.1 million. Undisputed champion in residential permits was California, far ahead of the field with a $53 million gain on last year's figures. A surprise contender was Hawaii, up $18.7 million. Washington and Nevada increased $11.6 million and $11.2 million, respectively. Commercial-industrial figures showed California in the lead, but Colorado had the biggest gain, its $24 million total almost double the 1962 figure.

TOP TWENTY-FIVE—Hottest spots in the West for April (in millions): **1.** Los Angeles, $49.9; **2.** Honolulu, $30.6; **3.** Los Angeles County, $20.9; **4.** Denver, $16.3; **5.** Phoenix, $12.8; **6.** San Francisco, $12.6; **7.** King County, Wash., $12.3; **8.** San Jose, $12; **9.** Sacramento County, $11.5; **10.** Seattle, $11.3; **11.** Contra Costa County, Calif., $11; **12.** Las Vegas, $10.7; **13.** Huntington Beach, Calif., $10.3; **14.** San Diego, $9.4; **15.** Orange County, $9.2; **16.** Clark County, Nev., $7.5; **17.** Portland, $7; **18.** Orange, Calif., $6.6; **19.** Ventura County, Calif., $6.3; **20.** Santa Barbara County, $6.2; **21.** Fullerton, Calif., $5.4; **22.** Jefferson County, Colo., $5.3; **23.** San Bernardino County, $5.1; **24.** Oakland, $5.1; **25.** Long Beach. $5.

ONWARD OAHU!—A nonprofit, nonpartisan community action group dedicated to placing strong, informed and impartial support behind planning, building and redevelopment of Oahu in the Hawaiian Islands has been organized by 22 Honolulu business leaders as the Oahu Development Conference. Its proposed budget is small, about $65,000, but its aims are big. Among them: to assist other groups in the preservation of natural beauty and elimination of slums and blight, all of which are beginning to threaten Oahu's economy due to accelerated growth subsequent to statehood and increased tourism.

EXAMINING THE EXAMS—California, Nevada, Oregon and Washington for the first time in June 1963 will utilize a common examination for applicants of architectural licenses and will work toward reciprocity in the four states involved.

CONCERNING COMPETITIONS—Cash awards totaling $55,000, including a grand prize of $15,000 and seven regional prizes of $4,000, will be offered in a national competition for the design of an elementary school incorporating a fallout shelter. Sponsored by the Department of Defense, the program is open to all U.S.-registered architects and engineers and to faculty members and graduates of architectural and engineering schools. Further details can be obtained by writing to A. Stanley McGaughan, AIA, Professional Adviser, National School Fallout Shelter Competition, 1735 New York Ave. N.W., Washington, D.C. . . . One of the nation's top architectural awards, which carries with it a $5,000 fellowship for a year's study at Paris' Escole des Beaux Arts, has been won by Thomas A. Briner, a first-year member of the architectural engineering staff of California State Polytechnic College at the San Luis Obispo campus.

Highlights & Sidel

DOINGS IN DALLAS—Since Henry L. Wright, Los geles, was unopposed in his bid for the presidenc the AIA prior to the convention opening May Dallas, his election was a foregone conclusion. from now on, the delegates decided, the succes from the first vice presidency to the top post wil automatic. The other offices except treasurer—J mond S. Kastendieck, Gary, Ind.—were contested Roy Carroll Jr., Philadelphia, won out as first president over the only other western candid James M. Hunter, Boulder, Colo. Arthur Gould C Jr., Charlotte, N.C., second vice president; and Cli Gamble, Fort Lauderdale, Fla., secretary, comp the slate. . . . The affiliate councils proposal was ta in an extremely close vote; the professional affi membership measure did not have a quorum; and idea of a competition for a headquarters building passed, but no further action was taken. . . . The lege of Fellows elected Paul Thiry as its chance Before leaving Seattle, he received an honorary m bership from the American Institute of Designers, first of scores of national organizations which hold their annual meetings in conjunction with tury 21 Exposition.

ARCHITECTS AT ASPEN—Such well-known archit as Louis Kahn, Walter Netsch and Brazil's Oscar meyer will be joined by such luminaries as psyc trist Karl Menninger, scientist Jonas Salk and anth pologist Margaret Mead when the Aspen (Colo.) sign Conference gets underway the week of June 2

BUY AMERICAN—Utah's heating and plumbing contr tors who convened in Salt Lake City last month fo three-day state convention asked all state agencies, cluding school districts, to specify only American-m products in the construction of new buildings. more than 200 delegates also adopted a resolution u ing all Utah municipalities to refrain from issu plumbing permits to unlicensed plumbing contract

ENGINEERS AND EDUCATION—"Design is the essen purpose of engineering. It begins with the recogniti of a need and the conception of an idea to meet t need." That was the key message presented to Rocky Mountain Section of the American Society Engineering Education late in April. Speaking on t University of Colorado campus in Boulder, Dr. Jam B. Reswick, director of the Case Institute of Techno gy Design Center, Cleveland, told the delegates t study of engineering science has led to a de-empha of design, but "now many realize the philosophy a the multi-disciplines behind design must be taught."

IT'S FAIR IN CALIFORNIA, TOO—Del E. Webb Cor one of the top building and development firms, h been awarded a management contract for the world fair which Long Beach is planning for 1966. Co struction of the site, which is presently under 47 f of water, was started in January of this year. Costin slighly more than $19 million, the filling-in process being operated on a 24-hour-round-the-clock schedu to meet the deadline.

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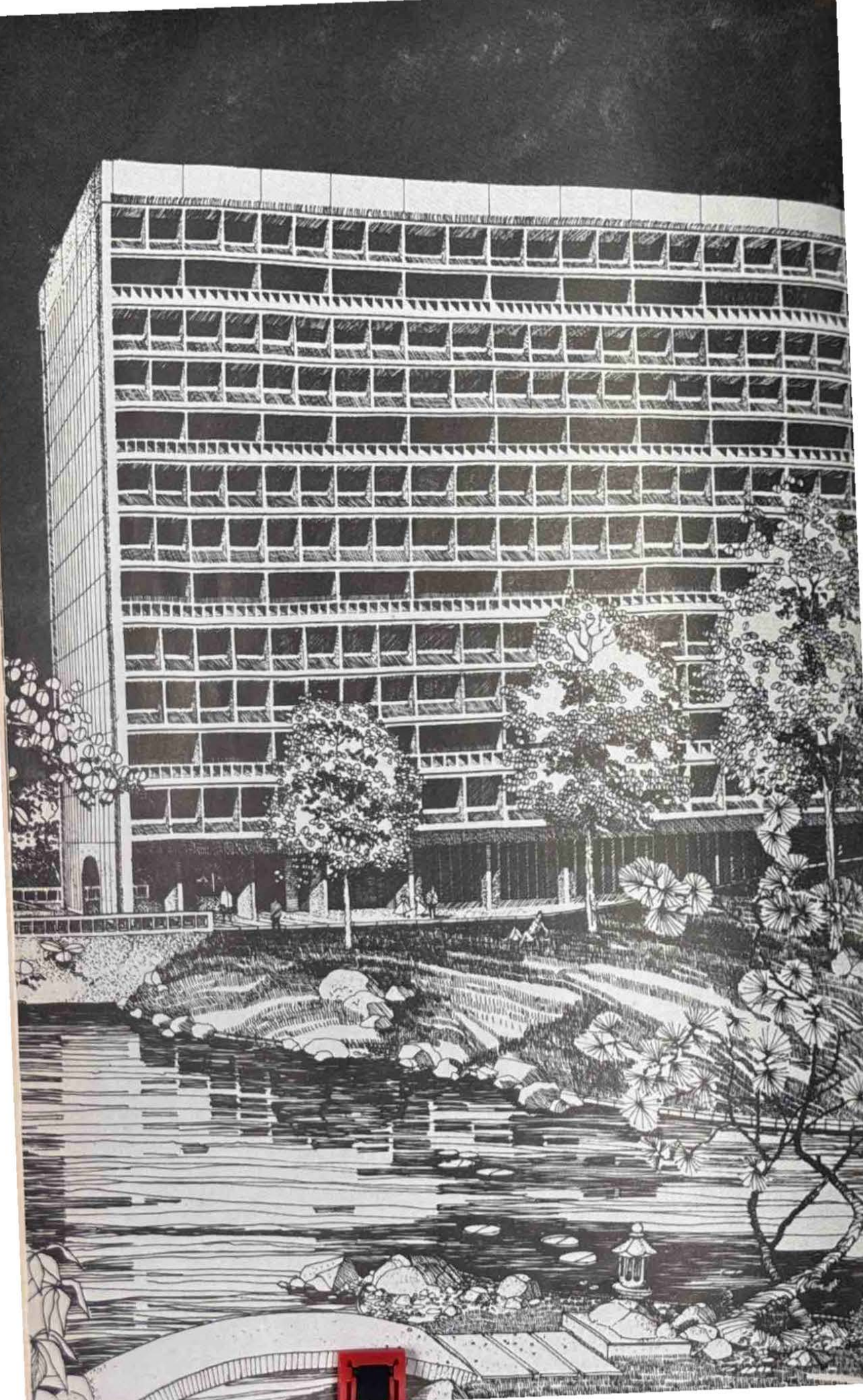
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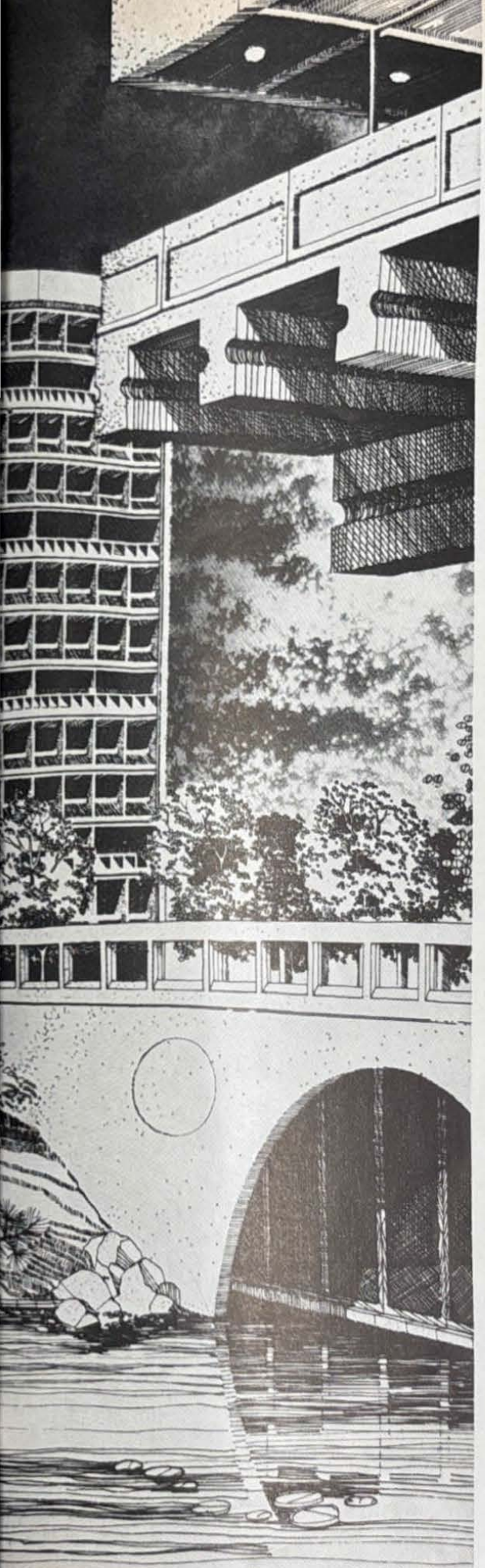
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FULLER

Left: University of Hawaii East-West Center Dormitory

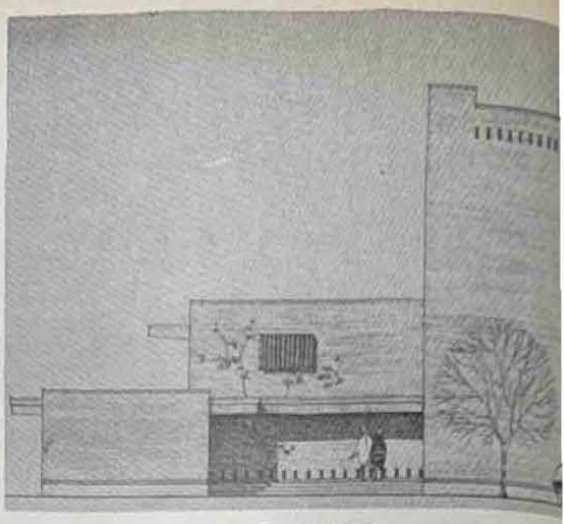
Washington's younger architects share laurels in prison chapel competition

A Spokane architect, Moritz Kundig, has been named the winner of a competition conducted by the Bureau of Prisons in Washington State to design a chapel to be built at McNeil Island Penitentiary.

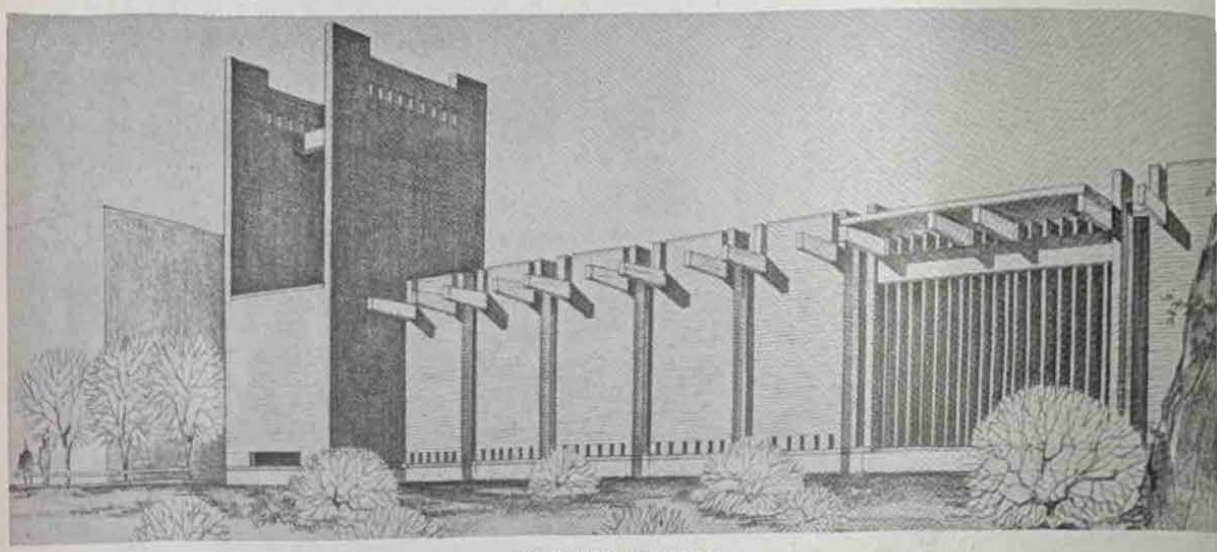
The $2,000 first prize includes the architect's commission. Three other cash awards of $1,500, $1,000 and $500 have gone to the runners-up.

The jury comment that "competitions of this kind release new, fresh talents, give opportunities to go forward and allow the public to become aware of abilities which might take longer to appreciate without such programs" is well borne out by the ages of the top four—all are under 38.

In this particular case, the competitors were individual architects since all contracts must be executed with an individual under the requirements.



WEST ELEVATION



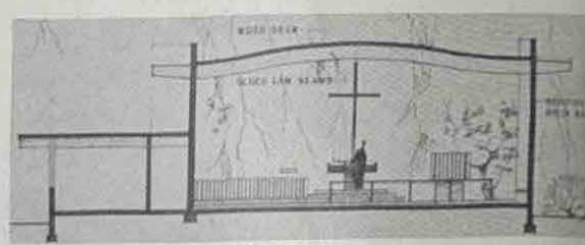
VIEW FROM SOUTHEAST

Dean Walter Gordon of the School of Architecture and Allied Arts, University of Oregon, was chairman of the jury, which commended "the excellence and high quality of the designs submitted." Other members were San Francisco architects Robert Anshen and Theodore C. Bernardi; Judge W. T. Beeks; and James V. Bennett, director of the Bureau of Prisons. Dean A. P. Herrman of the College of Architecture and Urban Planning, University of Washington, was professional adviser.

The jury further commended the sponsoring agency for its efforts to produce an inspiring environment for the prisoners. "This method of approach for selecting architects for government buildings is highly recommended and it should be stated that more government agencies should avail themselves of the citizens of the country so that best results will be obtained in as many instances as possible."

The program called for a nonsectarian chapel to serve both Catholic and Protestant services designed as a single nave structure seating 250. Access to McNeil Island is by boat and the site is in prominent view as one approaches.

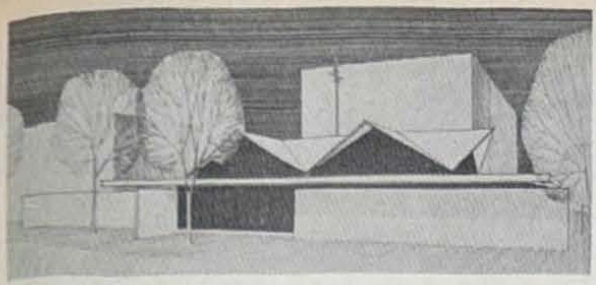
Structure was not limited as to forms or materials used except that the design had to be within the funds available. Total budget set up by the agency is $100,000 and prison labor will be engaged where possible.



TRANSVERSE SECTION

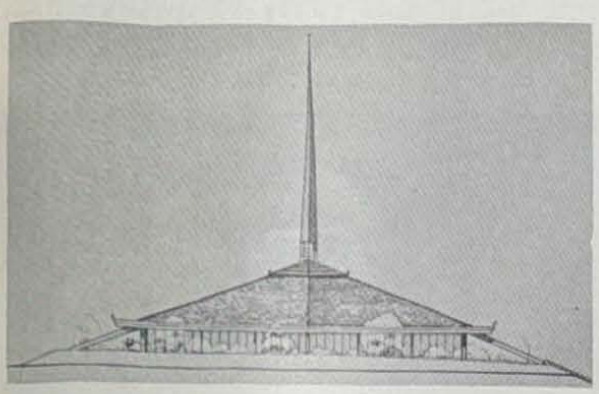
Excerpts from the jury's report on the award winn

"The jury felt that this design is very effective imaginative. A fine architectural character is achie through the use of simple materials and sensitive h dling. The architect has used his imagination to cre a series of inspiring experiences for the communicant he enters the church, seeing first the free-standing cr against the background of Puget Sound and the mou tains. It has evidence of being quite functional and mak effective use of space. The structure is to be built brick masonry and as a building material, this will easy for unskilled labor to construct. The bell tow should be especially commended because of the view se when looking up to the sky. The scale of the free-standi cross and the size and shape of the tower are excelle



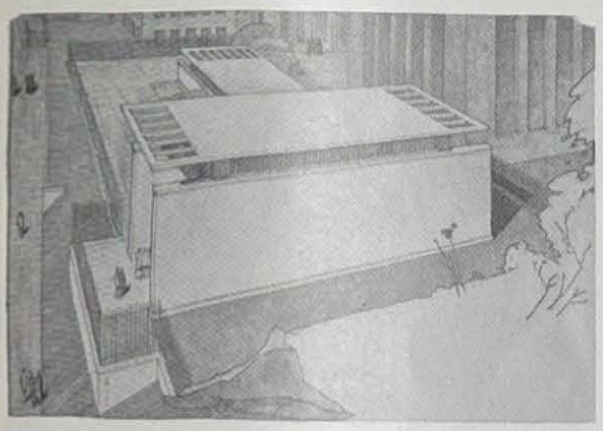
Second prize to John McGough, Spokane.

"One of the most beautiful plans presented. The jury felt that the character of the exterior appearance is not quite up to the first prize plan; the three-dimensional development of the plan is not sufficiently spiritual or religious in character. The roof structure is more complicated and would be more difficult to build than the first design. The jury commends the design, however, for its simplicity of concept. The arrangement of the courtyard would provide a pleasant experience.



Third prize to Jan H. Kiaer, Mercer Island.

"The jury selected this design for third prize because of its unique arrangement, because of the excellent manner in which the site is utilized and because it creates an intimate relationship between plants and species inside the building and outside by way of the sunken garden. The simplicity of the space for worship is to be commended. The idea of putting the church service function in the garden below is excellent.



Fourth prize to Milton Strickler, Seattle.

"The jury had difficulty selecting between the third and fourth designs. They are both equal in the amount of skill and careful intent of their authors. This design is very direct and straightforward in its solution. The filtering of light in the nave is done in a beautiful manner. The nave, both in plan and third dimension, is excellent."

TO THE POINT

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Washington turns to faculty for architectural dean

Robert H. Dietz, professor in the College of Architecture and Urban Planning at the University of Washington, will become its dean next fall. A member of the faculty since 1948, he succeeds Dr. Arthur P. Herrman who requested to be relieved of his administrative duties in order to devote his time to teaching and research.



DIETZ

Dietz combines a teaching background with wide experience in design, having won numerous awards as a partner in the Seattle firm of Waldron & Dietz. Since 1960 he has served as chairman of the graduate program in the college and as chairman of its design program committee.

On the national level, Dietz is a director of the Association of Collegiate Schools of Architecture and a member of the National Architectural Accrediting Board.

A 1941 graduate of the University of Washington, he received his master's degree from MIT in 1944.

Architecture and urban planning was raised in status from a school within the College of Arts and Sciences to an independent college in 1957. Recently an undergraduate program in landscape architecture was added to the curriculum.

CCAIA legal documents enjoy brisk sales

A 1961 best seller among the architects of California is the new short-form contract between architect and client published by the California Council, AIA.

The document sold nearly 2,000 copies last year, Executive Director Melton Ferris reports. It is one of three prepared by a special legal problems committee after more than two years of study. The other two, also best sellers last year, are a long-form contract between architect and client (1,500 copies sold) and a problem list for architects (600 copies), which contains information and recommendations about problems that California architects may encounter in their practice.

Serving on the legal problems committee were architects L. F. Richards, Santa Clara, chairman; John MacKechnie Hogg, Vallejo; Howard H. Morgridge, Los Angeles; and Atty. Robert E. Burns, CCAIA's adviser.

new offices, partnerships

Merle E. Whitney has opened his own architectural office at 435 D St., Idaho Falls, Idaho. He had been with Norman J. Hamill & Associates and C. A. Sundberg & Associates.

Joseph F. Angello has established an office for the general practice of architecture at Suite 1, 1915 21st St., Sacramento.

Salt Lake City architect Alton Dean Jensen, formerly with Donald H. Panushka & Associates, has opened his own office at 410 Felt Bldg.

The partnership of Villesvik & Smith has been formed by John S. Villesvik, Yakima, Wash., architect, and his former associate, Maurice Smith. The senior principal has practiced in the area since 1945. Smith joined Villesvik a year later.

Hawaii Chapter, AIA, and the Honolulu Chapter, Producers' Council, have opened a joint office at 1210 Ward Ave., Honolulu.

firm changes

Law & Wilson have changed the name of their firm to Wilson Associates, Inc., architects-engineers, with offices at Suite 1616 Ala Moana Bldg., 1441 Kapiolani Blvd., Honolulu.

Bassetti & Morse, who dissolved their Seattle architectural partnership in April, have established independent practices. Fred Bassetti & Co. are temporarily located at 1602 Tower Bldg.; John M. Morse & Associates continue to have permanent offices at 1610 in the same building.

new addresses

Roland Decker Pierson, architect, to Suite E, 1510 Oxley St., South Pasadena, Calif.

TUNISIA SEEKS VOLUNTEERS

The Peace Corps is training volunteers who will work as architects, builders and city planners in Tunisia. Similar projects are being developed for Gabon, Liberia, Somali, Malaya and several Latin American countries. For more details write to Peace Corps, Jules Pagano, Chief, Professional and Technical Division, Office of Public Affairs, Washington 25, D.C.

Hunter & Benedict, architects, to 3670 Wilshire Blvd., Los Angeles.

California Council of Landscape Architects to Suite 10, 1722 J St., Sacramento, where it shares space with John W. Harris & Associates, public relations consultants.

elections, appointments

California Council, AIA, has elected this slate: William Stephen Allen (Northern California), president; Albert M. Dreyfuss (Central Valley), vice president; George P. Simonds (East Bay), secretary; Fred E. Hummel (Santa Barbara), treasurer; and C. Day Woodford (Southern California), member-at-large.

Clinton C. Ternstrom, West Los Angeles, a 1940 graduate of the University of Southern California School of Architecture, has been elected president of the Architectural Guild, support organization for the school. Other officers are Carlos Munoz-Flores, Hollywood, vice president, and Henry N. Silvestri, Sherman Oaks, secretary-treasurer.

Seattle architect Benjamin McAdoo has been picked by the Agency for International Development as housing administrator for Jamaica, where he will be stationed in Kingston until July 1964. His office will be directed by Robert Wong during the assignment.

Two California architects—Jack R. Lewis of San Diego and R. Redmond Coghlan Jr. of Los Angeles—have been elected fellows of the Construction Specifications Institute.

Assoc. Prof. Paul E. Bartlett has been appointed assistant engineering dean for the University of Colorado Denver Extension Center, succeeding Prof. Clinton L. Conner who resigned to take a position with Planning Research Corp., Washington, D.C.

Los Angeles architect C. M. Deasy is the only nonresident appointed to the advisory board of Arizona State University's School of Architecture. Among his duties: arranging for special guest lecturers from Southern California to address architectural students on the Tempe campus.

travelers

Seattle architect Stephen Richardson, who has been reviewing design and construction techniques in Japan and Hong Kong, addressed a gathering of architects in Tokyo in May.

Architects' own house, office building get top awards from San Diego Chapter, AIA

From a field of 45 entries, six buildings have been permiated in the biennial design program of the San Diego Chapter, AIA. They are, in addition to the two Awards of Excellence shown below:

Award of Honor—Crabtree Building (see Methods & Materials, p. 28): Deems-Martin & Associates, architects; Trepte Construction Co., contractor.

Awards of Merit—La Jolla Federal Savings & Loan Association Building: Robert Moser & Roy Drew, architects; R. E. Hazard Jr., Inc., contractor; Bank of America Branch: Robert Moser & Roy Drew, architects; Callahan Bros., contractor; Dr. David De Groote Beach House: Tucker, Sadler & Bennett, architects; Mueller, Tuckett Construction Co., contractor.

The winners, with 11 of the entries considered to be outstanding, have been on display at the Fine Arts Gallery in conjunction with the Allied Craftsmen 16th annual spring exhibit of ceramics, weaving, enamels, jewelry, bronze and sculpture.

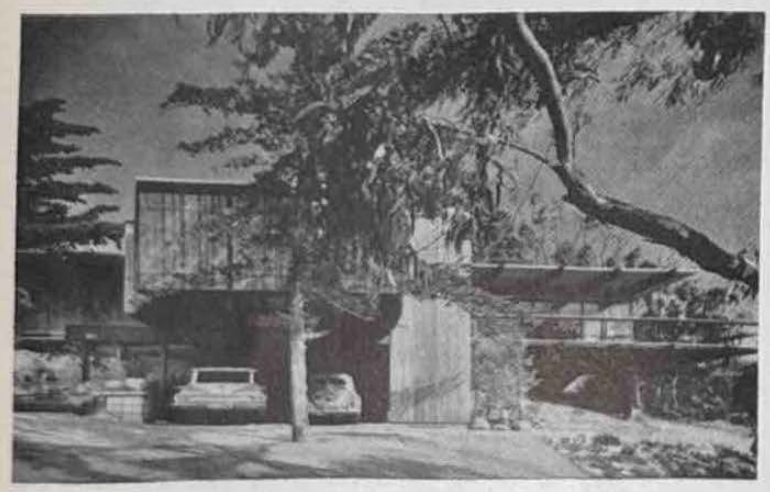
Jurors were architects John O. Merrill Jr., chairman, San Francisco; A. Quincy Jones, Los Angeles; Edward A. Killingsworth, Long Beach; and Samuel T. Hurst, dean of the School of Architecture of the University of Southern California; and artist Jackson Woolley, San Diego.

Awards of Excellence

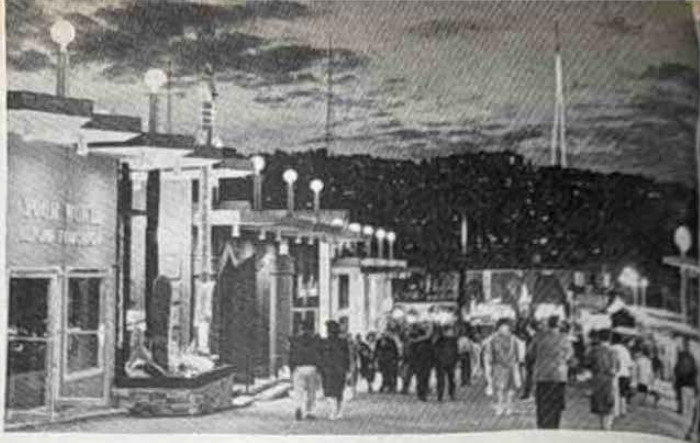
Douglas Simmonds photos

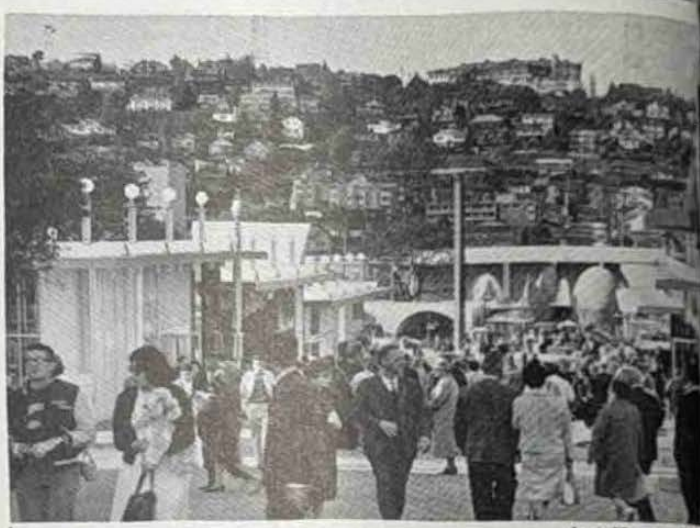


Architct's own office building in Old San Diego: Homer Delawie, architect; Randy Construction Co., contractor.



Architect's own residence, La Jolla: Robert E. Jones of Hester, Jones & Associates; Herbert Turner, contractor.





What a difference the day makes! Art Hupy photo

Seattle's jewel bo

Partly because of its relatively small size—74 ac in all—and partly because architectural control exercised from the very start, Seattle World's F has carried the "jewel box" title more than any oth But while the overall planning of the site is to highly commended, it must be pointed out in all h esty that some of the glitter wore off as Century Exposition reached its countdown April 21.

This can be said without detracting from the wo of the primary architect. For as Victor Steinbru wrote in the April issue of Architecture/West, P Thiry "deserves recognition for creating a comp orderly, flexible site plan utilizing the existing str grid pattern, which has proven to be exceptiona adaptable to the demands of constantly changing position requirements and a variety of exhibit structures."

But fair officials, for reasons they alone must held accountable, lowered the bars, so to speak, as opening date approached, allowing some buildings some exhibits that would not even do credit t county carnival, let alone a fair of worldwide statu and in more than one instance cluttering up others delightful open spaces.

The well-planned site, the interesting buildi the unusually fine facilities for a truly futuristic position were provided; but in all too many instan the exhibitors and concessionaires have shown a l



Fair's real gem is Federal Science Pavilion, both in terms of design and display.

t tarnished by day, a real sparkler by night

A personal report by the Editor

of feeling or lack of imagination that has not only left the possibilities unrealized, but almost totally obliterated them—like a boy scout encampment on the White House lawn.

Nighttime, of course, tends to minimize the clutter, just as it is wont to do with the ugliness of our cities. But there is more to the fair's evening personality than just that. It takes on an air of excitement that simply does not exist during the day. The lighting system is extremely effective and brings into sharp focus the one element which gives the exposition a real character of its own. To steal a phrase from a well-known Northwest product, "It's the water," and how fitting this is! Truly the fountains—they come in all shapes and sizes—tie the whole thing together.

We say this acknowledging the fact that two projects—the Alweg Monorail and the Space Needle—have caught the public's imagination and have given the fair the publicity it needs to make it a success. But if Seattle has earned the right to World's Fair status, it is because of one building and its contents: the Federal Science Pavilion.

We have heard Minoru Yamasaki on more than one occasion refer to the "visual delight" in architecture and now we have seen his term translated into reality at the exposition, working in association with a University of Washington classmate, Perry B. Johanson.

The dazzling white six-unit complex with its now well-known neo-Gothic arches is almost blinding in the daylight; it is enchantingly beautiful at night—a veritable fairyland in the best sense of that word. It is not only a place of beauty and repose, but despite its mammoth size, (85,000 sq. ft. under one roof on a six-acre tract), has a very human scale.

There are, of course, a number of other attractions that make a trip to the fair worthwhile from the design point of view. The James FitzGerald abstract bronze fountain which highlights the Playhouse court will be a joy forever and Seattle will always be indebted to Kirk, Wallace, McKinley & Associates for planning this intimate space.

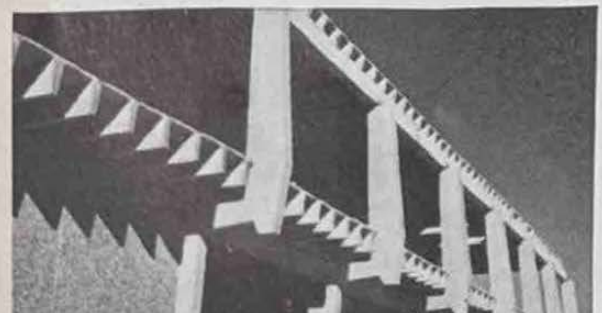
And there are major disappointments too, such as the Seattle Center Fountain, designed by two Tokyo architects as the result of an international competition, and the injustice done by the interior designers to Thiry's Coliseum. The World of Tomorrow exhibit it houses in no way conveys the sweep of the roof 110 ft. into the air. (Besides that, the script is an insult to the intelligence of the fairgoing public.) Not until the fair is over and the conversion to a sports and convention facility is accomplished, will the structure be understood and appreciated.

But rather than continue with words, we'll return to the exposition in our August issue to photographically point up both the good and the bad.



General Purpose Addition to the Central Utah Vocational School, Provo, Utah. Architects: Dixon, Knell & Long, Provo, Utah. Engineer: Hugh McKellar, Provo, Utah.

Fire safety came first—economy's a bonus in this low-cost, all-concrete school



Stepped columns support the prestressed concrete frame. Offset provides extra 4 feet of classroom space on second floor and built-in sunshade over first floor windows.

Fire protection is a vital consideration when building a school. This was one reason the architects chose all-concrete construction for the new General Purpose Addition to the Central Utah Vocational School at Provo.

And use of concrete in its newest forms gave opportunity for economy, too. The entire shell of the building, including prestressed concrete roof, frame and floor beams, precast columns and curtain wall panels, was completed for $3.21 per sq. ft.

All this and beauty, too. The warm texture of the exposed aggregate panels contrasts with the clean lines of the unusual stepped columns. Panels are "sandwich" type. No additional finishing is needed for interior surfaces. Over the entrance, small panels cast with plaster forms depict tools of industry.

More and more engineers are finding that concrete offers opportunity for money-saving construction.

PORTLAND CEMENT ASSOCIATION

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A national organization to improve and extend the uses of concrete

FOR STRUCTURES... MODERN **concrete**



Art Hupy photos through p. 23

THREE PROJECTS FOR INDUSTRY: A HUMANIZED CORPORATE IMAGE

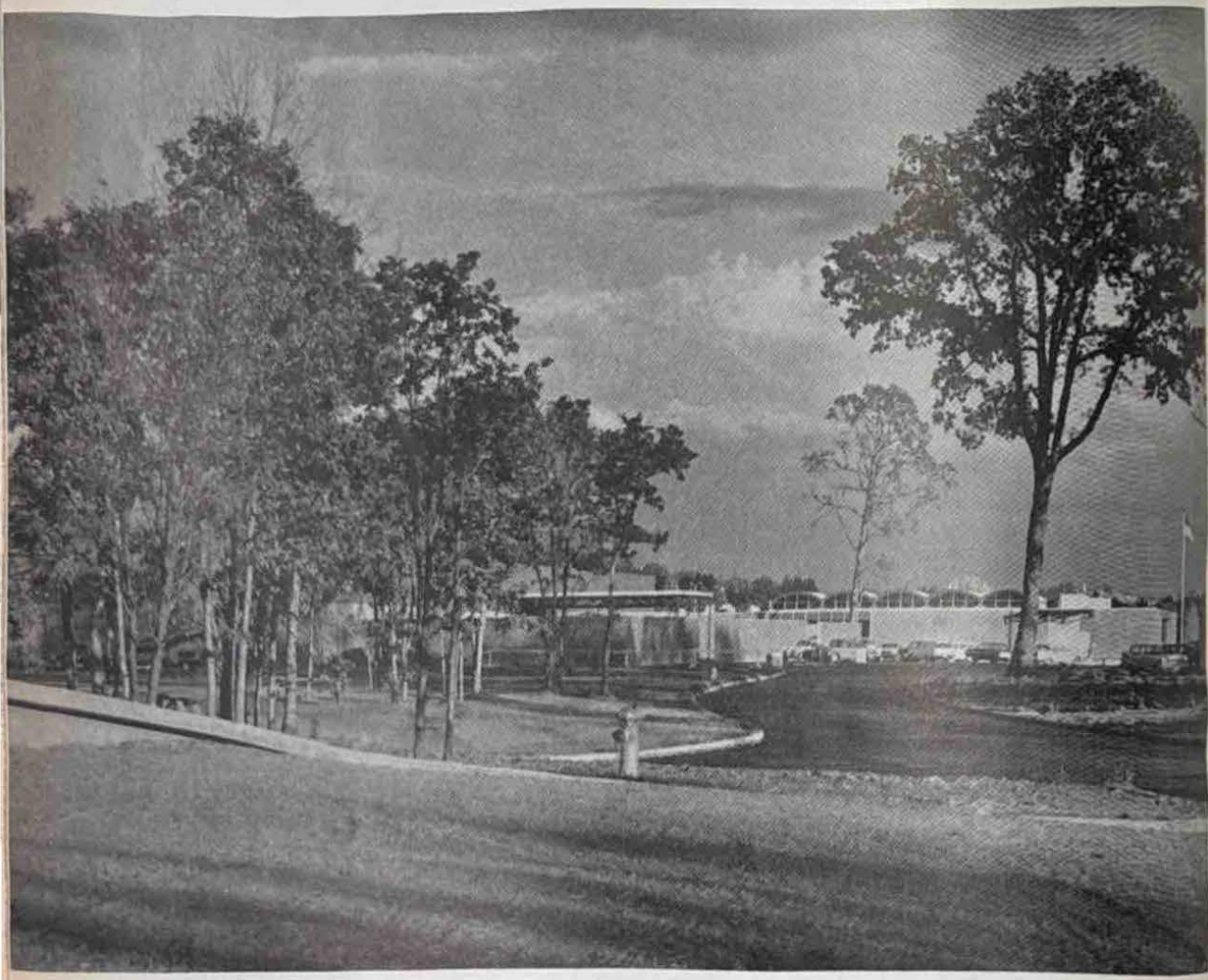
THE INDUSTRIAL COMPLEX shown above and on the following four pages is followed by two office buildings. All three are the work of Wolff & Zimmer for industrial clients; designwise, the trio shares another common denominator: incorporation of beyond-normal amenities to humanize the working environment. This results from the architects' philosophy of total integration of the building program from site development straight through to furnishings. ("We never question where the outside ends and the inside begins.") The staff, much smaller than that usually associated with industrial commissions, includes a planner, who spends one day a week with the City of Portland, and an artist, whose color sense contributes immeasurably to the overall architectural concept.

The corporate image: manufacturing in the park

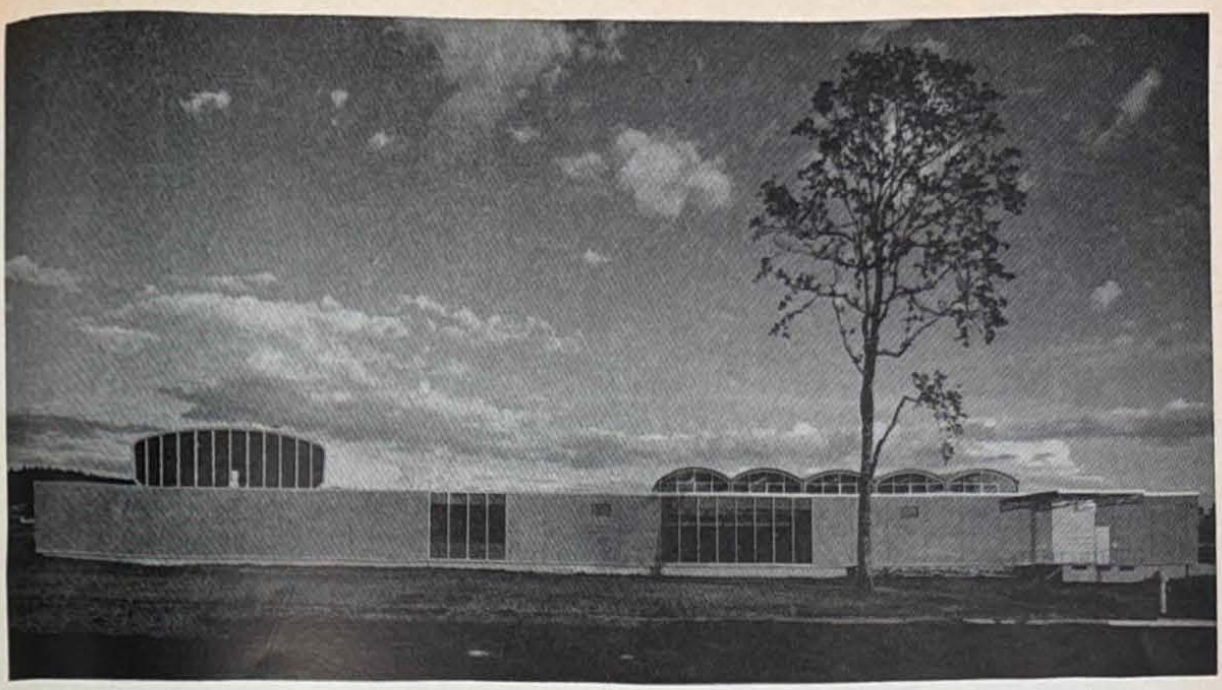
TEKTRONIX, INC., INDUSTRIAL PARK COMPLEX, Beaverton, Ore./*Wolff & Zimmer*, architects/*Arthur M. James*, structural engineer/*Ross B. Hammond Co.*, general contractor.

THIS INDUSTRIAL CAMPUS in a community just outside of Portland holds promise of becoming one of the truly outstanding projects of its kind in the West when fully developed (see site plan on p. 18). It is organized in what is seemingly an informal, casual manner and this approach, along with the preservation of existing trees, must make the complex a continually rewarding experience for the personnel who produce instruments for the electronics field.

The structures shown here—the assembly building complex and the ceramics building—were designed to be an integral part of a long-range program for a young corporation which has enjoyed a phenomenal growth these past few years. (It maintains field offices in 31 U.S. cities and is represented by engineering organizations in 23 overseas countries.)



All usable existing trees have been saved as indicated in this view from assembly building complex toward ceramics and metals buildings.



Ceramic component manufacturing plant derives major design element from high vault over large automated tunnel kiln and repetitive ones over clay preparation equipment.

The overall plan involves a system of internal parks and roads for recreation, delivery and the comparatively light interplant movement of men and materials; the external system provides for employee parking. Because the manufacturing process demands a controlled environment within each building, spaces for outdoor contact are arranged in conjunction with the cafeteria and as a sub-unit of the larger outdoor plan. Structures are fireproof due to the high value of in-process inventory and provide for a complicated and highly flexible utility system.

The assembly building complex contains about 250,000 sq. ft. in two identical units, joined by a cafeteria. The space is divided into four areas, each operating separately and accommodating about 400 persons. To make sure that employees get the most out of the floor-to-ceiling fenestration, company policy regulates the height of work bench shelves and insists that their tops be kept absolutely clear.

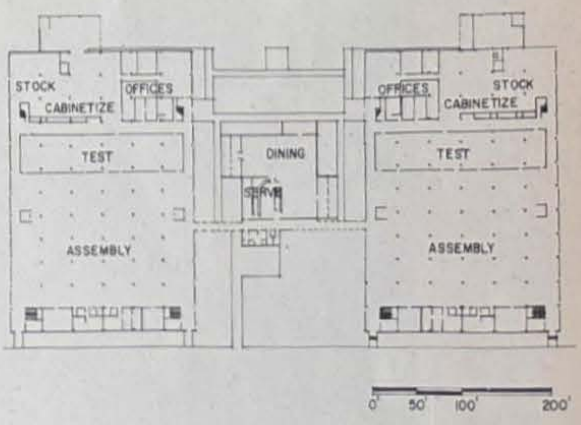
Structural frame of the assembly building complex consists of fixed prestressed precast concrete elements with a cavity brick exterior wall and fixed glass neoprene gaskets. It is, in fact, the straightforward structural expression that gives the buildings their real character.

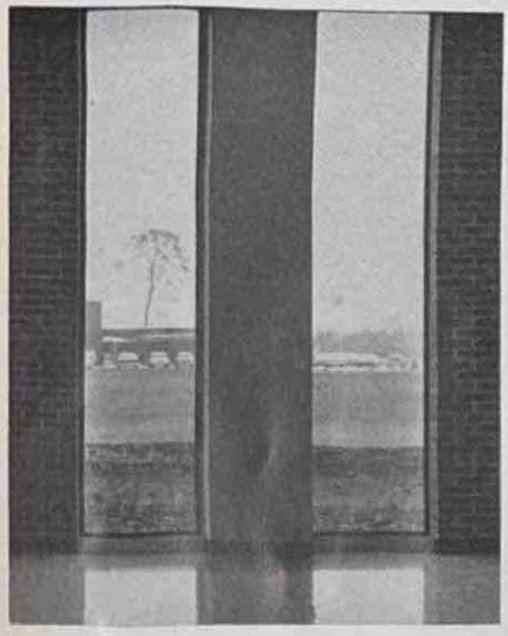
The ceramics building, which utilizes a light steel frame except for the precast concrete kiln room, is designed around a simple grass-covered court – again allowing employees some communication with the out-of-doors.

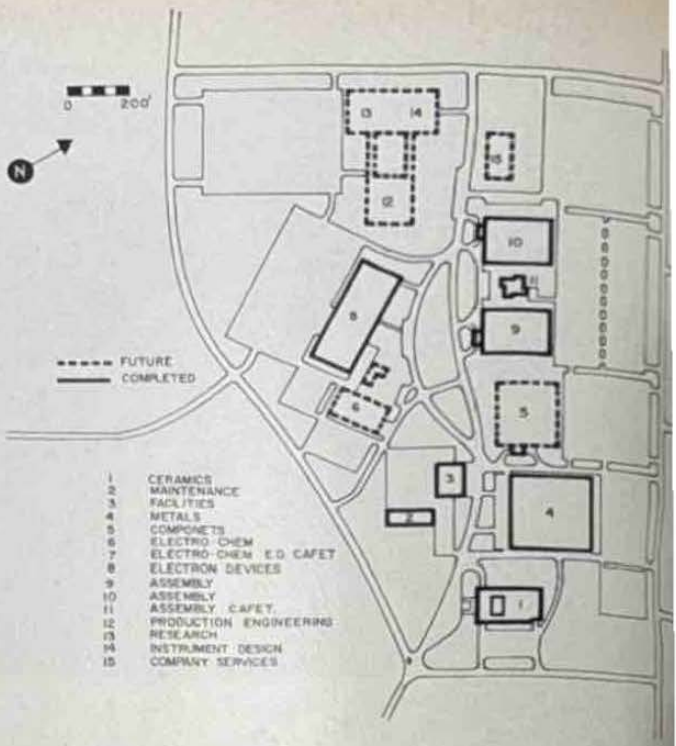
All buildings are serviced by a high velocity double-duct air conditioning system. Thomas E. Taylor was mechanical engineer; Grant Kelley & Associates, electrical engineers.



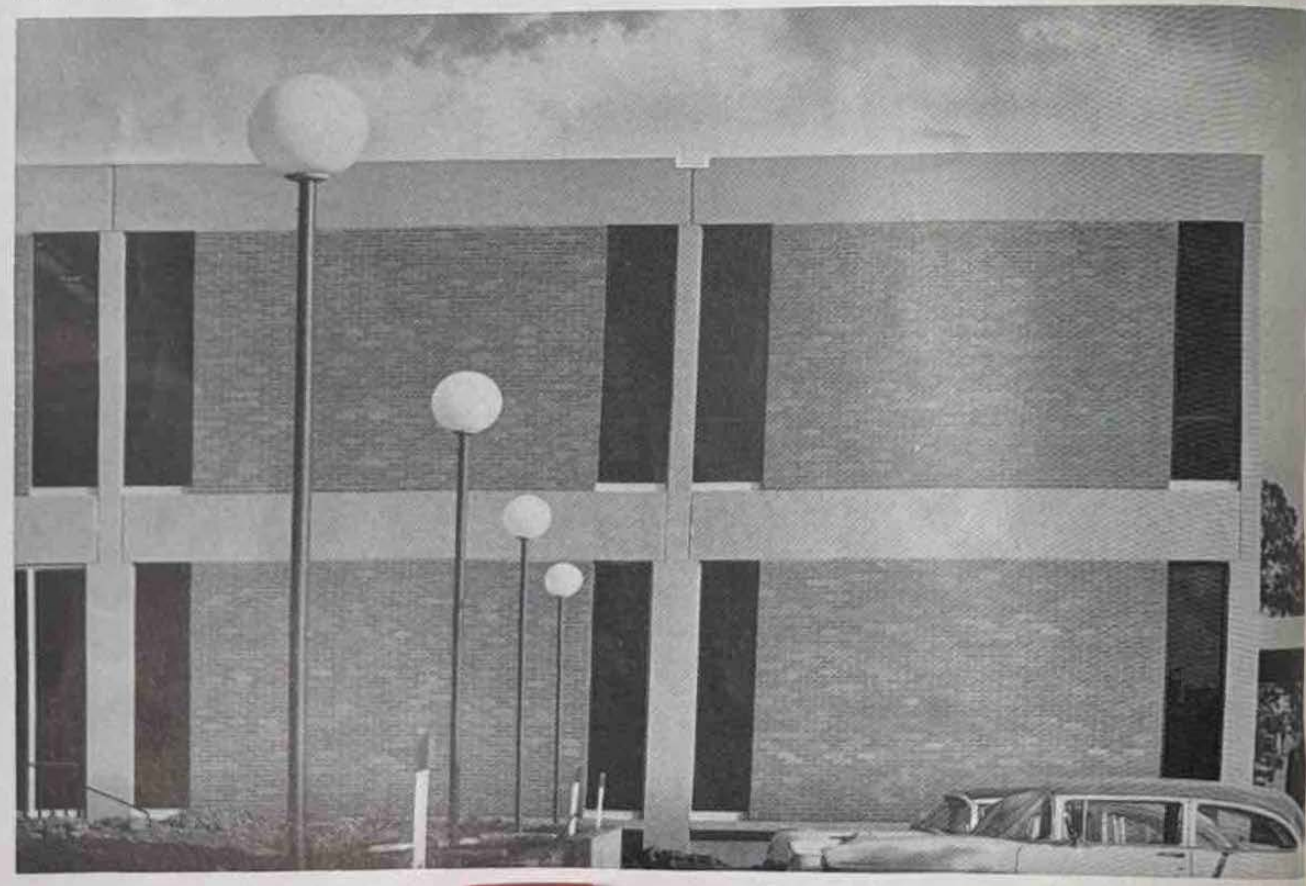
Cafeteria, which joins two assembly building wings, introduces exaggerated wood fascia to indicate special function, but weakens otherwise strong architectural statement.



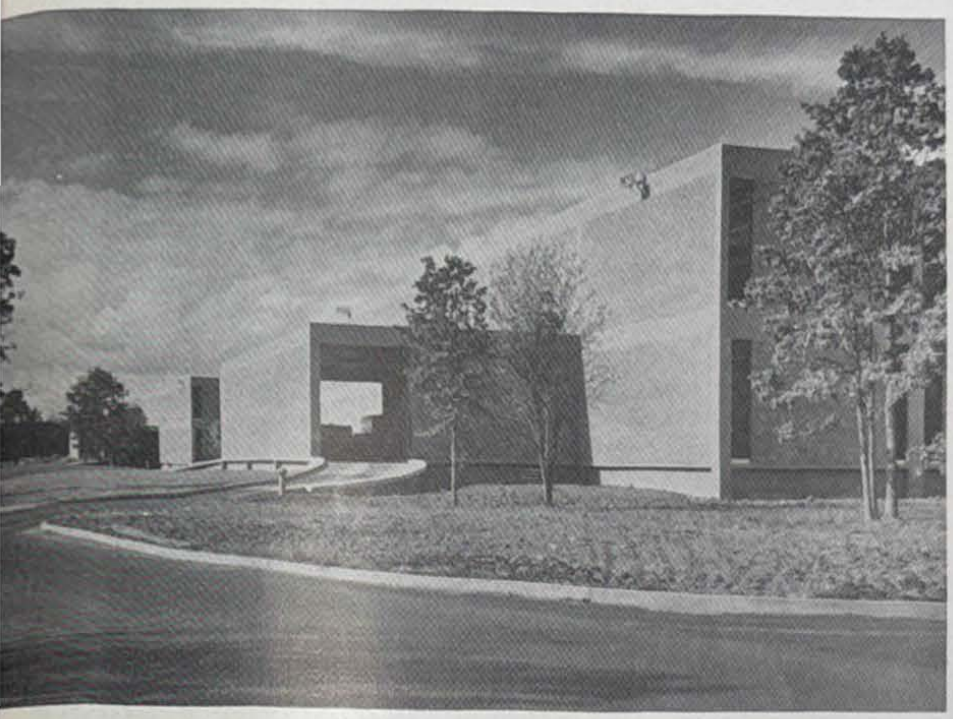




Typical fenestration of assembly building has gray tinted glass fixed in neoprene gaskets. Cavity bric walls are exposed on the inside. Precast concrete elements are visually expressed as structural fram



Loading docks from drive-in side reveal attention to detail throughout entire complex.



OUTLINE SPECIFICATIONS
(Ceramics Building)

Structure: foundation: concrete; frame: light steel; precast concrete for kiln room: roof: steel decking—Inland Steel Products Co.; precast channel slabs for kiln room—Empire Pre-Stress Concrete of Oregon; floors: concrete.

Exterior Finish: cavity brick with aluminum fascia.

Roof Surfacing: built-up with dolomite.

Windows: extruded aluminum—Mercer Steel Co.

Doors: exterior: hollow steel—Grand Metal Products; interior: hollow core wood—Tacoma Millwork Supply Co.

Floor Surfacing: vinyl asbestos tile—Armstrong Cork Co.

Interior Finish: concrete block; brick.

Ceilings: acoustical tile—United States Gypsum Co.

Heating: high velocity double-duct air conditioning; controls—Powers Regulator Co.

Plumbing: fixtures—American-Standard.

Total Area: 40,000 sq. ft.

Total Cost: $703,950.

Cost per Square Foot: $17.60.

Date of Completion: February 1961.

OUTLINE SPECIFICATIONS
(Assembly Building)

Structure: foundation: concrete; frame: precast prestressed girders and precast columns; roof: prestressed Lin-T units; floors: concrete slab on first, prestressed Lin-T units on second; all prestressed concrete—Empire Pre-Stress Concrete of Oregon.

Exterior Finish: brick cavity wall.

Roof Surfacing: built-up with marble chips.

Windows: extruded aluminum—Fentron Industries, Inc.

Doors: exterior: metal—Rigid Metal, Inc.; interior: hollow core wood—Tacoma Millwork Supply Co.

Floor Surfacing: vinyl asbestos—(Tile-Tex) Pioneer-Flintkote.

Interior Finish: gypsum wallboard—(Sheetrock) United States Gypsum Co.

Ceilings: mineral acoustical board—Celotex Corp.

Lighting: fluorescent fixtures—Smoot-Holman Co.

Heating: high velocity double-duct air conditioning; controls—Johnson Service Co.

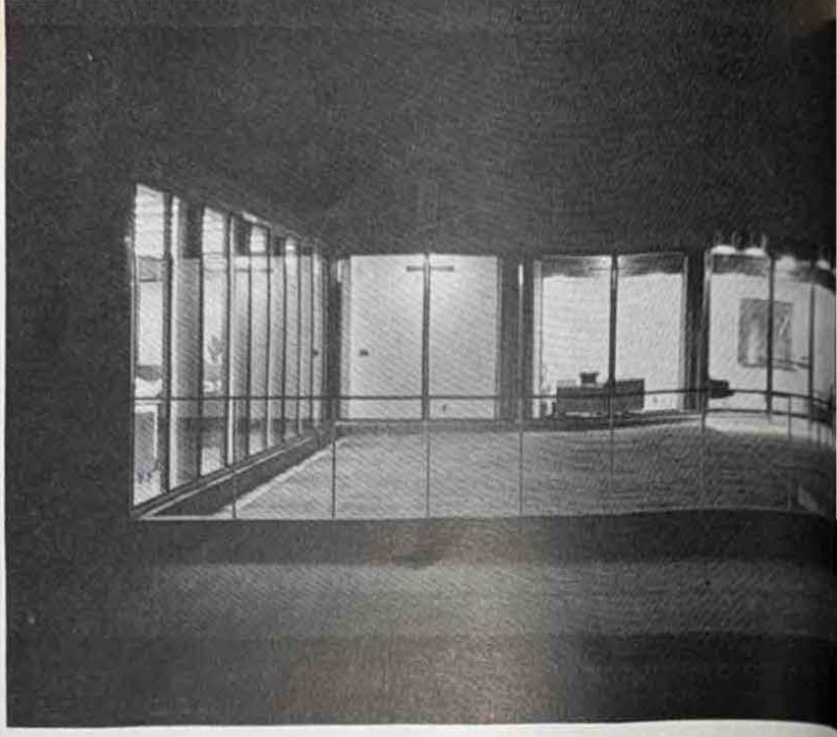
Plumbing: fixtures—Kohler Co.

Total Area: 128,000 sq. ft.

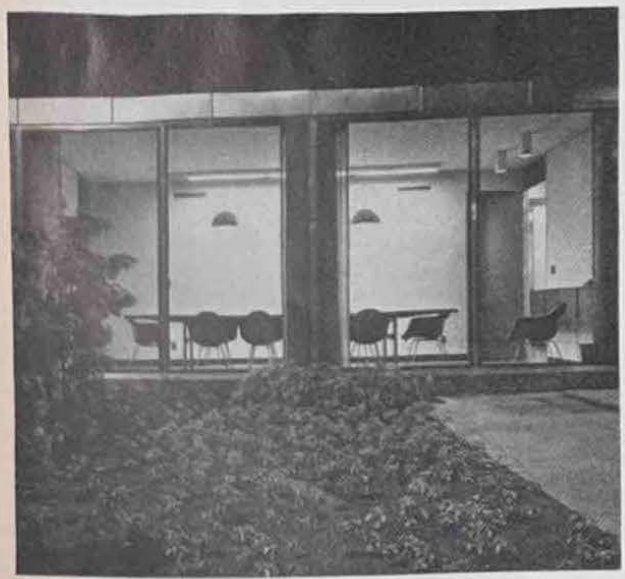
Total Cost: $1,415,000.

Cost per Square Foot: $11.05.

Date of Completion: January 1961.



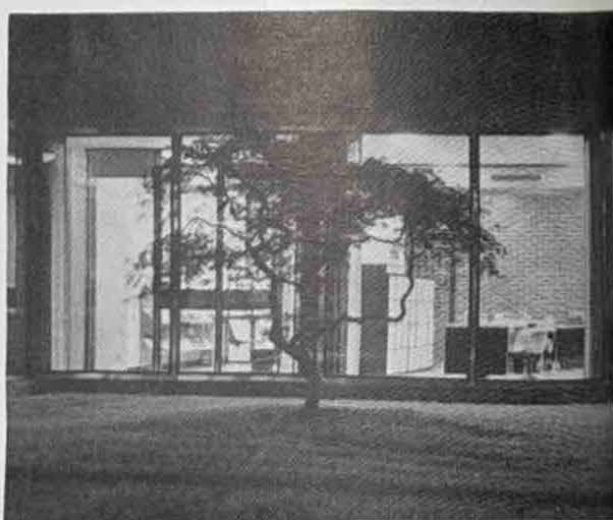
The corporate im



Delicate detailing of stainless steel, used as fascia and to sheathe steel columns is particularly evident in night views from north courtyard (above) and right wing (right).

ABSENCE OF CORRIDORS is a key element in the plan for this 5,000-sq. ft. sales office fronting a 20,000-sq. ft. warehouse for a diversified steel company. The space is divided into two separate departments sharing a general use area and headed by a single sales manager.

The site is adjacent to the main plant which is located in a "nuisance" industrial district and borders a deteriorated residential neighborhood. The poor outlook in all directions plus the functional considerations were the prime generators in the design of the structure. Dark brick was used because of the soot problem; stainless steel, a major sales item, covers fascia and structural steel columns forming glass mullions. The glass is set with neoprene gaskets.



ESCO CORP. SALES OFFICE BUILDING, Portland/*Wolff & Zimmer*, architects/*Henry M. Mason Co.*, general contractor.

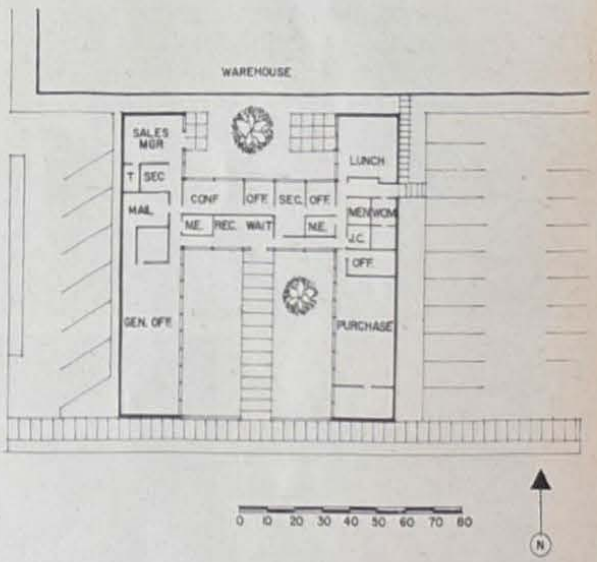


egrating a major line

The warehouse construction was determined by cost analysis.

Said the jury in presenting the building with an Honor Award on behalf of the Oregon Chapter, AIA: "Clarity and proportion are joined with a superb combination of colors and a restrained, highly effective use of materials. A custom integration of product is but one successful factor noted in this difficult building situation. In a relatively small space, long vistas, a charming interior garden and other pleasing aspects provide, in one office building, a sense of flow, intimacy and personal space."

John H. Bonebrake was mechanical engineer; Grant Kelley & Associates, electrical engineers.





OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: light steel; roof: steel decking—H. H. Robertson Co.; floors: on-grade concrete.

Exterior Finish: cavity brick.

Roof Surfacing: built-up with dolomite.

Windows: custom - fabricated; stainless steel—Atlas Sheet Metal Co.

Doors: exterior: sliding glass—Michel & Pfeffer Iron Works, Inc.; interior: hollow core wood.

Floor Surfacing: rubber tile—(Amtico) American Biltrite Rubber Co.

Interior Finish: gypsum wallboard on metal studs—(Sheetrock) United States Gypsum Co.

Ceilings: acoustical tile—Celotex Corp.

Lighting: fluorescent fixtures—Lighting Products, Inc.

Heating: low pressure air conditioning, gas fired boiler—Carrier Corp.; controls—Minneapolis-Honeywell Regulator Co.

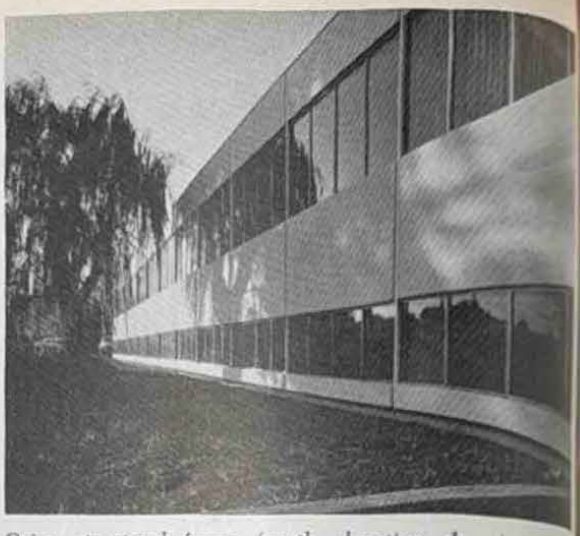
Plumbing: fixtures—Kohler Co.

Total Area: 5,000 sq. ft.

Total Cost: $130,000.

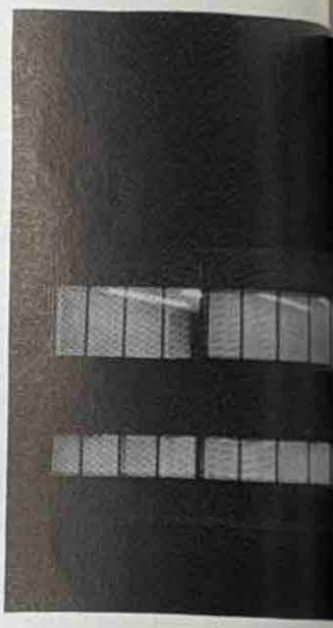
Cost per Square Foot: $26.

Date of Completion: March 1961.



Crisp structural frame (south elevation above) is interrupted by two-story main entrance with its delightful stainless steel and bronze sphere and graphic display to right, executed by Willard K. Martin of architectural staff.





Reception lobby (above) and secretarial area adjoining executive suites (below) suggest careful integration of furnishings, including selection of artwork, as part of total design.



OUTLINE SPECIFICATIONS

Structure: foundation: concrete; frame: light steel with cellular steel floor and roof decking—Inland Steel Products Co.

Exterior Finish: precast aggregate panels (Mo-Sai) Olympian Stone Co.

Roof Surfacing: built-up with dolomite.

Windows: tinted glass in aluminum sash—Marion Butler Co.

Doors: exterior: Marion Butler Co.; interior: hollow core wood — (Roddiscraft) Roddis Plywood Corp.

Floor Surfacing: rubber tile — Armstrong Cork Co.

Interior Finish: plaster on metal studs.

Ceilings: mineral acoustical tile—Wood Conversion Co.

Heating: low pressure steam boiler—(Powermaster) Orr & Sembower, Inc.; high velocity double-duct air conditioning controls—Johnson Service Co.

Plumbing: fixtures—American-Standard.

Total Area: 30,800 sq. ft.

Total Cost: $506,000.

Cost per Square Foot: $16.40.

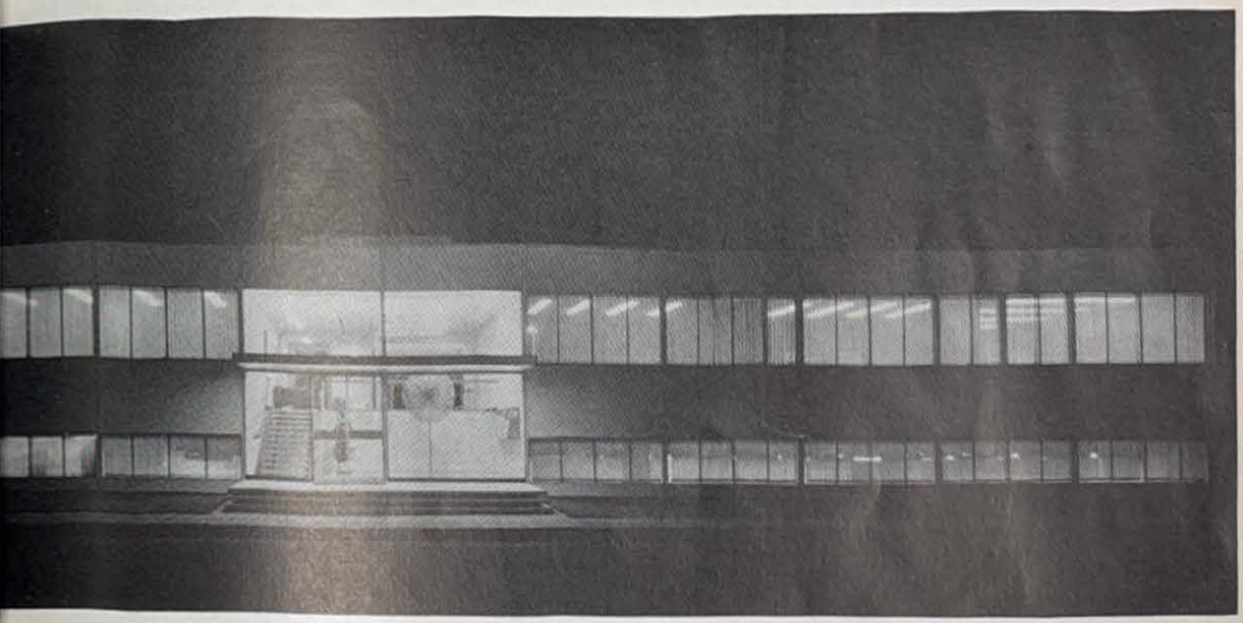
Date of Completion: June 1961.

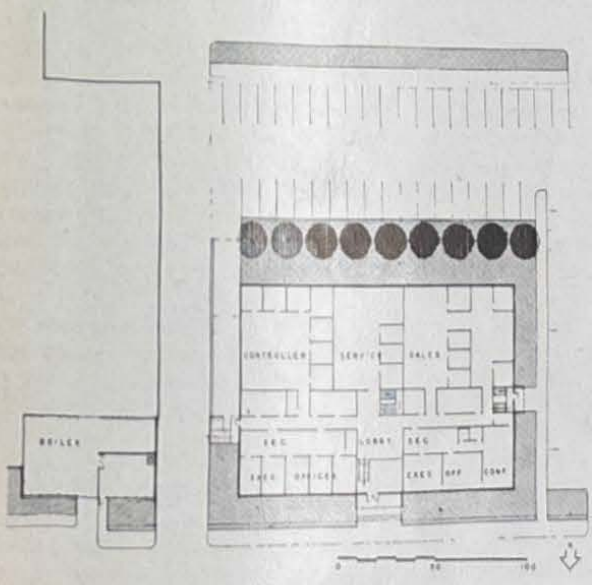
The corporate image: upgrading the visual role

THE PROGRAM here was to design a new office building to set the tone for an overall upgrading of the plant, making it visually consistent with its role as world headquarters for a medium-sized company. This meant provision for quality type offices for executive use in addition to space for accounting, service and sales department staffs.

The building contains 30,800 sq. ft. and provides a luncheon and meeting room on the lower level to accommodate personnel in both the old and new office buildings. An adjacent boiler house, which proudly puts the machinery on display with bold but tasteful colors,

HYSTER CO. CENTRAL OFFICE BUILDING, Portland/*Wolff & Zimmer*, architects/*Howard Brewton Co.*, general contractor.





contains a steam generator that will provide for any anticipated changes or additions in the total office complex as well as the new facility.

What the architects pointed out in the ESCO development plan—these programs are well thought out and equally as well presented in brochure form—was also applied to Hyster, but to a greater degree: "If color alone were discriminately used on all or even parts of the existing plant, it would become overnight a visual asset instead of a liability, a strong and enjoyable symbol of the company to its employees and to its community."

Structure is a simple light steel frame with cellular steel floors for power and signal distribution. Exterior walls are self-supporting precast aggregate panels with anodized aluminum sash and tinted glass. All areas are air conditioned. Thomas E. Taylor was mechanical engineer; Grant Kelley & Associates, electrical engineers.

Excerpts from the jury critique presented at the 1962 convention of the American Association of School Administrators in Atlantic C

Seven western citations:

school building architectural exhibit

THE 275 ENTRIES chosen for the final exhibit,* representing every general section of the country, clearly suggest that new school buildings are better equipped and more functional than they were a few years ago. They are more open and fluid. Almost delicate touches of human interest have been added.

The feelings of children of all ages, of teachers and of parents and other citizens of the community have been taken into consideration to a greater degree than in past years. The intricate processes of teaching and learning and the safety and well-being of children have clearly been basic points of departure in planning the great majority of school buildings entered in this exhibit.

Educational specifications for many of the projects have been carefully thought through and well drawn. Study corrals, small conference rooms and instructional spaces of varying sizes add degrees of flexibility. The provisions made for teachers' work spaces and for getting the ever-increasing amount of materials and equipment in the hands of the pupils and teachers when needed; the use of classroom furniture, fixtures and equipment scaled to the ages and needs of pupils; the approaches to relieving crowding and congestion that are always problems in large schools; and the attention given to the function of administrative control are but a few of the indications of improvements in planning and construction.

Imaginative yet cautious younger designers coming into the school building architectural field are bringing fresh, vital and stimulating influences as they create intimate, livable, inviting atmospheres. Many outstanding schools are coming from areas of the country from which previously no schools had been entered in the exhibit. There is substantial evidence that forward-looking educational concepts are spreading from one part of the country to another and that architects are responding to the challenges they carry.

While marked improvements in educational planning are being made, in many instances educational specifications are too far in the background. The character of the educational program is not clearly discernible.

Window space, particularly in recent years, has been used to good advantage in creating a free homelike atmosphere. As the use of glass diminishes, some other means must be found to achieve this purpose. In some instances architects have made commendable effort to solve this problem through imaginative use of materials and furnishings, together with features of the design that suggest broader vistas, that are scaled to human interests and adapted to psychological needs.

There are many buildings in the exhibit with inside rooms—inside rooms in which a child may spend as much as a half day or perhaps all day. The questions must be asked: Does excluding him from an outside view become difficult and tiring for him? Are designers sacrificing the physical and emotional well-being of a child for a mechanical advantage? There are good examples in this exhibit of imaginative and creative efforts to make interior classroom spaces inviting and attractive. More designing of this type is needed as the number of interior classrooms increase.

Effort to provide complete air conditioning at the lowest possible cost has been a fundamental consideration in planning many school buildings. Air conditioning, badly as it is needed in most localities, should not take precedence over the instructional program in shaping the design and character of the building. It is but a mechanical device comparable to heating and plumbing equipment.

With changes in the instructional program architects are searching for new ideas in the use of space. The rectangular classroom may be becoming outmoded. Movable partitions are more prevalent, but they bring with them some new and difficult problems to the teacher, the administrator and the architect. If they are to be successfully used, they must be economical and easy to operate and they must serve a useful purpose. Some folding partitions are placed in positions where they have little chance to be effective because the total design does not meet the commitment to the educational program envisioned.

Educational television has become an accepted fact as a physical property. But its real success depends on h it is used. Putting in cable without clear conception of the use of tel sion in instruction strongly suggests need for further study of this probl Unless educators continue to do cr tive thinking about its use and prob with research into its possibilities may become a one-way street that le to nowhere.

There are a number of buildings the exhibit that are being constructe as parts of redevelopment programs congested slum areas of big cit These buildings are bright spots to chi dren living in undesirable neighbo hoods. More buildings of this kind a needed and more money spent on the could be well justified. Even in the be of these plants, too little attention h been given to the fine arts; to the pr vision of trees, plants and grassy place and to outdoor play spaces.

The cost of the mechanical contrac for heating, plumbing, ventilating a the use of electrical power is rapid rising. There was a time not long a when 22 to 25% of the school buildi budget went to mechanical contrac Now it is 40% and in some instanc even higher. Every mechanical devi that is added to the school plant brin with it the potential problem at an i opportune moment. One of the bigge complaints about school buildin comes from breakdowns of mechanic equipment.

School buildings are becoming safe Single-story construction contributes t this end. As buildings become mo open, it is easier for the occupants t become aware of fires in time to evac uate without panic or loss of life and t give a better chance to extinguish the before serious property damage occur

The junior high school is perhaps th weakest link in school plant planning At this school age there is great differ ence in the degree of maturity. Junio high school pupils are in the transito stage from children to adults. There is noticeable lack of stability about them They are reaching, groping and strivi to find themselves in an adult worl that they do not understand. Their pur poses fluctuate from day to day an their emotions are bubbling almost t the overflowing point. Shaping an edu cational program and constructin school plant facilities that are tuned t these needs and that can meet them i an appropriate manner is one of th most challenging problems in the whol field of school plant planning.

*Twenty-seven citations were made in all by a jury consisting of Arnold C. Tjomsland, Washington State University, Pullman; architects Edwin B. Cromwell, Little Rock, Ark.; Samuel E. Homsey, Wilmington, Del.; and Fritz von Grossmann, Milwaukee; and Edward J. Anderson and Herbert W. Schooling, superintendent of schools for Wayland, Mass., and Webster Grove, Mo., respectively.



JY Studio photos

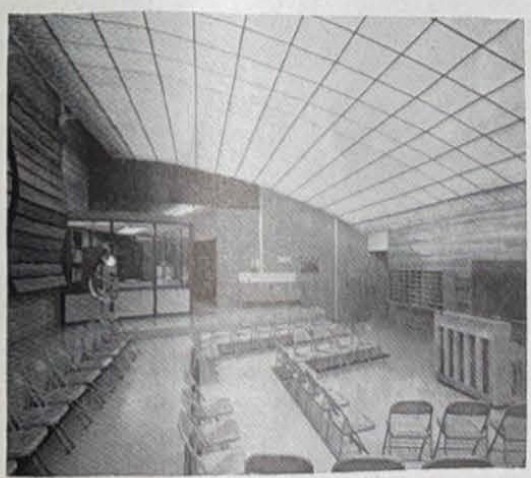


L. F. JOY ELEMENTARY SCHOOL, Fairbanks/*Alaska Architectural & Engineering Co.*, architects-engineers.

"An excellent adaptation of a building plan to climatic conditions prevailing on the edge of the Arctic Circle. Color used to good advantage in brightening and adding a touch of warmth in a harsh cold climate. Good instructional space. Architectural details handled with restraint and good taste. The wood rib dome roof construction and modern igloo design are notable features of this pleasing school building."

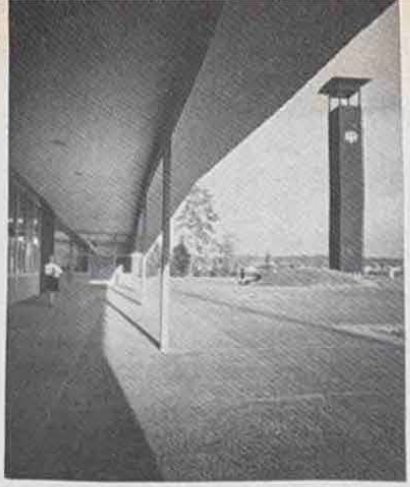
PACIFIC JUNIOR HIGH SCHOOL, Seattle/*Steinhart, Theriault & Anderson*, architects.

"Well-organized compact plan with open feeling and ease of circulation. Good adaptation to site. Centrally located administrative unit separates the quiet study areas from the active noisier areas. Close cooperation between teaching staff and the architect reflected in the plan."





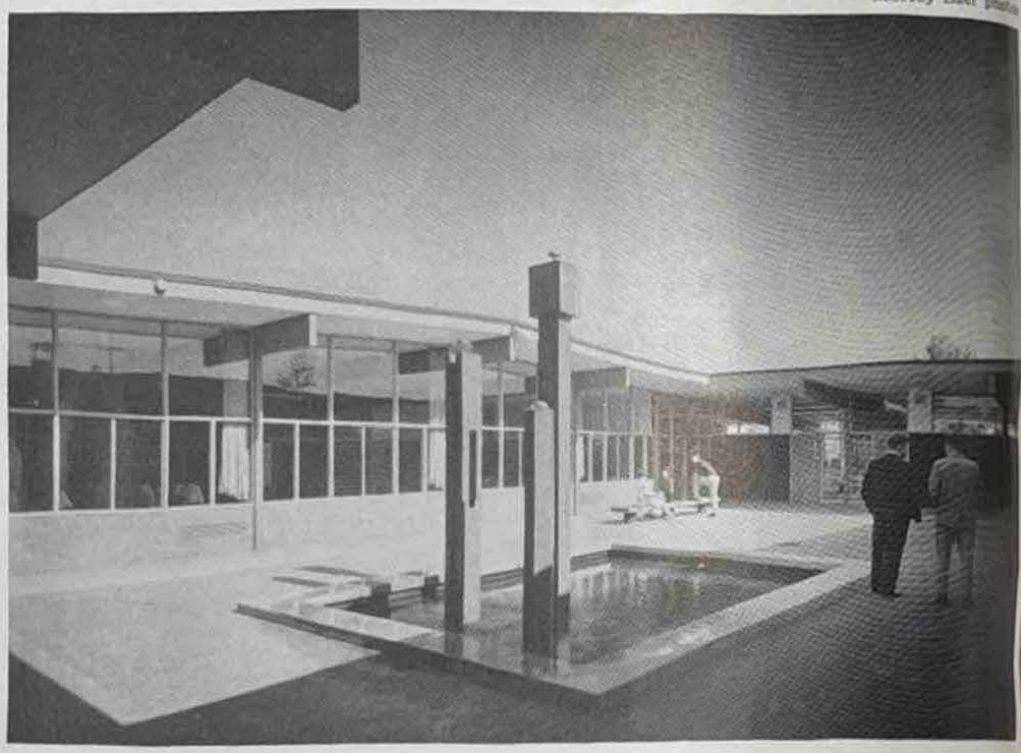
Hugh N. Stratford photos



MOUNT TAHOMA HIGH SCHOOL, Tacoma/*Robert Billsbrough Price*, architect.

"A large high school plant with a distinctive quality of intimacy and informality. Through the design, use of space, relationships between the different units and orientation to the site, the architect has caught and reflected the spirit of high school youth. Staple materials used with rare skill and discrimination. The carefully planned educational program is reflected in the use and orientation of space. An excellent facility for teaching and learning."

Morley Baer photo







ASHLEY ELEMENTARY SCHOOL, Vernal, Utah/*Edwards & Daniels*, architects.

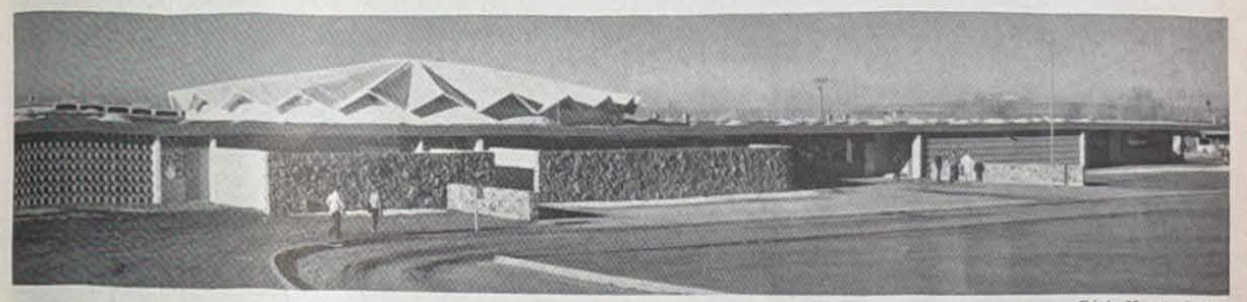
"Sensitive handling of details throughout the entire building in crisp clean-cut architecture. Daylighting of classrooms through recessed windows is a feature well adapted to the control of sun glare. Modest use of glass areas increases wall space available for instructional purposes. Growing plants in the window laboratories add pleasing touches to the learning environment."

SKYLINE HIGH SCHOOL, Salt Lake City/*Dean L. Gustavson & Associates*, architects.

"Architectural excellence reflected in a large high school plant. Good grouping of instructional areas. Organization that provides for effective use of space. Delightful school in a splendid setting."







Dick Kent photos

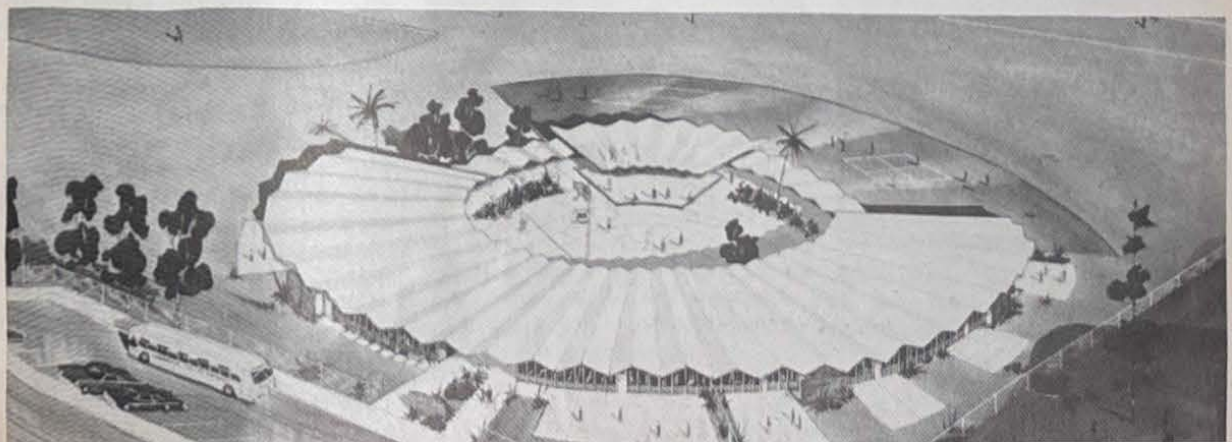
GRANT JUNIOR HIGH - LOS ALTOS ELEMENTARY SCHOOL, Albuquerque/*Flatow-Moore-Bryan & Fairburn*, architects.

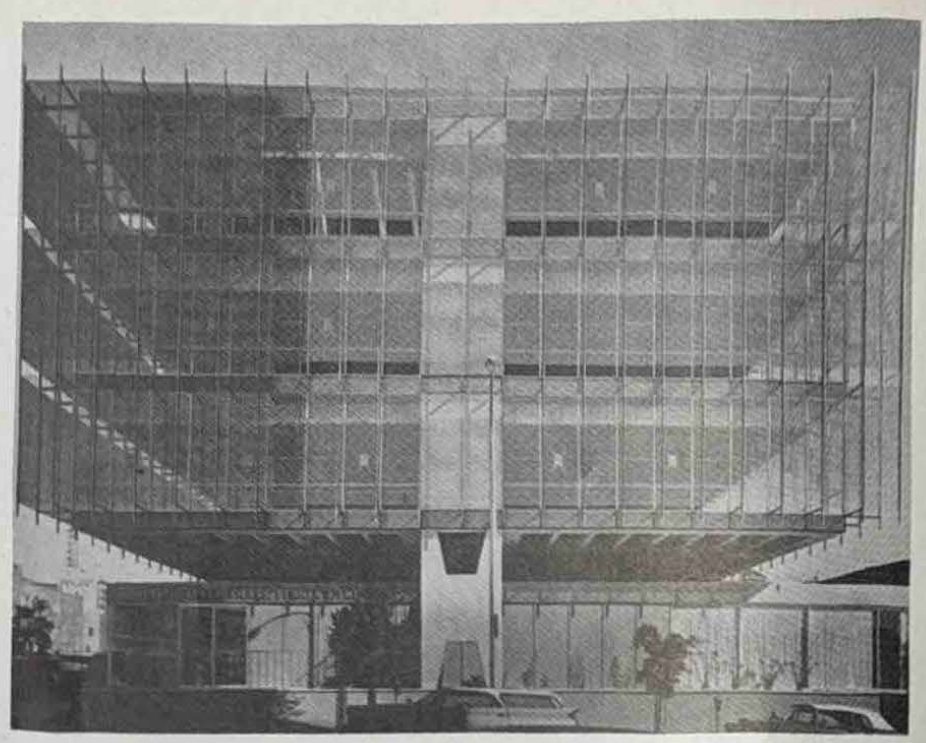
"A flexible compact plant adapted to climatic conditions with effective use of shading devices and restrained use of glass. Pleasing variety in the environment accomplished by use of different materials and exposure treatments. Skylighted corridor alcoves designed as teaching spaces. Well-located general purpose room and library."



JONAS E. SALK SCHOOL, Lawndale, Calif./*Carmichael-Kemp*, architects.

"The attention given in the initial planning stages of this building to the psychological needs of pupils and teachers and the character of the instructional program is commendable. The provisions made for traffic control, the use of color and the indoor-outdoor instructional areas are combined in a delightful environment for small children and an excellent teaching facility."

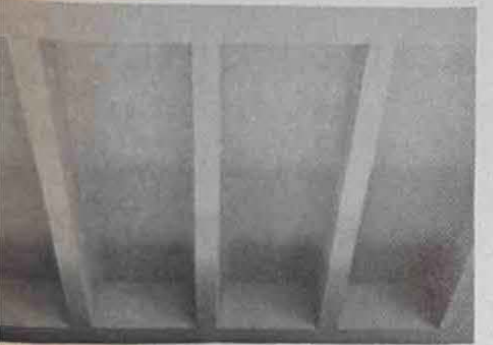




Award of Honor winner in 1962 design program of San Diego Chapter, AIA, Crabtree Building has all-concrete frame, nonload-bearing exterior walls and aluminum sun screen.



Pans are installed by dropping them into place from top side. Distance from face ridge of center brace to that of end brace is measured and filler is cut to size. Pan skirts are nailed to joist bottom with 8d. nails at 5-in. centers.



Smooth lines and surface produced by Presd-Pan are shown as exposed to street view in unretouched photograph.

Post-tensioned concrete office building initiates wide pan installation

GREATER FLEXIBILITY in the design of monolithic concrete structures can be attained with a resilient hardboard pan form coated with waterproof plastic that has had its successful introduction on a four-story office building in downtown San Diego.

Architects Deems-Martin & Associates, structural engineers Harry Deardorf & Associates and Trepte Construction Co. teamed up to produce the West Coast's first concrete cast-in-place building that has been post-tensioned. The 80-ft. square slab is supported by four columns.

Offering a 48-ft. clear span, the new 40-in. wide Presd-Pan of Masonite Corp. was utilized on this job. The pans were the first ones deeper than 15 in., being 19 in. for the joist plus 4 1/2 in. for the top slab. The construction omitted any drop beams, leaving the bottoms perfectly flush.

Comments Ward W. Deems: "We have found that the smooth quality of the pan surface lent itself to maintaining the exposed construction details."

Because of the unique design of this structure, no columns are within 16 ft. of the outside wall, which is a co tinuous window. The space in a 6,40 sq. ft. floor allowed maximum use the area and brought higher rent th conventional space cluttered wi columns.

While the entire cost of forms ge erally is amortized on one job, Pres Pan is guaranteed for six uses. Stock cost is reduced to a minimum. Sin pans can be removed as soon as th concrete is set, in 24 to 36 hours, wit out disturbing the shoring, fewer pa are needed and they are tied up f shorter periods.

Designwise, the pans offer these ad vantages: fewer columns allow greate flexibility of office partition plan; a "architectural concrete" surface is gua anteed on all pan jobs, making it suit able for exposed work; all panels ar butted for a continuous straight lin 40-in. panels are the most economica in all spans from a labor, concrete an steel material standpoint.

Among construction advantages forms are light weight (30x14-in. pa weighs 13 lb.), require no form oil and will not dent.

Analysis of aluminum warped space frame component

by JON H. STARNES

SPACE FRAME STRUCTURES became a matter of special interest in connection with a classroom problem of spanning a large area for a furniture factory. In doing the problem the question of how to support space frames became an intriguing one.

After closer examination of this type of structure, it became clear that the problem was not so much in the support itself, but with the elaborate and complex jointage methods of existing space frames. These slow erection time and they are expensive. Esthetic values are limited too in that the element must be of a planar composition; and when spanning a large area the depth of the structure seemed excessive.

Since aluminum lends itself to many of the requirements of space frames, this appeared to be a suitable field for study in connection with the Reynolds competition. The first step taken was a review of several "continuous" methods of construction which were conceived by a development team of faculty members several years ago and which are now being investigated by the Architectural Process Research Laboratory at Balcones Research Center, University of Texas.

Using this information as a starting point, I made extensive additional studies and solved the problem of the elaborate jointage system found in conventional space frames. The solution lay in a continuous member with a stitch joint. The joints could be stressed by warping the whole structure.

To further develop this theory, a model 36 in. square was constructed. Then wire was placed in tension along the diagonals of the structure to produce the warpage.

The next step was to develop the shape of the member and type of stitch joint. It was desirable to use a standard aluminum structural shape to keep the cost down by not having to produce a special shape. This required a rigid shape, but one that would be flat at the joint and keep the thickness at a minimum. The answer was the T-shape. The stem of the T would make the member rigid and could be cut off at the joint so there would be room for the bolt or rivet. This would make it possible for the continuous member to be bent and still stay within the limits of the minimum bending radii for aluminum. The stem would also help in the problems of roofing and the placing of panels on the underside of the structure.

The roofing solution required a material that could be translucent, if necessary, for solar heat gain or be opaque. The answer was fiberglass, making it possible to use the cables only as an instrument in producing the warpage. After warpage, the fiberglass could be bonded to the structure to absorb the forces and secure the space frame permanently to the desired curvature.

After development of all the elements that make the space frame, the spatial qualities of the space frame were considered. A complete study was made on how this building component could be used in conjunction with other units, including drawings of combinations that were basic and practical. The drawings did not fully evaluate the various spatial relationships of the units; therefore, models were constructed and photographed to study and express the various relationships involved.

The result of the study is the final design described as the "aluminum warped space frame component."

The function of this building component is as a structural unit which the architect or engineer can use in various spatial relationships to fit the need of their design. It is constructed of continuous members with stitch jointage. The members are aluminum T-sections. The stem of the T gives the members stiffness and enables roofing to bond to the structure, but is removed at the joints so a minimum depth can be obtained and the diagonal members can be bent.

Cables with turnbuckles are placed along the upper part (inside) of the space frame on one diagonal, on the lower part (inside) of the other diagonal. The structure is jacked up at the two corners of the diagonal where the cables are located in the upper part. Weight is applied to the top of the other two corners; at the same time the turnbuckles are tightened. This warps the structure and the skin roofing is applied to secure the warpage.

Because of the continuous members and stitch jointage, the joint itself is not stressed, as in space frames with single members and complex jointage. In warping, the space frame places stress in the stitch joint; this is why the structure will warp so easily.

Since in most space frames dead load constitutes the largest part of the load, aluminum was used because of its high strength-to-weight ratio. This leads to lighter foundations and reduced time and cost of installation and erection.



Jon H. Starnes (center) of University of Texas points out features of model of his "warped space frame component" which won $5,000 Reynolds Aluminum Prize for Architectural Students. Reviewing design are Philip D. Creer (left), director of School of Architecture, and R. Gomel Roessner, chairman of school's design committee.

"The winning design clearly stands out because of its diversity of application within the large-scale space frame concept now under constant study. Aluminum is well presented for its lightness and structural feasibility in warped surfaces and other complex forms. The intriguingly difficult jointing problem in space frame design has been reduced to a very simple fabrication. With a minimum number of elements the designer has solved a particularly difficult joint problem, utilizing uniform members throughout to create a space frame which permits assembly into diversified forms." —*Jury comment*

calking compound

Even women's metal-capped high heels will not penetrate Sta-Crete #201. The new formulation is recommended for high traffic areas and can be totally immersed in liquids. It is manufactured without plasticizers and has a non-flow consistency without solvents for minimum shrinkage and short tack life.—Sta-Crete, Inc., 115 New Montgomery St., San Francisco 5, Calif. (No. 1)

versatile vermiculite

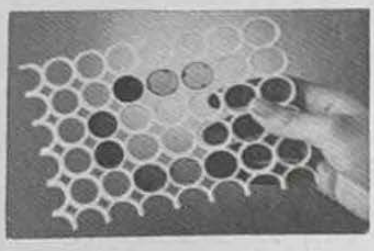
Textured appearance in thick or thin coats is possible with Whisper, a vermiculite formulation for acoustical ceilings. A thin coat of the material gives a deep-piled appearance, while a ½-in. coat produces a true, acoustical finish. When used for texturing, Whisper will cover 35 to 45 sq. yd. per sack; as a ½-in. coat, it covers 6 sq. yd., with a 0.55 NCR rating.—Labahrite Co., 1631 W. Lincoln, Anaheim, Calif. (No. 2)

wood folding partition

Available in American walnut, ash, birch, oak, pine and Philippine mahogany, the Pella Wood Folding Partition is designed for installations requiring a substantial closure or divider to meet the demands of hard use. Partition is available in heights up to 20 ft. and in widths to 50 ft. per single unit. It can be factory finished or ready for finishing on the job. Spring hinging allows the partition to be installed in sections.—Rolscreen Co., Pella, Iowa. (No. 3)

luminous ceiling inserts

Highlights or solid-color areas of Snapin' plastic inserts introduce sparkle in suspended luminous ceilings. The translucent ⅞-in. discs snap into a circular patterned Infinilite grillwork to create the effect of a three-dimensional color design. Ten colors



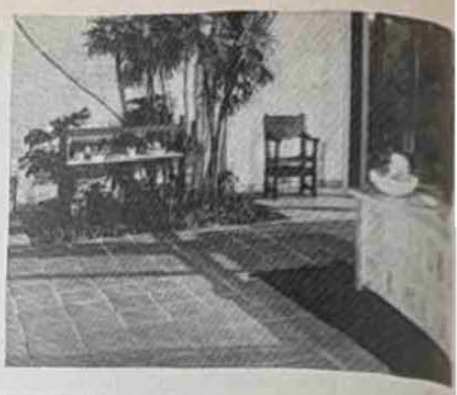
available lend themselves to assembling into imaginative design elements as well as symbols and company trademarks.—Integrated Ceilings & Grilleworks, Inc., 11766 W. Pico Blvd., Los Angeles 64, Calif. (No. 4)

multiple bubbler

Three bubblers are provided in a stainless steel wall drinking fountain by Haws. Each one features push-button slow-closing valves which are exceptionally vandal-proof, with nothing to grab, twist or pry. They cannot be jammed open. Fountain heads are designed in cast brass, hard anodized to a muted bronze color. Lower apron of electroplated steel with paint-grip finish may be painted to match surrounding decor. — Haws Drinking Faucet Co., 1441 Fourth St., Berkeley 10, Calif. (No. 5)

chemical bond breaker

By applying a thin coating of Debondene to the surfaces of wood, metal or paper forms used in concrete construction, the same forms can be used over and over again—without being cleaned. Unlike oil or waxes, this bond breaker's ingredients react chemically with the lime and alumina in the cement to form a thin, water-resistant chemical barrier between form and concrete. The chemical barrier leaves a smooth, white surface that will take paint or coating cement. — Concrete Tie Anchor Co., 6550 Avalon, Los Angeles, Calif. (No. 6)



hand-made tile

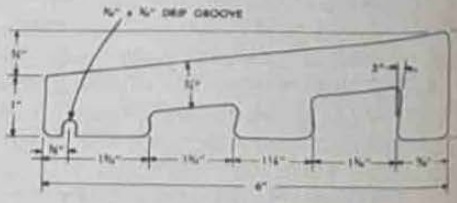
An exact replica of the designs found in early California missions, Western Quarry's latest tile has rounded edges and the same terra cotta color found in the Spanish originals. The modern tile, however, has been fired at 2,000 deg. F. for over 20 hours to insure durability. After firing, a water-repellant sealer is applied to make the tile impervious to weather. Both 11¾ in. squares and 5⅞x11¾-in. rectangles are available.—Western Quarry Tile Co., 2428 Dallas St., Los Angeles 31, Calif. (No.

raincoat-wearing window

Steel windows are now available clad with a vinyl coating for protection against weather and corrosion. Coating also resists the chemical action of typical construction materials which often contact window surfaces during building. It is offered in 1¼-in. steel —Ceco Steel Products Corp., 5601 W. 26th St., Chicago 50, Ill. (No.

extruded window sill

Time-saving installation of exterior sills for school, industrial and other multiwindowed structures is possible with Colorlith Sill Shape. Its special form incorporates a built-in slope that eliminates many of the operations formerly necessary for initial installation. Colorlith is an inorganic mixture of synthetic calcium aluminum silicate binder, reinforced with asbestos fibers, integrally mixed with chemically resistant inorganic pigments and fillers. Sill is produced in any reasonable length desired, allowing installation without joints. Colors are stone gray, cameo brown and sun green.—Johns-Manville, Industrial Insulation Division, 22 E. 40th St., New York 16, N.Y. (No.



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(After July 31 write directly to manufacturer)

1 2 3 4 5 6 7
8 9

Name

Title

Firm

Address

City Zone State

• **Northrop Corp.:** The Hawthorne, Calif., firm has been granted rights to manufacture Compriband, a joint sealant material imported from Holland since 1960, and is now in full-scale production for distribution to U.S. and Canadian markets.

• **Amerada Glass Corp.:** Lawrence T. Rasmussen has been named regional manager for eight western states: California, Oregon, Washington, Arizona, Nevada, New Mexico, Utah and Idaho. A practicing architect for nine years, the Pacific Palisades, Calif., resident formerly was regional manager for R. C. Mahon Co.

• **The Murray Corp.:** W. D. Michael has been appointed regional manager for Eljer Plumbingware Division. He will manage sales affairs in the West Coast and mountain states, headquartering in San Francisco.

• **Garrett Corp.:** The AiResearch Manufacturing Division, Phoenix, has transferred Stanley D. Whitaker to the Los Angeles-based parent firm. Replacing Whitaker as sales manager is Claude C. Kirk, formerly a management assistant. Kirk's position is filled by William G. Orr, management assistant to the vice president.

• **Plywood Service, Inc.:** Wendell L. Garrett has been appointed general sales manager of the new western division which will be located in Los Angeles.

• **Filon Corp.:** Sylvin Z. Perry will supervise special projects in his new position as assistant to the president. He was formerly marketing director.

• **Permacel:** Michael D. Cunningham has been promoted from division sales manager to western regional sales manager with headquarters in Oakland. His former post has been taken over by Ralph W. Riggins.

• **Adhesive Engineering:** The San Carlos, Calif., division of Hiller Aircraft Corp. has appointed James Maciel as technical sales representative, coinciding with the company's efforts to augment its product line.

• **Vermiculite Contractors, Inc.:** L. L. Loper has become president; J. A. Englert, vice president; G. R. MacKay, secretary.

• **Hexcel Products, Inc.:** Thomas P. Muchisky has been named western sales manager for paper products and Richard H. Horning, vice president of marketing. Both will be headquartered in Berkeley.

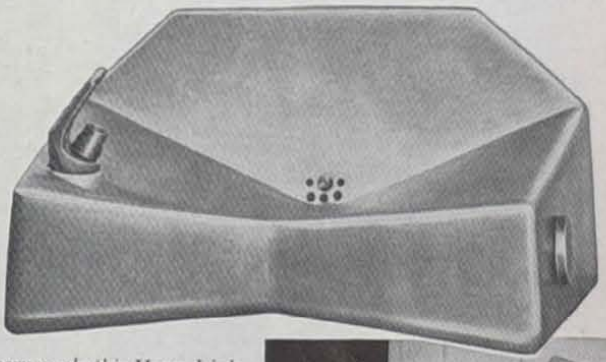
• **Vancouver Plywood Co.:** As steps in Vanply's expansion, two sales managers have been named at the Vancouver, Wash., headquarters: Don Almy, panel division; Virgil Ryland, lumber division. Regional sales manager include Dave Evans, Tom Saathoff and Ted Allen.

ASSOCIATIONS

• **West Coast Lumbermen's Association:** Reelected at the annual meeting held in Portland were: William R. Garnett, Tacoma, president; Nils B. Hult, Junction City, vice president for Oregon; Ben H. Gardner Jr., Seattle, vice president for Washington; Jack Fairhurst, Fortuna, vice president for California; R. W. Middleton, Aberdeen, Wash., treasurer; William Swindells, Portland, secretary; H. V. Simpson, Portland, executive vice president. WCLA has a years-old tradition of retaining officers for a second one-year term.

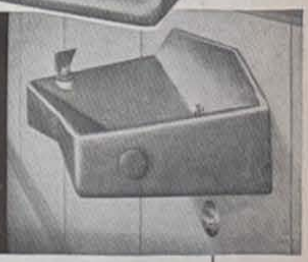
something *different* in

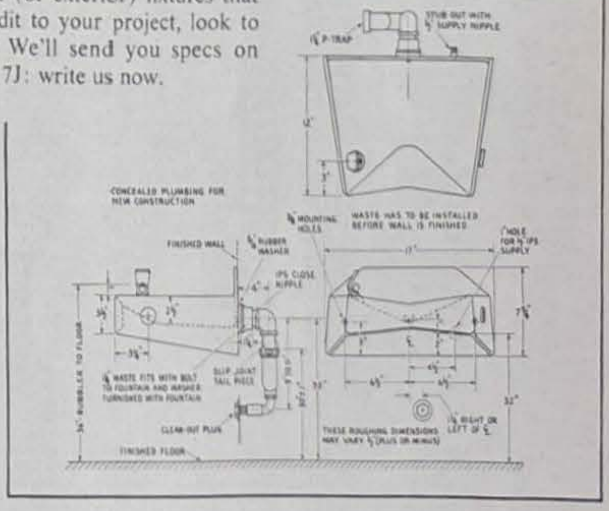
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From every angle this Haws drinking fountain breathes distinction that matches your *own* distinctive ideas. It's cast aluminum, hard anodized to a permanent, abrasion-resistant, muted bronze color—with new push-button valve and sanitary angle stream bubbler. If you desire interior (or exterior) fixtures that do credit to your project, look to Haws! We'll send you specs on Model 7J: write us now.

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Building Permit Totals

First Column Figures in Parentheses are Number of Residential Units • Second Column is D

CALIFORNIA

	# Res.	$ Value	Total $
Alameda	(17)	$ 175,255	$ 546,308
Alameda Co.	(398)	4,299,150	4,589,850
Albany	( )	Nil	66,982
Alhambra	(55)	433,680	789,025
Anaheim	(58)	632,659	4,310,307
Antioch	(2)	20,554	76,603
Arcadia	(45)	607,300	772,007
Arroyo Grnde	(19)	257,377	307,567
Artesia	(4)	45,800	58,300
Atherton	(1)	25,000	171,492
Atwater	( )	Nil	120,400
Auburn	( )	Nil	354,789
Avalon	( )	Nil	Nil
Azusa	(44)	307,000	488,040
Bakersfield	(59)	783,350	2,054,851
Baldwin Park	(66)	582,800	782,050
Banning	(14)	151,477	189,417
Barstow	(2)	8,875	395,965
Bell	(13)	115,000	135,780
Bellflower	(169)	1,773,760	1,970,235
Bell Gardens	(36)	275,800	433,895
Belmont	(12)	236,050	296,335
Benicia	( )	Nil	6,240
Berkeley	(9)	61,300	1,554,140
Beverly Hills	(25)	909,000	1,264,647
Bradbury	( )	Nil	2,342
Brawley	(21)	229,000	731,813
Brea	(5)	101,472	294,300
Buena Park	( )	Nil	1,503,462
Burbank	(29)	364,750	2,529,427
Burlingame	(3)	67,000	947,882
Butte Co.	(143)	1,472,163	1,705,063
Calexico	(3)	29,000	98,332
Campbell	(120)	1,904,900	2,385,440
Carlsbad	(43)	702,620	738,841
Carmel	( )	No Reply	No Reply
Chico	(7)	118,911	829,368
Chino	(19)	172,218	238,440
Chula Vista	(13)	140,032	1,448,265
Claremont	(1)	10,000	76,125
Coalinga	(3)	36,500	38,375
Colton	(5)	49,386	69,100
Commerce	(6)	45,120	515,820
Compton	(9)	160,650	364,429
Concord	(108)	1,407,910	2,497,133
Cntra Csta Co.	(251)	3,742,133	10,961,706
Corona	(3)	66,668	130,658
Coronado	(4)	121,549	142,701
Corte Madera	(9)	144,883	374,203
Costa Mesa	(51)	488,123	1,193,810
Covina	(65)	919,862	1,112,476
Cudahy	(42)	360,000	376,000
Culver City	(1)	32,500	597,881
Dairy Valley	( )	Nil	29,300
Daly City	(39)	550,282	878,163
Davis	(62)	501,000	586,838
Delano	(9)	100,000	126,160
Downey	(47)	453,820	1,036,585
Duarte	(31)	423,000	502,981
El Cajon	(12)	150,300	393,300
El Centro	(2)	41,400	98,895
El Cerrito	(4)	80,015	123,170
El Dorado Co.	(111)	1,226,528	2,192,521
El Monte	(82)	408,881	854,339
El Segundo	(33)	320,000	440,410
Emeryville	( )	Nil	213,300
Escondido	(19)	228,014	477,062
Eureka	(8)	158,780	345,400
Fairfield	(56)	519,554	529,516
Fillmore	(10)	95,960	115,440
Fontana	(19)	203,781	235,818
Fremont	(110)	1,523,600	2,383,285
Fresno	(99)	1,008,196	1,914,832
Fresno Co.	(54)	663,659	1,503,450
Fullerton	(248)	4,514,010	5,371,504
Glendale	(274)	2,838,218	3,335,019
Glendora	(39)	595,098	1,439,428
Half Moon Bay	(54)	418,000	424,600
Hanford	(13)	148,320	213,235
Hawthorne	( )	No Reply	No Reply
Hayward	(33)	226,700	543,230
Hemet	(8)	101,500	210,389
Hermosa Bech	(11)	137,086	168,314
Hidden Hills	(4)	125,000	139,200
Hillsborough	(5)	186,000	270,000
Holtville*	( )		6,000
Humboldt Co.*	( )		640,766
Hntingtn Bech	(719)	10,001,395	10,264,073
Hntingtn Park	(23)	195,000	390,425
Imperial Co.*	( )		44,800
Indio	(11)	53,000	311,435
Industry	( )	Nil	446,995
Inglewood	(10)	128,150	966,985
Irwindale	( )	Nil	800
Kern Co.	(220)	2,513,640	2,924,638
Laguna Beach	(33)	467,000	521,902
La Habra	(10)	105,600	287,456
Lakewood	(6)	160,800	350,800
La Mesa	(31)	394,600	876,567
La Mirada	(10)	121,400	525,345
La Puente	(70)	874,200	927,790
La Verne	(1)	8,500	12,855
Lawndale	(12)	141,800	159,030
Lindsay	(4)	57,050	62,300
Livermore	(64)	618,100	686,689
Lodi	(37)	323,700	471,275
Lompoc	(265)	3,718,079	4,317,617
Long Beach	(236)	1,799,320	4,967,850
Los Altos	(28)	623,000	870,798
Los Angeles	(2,045)	25,039,670	49,922,525
Ls Angeles Co.	(929)	12,101,000	20,886,499
Los Gatos	(55)	863,000	2,240,650
Lynwood	(1)	12,000	344,978
Madera*	( )		370,242
Madera Co.	(16)	125,725	467,575
Mnhattan Bch	(21)	347,845	479,593
Manteca	(12)	125,000	160,688
Marin Co.	(56)	1,004,000	1,349,000
Martinez	(15)	278,188	373,951
Marysville	(46)	421,665	453,373
Maywood	(21)	137,580	157,394
Menlo Park	(15)	255,000	687,076
Merced	(17)	271,082	371,578
Merced Co.	(39)	448,307	464,808
Millbrae	(86)	899,000	985,282
Mill Valley	(10)	198,800	259,380
Modesto	(98)	1,289,000	1,506,307
Monrovia	(54)	477,056	723,932
Montclair	(97)	1,193,755	1,229,950
Montebello	(122)	1,102,693	1,332,336
Monterey	(10)	205,500	530,660
Monterey Co.	(77)	865,230	1,072,560
Monterey Prk	(263)	2,617,300	2,860,650
Mountin View	(209)	1,318,511	2,148,926
Napa	(25)	407,821	693,560
Napa Co.	(27)	495,334	683,221
National City	(2)	18,490	54,898
Newport Bech	(56)	1,105,220	1,507,006
N. Sacramento	(19)	132,022	326,504
Norwalk	(17)	81,000	267,447
Novato	(8)	171,100	211,871
Oakdale	(5)	58,996	77,486
Oakland	(341)	2,772,050	5,048,673
Oceanside	(80)	1,173,000	1,241,810
Ojai	(9)	111,752	146,852
Ontario	(19)	167,621	1,685,711
Orange	(352)	5,926,810	6,555,484
Orange Co.	(390)	8,004,714	9,167,598
Oroville	(5)	65,500	300,362
Oxnard	(82)	641,420	1,092,002
Pacifica	(29)	341,800	413,900
Pacific Grove	(11)	106,300	117,050
Palm Springs	(8)	228,000	902,742
Palo Alto	(32)	419,950	810,784
Pls Vrds Estts	(12)	474,415	510,320
Paramount	(35)	244,400	336,200
Pasadena	(110)	866,590	2,983,994
Paso Robles	(5)	67,430	100,308
Pico Rivera	(8)	120,300	456,675
Piedmont	(2)	100,000	125,125
Pinole	(23)	258,645	274,892
Pittsburg	(6)	85,586	109,416
Placentia	(5)	50,190	109,927
Placer Co.	(45)	594,041	1,162,367
Pleasanton	(10)	158,940	175,590
Pomona	(24)	249,163	1,741,485
Porterville	(7)	85,000	185,271
Port Hueneme	(7)	41,500	51,100
Red Bluff	(10)	103,090	139,065
Redding	(8)	99,100	521,650
Redlands	(7)	99,700	241,015
Redondo Bech	(47)	465,880	573,964
Redwood City	(112)	815,700	1,162,650
Richmond	(74)	648,792	1,080,244
Riverside	(13)	223,850	2,624,232
Riverside Co.	(203)	2,118,547	3,390,202
Rolling Hills	(1)	42,000	65,450
Rlling Hls Ests	(5)	144,400	296,300
Rosemead	(16)	119,520	175,119
Roseville	(52)	393,936	445,729
Sacramento	(146)	1,512,300	4,453,000
Sacramnto Co.	(806)	8,202,588	11,501,707
St. Helena	(1)	14,680	33,880
Salinas	(76)	753,500	1,044,191
Sn Brnardino*	(64)	1,486,446	2,732,113
S. Brnrdno Co.	(407)	3,770,005	5,076,890
San Bruno	(25)	395,100	
San Carlos	(26)	573,587	
San Clemente	(49)	948,287	
San Diego	(539)	5,569,017	
San Diego Co.	(259)	3,694,500	
San Dimas	(27)	306,700	
San Fernando	(3)	43,800	
San Francisco	(453)	7,607,039	
San Gabriel	(11)	120,102	
Sanger	(12)	134,920	
San Jacinto	( )	Nil	
Sn Joaqin Co.	(39)	515,123	
San Jose	(1,047)	10,531,407	
San Leandro	(22)	331,844	
Sn Luis Obspo	(7)	103,596	
S Ls Obspo Co.	(41)	496,567	
San Marino	(1)	30,000	
San Mateo	(16)	249,000	
San Mateo Co.	(203)	1,573,500	
San Pablo	(64)	453,883	
San Rafael	(133)	1,308,059	
Santa Ana	(180)	1,842,772	
Santa Barbara	(111)	1,103,500	
Snt Brbara Co.	(278)	4,816,600	
Santa Clara	(205)	2,011,350	
Snta Clara Co.	(56)	1,334,939	
Santa Cruz	(41)	422,803	
Santa Cruz Co.	(102)	1,184,023	
Snt Fe Springs	( )	No Reply	
Santa Maria	(46)	357,710	
Santa Monica	(84)	740,685	
Santa Paula	(6)	57,460	
Santa Rosa	(164)	1,477,100	
Sausalito	(1)	40,000	
Seal Beach	(20)	183,403	
Seaside	(9)	78,000	
Selma	(12)	159,300	
Shasta Co.	(51)	683,122	
Sierra Madre	(8)	87,800	
Solano Co.	(8)	112,234	
Sonoma Co.	(144)	1,640,225	
South Gate	(25)	206,450	
So. El Monte	(1)	8,900	
So. Pasadena	(3)	54,213	
S. Sn Frncisco	(5)	56,500	
Stanislaus Co.	(38)	447,780	
Stockton	(78)	1,570,863	
Sunnyvale	(178)	1,985,045	
Temple City	(17)	212,100	
Torrance	(94)	1,127,165	
Tracy	(9)	87,800	
Tulare	(6)	57,793	
Tulare Co.	(51)	354,209	
Turlock	(2)	24,310	
Ukiah	(3)	92,613	
Upland	(90)	1,014,550	
Vacaville	(34)	221,050	
Vallejo	(20)	169,695	
Ventura	(145)	1,202,538	
Ventura Co.	(306)	4,030,721	
Visalia	(29)	458,307	
Walnut	( )	Nil	
Walnut Creek	(125)	1,320,620	
Wasco	( )	No Reply	
Watsonville	(4)	50,000	
West Covina	(31)	685,770	
Whittier	(22)	526,400	
Woodland	(13)	275,570	
Woodside	(4)	136,500	
Yolo Co.	(22)	303,975	
Yreka	(3)	35,000	
Yuba City	(16)	148,300	
Yuba Co.	( )	No Reply	
Total	**(19,337)**	**$233,311,108**	

OREGON

Albany	(8)	$ 88,950	$
Ashland	( )	No Reply	
Astoria	(2)	30,000	
Baker	(1)	7,000	
Beaverton	(14)	253,582	
Bend	(8)	93,500	
Central Point	(9)	86,500	
Clackamas Co.	(41)	629,200	
Coos Bay	(4)	53,800	
Corvallis	(14)	159,000	
Dallas	(4)	53,000	
Douglas Co.	(7)	61,850	
Eugene	(53)	660,560	
Forest Grove	(5)	62,000	
Grants Pass	(5)	41,500	
Gresham	(1)	15,000	
Hermiston	(3)	45,020	

*Complete figures not available

Western States for April

esidential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hillsboro	(21)	220,500	602,692
Hood River	(2)	28,500	32,675
Klamath Falls	(3)	54,000	112,188
La Grande	(1)	14,500	42,000
Lake Oswego	(12)	228,400	501,190
Lane Co.	(136)	1,305,258	2,269,542
Lebanon	(1)	14,000	137,890
Marion Co.	(54)	739,800	1,286,833
McMinnville	(2)	16,000	20,480
Medford	(20)	232,500	465,726
Milln-Freewtr	( )	Nil	6,150
Milwaukie	(29)	632,688	660,188
Multnomh Co.	(93)	1,371,986	1,674,774
Newberg	(6)	48,900	58,163
Newport	(3)	30,000	75,500
North Bend	(2)	23,330	74,297
Ontario	(4)	36,000	40,750
Oregon City	(1)	8,000	18,317
Oswego	( )	No Reply	No Reply
Pendleton	(4)	45,000	118,065
Portland	(387)	4,132,050	6,972,220
Roseburg	(5)	47,549	94,519
St. Helens	(2)	22,000	30,375
Salem	(33)	270,200	611,681
Seaside	(8)	57,000	71,500
Springfield	(12)	191,992	397,456
The Dalles	(1)	18,000	44,000
Washingtn Co.	(64)	1,296,062	1,628,367
Total	**(1,085)**	**$ 13,424,677**	**$ 25,838,445**

WASHINGTON

Aberdeen	(1)	$ 14,440	$ 168,572
Anacortes	(2)	60,000	103,472
Auburn	(32)	328,000	369,700
Bellevue	(13)	263,620	770,170
Bellingham	(3)	41,000	338,253
Bremerton	(23)	167,700	418,665
Camas	(1)	26,000	62,255
Centralia	(2)	19,000	53,530
Chehalis*	( )	Nil	50,737
Clark Co.	(44)	595,800	669,700
Clarkston	( )	Nil	10,080
Edmonds	(48)	681,600	726,515
Ellensburg	(2)	30,500	112,009
Enumclaw	(1)	9,000	10,800
Ephrata	( )	Nil	23,400
Everett	(27)	381,910	1,052,917
Grys Hrbr Co.	(27)	247,940	1,180,350
Hoquiam	(1)	12,000	102,322
Island Co.	(19)	73,300	109,850
Kelso	(5)	55,000	104,350
Kennewick	(8)	128,700	252,355
Kent	(13)	199,067	235,067
King Co.	(761)	10,188,625	12,266,097
Kirkland	(2)	25,000	56,550
Longview	(11)	187,900	356,549
Lynnwood	(8)	91,250	106,365
Mercer Island	(34)	737,770	862,750
Moses Lake	(25)	193,110	788,145
Mntlk Terrace	(54)	543,100	575,167
Olympia	(2)	33,000	448,347
Pasco	(4)	53,000	106,588
Pierce Co.	(204)	1,891,100	2,269,735
Port Angeles	(7)	77,700	117,700
Pullman	(5)	95,975	204,759
Puyallup	(38)	243,000	1,013,564
Renton	(7)	81,300	598,065
Richland	(13)	236,600	485,901
Seattle	(360)	5,389,600	11,252,241
Shelton	(8)	81,000	94,600
Snohomish Co.	( )	No Reply	No Reply
Spokane	(30)	570,050	1,631,224
Spokane Co.	(49)	776,506	983,114
Sunnyside	(1)	15,000	167,049
Tacoma	(57)	765,400	2,393,976
Thurston Co.	(43)	423,500	496,850
Vancouver	(34)	491,050	760,041
Walla Walla	(2)	28,000	354,192
Walla Wlla Co.	(7)	84,450	139,500
Wenatchee	( )	Nil	139,885
Yakima	(17)	233,000	426,404
Total	**(2,055)**	**$ 26,868,563**	**$ 46,020,427**

ALASKA

Anchorage	(41)	$ 776,700	$ 1,326,851
Fairbanks	(1)	22,500	42,800
Juneau	(1)	31,000	107,535
Ketchikan	( )	Nil	4,000
Total	**(43)**	**$ 830,200**	**$ 1,481,186**

	# Res.	$ Value	Total $
IDAHO			
Alameda	(7)	$ 90,000	$ 335,825
Blackfoot	(7)	129,000	154,570
Boise	(14)	206,300	557,559
Burley	(8)	121,500	123,500
Caldwell	(13)	181,900	461,300
Coeur d'Alene	(4)	49,233	616,382
Idaho Falls	(32)	432,542	562,112
Jerome	(3)	28,000	33,550
Lewiston	(4)	95,500	134,112
Moscow	(6)	86,000	124,114
Nampa	(9)	97,000	139,895
Payette	(2)	28,900	31,500
Pocatello	(9)	148,500	237,015
Sandpoint*	( )		21,500
St. Maries	( )	Nil	Nil
Twin Falls	(8)	81,000	147,900
Total	**(126)**	**$ 1,775,375**	**$ 3,680,834**
MONTANA			
Anaconda	( )	$ Nil	$ Nil
Billings	(43)	710,100	882,070
Bozeman	( )	Nil	169,269
Butte	( )	Nil	7,400
Cut Bank	( )	Nil	7,500
Glasgow	(3)	35,000	49,900
Glendive	(2)	20,450	103,880
Great Falls	(53)	513,957	766,673
Havre	(2)	7,858	151,230
Helena	(11)	170,500	248,944
Kalispell	(1)	12,000	50,050
Lewistown	(7)	58,500	104,500
Livingston	( )	Nil	8,190
Malta	( )	Nil	Nil
Miles City	( )	No Reply	No Reply
Missoula	(7)	85,000	206,862
Total	**(129)**	**$ 1,813,365**	**$ 2,756,468**
WYOMING			
Casper	(28)	$ 432,000	$ 880,653
Cheyenne	(114)	1,587,200	3,114,296
Cody*	( )		104,850
Laramie	(13)	169,100	217,601
Rawlins	(5)	31,300	46,110
Riverton	(8)	84,000	116,300
Rock Springs	( )	Nil	31,000
Sheridan	(6)	165,500	204,737
Total	**(174)**	**$ 2,469,100**	**$ 4,715,547**
COLORADO			
Adams Co.	(313)	$ 3,995,500	$ 4,755,705
Alamosa	(5)	70,400	80,822
Arapahoe Co.	( )	No Reply	No Reply
Arvada	(104)	1,251,000	1,802,683
Aspen	( )	Nil	10,500
Aurora	(61)	946,100	2,060,837
Boulder	(46)	519,200	698,476
Boulder Co.	(28)	282,113	382,308
Colrdo Sprngs	(113)	1,457,020	2,711,291
Cortez	(1)	5,000	47,950
Denver	(250)	2,811,517	16,331,770
Durango	(3)	40,107	72,652
El Paso Co.	(110)	1,335,500	1,470,851
Englewood	(5)	73,500	1,677,812
Estes Park	(2)	27,000	30,250
Fort Collins	(30)	321,000	438,484
Fort Morgan	(5)	48,528	58,308
Golden	(8)	134,340	137,440
Grnd Junction	(1)	10,000	50,720
Greeley	(18)	206,150	443,751
Jefferson Co.	(317)	3,617,669	5,319,502
La Junta	(1)	10,000	70,598
Lamar	( )	No Reply	No Reply
Littleton	(14)	240,440	963,140
Longmont	(25)	264,500	426,223
Loveland	(14)	158,500	774,750
Monte Vista	( )	No Reply	No Reply
Montrose	(2)	35,300	97,256
Pitkin Co.	(1)	32,000	103,500
Pueblo	(23)	276,652	665,915
Pueblo Co.	(11)	45,000	77,800
Sterling	(1)	10,000	14,450
Trinidad	(1)	10,550	32,532
Walsenburg	( )	Nil	2,765
Westminster	(23)	205,472	335,971
Total	**(1,536)**	**$ 18,440,258**	**$ 42,147,012**

	# Res.	$ Value	Total $
UTAH			
American Frk	(1)	$ 8,500	$ 12,150
Bountiful	(24)	373,900	430,500
Brigham City	(44)	440,900	1,234,863
Cedar City	(3)	62,500	69,100
Clearfield	(3)	70,000	208,900
Davis Co.	(14)	210,307	227,991
Kaysville	(10)	71,305	77,205
Layton	(34)	453,000	526,025
Logan	(23)	302,579	343,379
Murray	(25)	308,000	367,974
Ogden	(13)	325,926	583,326
Orem	(15)	176,260	395,251
Price*	( )		73,000
Provo	(23)	222,000	1,130,300
Salt Lake City	(140)	950,294	2,350,423
Salt Lake Co.	(325)	3,901,620	4,428,957
S. Slt Lke City	(2)	39,000	272,250
Spanish Fork	(2)	19,000	25,550
Tooele	(24)	299,450	341,529
Utah Co.	(8)	105,920	165,700
Weber Co.	(13)	148,000	154,000
Total	**(746)**	**$ 8,488,461**	**$ 13,418,373**
NEVADA			
Boulder City	(1)	$ 20,229	$ 28,973
Clark Co.	(202)	3,231,490	7,542,567
Elko	(1)	16,300	30,260
Las Vegas	(883)	8,368,344	10,738,917
N. Las Vegas	(82)	879,604	964,856
Reno	(59)	544,690	912,855
Sparks	(141)	1,723,100	1,875,336
Washoe Co.	(24)	375,530	785,488
Total	**(1,393)**	**$ 15,159,287**	**$ 22,879,252**
ARIZONA			
Buckeye	(2)	$ 18,000	$ 23,190
Casa Grande	( )	Nil	5,500
Chandler	(15)	141,000	160,500
Douglas	(1)	3,000	69,058
Flagstaff	(50)	91,544	289,310
Florence	(2)	5,000	5,000
Glendale	(73)	403,000	455,747
Maricopa Co.	(161)	1,622,423	1,836,100
Mesa	(107)	651,989	1,776,680
Phoenix	(984)	9,434,691	12,833,199
Pima Co.	(233)	2,300,310	2,607,469
Prescott	(4)	48,400	124,450
Scottsdale	(13)	166,600	3,224,701
Tempe	(153)	1,430,776	1,551,650
Tucson	(353)	3,013,814	4,181,418
Wickenburg	( )	Nil	1,450
Winslow	(4)	48,500	63,850
Yuma	(6)	30,000	75,955
Total	**(2,161)**	**$ 19,409,047**	**$ 29,285,227**
NEW MEXICO			
Alamogordo	( )	Nil	$ 117,260
Albuquerque	(132)	1,978,524	2,893,489
Artesia	(3)	29,000	237,296
Carlsbad	(16)	188,000	342,070
Clovis	(18)	195,851	438,282
Deming	(9)	64,300	70,000
Farmington	( )	No Reply	No Reply
Gallup	(2)	26,396	238,946
Hobbs	(16)	214,385	254,693
Las Cruces	(10)	105,500	202,250
Las Vegas	(1)	31,000	44,800
Lovington	(4)	34,400	36,010
Raton	(1)	6,000	8,000
Roswell	(66)	665,000	1,201,530
Santa Fe	(24)	188,400	391,646
Silver City	(3)	59,700	85,750
Truth Or Consequences	( )	No Reply	No Reply
Tucumcari	(4)	39,000	312,925
Tularosa	( )	Nil	9,408
Total	**(309)**	**$ 3,825,456**	**$ 6,884,355**
HAWAII			
Hawaii Co.	(51)	$ 841,334	$ 1,121,770
Honolulu	(1,856)	23,037,875	30,599,747
Maui Co.	(25)	261,616	645,620
Total	**(1,932)**	**$ 24,140,825**	**$ 32,367,137**
GRAND TOTAL	**(31,026)**	**$369,755,722**	**$614,822,112**

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In our continuation of the subject of commitments, would like to consider three points which we feel h a bearing on a more equitable and more practical proach to the matter. Let's begin on the positive by citing a practice we applaud.

1. The established publication date is becoming creasingly popular in the case of particularly signific or newsworthy projects. Under a gentleman's agreem media of the same category honor a date specified by client or the architect (but generally the former). T approach, for example is being employed by the U Air Force Academy relative to the interiors of the chap whose dedication is scheduled for July 27. In this instan monthly magazines such as Architecture/West are quested to hold material for their August issues, while other media are asked to hold for issues that hit newsstands on or after July 22.

Generally speaking, when the release date is us a press kit with complete photographic coverage is ma available to all interested parties, but the client coop ates with an individual publication in developing speci angles or photographs. We believe this is a sound w to handle really important buildings—those structur which every editor knows about and wants to cover some fashion—because it gives each publication an equ break in coverage, yet provides for editorial initiati within that framework.

2. Publications have an obligation to report on m terial they receive from an architect or his representati usually the photographer, within a reasonable length time. And we feel this applies even when the phot graphs have been submitted purely on speculation. the magazine makes no report whatsoever after 90 da or so, the material should be made available to othe who might be interested—and we know more than o photographer who now operates on this principle. The may be a considerable lag, of course, between the accep ance and actual publication due to editorial schedule special issues, etc.

3. Commitments should never hinder or conflict wi the legitimate news coverage of a project. A buildi that wins a design citation for example, should be avai able to all publications for regular reporting regardle of any prior commitment. Surprisingly enough, on mo than one occasion we have had to do battle with a architect or a photographer on this score because h had "promised" the award-winning structure to anothe magazine.

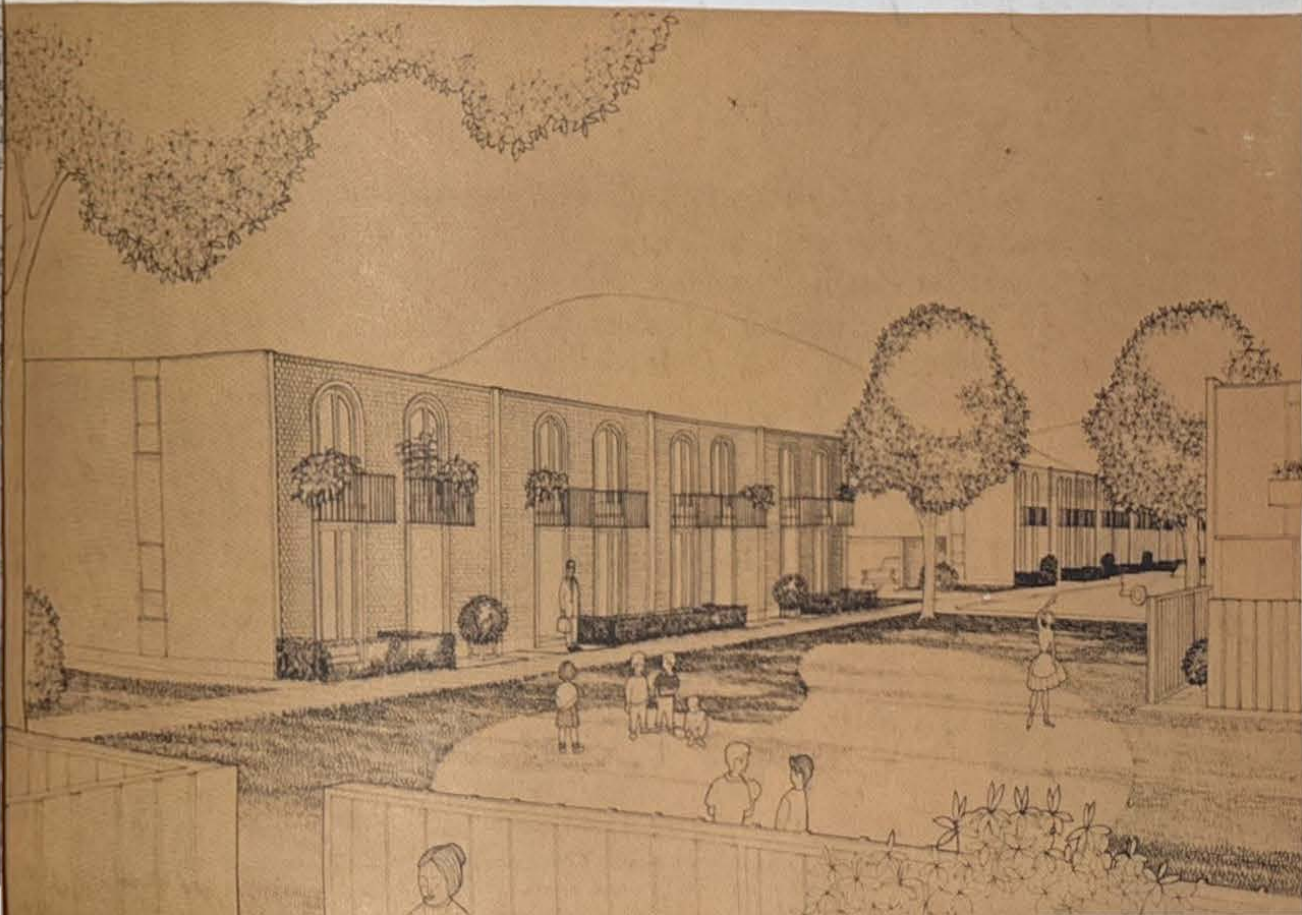
Next month we go on to an even more provocati topic: architectural criticism. R.E.K

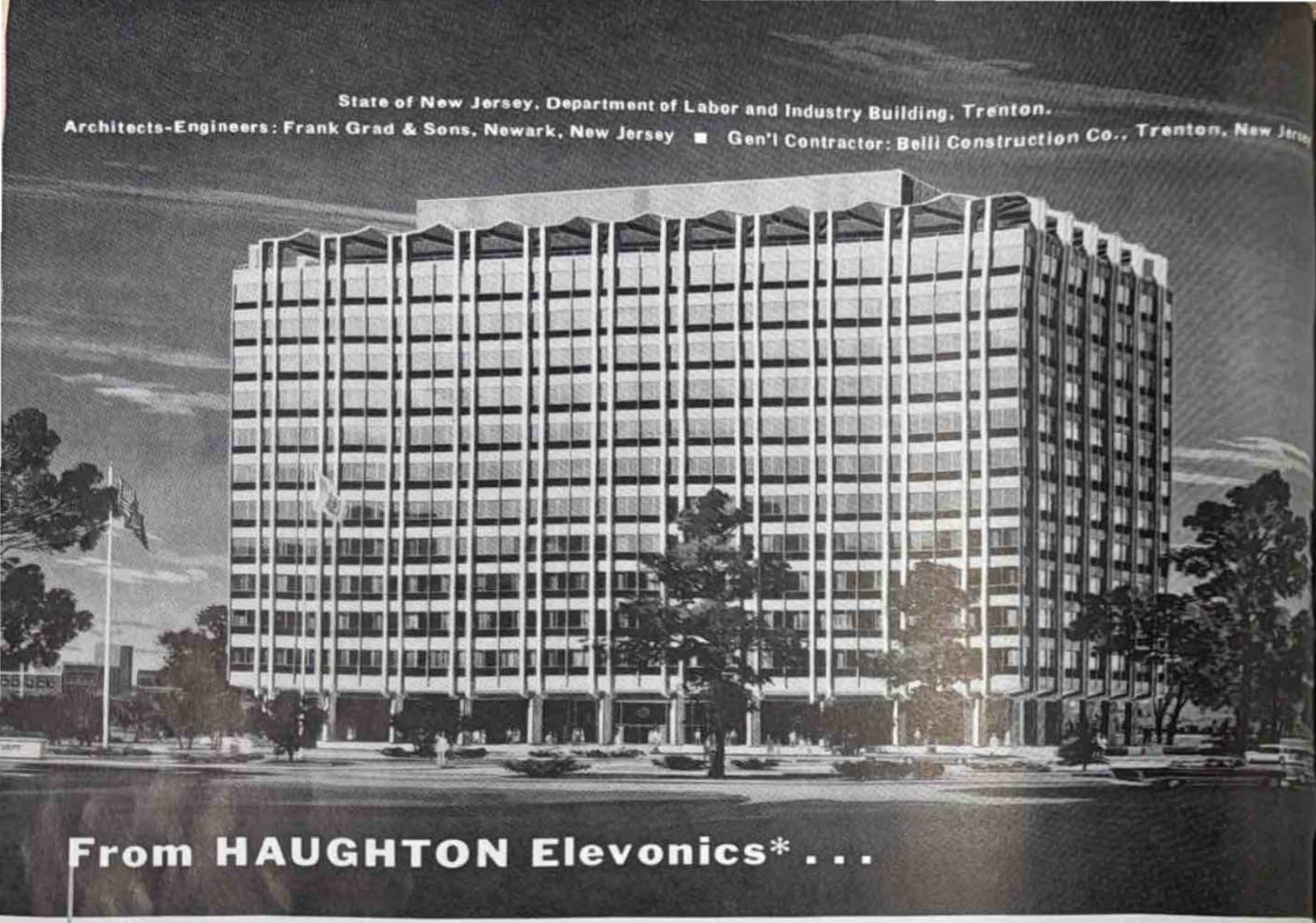
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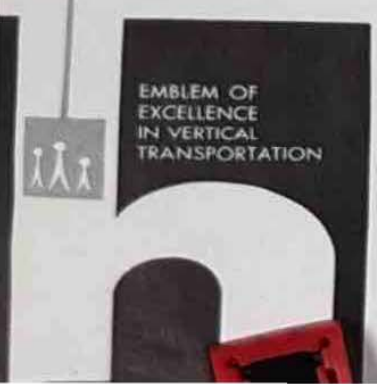




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Architecture / West

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Business data on page 36

Cover: Sketch of Eichler Homes Development in Visitacion Valley, San Francisco (p. 23); Claude Oakland, architect

ABOUT THIS ISSUE: The major portion of our design section this month is devoted to the why and wherefore of the phenomenal success of Joseph Eichler who probably has done more to further architect - homebuilder relationships than any other individual in the U.S. And it's a timely article too in that he just recently extended his activities into the redevelopment field.

"Where Architects Hang Their Hats" reappears for the first time in many a moon and we hope that from now on we'll be able to continue this popular feature almost every month.

A few weeks ago an architectural student walked into our office to express displeasure at the remarks made by Edward H. Fickett upon assuming the presidency of the Southern California Chapter, AIA. Would we be willing to run a rebuttal spelling out the opposite point of view? Our answer is found in this issue.

Sponsor a design competition and you can be sure the West will be well represented among the winners. For evidence, turn to the news section for July.

COMING IN AUGUST: A delay in completion has postponed the dedication of the U.S. Air Force Academy Chapel but the officials at the Colorado Springs institution are keeping their word about the release date for publication of the long-awaited interior photographs. Speaking of Colorado, we'll have a report on the Aspen Design Conference and on this interesting community itself. Then we'll be returning to the Seattle World's Fair to wind up our photographic coverage of this six-month exposition due to close October 21.

THE BUILDING MONTH

THE BUILDING WEST—For the fifth consecutive month, permits issued in the 13 western states were up, climbing to a healthy $658,461,648 for May (complete tabulation on pp. 34-35). Residential construction accounted primarily for the $96 million increase over last year's figures among the 500 agencies surveyed by Architecture/West. It is interesting to note that residential permit volume rose in 11 of the states. Biggest jump over May 1961 was in California, up $38 million, followed by Washington, up $10 million. Only Wyoming, shy a handful of permits, and Arizona were down. Colorado made a phenomenal gain in terms of total volume, which includes commercial, industrial and public buildings. Its $37.6 million rise was almost 2½ times its previous May's total. California, usually the leader in increased total construction, was $28 million ahead of last year, while Washington was third, chalking up a $20 million gain.

TOP TWENTY-FIVE—Hottest spots in the West for May (in millions): **1.** Los Angeles, $59.3; **2.** Denver, $33.2; **3.** Los Angeles County, $27.2; **4.** San Francisco, $21.5; **5.** Honolulu, $16.5; **6.** San Diego, $16.2; **7.** King County, Wash., $13.4; **8.** Seattle, $11.6; **9.** Long Beach, $11.6; **10.** Orange, Calif., $11.5; **11.** El Segundo, Calif., $10; **12.** Oakland, $7.5; **13.** Jefferson County, Colo., $6.8; **14.** Ventura County, Calif., $6.7; **15.** San Bernardino County, $6.5; **16.** Phoenix, $6.4; **17.** San Jose, $6.4; **18.** Riverside County, Calif., $6.2; **19.** Contra Costa County, Calif., $6.2; **20.** Orange County, $6.1; **21.** Clark County, Nev., $5.7; **22.** Las Vegas, $5.7; **23.** Santa Clara County, $5.2; **24.** Huntington Beach, Calif., $5.1; **25.** Santa Barbara County, Calif., $5.

CONSULTING THE CALENDAR—Eugene will host the seventh National Working Conference on Urban Renewal July 8-10 with more than 40 speakers slated to discuss the main themes of "Design Considerations in Urban Renewal" and "Downtown Revitalization." The University of Oregon School of Architecture and Allied Arts is cooperating with the sponsor, the National Association of Housing and Redevelopment Officials. . . . For the second time in a row, the American Institute of Building Design will hold its annual convention in San Francisco. The Jack Tar Hotel will be headquarters for the July 26-29 sessions. The manufacturers' display of home appliances and supplies will be open to the public.

Highlights & Sidelig

THE WEST AND WASHINGTON, D.C.—Following in t footsteps of another westerner, James Bailey, forme executive assistant to the California Council, AIA, San Francisco, has gone to the Octagon to serve as he of information services and assistant editor of the A Journal. Leaving the position which he assumed l in January is Donald J. Canty, now with the New Yo staff of Architectural Forum.

CAMPUS COMMISSIONS—Most college presidents w more than the usual approach to building designs fr the architects they commission to create educatio environments for their campus. That word comes fr Philadelphia architects Nolen & Swinburne upon s veying the heads of 547 institutions of higher educati in the U.S., Guam, Puerto Rico and the Canal Zo President Charles E. Odegaard of the University Washington observed: "I suspect that university arch tecture is in a transitional stage and that further stu must be given to the problem of 'marrying' the ne with the old on our campuses and of making efficie yet attractive, use of the land." Anyone who has visit the Seattle institution would have to agree that t parson has quite a job.

BAY AREA ALLIED ARTS—Work of local architects a landscape architects is being given prominent attenti during the summer-long "Arts of San Francisco" exh bition at the San Francisco Museum of Art. The f exhibit is designed as a massive survey of the visu arts of the Bay area. In addition to architecture, e amples of painting, sculpture, print making, photo raphy and design crafts are being shown. Says t catalog: "Few artists carry as great a weight of respo sibility as the architect and city planner in this peri of accelerated urban and suburban change." . . . A 75- high monument to world peace created of concrete a redwood and sheathed in lead will soon rise on a san stone cliff over the Pacific Ocean in Sonoma Coun Calif. It is the largest piece of work ever attempted b the controversial San Francisco sculptor, Beniami Bufano, and has been in the planning stage for over year.

Analysis of Types of Building in Typical Major Cities, Counties for May 1962

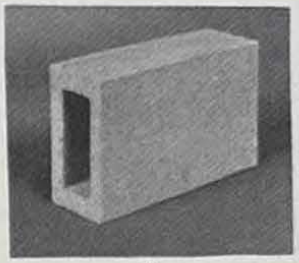
CITIES	Single Family Dwelling Units	Dollar Volume	Multi Family Dwelling Units	Dollar Volume	Public Building	Dollar Volume	Commercial Buildings	Dollar Volume	Industrial Buildings	Dollar Volu
Denver	60	$ 1,093,740	332	$ 1,336,033	1	$1,590,280	16	$ 9,987,531	4	$ 443,0
Honolulu	374	4,888,063	401	3,277,800	2	110,000	7	1,182,000	6	486,1
Kern County, Calif.	129	1,783,911	43	275,244	1	21,000	8	585,080	—	—
King County, Wash.	670	9,868,957	161	1,841,150	7	466,000	4	227,200	2	30,4
Las Vegas	191	2,227,900	342	2,403,950	—	—	9	532,860	—	—
Los Angeles	644	13,615,436	1,966	17,947,442	5	204,000	41	6,152,373	15	1,360,9
Los Angeles County	940	16,511,000	392	2,958,300	3	235,000	46	1,909,150	24	1,052,1
Multnomah County, Ore.	116	1,683,900	19	133,000	3	178,000	7	74,500	7	86,3
Sacramento County	195	2,763,478	51	465,224	1	15,656	16	715,013	9	136,8
Seattle	88	1,460,308	292	2,610,000	3	3,490,000	10	330,200	8	608,8
	3,407	$55,896,693	3,999	$33,248,143	26	$6,309,936	164	$21,686,907	75	$4,283,9

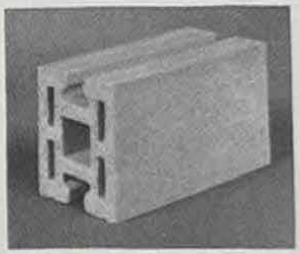
ENHANCING HONOLULU—Construction has begun on Honolulu's Queen Emma Gardens, the first major apartment complex of the city's redevelopment program. The $10 million, 582-unit project will be built on an 8.3-acre site directly behind the city's present geographic center. Architect is Michigan's Minoru Yamasaki. . . . Meanwhile, a new plan has been formulated for the 75-acre Kukui project, a part of the larger downtown area which has been declared "blighted" by the Honolulu Redevelopment Agency. This plan emphasizes residential and secondary commercial land uses, calls for the creation of "institutional" zones in which ethnic groups can be relocated at favorable land prices, recommends mixing of public and private housing with pedestrian malls along Nuuanu Stream and a park to replace a street serving the housing areas. A suggested public transportation center also is included in the proposal, which must receive the approbation of Honolulu's City Council. The plan has been prepared by Peter Walker of Sasaki, Walker & Associates and Paul Fullerton of Western Real Estate Research Corp. under the supervision of architect Cyril W. Lemmon.

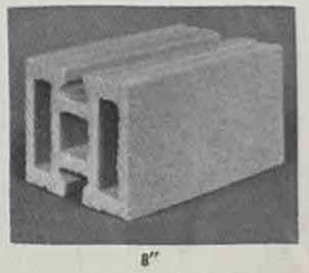
SAVING SAN FRANCISCO—One hundred blocks square and 40 ft. high: not a supersize building complex but a temporary zoning decree by the San Francisco Board of Supervisors covering all construction from the Marina to the east slope of Telegraph Hill. Aimed at keeping high-rise buildings from blocking views to the Bay, this is a stopgap measure until the City Planning Department can come up with other solutions that will please not only view-lovers but practical developers. . . . Architect Mario Ciampi has been named consultant to the City Planning Commission on a $25,000 study of downtown San Francisco. . . . Architects are set against architects in a controversy over the proposed 33-story Hartford Building, designed by Skidmore, Owings & Merrill for a site adjacent to old St. Mary's Church on the edge of Chinatown. Claiming that the structure is massively out of scale with its surroundings, eight well-known architects and related professionals have formed a "Committee to Save Chinatown": architects Gardner A. Dailey, Ernest J. Kump, John Carl Warnecke and Worley K. Wong; landscape architect Lawrence Halprin; designer George Livermore; structural engineer Yue C. Yang; and regional planner Lawrence Livingston Jr. Defending their design, Skidmore, Owings & Merrill describe the building as "a tall, graceful spire" which, because it is set in the middle of the site, with plenty of light and air surrounding it, will be a decided asset to the neighborhood. . . . The "dream project" of the Bay Area Rapid Transit District, which needs the approval of three county boards of supervisors, has been endorsed by the Down Town Assn. of San Francisco.

DESIGNING DESIRABLE IMAGE—The Los Angeles architectural firm of Richard Dorman & Associates has been selected to design the first two prototypes of traveling trade pavilions for the Office of International Trade Fairs, U.S. Department of Commerce. The first of the buildings will be for an exhibition at an international trade fair to be held in Salonika, Greece, September 2-28. The demountable structures, containing about 15,000 sq. ft. of floor area, are expected to be used as basic design for other U.S. government agencies. Dorman was chosen for the commission following a review of the work done by architects nationally in use of plywood materials. Deputy Chief Charles H. Clarke also indicated that "Dorman's characteristic contemporary styling would present a desirable image of modern America in foreign countries."

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Architects take their bows, open booth at World's Fair

Sunday, June 3, was designated Architects' Day at the Seattle World's Fair as 18 individual practitioners and firms were honored with commemorative medals for their design of official exposition buildings. But judging by the amount of praise heaped upon the participants, members of the profession could rightly claim every day as their own.

Fair President Joseph E. Gandy, speaking before the presentations were made in front of the Horiuchi mural, termed the buildings "Exhibit A for American architecture in 1962," adding this thought: "We didn't build a fair; we built a civic center." (But just how that center will be developed at the end of the six-month run already is becoming a heated discussion, with the "cultural" proponents in one corner and the "carnival" proponents in another, plus a third segment which is attempting to act as referees.)

Among those cited was Clayton Young, long-time director of site and building development for Century 21 and now the liaison officer to the newly organized postfair committee.

Some 100 members of the Royal Architectural Institute of Canada and presidents of architectural societies of that country, Great Britain, Australia and the U.S. who were in Seattle for the event generally praised the fair and particularly the Freedom Fountain—previously known as the Seattle Center or International Fountain—which has been the subject of much local crititcism.

The visitors, of course, were put on the spot during a press conference since most of them had not yet had an opportunity to really study the fair and its architecture.

Torao Saito, editor of "This Is Japan," explained that his countrymen who designed the fountain had a fresh viewpoint because in Japan there are no fountains. "It is a tribute to their boldness in conception."

AIA President Henry L. Wright called the fountain "very seeable; it has a feeling of gaiety. It is wonderful at night and I recommend a trip on the Sky Ride to view it."

In referring to the exposition as a group effort, Wright pointed out th "the expression of architecture by i dividual talents has not been lo

Sir William Graham Holford, pre dent of the Royal Institute of Briti Architecture, said the Space Need afforded him "the most breathtaki view I've ever seen." He also lik the compact arrangement of the exp sition but felt the fair's array of co ors presents a "loose effect."

On the other hand, Prof. H. Ingha Ashworth, president of the Roy Australian Institute of Architect found "the areas of color gay an inviting."

But Sir Holford added: "When th fair is over and only the permanen buildings remain, I think there wi be an entirely different feeling, on of simplicity. I like a compact fai It is a better choice."

John Davies, president of the Roya Architectural Institute of Canada, ha this to say: "It is rather difficult t plan a group of buildings in such small area. There are many problems I think the architects have done rathe well."

Architects' Day also marked th official opening of the display and information center being sponsored by the Seattle Chapter, AIA. A. O. Bumgardner served as chairman of the building committee, assisted by David McKinley, Aaron Freed and Ibsen Nelsen. L. Jane Hastings is in charge of staffing the center.



Paul Thiry (right), primary architect f World's Fair and Seattle Center a designer of Coliseum, receives awa from Harold Shefelman, chairman Civic Center Advisory Commission.



Distinguished guests include Henry Wright, Los Angeles, newly elect national head of AIA, and Harle Steele, past president of Royal Arc tectural Institute of Canada, who members were honored at receptio



Architectural headquarters at fair is pole structure rigged with yellow and white canvas roofs arranged one above other. Victor Steinbrueck, who drew this sketch, designed pavilion, which has Coliseum Century 21 as backdrop.



Arnold Gassan photos

Award-winning 56,000-sq. ft. structure represents largest installation of copper sheet bonded to concrete panels.

Designing in copper: Colorado courthouse wins prize

The 1962 Copper and Brass Architectural Achievement Award has gone to the Boulder, Colo., firm of Nixon & Jones for the design of the $1.2 million Fremont County Courthouse, winning out over 31 other entries.

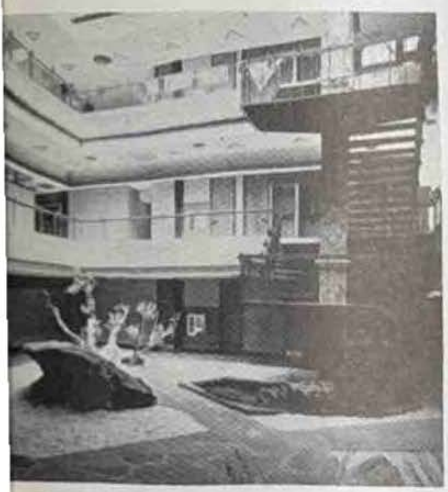
The award, a replica of the ankh, metallurgical symbol of copper, and $500, was presented May 16 at the annual meeting of the Copper and Brass Association in Hot Springs, Va.

Located in Canon City, which is surrounded by the foothills of the Rocky Mountains, the structure consists of two stories and a basement. Exterior walls are of rough-surfaced native marble capped with a total of 32 huge panels of copper laminated to concrete. Each panel weighs 2½ tons.

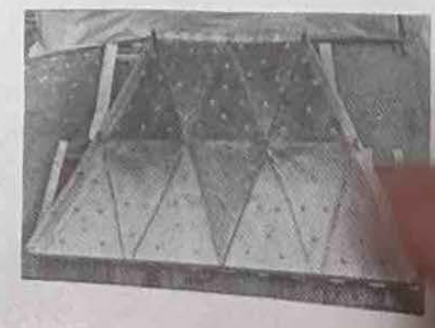
Of technical interest is the fact that this project represents the first time that concrete backing was used with sheet copper in such a large quanity. About 35,000 lb. of 16-oz. sheet copper was employed, including the valleys, gutters, flashings, interior and exterior finishes.

After the designs were formed in the copper, the reverse side of each sheet was fitted with a series of copper clips and coated with an epoxy glue. Following the pour of the concrete, the laminated panels were permitted to age for seven days before the forms were removed. The panels were then raised and bolted to a perimeter truss.

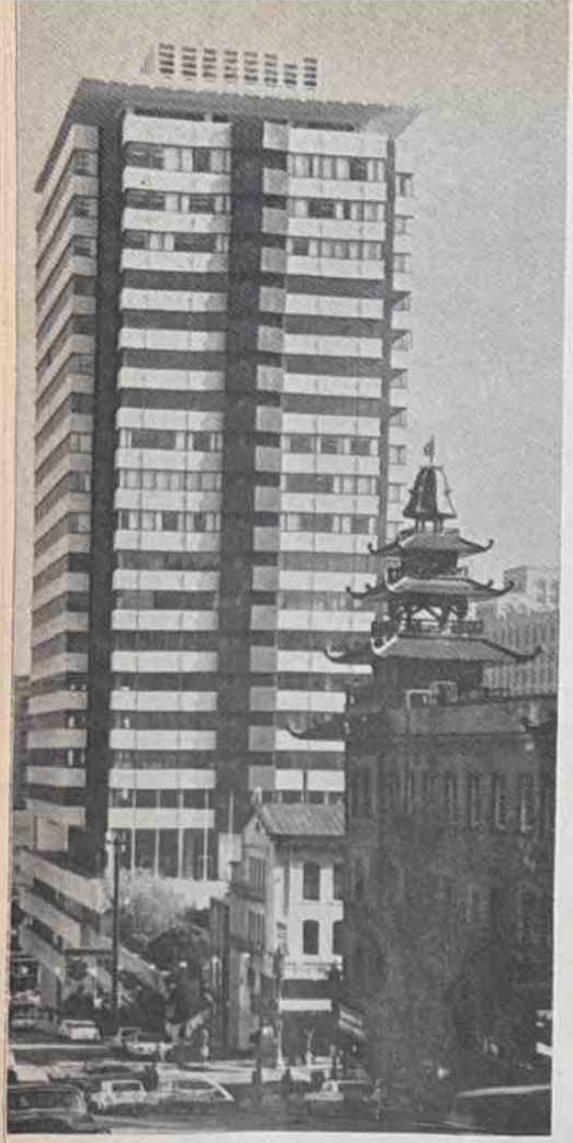
Another accomplishment was the natural patina which the architects were able to form on the sheet copper. Dissatisfied with the available solutions for aging copper, Nixon & Jones and the general contractor, Ross E. Cox, found that con[illegible]eat-soldering flu[illegible]



Design motif is carried inside courthouse to skylight-covered courtyard. Here, smaller copper sheet panels are used for facing each of two floors opening onto landscaped area with pool.



Twelve individual sheet copper panels are joined to form trapezoid measuring 16 ft. at base and 8 ft. at crown.



International Building, San Francisco: Anshen & Allen, architects; Gould & Degenkolb and Robert D. Dewell, structural engineers; Dinwiddie Construction Co., general contractor; Bethlehem Steel Co., fabricator. "Sophisticated plan developed from the air rights and its structural soundness in an earthquake area are praiseworthy. The spirit of the Chinese environment in which the building sits is enhanced through the use of modern cantilevers."

Designing in steel: four California jobs earn awards

Four California projects — an office building, a school, a service station and a church—are among 13 which have won Architectural Awards of Excellence for their designers in recognition of outstanding use of structural steel.

The American Institute of Steel Construction, which is sponsoring the nationwide competition for the third year, has honored the architects for employing steel esthetically in a dimension beyond its use as a basic structural frame.

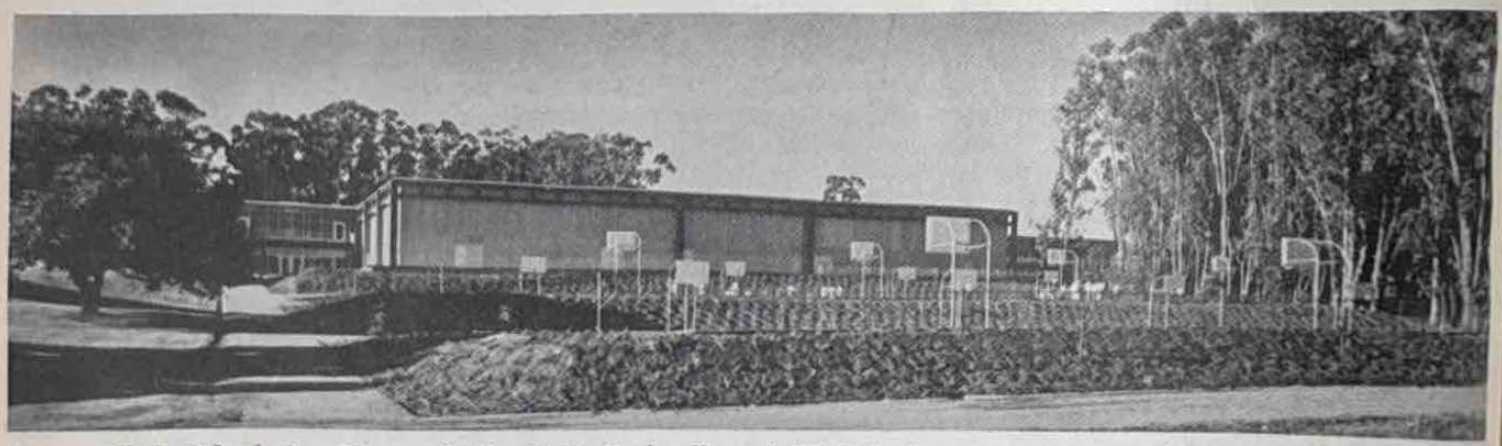
The 1962 program drew 50% more entries than last year. Members of the jury were architects Robert W. Cutler and Julian Whittlesey, New York; John T. Grisdale, Philadelphia; George Edson Danforth, department of architecture and city planning, Illinois Institute of Technology, Chicago; and consulting engineer William J. LeMessurier, Boston.

Danforth, speaking for the jury, comments: "We were looking for the utilization of structural steel for its maximum architectural potential. The jury chose these buildings as outstanding examples of architectural leadership and direction. The winning architects have used standard framing methods in many cases, but they have used them superlatively."

All citations carry equal prestige and no honorable mentions were made. The Award of Excellence is a walnut panel. Mounted on the top half is a photograph of the building protected by clear lucite. Certificates also are presented to the owner, structural engineer, general contractor and structural steel fabricator.

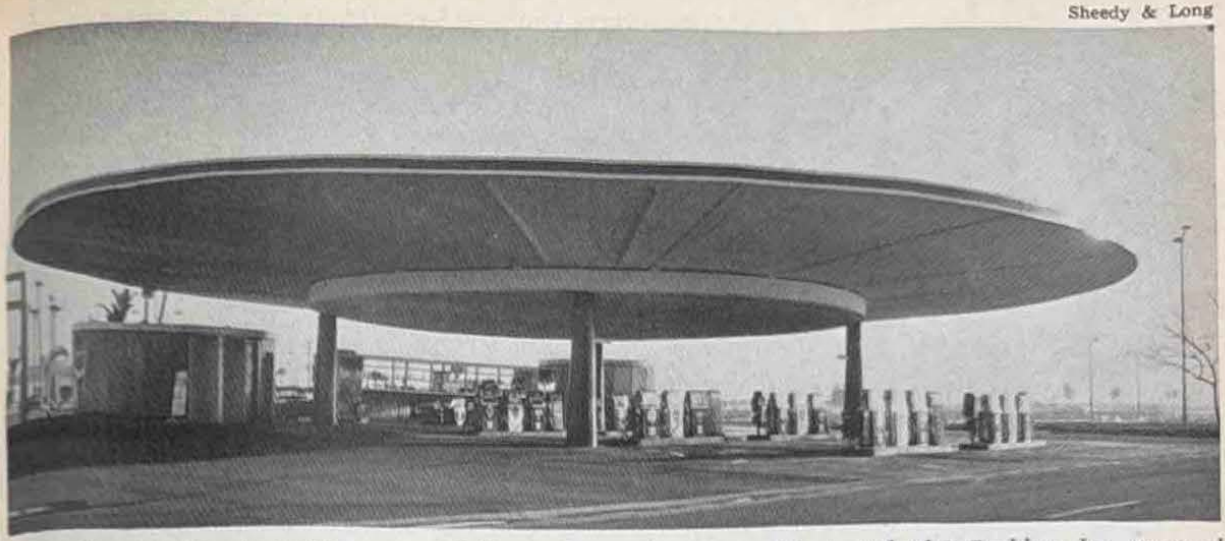
The California winners:

- International Building is adjacent to a public park and contains underground garage space for 1,400 cars. Air rights were used to insure light and air on all sides and a connection with the park to the west. The 17-ft. length of the cantilevers was established as the maximum which could be attained without any premium in cost and the cantilever construction established the basic outline of the structure.
- Aragon High School is characterized by rigorous use of the module from structure to finish. The owner requested complete flexibility of space. All partitions and exterior wall assembly are capable of relocation or rearrangement. The construction is steel frame, steel roof deck and concrete floor on grade except over locker and shower areas. Steel trusses provide lateral resistance in gymnasia and little theater frame. Cantilever steel columns provide lateral resistance in classroom areas.
- Service Station for Standard Oil Company of California has a canopy composed of a large circular box beam supported by four columns. The system supports a radial pattern of tapered steel plate girders cantilevered and balanced at their approximate mid-point on the ring beam. Radial, inverted high-rib steel decking completes the roof surface and provides its own waterproofing. The circular free-standing structures under the umbrella are framed with the same steel decking used for structural walls and exposed as the interior finish.
- Gardengrove Community Church incorporates 16 steel bents economically dimensioned to form a "visual fugue" while the bell tower rises toward the clouds as a marker in the landscape. A unique feature is that 600 cars can amphiteatrically park facing the minister's wide platform balcony overhanging a reflection pool when broad sliding doors open and tune into the services through individual listening devices.



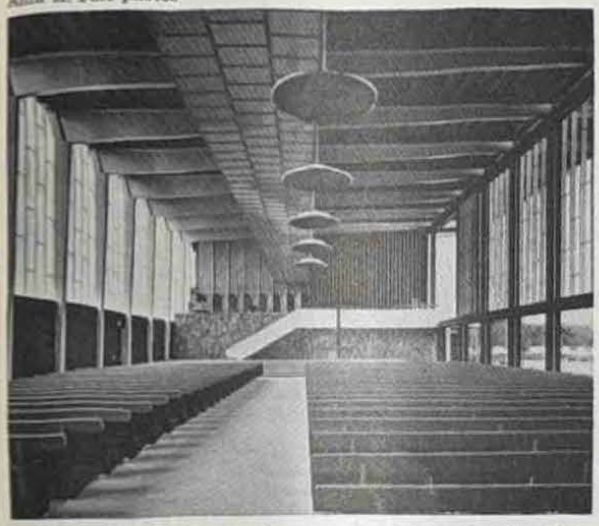
Aragon High School, San Mateo, Calif.: Reid, Rockwell, Banwell & Tarics, architects-engineers; Rothschild, Raffin & Weirick, Inc., general contractor; Pittsburgh-Des Moines Steel Co., fabricator. "Well planned, well sited on a hillside."

Sheedy & Long



Service Station for Standard Oil Company of California, Los Angeles International Airport: Charles Luckman Associates with Welton Becket & Associates and Paul R. Williams & Associates, architects; Richard R. Bradshaw, Inc., structural engineer; Miller & Miller, general contractors; Madison Builders, Inc., fabricator. "A logical solution for a steel roof."

Amir H. Farr photos



Community Church, Garden Grove, Calif.: Richard J. Neutra & Associates, architects; Eugene Birnbaum, structural engineer; John E. Snyder, general contractor; Grano Steel Corp., fabricator. "Simple and direct structure is imaginatively engineered and wide open for worshippers amidst the garden groves. Beautifully detailed steel and glass."



'Study in Steel — 1962' tours three West Coast cities

Repeating a program started last year to dramatize the potential of steel and to show how it can meet the demands of modern product design, United States Steel Corp. has shown its new exhibit in three West Coast cities—Seattle, San Francisco and Los Angeles—as part of a coast-to-coast tour.

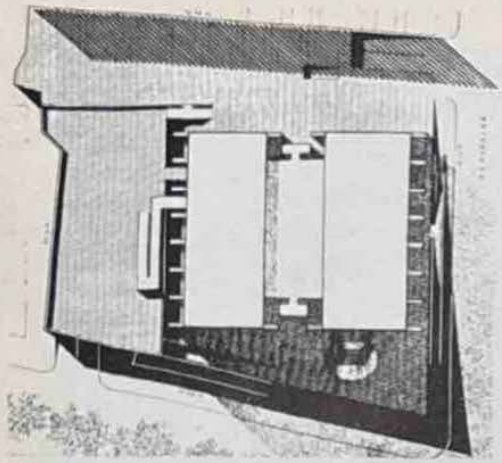
Called "Study in Steel—1962," the product ideas are showcased in a full-scale kitchen, dining room and patio. Although still in the prototype stage, the models suggest concepts that are likely to appear in American homes within a very few years.

Peter Muller-Funk Associates created the ideas, but U.S. Steel is quick to explain that it is not in the design business; instead, the marketing program is a vehicle for stimulating thinking and the company offers the concepts to anyone who can adapt them to his own use.

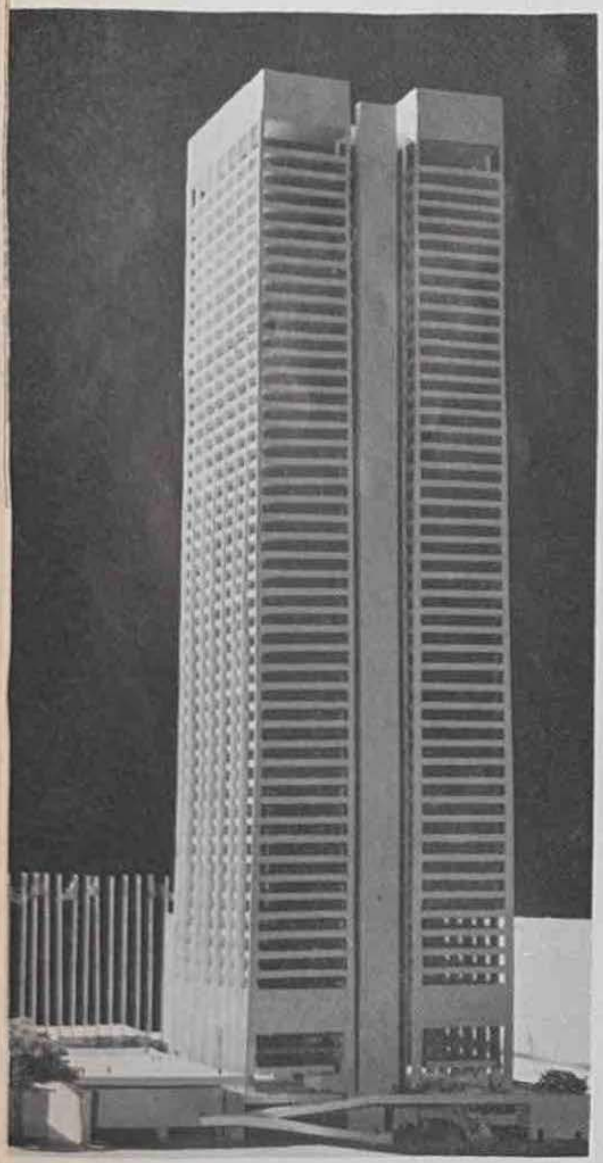
The exhibit runs the gamut from a modular structural system which forms a kitchen storage wall to privacy screens and garden lighting. One of the entirely new ideas is a deck patio system which can be installed without the usual grading and filling associated with present methods.



Chairs are outdoor versions of dining room model. Seats are formed woven wire with organic coating. Back rest is painted in back, vinyl coated in front.



SITE PLAN



If this prize-winning project were to become reality, it would be tallest reinforced concrete building in world.

Denver architects share international prize money

Ranking eighth among 10 prize winners in a worldwide competition for the design of the Peugeot Building to be constructed in Buenos Aires, Argentina, two Denver architects—Marvin Hatami and Don W. Lister—have been awarded 400,000 pesos. (The $4,800 quoted in the daily press is not a correct exchange rate, according to Hatami.)

Organized by the Sociedad Central de Arquitectos and approved by the International Union of Architects, the competition drew 280 submissions from 31 nations.

Seven architects from the U.S., Brazil, Argentina and France picked a Brazilian, Alberto Claudio Afalo, Sao Paolo, as the winner. The only other Americans to place in the prize money were Charles T. Burger and Harold Landrum, St. Louis.

The program called for the design of the tallest building in South America to combine offices for large companies with a commercial, social and cultural center in the capital city.

The reinforced concrete structure proposed by the Denverites consists of a 72-story building with a 10-story underground parking garage for 1,400 cars. Twin towers connected by a central core and services rise 685 ft. above the ground. The whole complex covers about 1,500,000 sq. ft.

The structural frame incorporates poured tapered columns and precast prestressed U-shaped spandrel beams and joists 48 ft. in length. Poured floor slabs serve to tie the entire structure together laterally. On the plaza level the exhibition hall, restaurant and reception hall are hung from the ceiling structure, which forms the floor of the mechanical space above.

Hatami comments: "The main feature of this design is the integration of structure with architecture and mechanical equipment of the building. The structure being used as the outside skin eliminates the conventional curtain wall solution and consequently the unnecessary usage of extra materials. The U-shaped spandrel beams in each floor carry mechanical, electrical and communicational services. The tapered columns, nearly 7 ft. top to bottom, provide interesting shade and shadows along the long sides of the towers."

Two Denver firms acted as consultants on the project: Boduroff & Maheen, Inc., structural, and Francis J. Stark, mechanical.

Architectural services must be expanded: Scheick

Architects face the challenge of expanding their professional services if they are to have a full role in planning construction during the next 30 years.

This message, which more or less served as the theme for the national AIA convention last month, was emphasized by Executive Director William H. Scheick as he made a brief tour in the West prior to the Dallas sessions.

"The profession has a great opportunity to contribute to the progress of the nation in the next three decades, but simultaneously architects must be prepared to assume responsibilities not previously considered essential to creating design of buildings and homes," Scheick declared. "These architectural services must be broadened to deal with the total scope of urban design and to render additional services which contribute to successful building in the increasingly complex environment."

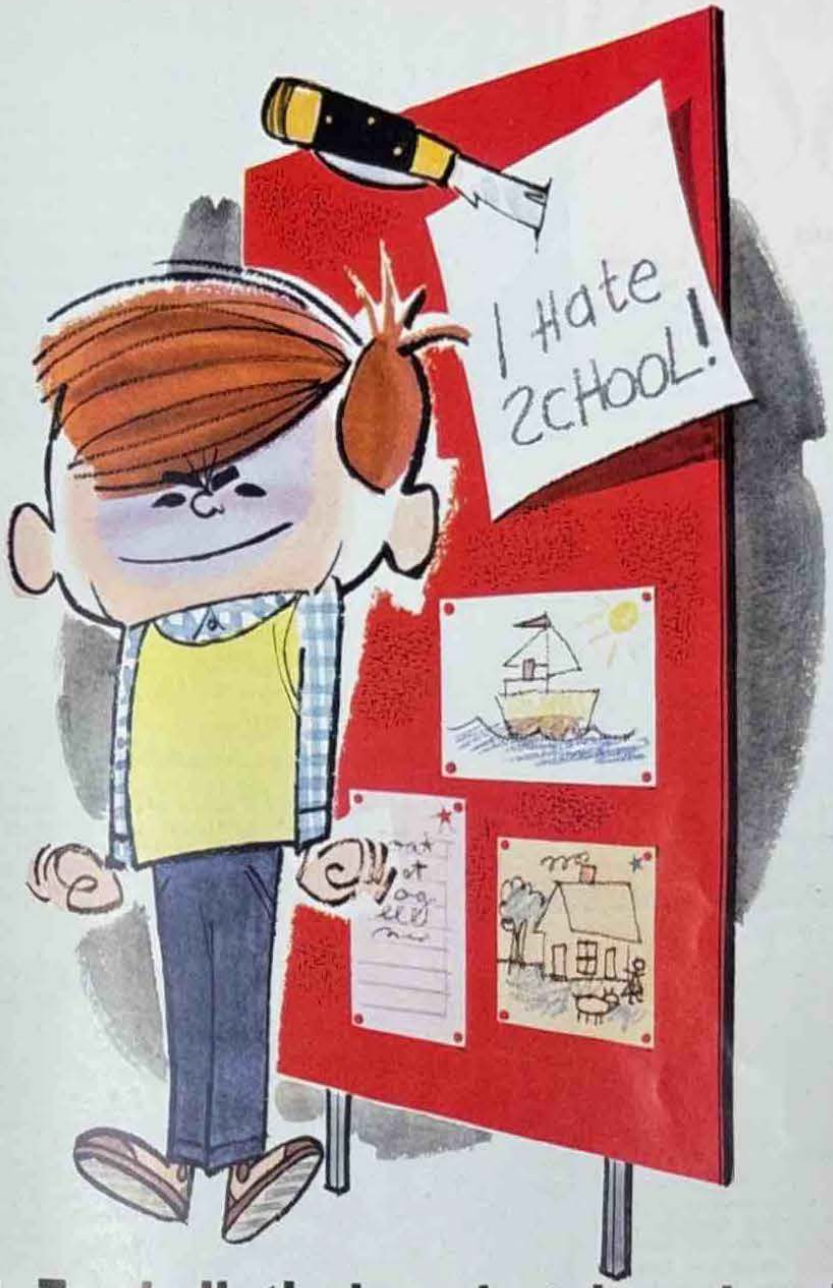
Planning for the overall city development, in Scheick's thinking, includes not only physical appearance of downtown buildings and provision for ample arteries and parking but the relation of residential areas, parks, playgrounds and secondary shopping and commercial facilities.

The architectural service to all clients must include not only design to meet esthetic, economic and use considerations but such functions as feasibility studies, evaluations of land economics and financing guidance. To date, few architectural firms have considered such consultation as within the sphere of their professional service, Scheick added.

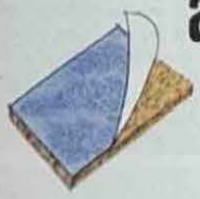
In the same vein at the closing business session in Dallas, Institute President Henry L. Wright dwelled on the idea that has been no overnight revolution in the AIA.

"When a professional society undertakes a sweeping program of self-study and self-improvement," the Los Angeles architect declared, "it naturally becomes the subject of great discussion and, as naturally, some controversy. Some of the controversy is generated by misunderstandings based on semantics.

"For example, we have been hearing the phrase 'expanded services' in Institute conversations. This has alarmed a few members who feel that it implies changes that will turn the professional architect into some sort of broker or packager. This is not the case."

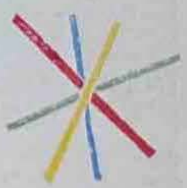


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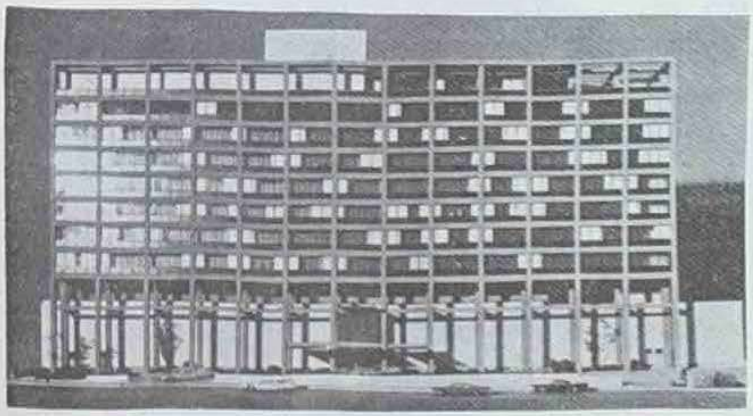
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HEALING IN BAY AREA

Mary's Help Hospital, to be built on 11-acre hilltop site in Daly City, Calif., will be separated vertically into three lower floors of supporting facilities, including mechanical, surgery, radiography, laboratory, administration, dining and dietary, with upper floor devoted entirely to patient care. Initial phase will be 250-bed general acute hospital, expanding to 400. Architects: Stone, Marraccini & Patterson.



PROJECT PREVIEW

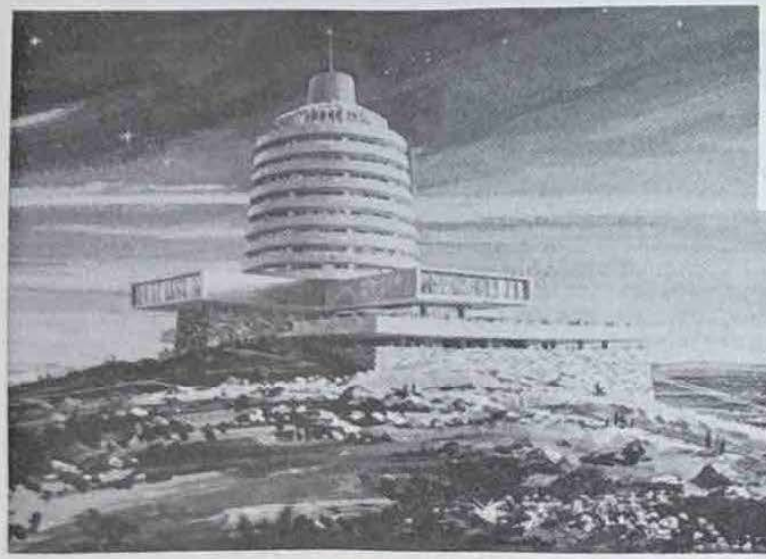
PLAYBOYING IN HOLLYWOOD

Thirty-foot high colonnade will dramatize off-street drive 3 ft. abov level of Sunset Boulevard as guests arrive to enjoy $7.5 million Playbo Club and Hotel. Thirteen stories will include 200 guest rooms, plaza fo swimming and other recreational activities, health club, shopping arcad and rooftop heliport. Concrete framing will be exposed as part o design. Architects-engineers: Curtis-Davis Associates.



BANKING IN MONTANA

Ravalli County Bank will provide Hamilton residents with drive-in facilities under rear roof of 6,000-sq. ft. structure. Among design features: reflecting pool located at entryway and two enclosed garden courts visible only from inside. Architects: Page-Werner & Associates.

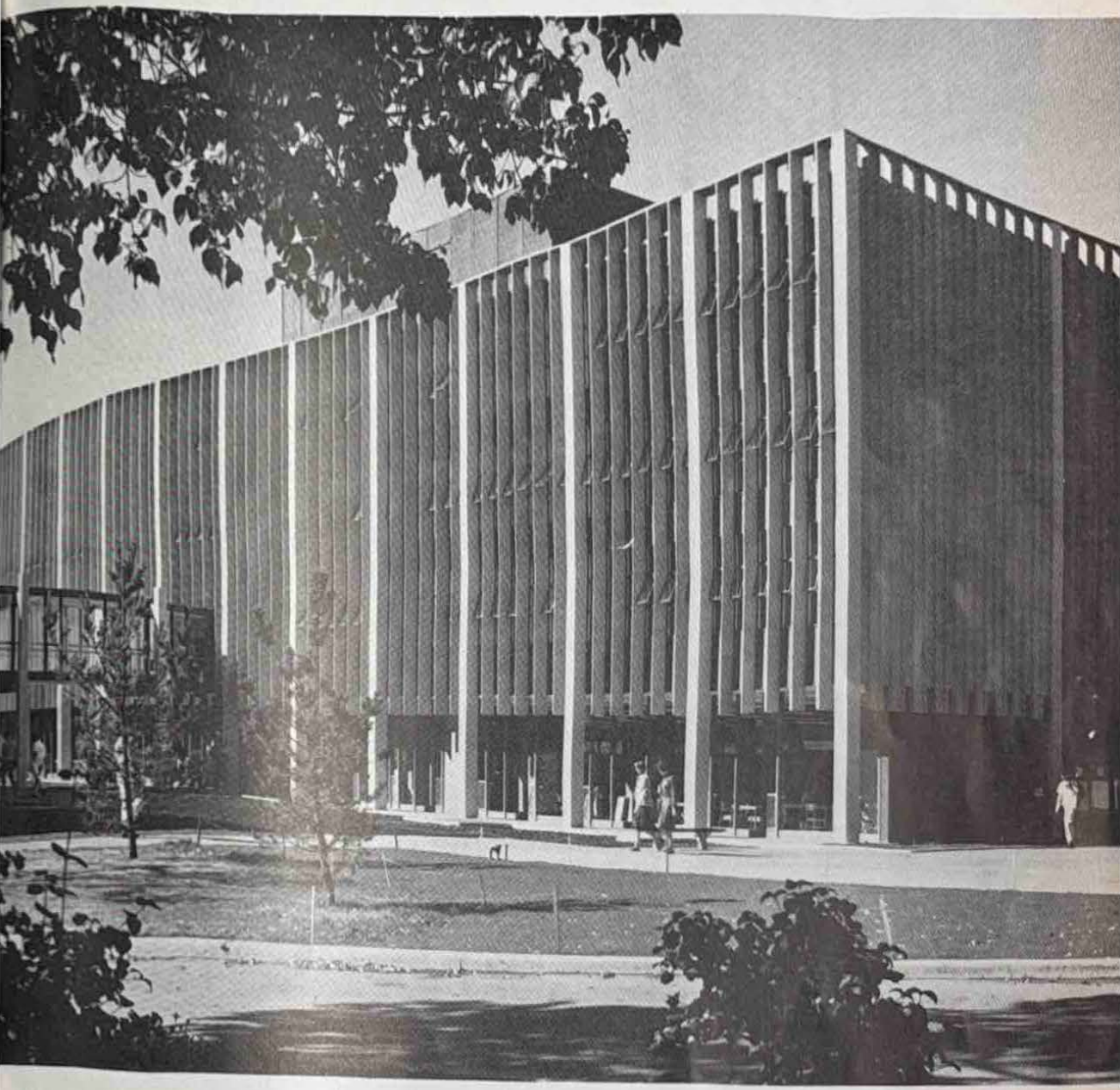


REVOLVING IN ALBUQUERQUE

Cone-shaped restaurant 10,000 ft. above sea level, reached by 3½-m cable car route, highest and longest in Western Hemisphere, will b perched atop South Sandia Peak. Planned by designers of Spa Needle, revolving Cable Car Lodge will accommodate guests in 6 suites and rooms. Lower terminal of cable route will have 250-roo convention-type hotel, 134-unit motel and tourist shopping cent within city limits. Architects-engineers: John Graham & Co.

Education in the Space Age with

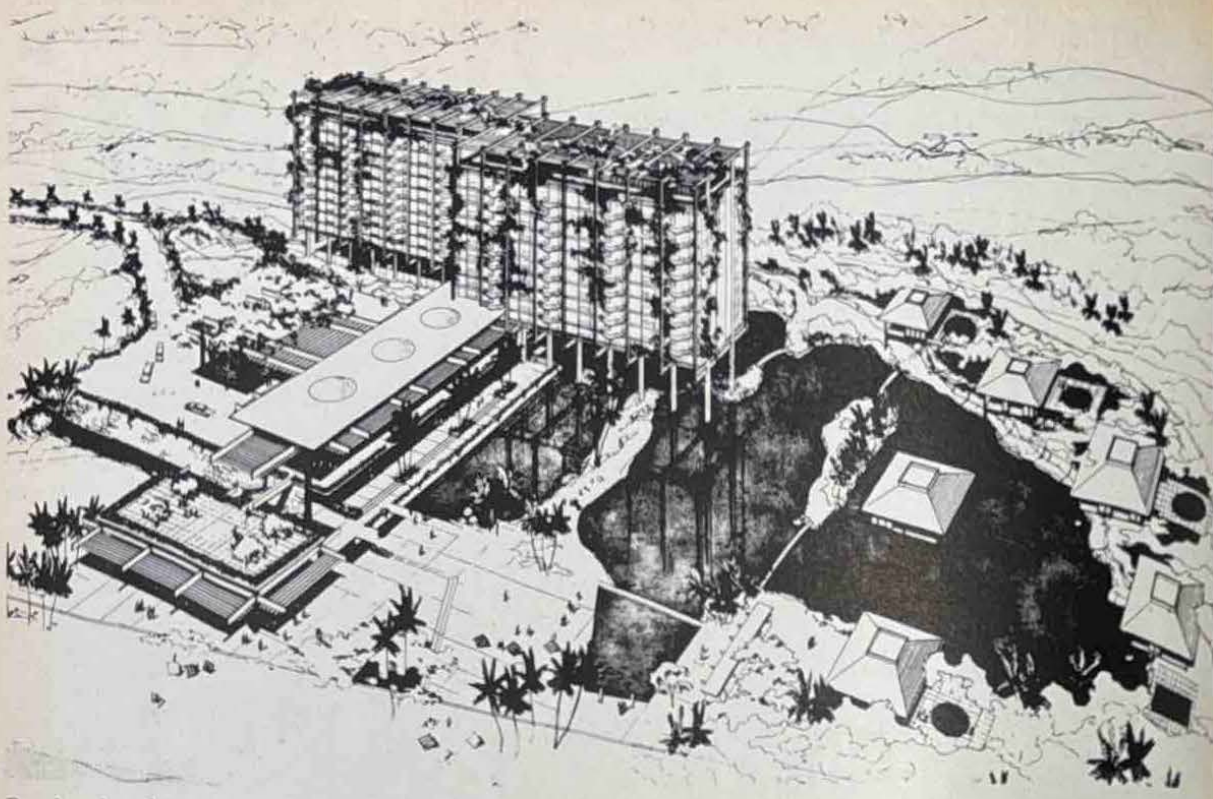
Mo-Sai



Ralf E. Decker, A.I.A., Architects and Kirk, Wallace, McKinley A.I.A. & Associates, Architects

Capturing all the excitement of the age of space and astronauts is this recently completed contemporary Business Administration Building on the campus of the University of Washington in Seattle. Fine, tan pebble aggregates in an off-white cement matrix form the 42-feet-high, five-ton, single-unit Mo-Sai pre-cast concrete channel section fins that are quickly and firmly bolted to structural floor slabs. Versatility of Mo-Sai provides a new world of beauty for the space age architect.

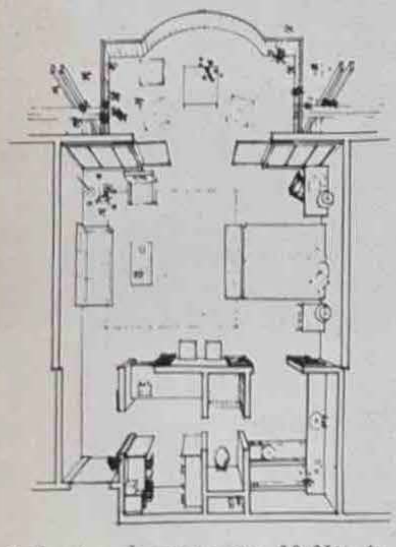
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Royal palm drive approach leads to elevated banyan entrance court and lobby with 30-ft. high ceiling.

Kahala Hilton outdoes its Beverly Hills counterpart

JOB OF THE MONTH



Bath of each guest room, 16x21½ ft., is divided type: shower and toilet compartment separate large mirrored dressing room with bath from second dressing room with lavatory, wardrobe and walk-in closet. Bar adjoins entry.

A review of the plans for Conrad Hilton's latest Hawaiian venture leaves no doubt it "will cater to the carriage trade, incorporating facilities that we have found popular with our guests at such luxury resorts as the Caribe Hilton in Puerto Rico and Las Brisas Hilton in Acapulco."

Designed by Killingsworth, Brady, Smith & Associates, the $7 million Kahala Hilton will feature 300 spacious rooms lavishly decorated with quality furnishings and wall coverings.

Comment the architects: "Extensive research by our firm has confirmed the use of the living-sleeping areas with a large lounging space adjacent to the sleeping area. The balconies and large glass openings provide an outdoor space and a view for the lounge and sleeping areas.

"Our economic studies have indicated a maximum of 570 sq. ft. and a width of 21 ft. for each guest room. Further investigations and design studies have suggested the feasibility of two separate toilet areas within each guest unit."

The plans also call for 60 suites consisting of an entry, living room, bedroom, dressing room, bath, luggage room and separate powder room.

The 800-ft. waterfront site is surrounded on three sides by the Waialae Country Club and enjoys a view of Koko Head to the east and Diamo Head to the west. A large lagoon being created on the property arou and over which the building will developed. The water will be pump filtered and stocked with tropical fi

There will be much use of natu materials, deep subdued colors a extensive landscaping, including n merous trellises for bougainvillea grow over the facade of the build and onto the roof.

Framing members will be expos on the exterior as an interlacing sy tem of beams, columns and slabs give a sculptured effect. Structur engineers Alfred Yee & Associat have selected 6,500-psi. concrete f the members, thereby retaining th lightweight appearance and practic post and beam construction.

In developing the air conditionin Jaros, Baum & Bolles acknowledg the fact that even Hawaii has its w spells too. Designed to reduce humidi ty throughout the entire hotel whe particular areas are closed, the sys tem will automatically turn off i individual spaces when the slidin glass doors are opened during th typical drier, warm weather periods

Garden cottages, each with its own swimming pool, will surround the la goon. They will consist of three bed rooms, three baths, living room and kitchen.

T-SQUARE TALK

new offices, partnerships

Gordon Harvin Glass has opened an office for the practice of architecture at 2515 East Coast Highway, Corona del Mar, Calif. He formerly was an associate with Blurock, Ellerbroek & Associates.

William J. Mangino has established his own architectural practice at 1111 W. Lawrence Lane, Phoenix.

Ronald Cameron has opened an office for the practice of architecture in the Holtzinger Building, Yakima, Wash. A graduate of Washington State University, he most recently was associated with Food Industries Research and Engineering Co.

Richard N. Dennis, formerly with Design Associates, Ltd., has opened an architectural office at 1210 Ward St., Honolulu.

Bruce Wendell Beebe has established an architectural office at 458 Broadway, San Francisco.

Douglas Garber and Howard H. Scoones have formed a new partnership with offices at 1301 First Ave. S., Great Falls, Mont.

George R. Hermach, formerly president of Architectural Plastics Corp., has formed a consulting firm, George R. Hermach Associates, with headquarters in Eugene, to service architects and engineers in the field of plastic building materials. A related company, Materials Research Institute, also is being organized to provide a pilot group in product development.

new partners

Philip C. Patterson and Robert P. Meyerhof have become full partners in the firm of Smith & Williams, architects-engineers, South Pasadena, Calif.

deaths

Salt Lake City architect William Elmer Nelson, 68 died in June following a lingering illness. A past president of the Utah Chapter, AIA, he was active in scouting for over 45 years.

new addresses

William Wright, architect, to 290 Fillmore St., Denver.

Ralph Bowerman, architect, to 14401 Gilmore St., Van Nuys, Calif.

P. E. Buchli & Associates, architects, to 100 W. Camelback, Phoenix.

Robert Dennis Murray, architect, to 2501 Los Feliz Way, Carmichael, Calif.

Kinney E. Griffin, architect, to 37217 Fremont Blvd., Fremont, Calif.

appointments

Casper F. Hegner, for 16 years a partner in the firm of Smith & Hegner, Denver architects, has been named director, architectural-structural service of the Construction Service, Veterans Administration, Washington, D.C. He also is to serve as acting manager of operations. Dudley T. Smith will continue in the practice of architecture in his own name at the offices of the firm, 817 17th St.

Oregon Chapter, AIA, has a new administrative secretary, Mrs. Marie Robinson, with the office continuing at 206 S.W. Stark St., Portland.

Seattle Citizens' Planning Council has named three architects to its executive committee: Ted Bower, Perry Johanson and Victor A. Steinbrueck.

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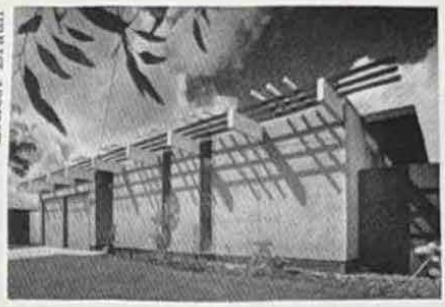
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One of 1958 models designed by Anshen & Allen for several locations indicates how open court always has been important feature of Eichler houses. Exterior (across page) produced considerable comment because of blank wall facing street and flat roof.


Ernest Braun

Using the words "homebuilder" and "architect" in the same breath is the exception rather than the rule; but then Joseph L. Eichler threw away the rule-book the day he ventured into the home-building field. Since then his forward ideas in home construction have set the pace for the entire industry. Not a man to stand still very long, Eichler has embarked on a new concept by which the advantages of row housing are merged with contemporary apartment living. What led up to that development is told in this article by May B. Hipshman, A/W's Northern California editor.

THE EICHLER STORY:

From butter and eggs to redevelopment


Rothschild



Interior of this 1955 Jones & Emmons house built in San Mateo is significant in that it shows way Eichler used to do family room in relation to living room rather than in relation to kitchen. It was found to be unsatisfactory because there was no separate dining space and because from kitchen mothers could not watch children playing.

Ernest Braun



Another Jones & Emmons project in San Mateo is experimental X-100 model. Constructed in 1957, it employed factory-finished, prefabricated sections wherever possible. Light steel structural frame eliminated load-bearing walls.

When a man has perfected a formula for success, it is seldom that he changes that formula. But home builder Joseph L. Eichler is doing just that. Having led the northern California market in quality tract housing since the first Eichler home was sold near Palo Alto 15 years ago, he is now branching out into two major experiments: redevelopment and community housing. He is deeply involved in two of San Francisco's redevelopment projects—Western Addition and Diamond Heights—and at the same time is launched on his first venture into community-owned row housing—Pomeroy Green in Santa Clara.

Many of the elements of Eichler's success formula are being repeated in these new enterprises. Perhaps most important of all, he is continuing to use the same top-drawer architects who have designed his award-winning tract houses: Anshen & Allen of San Francisco; Claude Oakland, formerly with Anshen & Allen, and now in his own practice; and Jones & Emmons of Los Angeles. It is also his aim to continue to provide "the most house for the money," which has been his by-line in his dozens of tracts throughout the state. He will also continue to give his buyers "what we know they want, before they know it."

Joseph Eichler, now a dynamic 60 years of age, became interested in architecture and housing quite by chance. Having made a comfortable fortune in the "butter and egg" business in San Francisco, he rented a house designed by Frank Lloyd Wright (the Bassett house) in Hillsborough during World War II. He and his family lived there for two years and as Eichler says now: "Each day offered new living experiences that were a revelation to me." He began to dream of building low-cost houses that would incorporate some of the delights he found in the Wright house: freedom of design, a close integration to the out-of-doors, the use of natural materials and a sense of spaciousness. Remembering the great housing boom that followed World War I, he resolved to test his dream at the end of the second.

The beginning: prefab houses

In the meantime, he wanted to build a house for his own family: a house that would give them the same sense of full living that they had experienced in the Bassett house. He talked to a series of architects in the area. "Finally someone introduced me to Bob Anshen," he says, "and I felt almost immediately that this man could do the job." The firm of Anshen & Allen designed the house, entirely to Eichler's satisfaction, but wartime restrictions prevented its being built. But this marked the start of a long working association and close friendship that has continued through the years.

Eichler's entry into the low-cost building field was an unpropitious beginning—via prefabricated houses. The houses were sold as a package, to be erected on

the owner's own property, and Eichler admits that neither he nor the clients were particularly happy with the results. He gives credit to one of his building superintendents for getting him started in a new direction by suggesting that he buy a small ranch that was for sale in Sunnyvale, erect the houses, then put them up for sale. Eichler, never a man to move slowly, bought 45 acres in the next two days and began to build the same type of prefabricated houses. Halfway through the project, he decided that this was equally unsatisfactory. He then hired a draftsman and began to build conventional houses.

During the time these first draftsman-designed houses were under construction, the Eichlers again engaged Anshen & Allen to design a house for the family, this one to be located in Atherton. As plans progressed, Bob Anshen repeatedly urged Eichler to let the firm design his low-cost tract houses as well. Somewhat dubious that an architect could design a house to sell for $10,000, Eichler finally agreed to give Anshen & Allen a chance and they designed the first group of real Eichler houses near Palo Alto around 1950.

These first houses, with their flat roofs, blank walls facing the street and open planning, were startlingly different from the conventional tract models that were springing up all over northern California. They started a fair storm of controversy. "They'll never sell," was the consensus of conservative real estate men. There was no middle ground in potential buyers' reactions. As Eichler himself recalls, people "either loved 'em or hated 'em."

The initial buyers to "love 'em" and move into them, first by the dozens and then by the hundreds, tended to be predominantly young professionals, including a fair number of young architects and engineers, who found the Eichler house the closest they could come to contemporary custom-design in a mass-built price range. Gradually, during the ensuing years, the range of buyers has widened considerably and the designs have become accepted. Eichler's researchers, analyzing their "average buyer" today, estimates that he is 34 years old, with 1¾ children. "We like to think that he is a young man headed for success. He is open-minded, likes the good things and is happy in our house."

Today's scoreboard: over 8,500 homes

About two years after Anshen & Allen began designing these houses in northern California, the firm of Jones & Emmons in Los Angeles also was hired.

Today over 8,500 homes in a number of subdivisions have been sold, but the firm also does custom work. The organization of Eichler Homes, Inc., now numbers some 60 people, headquartered in handsome Palo Alto offices designed by Jones & Emmons. Edward and Richard Eichler, Joseph's two sons, play important roles in the organization.

With his homes an undisputed success, both in

Al Waldis photos





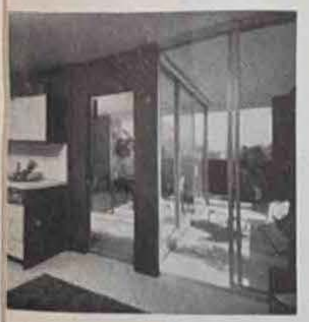
Tract houses in Sunnyvale (above) and Walnut Creek (below) are work of Jones & Emmons. Tree-lined streets have lesson for every developer.





Ernest Braun photos





First 12-unit apartment building in Western Addition with living room (above) and kitchen, family room and balcony (left). Architect is Claude Oakland.

financial terms and in recognition (by more than a baker's dozen awards from such diverse sources as the U. S. Department of Commerce, Parents Magazine, the American Institute of Architects and the Southwest Research Institute Housing Foundation), Joseph Eichler began to look for new outlets for his energy.

Western Addition: four blocks of malls

In 1960 Eichler Homes was successful bidder on four blocks in the heart of the Western Addition redevelopment project.

Eichler's four blocks (which will have the Japanese Cultural Center, designed by Minoru Yamasaki, on one side and a large apartment project for the International Longshoreman's Union, designed by Marquis & Stoller on the other) are being developed as a planned community, abounding in malls and green areas common to more than one of the buildings. The City of San Francisco has cooperated by permitting the closing of two streets so that they will not bisect the community. One block will contain "garden apartments"—a slight euphemism to describe three-story buildings, wood frame, built over a base of ground-level garages. This block will contain six buildings of 12 units each, all with three bedrooms, two baths and a family room. Each building is built around a central courtyard and apartments will have private balconies.

The second block will contain a circular 19-story apartment building with a three-story garage under part of the structure and an open plaza at ground level. This building will contain 234 two-bedroom units. The remaining two blocks will have two more conventional high-rise apartment buildings: 15 and 19 stories, containing both two- and three-bedroom units.

All will incorporate some of the features that have made Eichler Homes a well-known brand name: open planning, splendidly equipped kitchens, family rooms and multiple baths. All are being designed by the same architects whose names have long been associated with the firm. Anshen & Allen are architects for one high-rise apartment building; Jones & Emmons for another; and Claude Oakland is designing the garden apartments and the circular tower.

The first 12-unit garden apartment building is completed and five identical buildings are under construction. These are being sold as cooperatives at an average price of about $36,000. The first high-rise building by Jones & Emmons already has started.

Diamond Heights: single-family dwellings

In the Diamond Heights redevelopment area, Eichler Homes was the successful bidder on 105 individual lots, all of which will contain single-family dwellings of the same type previously built in the suburbs. The great majority of these have four bedrooms and 2 1/2 baths, with five having three bedrooms and two baths. Construction is almost completed on the first

65 houses. The price range is from $36,000 to $46,000.

The "most house for the money" has always offered innovations both in design and in equipment. Eichler claims many "firsts" in tract house design: the first to provide completely equipped kitchens, including dishwashers, garbage disposers and plastic laminated counter tops; the first to use metal window frames; the first to provide radiant heating; the first to offer multiple patios, family rooms and multiple bedrooms and baths.

One of his most successful recent designs is a house built around an open central court or atrium. Eichler uses this design as an example of his giving buyers what they want before they know they want it. "If I had asked 1,000 people if they wanted a house with an atrium, 999 would have said no, partly because they didn't know what an atrium was and partly because they weren't sure they would like it." But his atrium houses in Palo Alto have been so enthusiastically accepted that Look magazine recently devoted several pages to them.

Eichler himself gives full credit to his architects for the success of the houses. His architects are equally generous in giving credit to the builder for many of the design features that keep his houses in demand. It is certainly true that Eichler is an active participant in every phase of the planning. He "lives" with each new design, often sketching rough ideas for further refinement by his architects. His interest does not stop when the houses are completed and sold. It is not unusual for him, for example, to drop in on a buyer, after the family is well settled, to see how the house works and where changes and improvements should be made.

His decision a few years ago to move the laundry center from its traditional place in the kitchen to the hall close to the bedrooms was made after he observed housewives carrying loads all through the house to the kitchen and back again for stacking in the linen closet. This type of personal research also led him to have one bathroom opening from outside for the convenience of playing children. Again, so that housewives could sit down to do their kitchen chores, he recently lowered many of the kitchen work surfaces to table-top height.

Pomery Green: common use of land

The depth of his concern with design is evidenced by the fact that in 1960 he took A. Quincy Jones of Jones & Emmons and Claude Oakland on an extended tour of Europe, which included 11 countries. They studied many concepts of housing, with the hope that the best of them might later be incorporated in new Eichler projects.

Eichler believes that his Pomeroy Green in Santa Clara represents a major breakthrough in the homebuilding field. Pomeroy Green will consist of 78 town houses, all two stories, with four bedrooms and 2 1/2 baths, connected in groups of row houses. Each group is built around a common green containing recreational facili-



Gerald Ratto photos

In Diamond Heights Claude Oakland presents Eichler version of San Francisco's bay window. Entry garden (below) looks into family room and kitchen.





Single-family house in Castro Valley: $28,000 with land; architect: Jones & Emmons.



Single-family house in San Jose: $22,500 with land; architect: Claude Oakland.

ties and a swimming pool. Each house also has a sm private fenced garden of its own as well as a carpo A monthly payment of $178.46, over a 40-year period 5 1/4%, not only buys a house of 1,570 sq. ft. but i cludes mortgage insurance, pool maintenance and prorated share of the salaries of a manager-handyma gardener and lifeguard. With land costs continuing t rise everywhere and with land at any price becomi scarce, Eichler believes that this common use of lan for common enjoyment is a logical step forward.

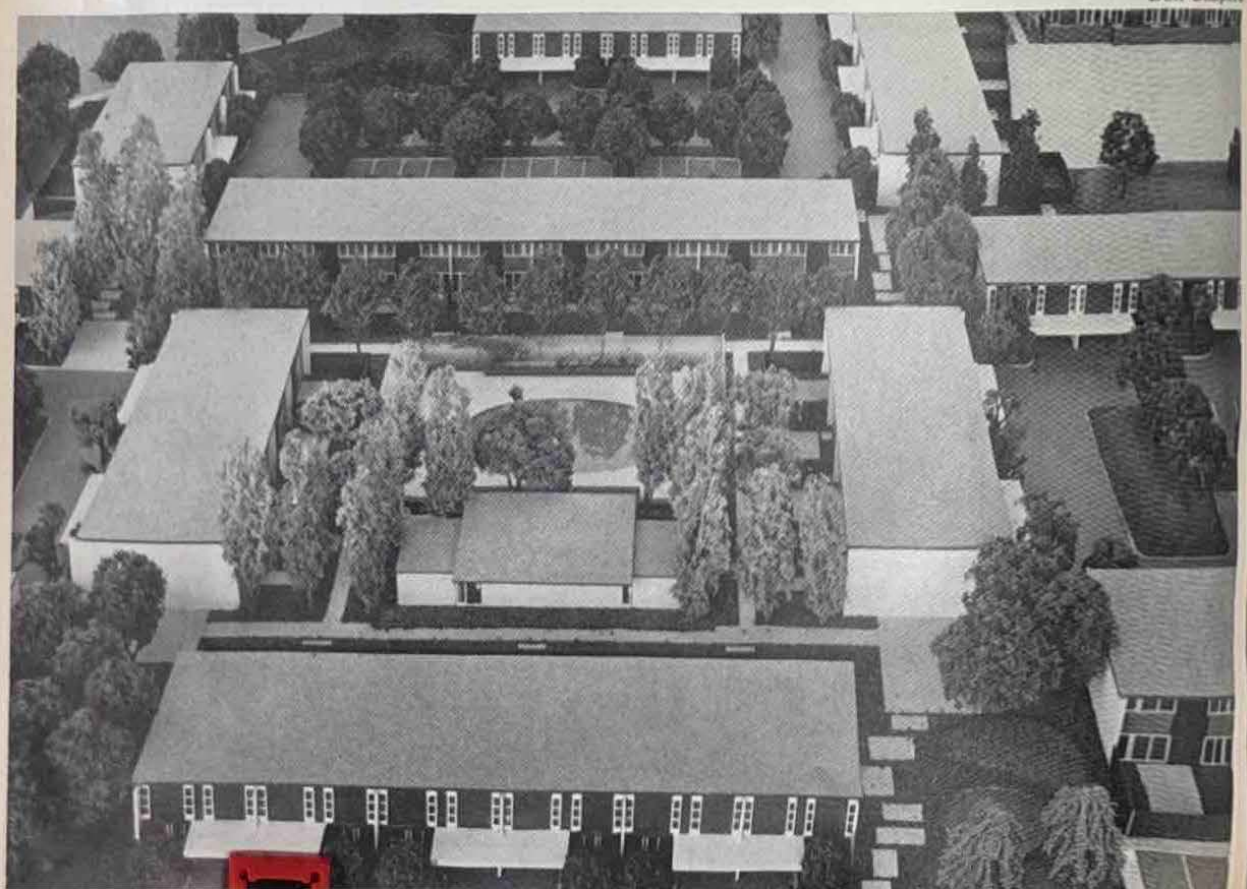
Concurrently with his new ventures, Eichler is stil actively engaged in building more tracts: seven i northern California, one in the city of Orange and another planned for the San Fernando Valley.

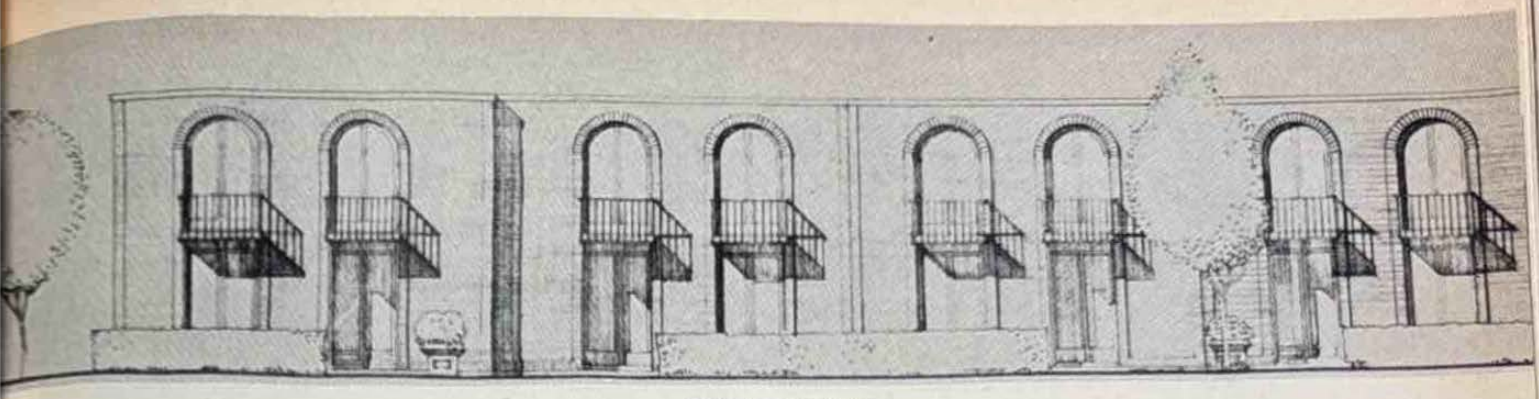
The philosophy of Eichler Homes, Inc., might be summed up by saying that its management believes i specialization and professionalism and is willing to pay for them. "We hire the best people we can find for al facets of our operation and we work together to find the best possible solutions."

With the announcement late last year that his firm plans a $6 million project in the suburbs of New York, Eichler continues to live up to his claim that "we will try anything." What will the New York versions be like? "They will be typical Eichler homes," says a spokesman, "with a few minor concessions to the dif ferences in climate." It seems reasonable to predict that New York is in for a new concept of tract living. It also seems reasonable to predict that in the years to come, Joseph Eichler and his sons will continue to make news as they keep on with their search for the best possible ways to house middle-income families.

Pomeroy Green: 78 two-story town houses—new concept in cooperative housing designed by Claude Oakland.

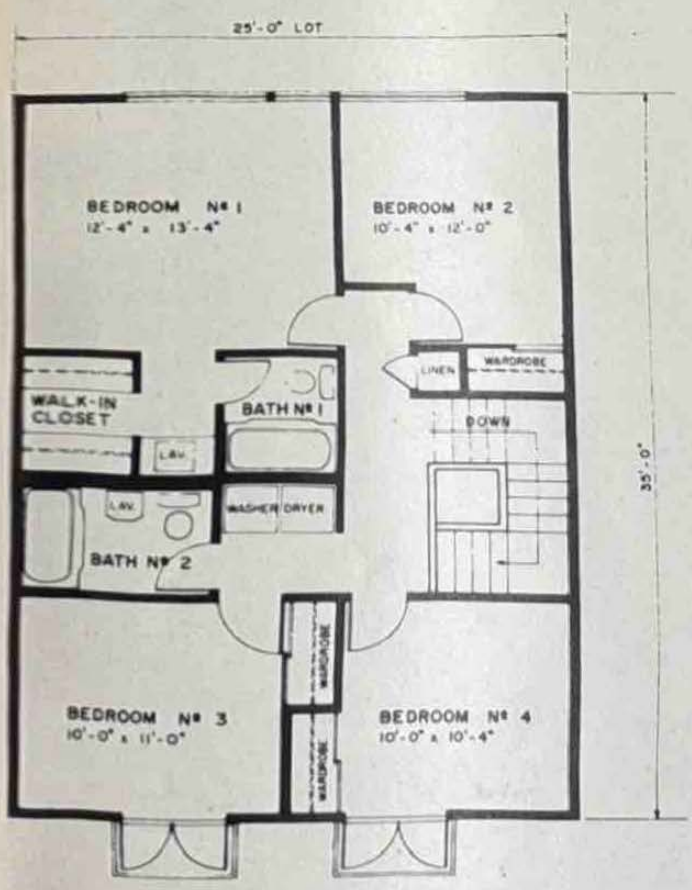
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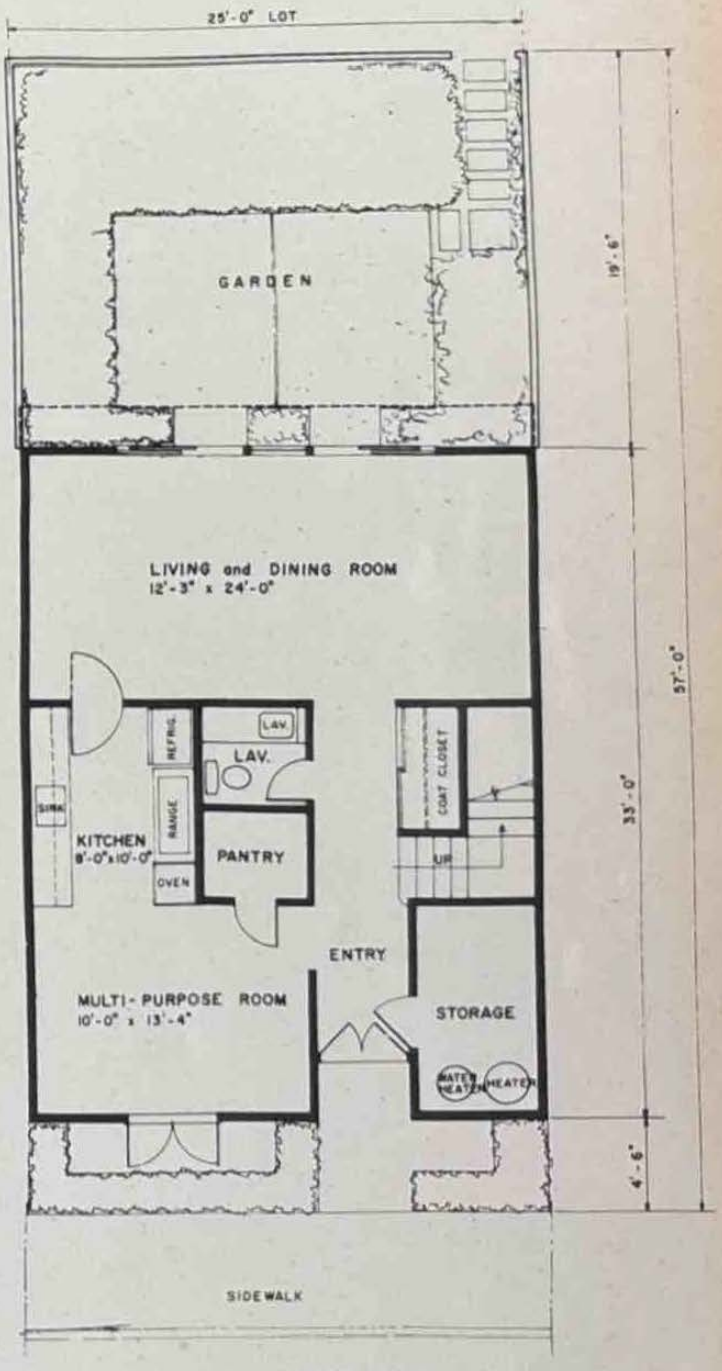


STREET ELEVATION

Visitacion Valley is 21-acre project in San Francisco for which Eichler has presently planned 221 town houses (all of them identical) and about 575 units in two high-rise buildings. Brick exterior is Eichler's answer to New York's brownstones. Designed by Claude Oakland, each two-story house has 1,700 sq. ft. Typical floor plans are shown here.



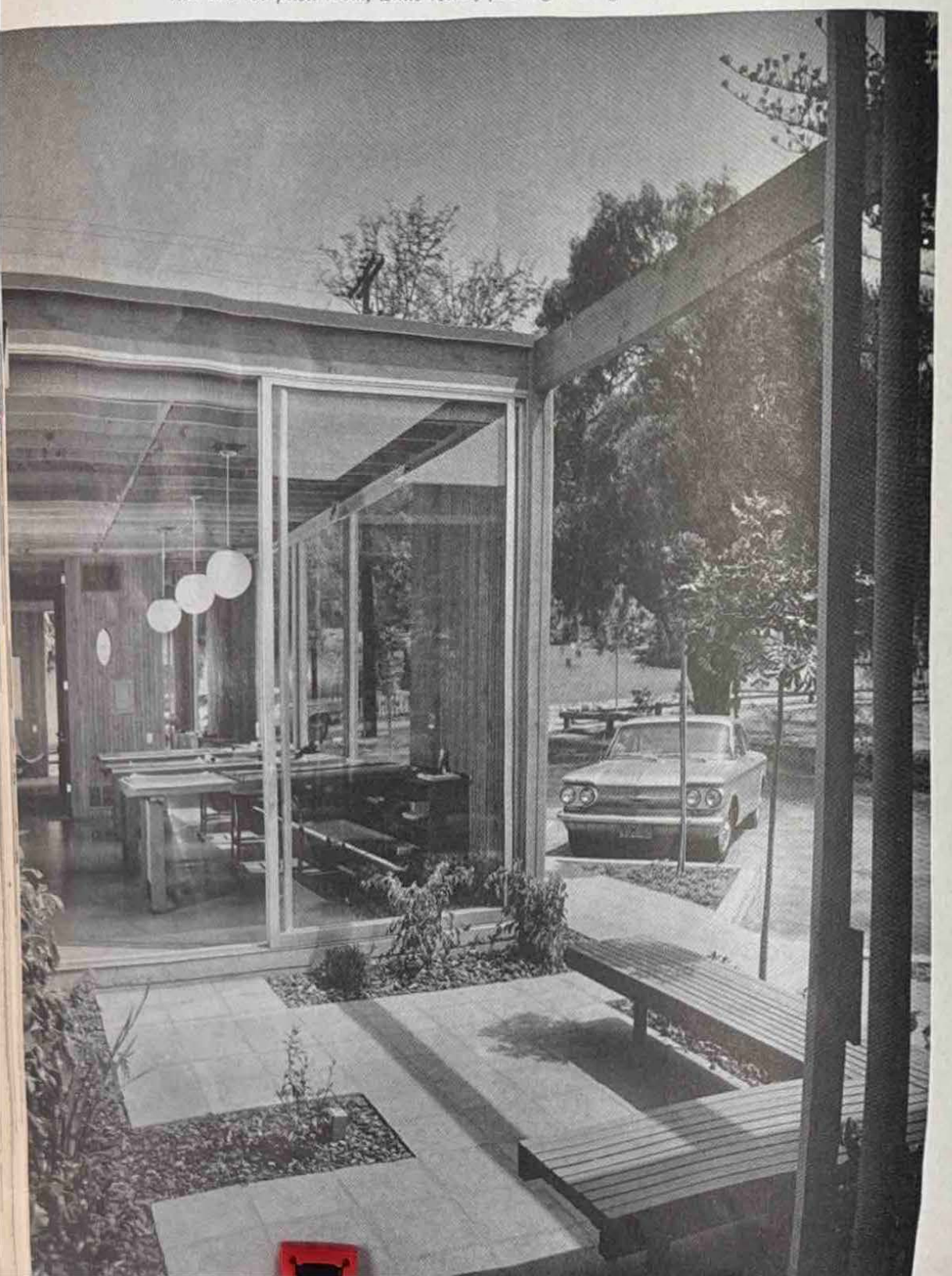
SECOND FLOOR

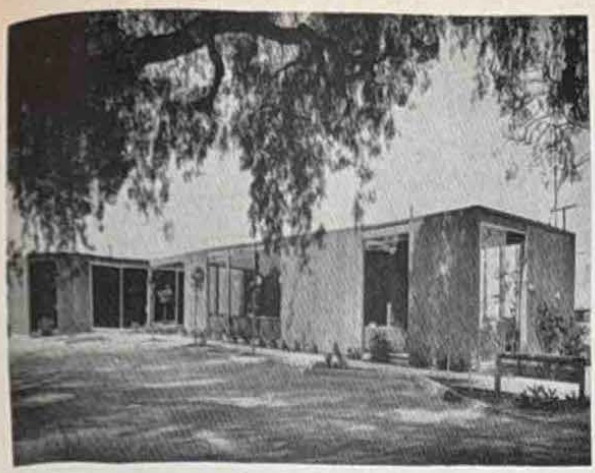


FIRST FLOOR

HOMER DELAWIE
San Diego, California

Mexican beige paver tiles, 12 in. square, are used on all outside walks and carried into reception room, while rest of flooring is integral color concrete slab.





Wood frame structure has 1x12-in. vertical cedar siding on east side, concrete block fire walls along property lines.

Douglas Simmonds photos



Furnishings incorporate muted shades of orange carpeting, earthy yellow laminated plastic desk tops and leather chairs.

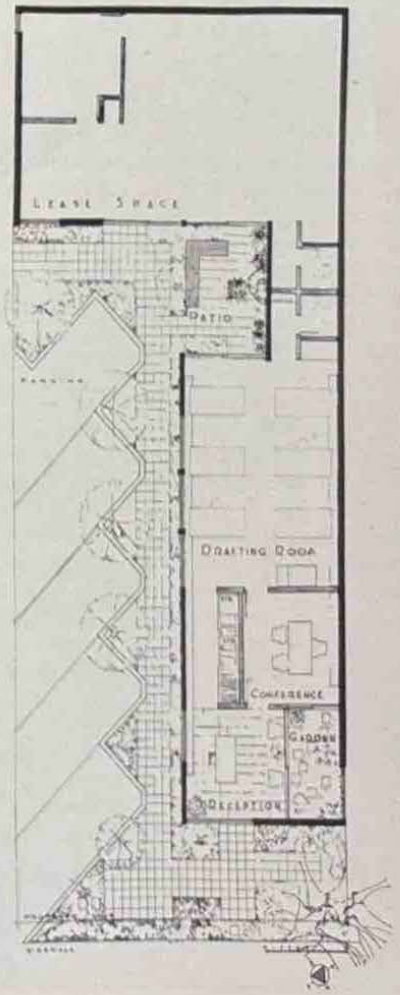
IN PLANNING his own office building with one rental space, the architect set out to blend the 2,015-sq. ft. structure into its surroundings—historic Old San Diego, facing Presidio Park—in a manner consistent with his approach to design. This was accomplished by employing materials sympathetic to the area, such as Mexican paver tile, rough cedar siding and metal grillwork done in a contemporary expression.

The L-shaped plan for a 40x100-ft. level lot provides each of the offices with a view of the park, allowing space for the staggered parking scheme which takes advantage of the adjacent 14-ft. alley. The small patio at the rear serves as a garden for seating and sculpture and as a separation between the two office units.

Toilet areas are placed back to back between the offices both for economy and as a sound buffer. By removing the wall between the two adjacent hallways, the front office can easily expand into the presently leased space. Conference and reception rooms are situated around a small garden court, providing a second outdoor area, yet privacy from the exterior and from each other. Passage and sliding glass doors are full height to convey a feeling of elegance and spaciousness.

Selection of colors heightens the indoor-outdoor integration of the building: warm wood stain on the siding; clay-sand on masonry walls of rooms and patios for an earthy natural look; and a darker element of the roof line repeated on interior cabinets and doors.

Built by Randy Construction Co., the office building won an Award of Excellence in the 1962 design program of the San Diego Chapter, AIA.



Comment on a commentary

by RICHARD STOREK, University of Oregon student currently working with Seattle designer Gideon Kramer, in reply to Edward H. Fickett's statement published in Architecture/West for May 1962

THE HOPE FOR MAN'S FUTURE lies not merely with youth. It rides with those that are now living by a conviction that they, by sweat, will have a small effect on this imperfect society with its imperfect ways, living in its imperfect environment.

If it is the architects who are willing to accept the responsibility of their environment (and obviously they are eager to do so), they must soon awaken to the fact that a leisurely pace is a luxury they cannot afford—least of all an intermission of generous self-acclaim, congratulations, applause and basking in an imagined sunbeam.

There is a hollow and unhealthy notion, aptly titled "Prestige, Privilege and Tradition" by Mr. Fickett, this profession holds dear to its heart that can't stand the light of honest scrutiny. The "modern miracle of man" is *hardly* today's architect. (It is more that we are still living.) And who ever crowned the architect "king of professionals"? If he is, as he is quick to acknowledge, the creator of the environ, then he surely wasn't crowned on merit of his past performance.

The environment we file through to and from our daily work is a notoriously absurd thing. The environment of our work is grossly inconsiderate. Our children's schools are monuments to masonry or glass or somebody's ego (rarely learning). And our crude dwellings stand for Who Knows What.

The man in the street has likely never spoken with an architect. But having done so, he would probably emerge with a less-than-clear understanding of just what it is this professional man does or why we need him so desperately; more likely, he now regards the architect as a crystal gazer operating behind a (conjured) cloud of obscurity.

It seems to me that the architect's first point of business (and the honorable thing to do) is to face a little reality, to admit he could have done better and resolve to try harder. Today.

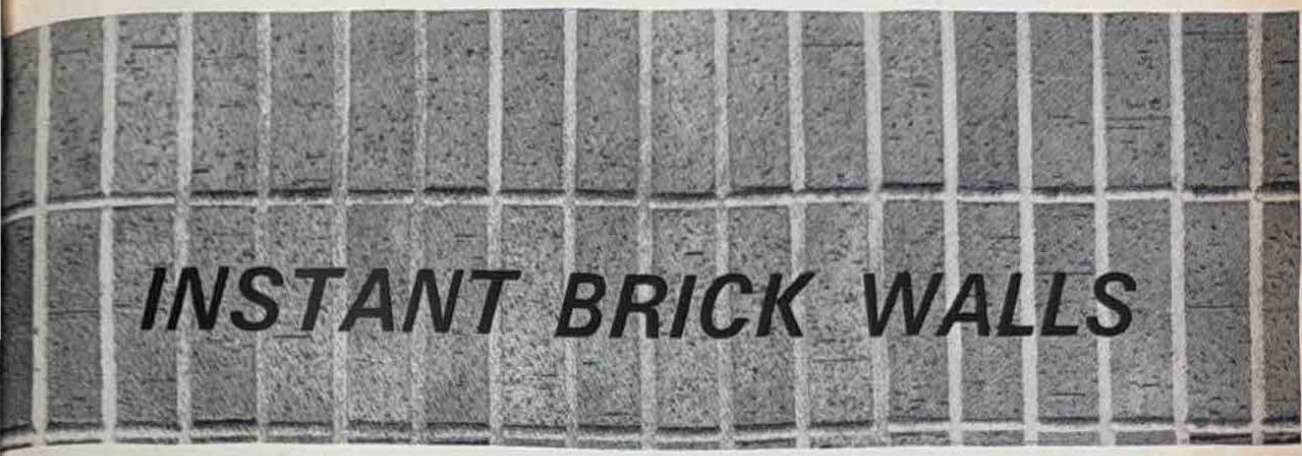
The architect so far determines only the *shape* or the *color of* some element chosen by someone else. He doesn't yet determine *what* shall be built. There is much he has to learn and do to become more the instigator and initiator of his environment and less the hired hand.

A share of the blame for man's predicament is due the specialists and professionals who have pried the meaningful experiences away from the individual, leaving him a bored spectator. Couldn't the architect begin a reversal? Couldn't he set a new standard and encourage participation by everyone in the process of acquiring a meaningful place to live? We are quick to notice and condemn the rigid conforming nature of man but seem to forget he also has an innate attraction to the new and untried which can be supported and developed.

Though he continually thinks of himself as the artist of the new technology, the architect is working out of a stale toolbox, depending daily on methods he used 10 or 30 years ago. There is a tremendous potential tool in methods of manufacture, synthetics, communication, distribution, data processing and the new economy of finance and in our findings on the inner nature of man himself. These are realms barely scratched by the average architect and with imagination can be used with powerful results.

Surely we can do more than coast on our laurels (which barely exist) hoping somehow that life 10 years hence will be more reasonable and meaningful; and we can do more than hope that men will eventually regard each other with more concern and respect.

Let this *profession* become a *doion* and if the architect is really responsible for what he claims, let him *work* for his crown.



INSTANT BRICK WALLS

Major breakthrough in prefab techniques seen in Seattle World's Fair project

SERMONS FROM SCIENCE BUILDING at the Seattle World's Fair may appear to be just another brick structure but looks can be deceiving. Essentially an auditorium for the presentation of daily scientific demonstrations, it is constructed of prefabricated brick panels—102 in all ranging in size from 19½ to 78 sq. ft. and in weight from 700 to 2,800 lb. Thirty-two different sizes were used.

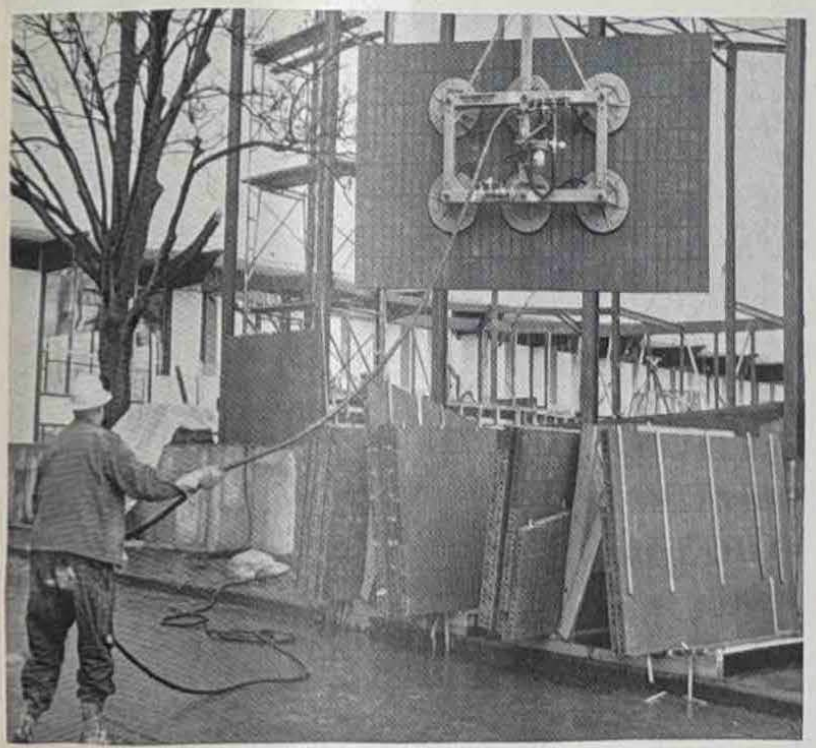
The client wanted a brick structure with portability so that after the exposition's six-month run it can be taken apart and reassembled elsewhere, thus reducing the cost of erecting the walls a second time conventionally. Architects Johnson, Nesland & Sibold teamed up with engineers Harry R. Powell & Associates and Builders Brick Co. to develop the prefabrication technique.

The panels were built at the manufacturer's Newcastle plant 17 miles from the site, utilizing 30,000 bricks,

Forde photos



Curved panels are built on asphalt area in stack soldier course as they cannot be turned. Masons use curved templates attached to story poles.

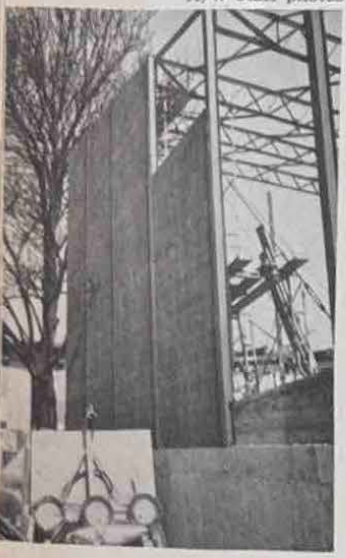


Lifting device consists of six individual grippers having special closed cellular sponge seals assembled in rectangular load bar which unitizes system. Here it raises 9x5-ft. panel. Power is supplied by gasoline-driven vacuum pump.



Brick panels are set into place in steel H-column framework. Individual units are still noticeable here as horizontal joints have not yet been pointed.

A/W staff photos



each 3½x2½x7½ in. with three core holes and one end with a ½-in. radius groove to allow for steel. Mortar was composed of one part high-early portland cement, one-half part lime and four parts sand with 2 lb. of lamp black per yard for coloring.

The 79 flat panels were constructed alongside a steel frame storage building with 20-ft. bays. Strongbacks consisting of one 2x6 and one 2x8 glued and nailed were attached to steel columns with C-clamps at a height 2 in. short of the top of each panel. Pieces of plywood with ½-in. diameter holes spaced every 8 in. were secured to the top flat side of the strongbacks. Story poles were attached to the two extreme ends of these templates. Jack lines were used for the other plumb corners and a coursing line was pulled for the panels —generally three per bay—from the two story poles.

After the first course was laid, a ⅜-in. rebar was inserted in the plywood every 16 in. o.c. and placed in the head joints. A 2x8 was attached to the columns behind the panels at the two-thirds point before topping out. They were then secured and the upper strongbacks removed, having been cured a minimum of seven days.

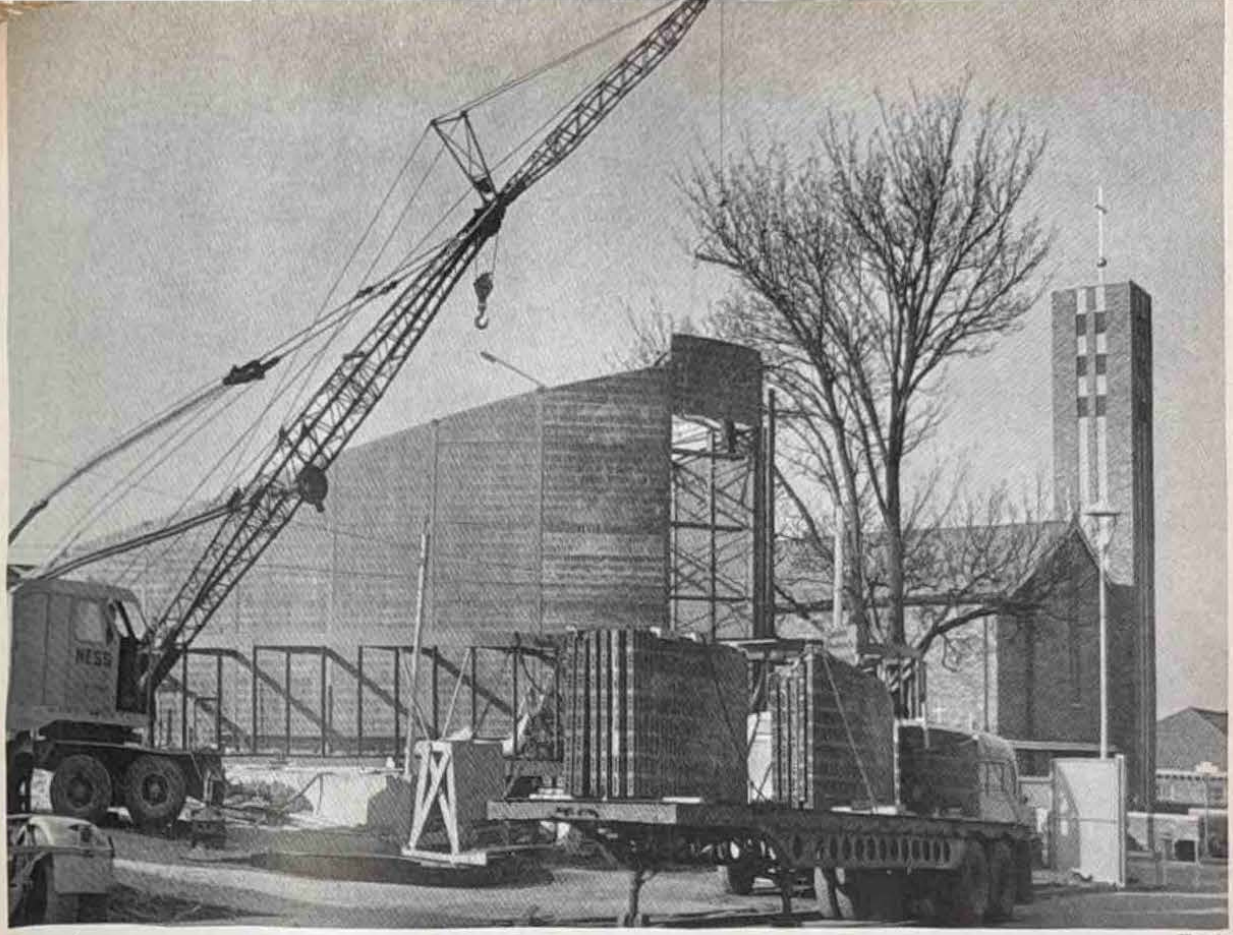
Curved panels were built on an asphalt area in the stack soldier course as they could not be turned. Employing the same amount of steel, masons used curved templates which they attached to story poles.

A fork lift with a chain hoist on each fork rotated the flat panels 90 deg. in the plane of their face surface. A vacuum material handler, Whiting Corp.'s Pressuregrip, with two pickup arms was attached to the hoists. The pickup was then transferred to the other arm and the panels set in a wood cradle for transportation. The curved units were placed directly on the bed of the truck and secured in place.

The vacuum gripper was taken to the jobsite and attached to a mobile crane. The 3½-in. thick panels were slid down between two 6-in. wide flange columns, the bed joints shimmed and mortared. Panels were sealed with ¼x1-in. soft neoprene rubber strips adhered to the steel columns. They first were wedged outward and angle iron clips bolted through the web of the columns to hold them in place. Neoprene gaskets also were used on the steel clips to allow for any irregularity of the brick surface.

Gwinn Construction Co. was the general contractor; Don V. Klier built the panels; and Hatcher & Hatcher did the installation.

Builders Brick President Richard C. Houlahan says all type of brick can be used in the creation of panels, opening up new avenues of design.

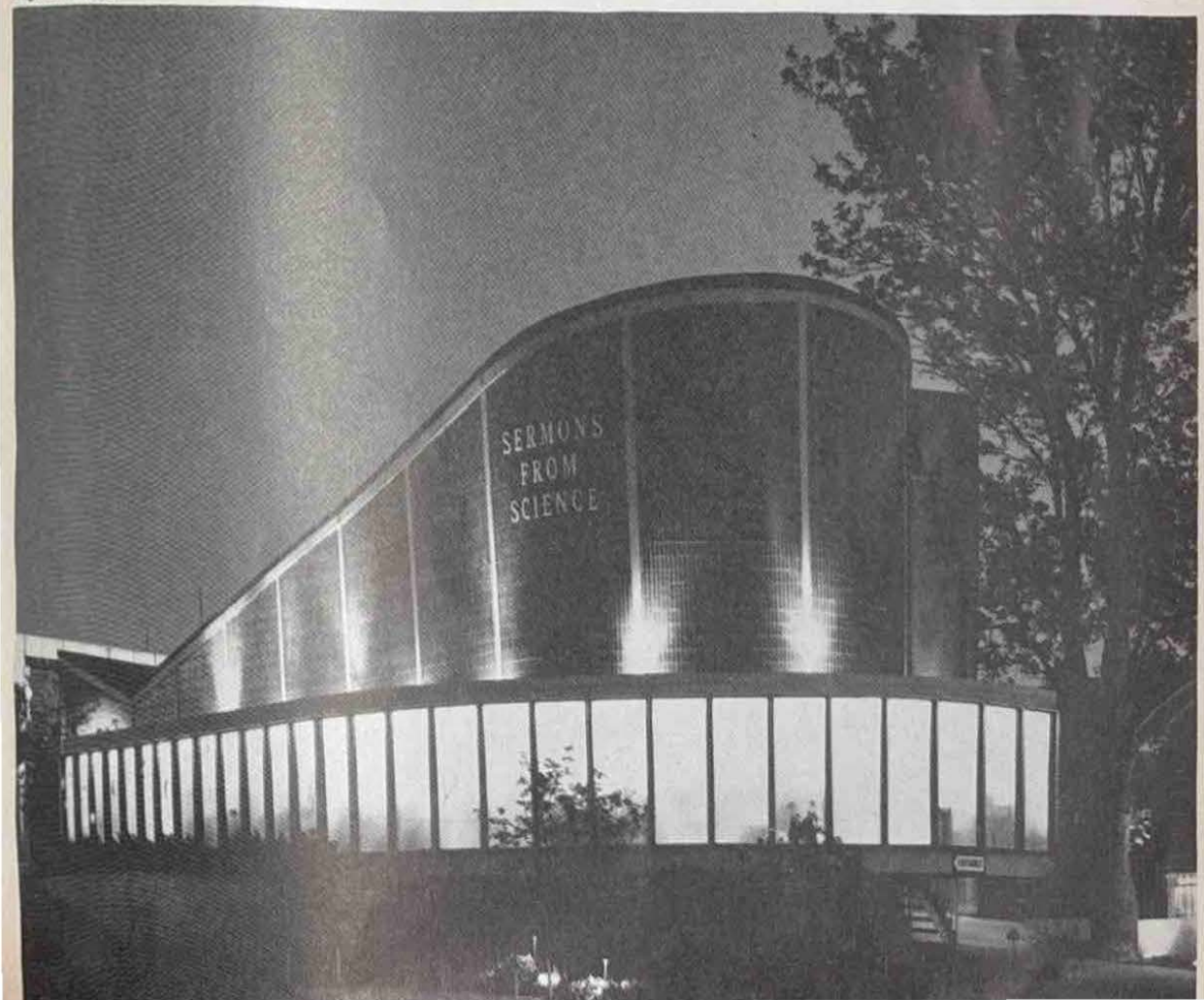


Twenty-three circular units, built upright at plant as shown, have 14-ft. 1½-in. radius. Mission texture was used on job.

Forde

Auditorium is faced with Inca (red) ceramic panels on one side and cobalt blue on other, secured in light blue steel frame. Offices are housed in lower portion of building.

Hugh Stratford



architectural aluminum sheets

Permanent finish of Polynodic aluminum sheets is hard, light-fast and corrosion resistant, allowing reproduction of almost any piece of art, even in three dimensions. Indoors or outdoors, the sheets might be used for murals, panels or doors. Combinations of gold, silver, bronze and gray with neutrals are available.—Fromson Orban Co., Inc., 261 Madison Ave., New York 16, N.Y. (No. 1)

safety glass doors

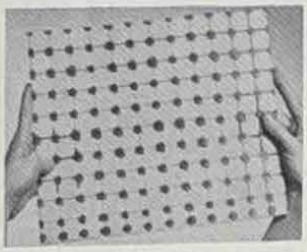
The hazard of "invisible" glass patio doors has caused many home accidents. Amerada proposes two solutions to this problem: Decor-Glass is made with a choice of fadeproof patterns laminated between two layers of glass; Twi-Lite is tinted gray and cuts down heat and glare while providing "visual identity." Both are shatter-resistant safety glass.—Amerada Glass Corp., 3301 S. Prairie Ave., Chicago 16, Ill. (No. 2)

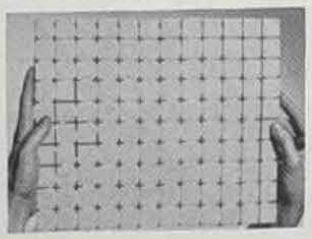
self-contained fluorescent

A portable long-life fluorescent lamp, powered by ordinary flashlight batteries, is now in production. The lamp is said to provide a far greater volume for more hours than was previously possible with incandescent portables. The ITT fluorescent can be used in any situation where ordinary lighting is impractical or impossible. A special reserve position switch provides up to 30% additional life even after the batteries have "run down."—ITT Industrial Products Division, 15191 Bledsoe St., San Fernando, Calif. (No. 3)

tile mounting system

An improved method of back or permanent mounting called Dot Tile has been developed for 1-in. squares of ceramic mosaic tile. The system uses less material and leaves about 85% of the tile exposed. The sheets of tile are easy to handle and can be cut with a knife or trowel. Dot Tile can be applied with any standard setting bed, adhesive or mortar, conventional



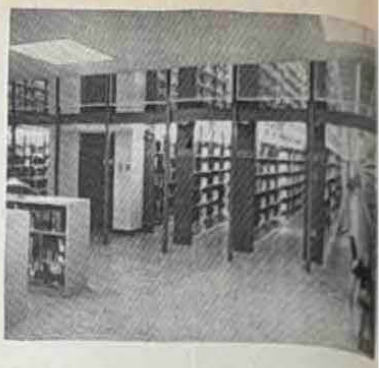


or thin-set. All sheets are the same size and will not stretch, shrink or sag. Back (top) and front (bottom) views are shown above.—The Mosaic Tile Co., 131 N. Robertson Blvd., Beverly Hills, Calif. (No. 4)



burlap-textured hardboard

Texture of expensive grass cloth is combined with the economy of hardboard in Forest Burlite. The board is easy to install and can be worked with ordinary hand or power woodworking tools. The surface may be left natural burlap color or painted.—Forest Fiber Products Co., Box 68, Forest Grove, Ore. (No. 5)



multi-tier bookstacks

Designed for libraries, Estey multi-tier bookstacks have a cellular steel deck which serves as a ceiling for the lower level of shelving. Underside of the deck is painted at the factory in a light reflective color. No field painting is required. Decks and columns are UL approved for use as wire raceways.—Estey Corp., 1 Catherine St., Red Bank, N. J. (No. 6)

permanent form hardware

Now available with permanently attached hardware, Symons steel-ply forms are engineered to reduce labor and material costs. A modified latch-bolt is used with standard forms on residential, commercial or heavy construction. A high strength, 6,000-lb. flat tie allows for 3-ft. spacing of all ties with the latch-bolt, thereby reducing the number of ties required. Symons' new steel cap waler-brace fits easily over the top of the forms, requiring no hardware. Field tests indicate exceptional speed in erection and stripping through the use of the system. — Symons Mfg. Co., 200 E. Touhy Ave., Des Plaines, Ill. (No. 7)

elastic roof coating

A colorful, flexible coating has been designed specifically for contemporary architecture where prestressed concrete, asbestos cement, solid slate and other thin shell construction is employed. Zyloflex is also recommended where unusual vibration or stress is a problem. The ready-to-use coating can be rolled, sprayed or brushed over concrete, metal, plywood, stucco and insulated roof and sidewall surfaces. Black, aluminum and pastel colors are available.—The Monroe Co., Inc., 10721 Quebec Ave., Cleveland 6, Ohio. (No. 8)



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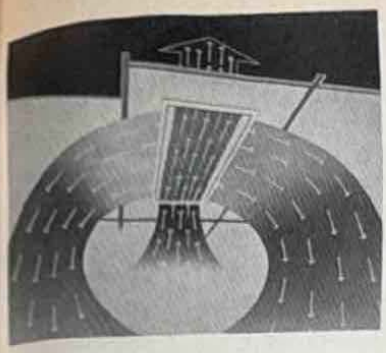
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lighting-cooling fixture

The Clymatron combines lighting, cooling and heat exchange in a single fixture, making it possible to double or triple the present average lighting level in modern buildings without overburdening the air conditioning system. The unit supplies cool, conditioned air from both sides of the fixture, returning room air through the end of the fixture and simultaneously exhausting lamp heat.—Day-Brite Lighting, Inc., 6260 N. Broadway, St. Louis 15, Mo. **(No. 9)**

fire-retardant acrylic

All-plastic luminous ceilings may soon be possible. A flame-retardant acrylic sheet called FRA7, can be subjected to heat from a blowtorch without bursting into flame. The new material may contribute to substantial changes in home and office decor, since up to now most ordinary acrylic plastics have been banned by fire or building codes.—The Polycast Corp., 69 Southfield Ave., Stamford, Conn. **(No. 10)**

all-master intercom

Each phone in the Rapidofon system serves as a master station, accommodating up to seven telephones. Calls can be transmitted to and received



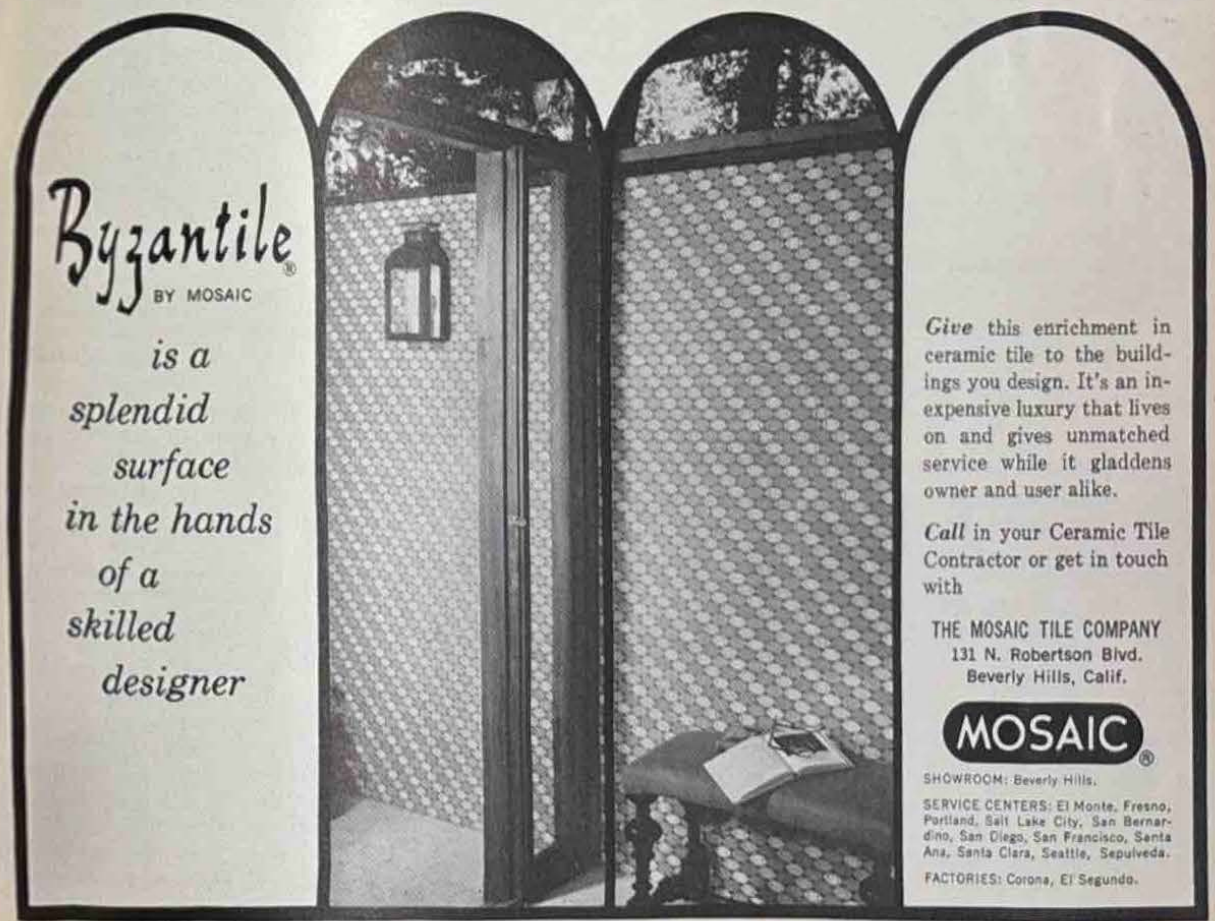
from any phone in the system. (Conventional "squawk box" intercoms can communicate only with the master.) The homeowner can also hook up an electric front door opener or telephone-front door loudspeaker connection.—Tele-Norm Corp., 55 W. 42nd St., New York, N.Y. **(No. 11)**

polyurethane protective coating

A tough, transparent, high gloss finish is produced by Dynathane, a polyurethane coating for interior and exterior, on-grade and off-grade wood, concrete and metal surfaces. When used on wood, the product lets the natural grain and color show through. Dynathane is recommended for use on gymnasium floors, bowling alleys, wood siding and marine exposures where a long-lasting, no-wax surface is dedesired. It is easily cleaned.—A. C. Horn Companies, 550 Third St., San Francisco 7, Calif. **(No. 12)**

high strength adhesive

The long open bonding time and high immediate wet strength of 3M's new adhesive, Tacky, permit large areas to be coated at one time. The adhesive is used to bond glass fiber insulation to metal, wood and similar surfaces for insulating air conditioning units and heating equipment; it can also bond aluminum foil and kraft paper vapor barrier facings to the glass fiber insulating material. Either brush or spray method can be emplyod—Minnesota Mining and Manufacturing Co., 800 Bush Ave., St. Paul 8, Minn. **(No. 13)**





a/w pick of the month

The use of large areas of glass in modern architecture has introduced special design problems: heat and glare control, maintenance of privacy, uniformity of reflection and many others. "To Capture, Control or Create an Environment" discusses these problems and illustrates some notable solutions. The booklet's 16 pages show colorful, creative applications of clear, tinted and textured glass in recent buildings.—American-Saint Gobain Corp., Box 929, Kingsport, Tenn.

Textured Laminated Surfacing; displays patterns of Textolite, no-glare laminate with textured surface for counters, tabletops, walls, doors. Booklet T-CDL-540; 8 pp.—General Electric Co., Laminated Products Dept., Coshocton, Ohio.

Hospital and Institutional Furniture: includes color room settings as well as specifications for beds, chairs, tables, desks, etc., suitable for hospital or dormitory use; 64 pp.—Hard Manufacturing Co., Box 427, Buffalo 5, N.Y.

Plexiglas for Offices, Retail Stores, Institutional Buildings and Homes: contains information on transparent, translucent and colored acrylic plastic, suggesting such architectural applications as luminous walls, window well covers for basement gardens and spandrel panels; 12 pp.—Rohm & Haas Co., Washington Square, Philadelphia 5, Pa.

Plate Glass Lifter: describes a vacuum cup lifter with 4:1 safety factor designed to speed installation of large sheets of glass; 8 pp.—Vac-U-Mation Division, 3117 Clybourn Ave., Chicago 18, Ill.

LITERATURE

Overlay Plywoods (AIA 19-F): contains description and suggested uses of prime-painted siding, now available in textured finish; 4 pp.—Evans Products Co., 1029 S.W. Alder St., Portland 5, Ore.

Curtain Walls, Fire Walls and Partitions (AIA 17-A): covers insulated metal walls, UL rated fire walls and non-insulated single-sheet siding; Catalog W-62; 16 pp.—The R. C. Mahon Co., 6565 E. Eight Mile Road, Detroit 34, Mich.

Poured Gypsum Roof Decks (AIA 4-L): organizes design and selection information for components, formboards, subpurlins, spans and loads; 16 pp.—Gypsum Association, 201 N. Wells St., Chicago 6, Ill.

Telephone Installations (AIA 35-R): offers space-saving door-free design ideas for single or multiple installations; 4 pp.—Acoustics Development Corp., 1063 N. Northwest Highway, Park Ridge, Ill.

Retirement Home (AIA 4-K): describe Hopedale House, a combination hospital, nursing home and residence for the elderly; 6 pp.—The Flexicore Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio.

Built-Up Roof Specifications (AIA 12-A-2): charts for quick reference four types of roofing sheets used in Pabco-Glas assemblies; 4 pp.—Fibreboard Paper Products Corp., Brannan St., San Francisco 19, C

Door Hardware (AIA 27): prov architectural specifications and guide to the company's line of d and door hardware; Catalog A- 192 pp.—Richards-Wilcox Mfg. Aurora, Ill.

School Lighting Guide (AIA 31-F discusses selection of luminai glare control and economical ligh maintenance; 16 pp.—Wakefield Co Vermilion, Ohio.

Fiberglass Manual: reports on tra lucent fiberglass reinforced pla panels, covering physical proper code approvals, comparison with oth materials and specific types of ins lations; 90 pp.—Filon Corp., 333 Van Ness Ave., Hawthorne, Calif.

Parking Area Lighting: explains si plified parking area lighting speci cations; a choice of incandesce mercury vapor and fluorescent u is offered; portfolio of four brochu —Steber Division, 1334 Kostner Av Chicago 51, Ill.

Nailed Box Beams (AIA 19-F): i cludes design, fabrication and insta lation details for site-fabricated g rage door headers 8 to 18 ft. lon gives simple method of figuring lo requirements; 24 pp.—Douglas F Plywood Association, 1119 A St., T coma 2, Wash.

TECHNICAL PUBLICATIONS

Modern School Shop Planning. Prakken Publications, Inc., 416 Longshore Drive, Ann Arbor, Mich. 1961. 221 pp. $4.50.

Third edition has three new features: new equipment lists for all shop areas; a completely new section on planning and equipping for technical education; and a separate section devoted to purchasing and equipping considerations.

Prestressed Concrete Building Code Requirements. Prestressed Concrete Institute, 205 W. Wacker Drive, Chicago 6, Ill. 1961. 16 pp. $1.

Presents first national code formulated by the PCI committee headed by California's T. Y. Lin and includes all design requirements such as allowable stressed in concrete and steel, load factors, ultimate flexural strength, etc. It is intended to serve as an intermin code until the issuance of the new ACI code.

The Agadir, Morocco, Earthquake. Comm tee of Structural Steel Producers of Amer can Iron and Steel Institute, 150 E. 42nd St New York 17, N.Y. 1962. 112 pp. No pri indicated.

Analysis of 1960 earthquake; treat dynamic response of structures strong-motion earthquake studies an building code provisions which ca lessen damage.

Introduction to Engineering Analysis fo Computers. International Business Machine Corp., 112 E. Post Road, White Plains, N.Y. 1961. 134 pp. No charge.

Describes the role of the electroni computer system in solving comple engineering problems and the rapid growth of the computer art. Numerous engineering problems are dis cussed and the solutions are presented in Fortran (formula translation), a language which allows the engineer to communicate a problem to the com puter.

MANUFACTURERS/SUPPLIERS

• **Gladding, McBean & Co.**: The firm has begun direct sales and service of face brick and related masonry materials in Seattle and King County Wash., using existing sales-service facilities of the Graystone Division of Boise Cascade.

• **Flintkote Co.** A $15 million cement plant has begun production in Redding, supplying cement to Oregon and most of northern California.

• **W. P. Fuller & Co.**: Following the merger with Hunt Foods and Industries, Inc., Harold M. Williams, former executive vice president of the latter firm, has become president of the San Francisco paint and glass manufacturer. He replaces the now retired W. P. F. Brawner.

• **Cleaver-Brooks Co.**: Shea Equipment Co., San Francisco has been appointed Beaver boiler distributor in northern California and west-central Nevada.

• **Alsco Aluminum Building Products**: Richard Ihler has been promoted to general manager of the Salt Lake City office.

• **Bowman Steel Corp.**: Byerrum Engineering Sales Co. has been named Denver sales agent.

• **Fostoria Corp.**: M. J. Hooey, San Francisco, will represent the firm in northern California, western Nevada and Hawaii.

• **Universal Molding Co.**: "Supermarket" convenience is offered by the new $500,000 service center in Lynwood, Calif., designed to speed service of roll-formed metal products to the customer.

• **Western Wood Components**: The new Portland firm is opening a plant to produce sliding walls for wardrobes and other cabinets.

• **Pascoe Steel Corp.**: The new position of vice president—marketing has been filled by C. V. Blackburn in Pomona, Calif.

• **Kaiser Gypsum Co., Inc.**: Evans-Harbor Products Co., Yakima, has been appointed a full-line distributor of Fir-Tex products.

• **Formica, Corp.**: Recent additions to the sales staff include William M. Kenney, who has joined the Denver office, and Harrison W. Wood, formerly with the firm's Dallas office and now located in San Francisco.

• **Cal-Tech Systems, Inc.**: The Glendale manufacturer has appoined Alvin A. Meyrowitz to the new position of executive vice president.

• **Motorola, Inc.**: Everett LeGette has been promoted from sales manager in Southern California to regional sales manager in the western U. S.

• **Larsen Products Corp.**: T. O. (Tom) McShane has joined the firm as representative in California, Arizona and Nevada, headquartered in Inglewood.

• **Thomas Industries, Inc.**: Nicholas Condos has been appointed to the new position of southern Pacific general manager, headquartering in the Los Angeles plant.

• **Structural Concrete Bonding Co.**: George Albright will handle technical sales in the Pacific Coast states for the San Carlos, Calif., firm.

• **Dura-Vent Corp.**: O. E. (Bill) Collins has been appointed general sales manager of the Redwood City, Calif., subsidiary of Dover Corp.

ASSOCIATIONS

• **Portland Cement Association**: A new district to serve northern California and northern Nevada has set up headquarters at 235 Montgomery St., San Francisco, with Charles F. Moran as engineer. Joining PCA in 1953, he has been supervising and structural engineer of the San Francisco office of the Los Angeles district for the past two years. . . . Thomas H. Chapman has been named field engineer in San Diego and Imperial Counties.

• **Western Red Cedar Lumber Association**: The Seattle-based group is embarking on the biggest educational program in the history of the industry, aimed at consumers, architects, builders, wholesalers and dealers.

• **National Concrete Masonry Association**: Paul M. Thomas, general manager of Superlite Builders Supply, Phoenix, has been installed as president.

• **National Lumber Manufacturers Association**: A $3,000 graduate fellowship in timber engineering has been established in the University of California's department of civil engineering through a NLMA grant.

• **Northwest Hardwood Association**: New manager of the group is Dr. Donald H. Clark, Seattle, who has worked with NHA to develop grading rules.

Arizona manufacturer's office is showcase of products

When Superlite Builders Supply Co. was forced to vacate its leased office in Phoenix, the concrete block manufacturer decided to build. Although the firm handles every shape and size of concrete masonry unit, it was after a simple but dignified approach to design.

Basically the entire building is made of standard catalog block shapes available to all. The client wanted architects Guirey, Srnka & Arnold to explore some of the potentials of these standard units. To this end, they developed a decorative concrete block fascia, columns, office partitions, return air grills, fence and entrance doors. The only special units made were those used for the masonry solar screen on the southern exposure.

General contractor was Homes & Son Construction Co.

Dick Dietrich



Superlite occupies first floor and rents second of 24,000-sq. ft. building.

Building Permit Totals

First Column Figures in Parentheses are Number of Residential Units • Second Column is Do

CALIFORNIA

	# Res.	$ Value	Total $
Alameda	(246)	$ 1,871,760	$ 2,080,980
Alameda Co.	(89)	901,650	1,435,085
Albany	( )	Nil	78,180
Alhambra	(18)	120,000	1,332,442
Anaheim	(273)	1,287,500	2,317,313
Antioch	(16)	149,252	243,819
Arcadia	(59)	669,853	943,964
Arroyo Grnde	(5)	64,962	133,370
Artesia	(6)	61,300	236,100
Atherton	(3)	170,000	237,637
Atwater	( )	Nil	12,600
Auburn	(7)	96,500	360,738
Avalon	( )	Nil	24,250
Azusa	(30)	194,300	360,725
Bakersfield	(44)	592,050	827,109
Baldwin Park	(39)	356,860	456,636
Banning	(12)	141,541	234,199
Barstow	(1)	10,000	189,462
Bell	(45)	336,550	381,400
Bellflower	(106)	1,144,900	1,307,445
Bell Gardens	(51)	340,550	392,160
Belmont	(9)	189,000	264,365
Benicia	( )	Nil	5,870
Berkeley	(63)	683,550	1,475,841
Beverly Hills	(5)	434,000	3,267,122
Bradbury	(1)	45,500	45,500
Brawley	(4)	39,000	52,444
Brea	(49)	535,038	565,329
Buena Park	(230)	2,986,387	3,254,762
Burbank	(60)	679,350	1,596,230
Burlingame	(2)	30,000	224,171
Butte Co.	(145)	1,081,637	1,364,837
Calexico	(2)	8,000	18,900
Campbell	(174)	1,255,100	1,299,660
Carlsbad	(15)	139,534	173,603
Carmel	( )	No Reply	No Reply
Chico	(10)	146,442	230,049
Chino	(13)	158,725	298,825
Chula Vista	(5)	54,754	199,735
Claremont	(99)	1,871,350	2,037,280
Coalinga	(7)	114,000	134,675
Colton	(1)	12,673	27,869
Commerce	( )	Nil	77,235
Compton	(8)	164,800	648,255
Concord	(92)	1,357,930	1,445,470
Cntra Csta Co.	(321)	5,148,660	6,260,682
Corona	(5)	70,858	202,208
Coronado	( )	No Reply	No Reply
Corte Madera	(4)	71,260	78,968
Costa Mesa	(167)	2,553,389	2,940,734
Covina	(12)	117,000	286,760
Cudahy	(81)	626,700	673,990
Culver City	(35)	174,000	916,288
Dairy Valley	( )	Nil	21,400
Daly City	(36)	552,809	763,591
Davis	(11)	147,000	184,145
Delano	(4)	47,000	66,600
Downey	(82)	847,935	1,883,334
Duarte	(97)	646,000	809,300
El Cajon	(31)	143,200	308,970
El Centro	(5)	74,000	139,258
El Cerrito	(7)	64,305	122,037
El Dorado Co.	(94)	1,156,068	1,568,638
El Monte	(479)	1,702,976	2,433,593
El Segundo	(6)	66,500	9,994,690
Emeryville	( )	Nil	10,803
Escondido	(49)	625,349	718,609
Eureka	(5)	79,000	190,449
Fairfield	(27)	319,517	393,217
Fillmore	(2)	17,824	22,994
Fontana	(10)	139,167	173,135
Fremont	(147)	1,914,000	2,233,009
Fresno	(29)	335,086	1,209,851
Fresno Co.	(58)	633,174	1,575,198
Fullerton	(108)	2,319,849	3,945,708
Glendale	(285)	2,702,862	3,364,731
Glendora	(211)	3,218,800	3,413,735
Half Moon Bay	(2)	21,000	34,000
Hanford	(38)	190,800	288,776
Hawthorne	( )	No Reply	No Reply
Hayward	(29)	195,200	753,055
Hemet	(103)	1,173,600	1,525,567
Hermosa Bech	(7)	119,577	313,722
Hidden Hills	(2)	64,000	98,500
Hillsborough	(3)	128,000	201,730
Holtville	(1)	8,000	26,400
Humboldt Co.	(33)	541,484	693,208
Huntngtn Bech	(361)	4,944,455	5,161,778
Huntngtn Prk	(10)	100,865	132,265
Imperial Co.	( )	Nil	65,900
Indio	(47)	752,815	1,179,864
Industry	( )	Nil	36,185
Inglewood	(114)	1,099,430	1,411,860
Irwindale	( )	Nil	22,500
Kern Co.	(172)	2,059,155	2,782,789
Laguna Beach	(40)	731,020	780,615
La Habra	(147)	1,530,947	1,771,130
Lakewood	(52)	541,500	661,450
La Mesa	(9)	174,174	275,678
La Mirada	(22)	140,000	375,150
La Puente	(45)	548,800	730,805
La Verne	(6)	102,000	164,945
Lawndale	(32)	247,300	287,765
Lindsay	( )	Nil	4,959
Livermore	(39)	376,200	584,048
Lodi	(7)	77,100	282,260
Lompoc	(12)	178,500	458,928
Long Beach	(670)	9,276,350	11,571,535
Los Altos	(16)	391,500	524,897
Los Angeles	(2,610)	31,146,878	59,277,830
Ls Angels Co.	(1,398)	20,019,950	27,227,427
Los Gatos	(109)	1,518,500	1,755,000
Lynwood	(41)	258,900	334,856
Madera	(3)	40,500	51,129
Madera Co.	(18)	158,800	459,500
Mnhattan Bch	(21)	185,300	346,029
Manteca	(13)	135,750	218,455
Marin Co.	(39)	745,760	1,229,180
Martinez	( )	Nil	81,488
Marysville	(3)	56,500	85,006
Maywood	(3)	21,178	67,001
Menlo Park	(7)	121,000	429,640
Merced	(7)	99,077	527,149
Merced Co.	(27)	415,442	618,684
Millbrae	(77)	734,000	836,310
Mill Valley	(10)	222,500	287,330
Modesto	(90)	1,169,000	1,350,304
Monrovia	(40)	364,400	670,384
Montclair	(127)	1,012,237	1,192,117
Montebello	(83)	776,840	1,090,842
Monterey	(14)	201,650	380,570
Monterey Co.	(46)	708,575	1,117,525
Monterey Park	(84)	760,660	941,553
Mountain View	(33)	326,548	1,025,128
Napa	(22)	263,146	606,967
Napa Co.	(22)	575,493	801,138
National City	(30)	198,379	348,195
Newport Beach	(98)	2,494,725	2,770,195
N. Sacramento	(28)	211,850	237,647
Norwalk	(67)	710,100	967,360
Novato	(11)	218,000	860,731
Oakdale	(5)	60,956	84,914
Oakland	(307)	2,938,974	7,520,642
Oceanside	(22)	243,500	439,198
Ojai	(1)	9,000	24,279
Ontario	(153)	1,248,407	1,509,977
Orange	(410)	5,130,045	11,531,290
Orange Co.	(189)	3,701,166	6,097,595
Oroville	(2)	22,408	386,850
Oxnard	(311)	2,667,200	3,052,930
Pacifica	(22)	252,100	553,783
Pacific Grove	(10)	89,660	133,156
Palm Springs	(66)	882,500	4,058,963
Palo Alto	(26)	292,884	3,220,825
Pals Vrds Estts	(17)	657,630	718,405
Paramount	(26)	227,000	490,500
Pasadena	(74)	668,515	1,890,379
Paso Robles	(2)	26,540	40,042
Pico Rivera	(2)	33,000	348,615
Piedmont	(3)	109,000	147,258
Pinole	(2)	27,254	44,473
Pittsburg	(13)	161,604	179,121
Placentia	(79)	1,431,980	1,447,129
Placer Co.	(76)	1,200,473	1,436,785
Pleasanton	(5)	88,800	94,170
Pomona	(60)	670,152	996,386
Porterville	(3)	33,000	104,829
Port Hueneme	(4)	20,000	64,080
Red Bluff	(5)	46,707	248,294
Redding	(8)	102,343	226,457
Redlands	(61)	1,109,250	1,961,870
Redondo Bech	(71)	662,200	950,017
Redwood City	(34)	229,805	595,478
Richmond	(54)	462,095	1,177,744
Riverside	(80)	1,285,480	3,104,632
Riverside Co.	(434)	4,415,265	6,274,057
Rolling Hills	(3)	121,300	131,500
Rllng Hills Ests	(30)	779,100	928,300
Rosemead	(5)	55,700	75,065
Roseville	(42)	348,450	442,648
Sacramento	(113)	1,338,700	4,029,100
Sacramnto Co.	(255)	3,220,062	5,013,406
St. Helena	(2)	31,474	41,719
Salinas	(18)	235,500	509,349
San Bernardno	(23)	350,030	1,604,345
Sn Brndn Co.*	(590)		
San Bruno	(66)	949,900	
San Carlos	(8)	190,207	
San Clemente	(189)	2,985,916	
San Diego	(493)	5,453,859	
San Diego Co.	(147)	2,357,500	
San Dimas	(31)	414,300	
San Fernando	(8)	56,400	
San Francisco	(794)	11,902,411	
San Gabriel	( )	No Reply	
Sanger	(3)	25,340	
San Pacinto	(4)	35,900	
Sn Joaqun Co.	(50)	462,102	
San Jose	(581)	5,562,500	
San Leandro	(43)	351,300	
Sn Luis Obsp	(39)	668,697	
Sn Lus Obs Co	(55)	802,384	
San Marino	(1)	50,000	
San Mateo	(27)	286,500	
San Mateo Co.	(57)	1,030,200	
San Pablo	(38)	297,786	
San Rafael	(123)	1,159,303	
Santa Ana	(63)	1,264,880	
Santa Barbara	(65)	1,381,300	
Snta Brbra Co.	(296)	4,089,200	
Santa Clara	(54)	479,900	
Santa Clra Co.	(104)	4,563,650	
Santa Cruz	(42)	417,781	
Santa Cruz Co	(169)	1,981,760	
Snt Fe Springs	( )	Nil	
Santa Maria	(139)	1,882,959	
Santa Monica	(179)	2,938,470	
Santa Paula	(29)	440,245	
Santa Rosa	(47)	583,200	
Sausalito	(113)	1,649,000	
Seal Beach	(11)	99,659	
Seaside	(18)	147,000	
Selma	(3)	36,300	
Shasta Co.	(52)	774,930	
Sierra Madre	(4)	71,900	
Solano Co.	(9)	134,671	
Sonoma Co.	(173)	1,736,971	
South Gate	(12)	107,789	
South El Monte	( )	Nil	
South Pasadna	(32)	381,019	
S. Sn Francsco	(45)	340,825	
Stanislaus Co.	(40)	454,620	
Stockton	(45)	754,550	
Sunnyvale	(163)	2,547,200	
Temple City	(16)	170,800	
Torrance	(195)	1,794,550	
Tracy	(10)	172,400	
Tulare	( )	No Reply	
Tulare Co.	(111)	829,326	
Turlock	(5)	76,121	
Ukiah	(2)	25,900	
Upland	(93)	1,494,390	
Vacaville	(18)	186,850	
Vallejo	(47)	478,600	
Ventura	(24)	262,500	
Ventura Co.	(392)	5,151,500	
Visalia	(30)	489,704	
Walnut	( )	Nil	
Walnut Creek	(67)	846,805	
Wasco	(4)	53,000	
Watsonville	(5)	64,000	
West Covina	(8)	141,880	
Whittier	(40)	433,600	
Woodland	(12)	172,060	
Woodside	(6)	165,000	
Yolo Co.	(22)	357,960	
Yreka	(5)	74,500	
Yuba City	(9)	56,834	
Yuba Co.*	( )	221,714	
Total	**(21,155)**	**$259,313,170**	**$428,172,**

OREGON

Albany	(6)	$ 72,200	$
Ashland	(8)	60,500	
Astoria	(3)	43,000	
Baker	(1)	10,000	
Beaverton	(12)	230,580	
Bend	(6)	99,000	
Central Point	(10)	98,900	
Clackamas Co.	(73)	898,321	
Coos Bay	(2)	44,900	
Corvallis	(23)	244,000	
Dallas	(2)	26,000	
Douglas Co.	(9)	115,300	
Eugene	(25)	320,300	
Forest Grove	( )	Nil	
Grants Pass	(6)	69,500	
Gresham	(11)	149,000	

*Complete figures not available

Western States for May

Residential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hermiston	(7)	101,045	116,080
Hillsboro	(4)	59,700	72,250
Hood River	( )	Nil	18,626
Klamath Falls	(5)	72,500	151,133
La Grande	(4)	57,620	73,175
Lake Oswego	(15)	282,250	332,665
Lane Co.	(91)	968,118	1,464,925
Lebanon	( )	Nil	288,507
Marion Co.	(62)	742,476	963,151
McMinnville	(4)	49,500	66,695
Medford	(30)	334,800	394,560
Milln-Freewtr	(2)	10,000	16,435
Milwaukie	(29)	398,027	958,762
Multnomh Co.	(135)	1,816,900	2,719,730
Newberg	( )	Nil	25,950
Newport	(1)	14,000	70,000
North Bend	(4)	45,790	64,105
Ontario	(2)	17,000	74,950
Oregon City	(6)	51,300	63,991
Oswego	(15)	282,250	332,665
Pendleton	(4)	44,000	63,750
Portland	(60)	721,300	3,539,855
Roseburg	(5)	57,542	228,720
St. Helens	(1)	10,000	15,750
Salem	(10)	125,370	1,059,468
Seaside	(1)	11,000	55,850
Springfield	(39)	307,094	420,556
The Dalles	(5)	70,000	143,260
Washington Co.	(76)	1,335,242	1,729,832
Total	**(814)**	**$ 10,466,525**	**$ 23,141,870**
WASHINGTON			
Aberdeen	(2)	$ 44,576	$ 82,041
Anacortes	( )	Nil	103,472
Auburn	(17)	174,000	256,550
Bellevue	(7)	154,500	478,100
Bellingham	(3)	33,000	1,292,534
Bremerton	(13)	171,340	296,110
Camas	(2)	31,000	61,120
Centralia	(2)	25,500	409,796
Chehalis	(2)	28,000	42,776
Clark Co.	(63)	810,100	939,300
Clarkston	( )	Nil	16,040
Edmonds	(58)	714,000	736,525
Ellensburg	(1)	21,000	47,705
Enumclaw	(2)	10,000	12,700
Ephrata	( )	Nil	32,475
Everett	(23)	272,240	1,153,803
Grays Hrbr Co.	(8)	88,000	233,800
Hoquiam	( )	Nil	17,880
Island Co.	(28)	125,650	144,300
Kelso	(3)	36,000	75,050
Kennewick	(4)	50,000	297,740
Kent	(28)	667,100	758,503
King Co.	(822)	11,519,207	13,430,043
Kirkland	(2)	24,000	31,000
Longview	(4)	67,500	315,860
Lynnwood	(2)	31,600	89,998
Mercer Island	(19)	453,430	503,475
Moses Lake	(16)	201,070	614,835
Mntlk Terrace	(17)	202,300	234,445
Olympia	(5)	80,500	127,235
Pasco	(1)	12,000	215,000
Pierce Co.	(149)	1,670,822	2,670,379
Port Angeles	(4)	41,500	82,050
Pullman	(14)	78,016	95,866
Puyallup	(6)	68,200	162,777
Renton	(11)	143,680	515,709
Richland	(14)	244,400	2,691,975
Seattle	(376)	4,031,308	11,634,729
Shelton	(1)	15,000	16,500
Spokane	(37)	504,650	1,219,902
Spokane Co.	(50)	847,793	2,749,350
Sunnyside	( )	Nil	6,420
Tacoma	(117)	1,501,200	4,623,233
Thurston Co.	(31)	261,500	354,900
Vancouver	(16)	205,250	453,321
Walla Walla	(3)	38,000	147,845
Walla Wlla Co.	(3)	34,000	51,800
Wenatchee	(1)	13,000	171,956
Yakima	(17)	248,000	424,872
Total	**(2,004)**	**$ 25,993,926**	**$ 51,104,885**
ALASKA			
Anchorage	(41)	$ 847,650	$ 1,285,727
Fairbanks	(2)	80,300	1,914,015
Juneau	( )	Nil	564,430
Ketchikan	( )	Nil	35,220
Total	**(43)**	**$ 927,950**	**$ 3,799,392**

	# Res.	$ Value	Total $
IDAHO			
Alameda	(15)	$ 188,600	$ 410,245
Blackfoot	(10)	166,500	928,295
Boise	(14)	199,500	735,029
Burley	( )	No Reply	No Reply
Caldwell	(4)	59,000	132,280
Coeur d'Alene	(6)	83,250	126,447
Idaho Falls	(28)	338,728	726,427
Jerome	( )	Nil	2,665
Lewiston	(2)	24,000	88,477
Moscow	(11)	106,000	127,050
Nampa	(9)	119,000	348,095
Payette	(3)	21,200	40,900
Pocatello	(3)	45,500	203,937
Sandpoint	(1)	8,000	20,500
St. Maries	( )	No Reply	No Reply
Twin Falls	(8)	70,000	213,600
Total	**(114)**	**$ 1,429,278**	**$ 4,103,947**
MONTANA			
Anaconda	( )	$ Nil	$ 1,762
Billings	(38)	576,550	842,566
Bozeman	(7)	131,000	171,300
Butte	(1)	12,000	425,100
Cut Bank	( )	Nil	10,250
Glasgow	(7)	35,000	43,500
Glendive	(1)	15,000	1,292,923
Great Falls	(29)	284,832	1,391,215
Havre	(3)	38,600	49,872
Helena	(20)	297,100	459,177
Kalispell	( )	Nil	28,175
Lewistown	(2)	24,000	52,400
Livingston	( )	Nil	77,700
Malta	(1)	8,000	8,000
Miles City	( )	No Reply	No Reply
Missoula	(2)	26,000	156,676
Total	**(111)**	**$ 1,448,082**	**$ 5,010,616**
WYOMING			
Casper	(25)	$ 331,500	$ 445,792
Cheyenne	(80)	687,950	863,181
Cody	(4)	92,000	133,550
Laramie	(12)	128,275	248,963
Rawlins	(1)	1,800	41,350
Riverton	( )	Nil	64,500
Rock Springs	(2)	31,000	103,000
Sheridan	( )	Nil	107,082
Total	**(124)**	**$ 584,575**	**$ 2,007,418**
COLORADO			
Adams Co.	(233)	$ 2,824,400	$ 3,179,860
Alamosa	(3)	57,000	70,447
Arapahoe Co.	(239)	4,488,350	4,750,274
Arvada	(131)	1,704,000	2,625,460
Aspen	( )	No Reply	No Reply
Aurora	(103)	816,710	940,186
Boulder	(29)	514,900	825,503
Boulder Co.	(43)	518,530	2,820,873
Colrdo Springs	(134)	1,731,006	3,276,163
Cortez	( )	Nil	20,300
Denver	(340)	2,288,773	33,253,351
Durango	(4)	60,540	95,684
El Paso Co.	(37)	599,675	925,393
Englewood	(9)	85,500	520,042
Estes Park	(2)	12,100	28,850
Fort Collins	(26)	379,000	473,228
Fort Morgan	(6)	70,556	83,851
Golden	(4)	50,500	91,460
Grand Junctn	(2)	16,000	81,095
Greeley	(34)	390,573	475,439
Jefferson Co.	(334)	4,125,072	6,804,706
La Junta	( )	No Reply	No Reply
Lamar	( )	No Reply	No Reply
Littleton	(28)	489,200	616,876
Longmont	(19)	216,450	270,688
Loveland	(11)	116,500	324,550
Monte Vista	(1)	25,000	37,100
Montrose	(3)	40,000	65,723
Pitkin Co.	( )	No Reply	No Reply
Pueblo	(34)	337,637	1,090,745
Pueblo Co.	(8)	40,000	62,000
Sterling	(1)	3,000	145,950
Trinidad	( )	Nil	23,650
Walsenburg	( )	Nil	7,159
Westminster	(16)	255,448	651,597
Total	**(1,834)**	**$ 22,256,420**	**$ 64,638,203**

	# Res.	$ Value	Total $
UTAH			
American Fork	(4)	$ 41,000	$ 47,430
Bountiful	(25)	395,800	461,200
Brigham City	(18)	265,600	732,167
Cedar City	(2)	58,000	121,160
Clearfield	(3)	26,000	26,000
Davis Co.	(12)	179,814	573,155
Kaysville	(13)	91,990	95,490
Layton	(35)	430,000	507,960
Logan	(16)	248,507	493,137
Murray	(15)	181,000	712,099
Ogden	(55)	706,850	1,004,521
Orem	(10)	101,000	150,104
Price	( )	Nil	7,000
Provo	(14)	138,000	827,800
Salt Lake City	(121)	1,235,375	2,601,296
Salt Lake Co.*	(297)	3,455,700	
S. Salt Lk Cty	(2)	37,000	453,839
Spanish Fork	( )	Nil	11,900
Tooele	(89)	721,585	746,127
Utah Co.	(6)	87,110	120,310
Weber Co.	(12)	125,000	140,500
Total	**(749)**	**$ 8,525,331**	**$ 9,833,195**
NEVADA			
Boulder City	(2)	$ 36,968	$ 48,380
Clark Co.	(295)	4,269,028	5,660,138
Elko	( )	No Reply	No Reply
Las Vegas	(533)	4,631,850	5,652,852
N. Las Vegas	(65)	1,070,850	1,214,968
Reno	(37)	371,330	916,481
Sparks	(119)	1,616,200	1,815,583
Washoe Co.	(35)	485,720	1,205,570
Total	**(1,086)**	**$ 12,481,746**	**$ 16,513,972**
ARIZONA			
Buckeye	( )	$ Nil	$ 9,615
Casa Grande	(5)	72,500	99,995
Chandler	(14)	231,440	301,409
Douglas	(3)	20,000	42,520
Flagstaff	(50)	174,214	1,089,385
Florence	(2)	31,500	55,500
Glendale	(14)	92,200	222,224
Maricopa Co.	(270)	2,866,737	3,308,533
Mesa	(47)	516,286	813,328
Phoenix	(462)	3,699,944	6,448,252
Pima Co.	(194)	2,035,623	2,828,122
Prescott	(10)	107,300	195,050
Scottsdale	(110)	929,500	1,297,753
Tempe	(131)	850,944	1,376,398
Tucson	(174)	1,357,733	2,589,725
Wickenburg	( )	Nil	15,500
Winslow	(1)	13,800	124,000
Yuma	(9)	54,000	284,385
Total	**(1,496)**	**$ 13,052,721**	**$ 21,101,694**
NEW MEXICO			
Alamogordo	(1)	$ 23,000	$ 61,000
Albuquerque	(122)	1,972,164	2,912,681
Artesia	(10)	88,500	107,262
Carlsbad	(12)	153,000	224,730
Clovis	(25)	294,203	2,166,929
Deming	(12)	69,100	84,700
Farmington	(3)	20,872	101,824
Gallup	(6)	70,700	348,500
Hobbs	(14)	244,698	373,272
Las Cruces	(10)	119,000	144,050
Las Vegas	( )	Nil	7,550
Lovington	(10)	90,600	190,600
Raton	(2)	11,000	24,000
Roswell	(80)	775,000	1,922,470
Sante Fe	(34)	247,900	2,300,123
Silver City	(1)	18,000	67,900
Truth or Consequences	( )	No Reply	No Reply
Tucumcari	(3)	28,500	215,800
Tularosa	( )	Nil	Nil
Total	**(345)**	**$ 4,226,237**	**$ 11,253,391**
HAWAII			
Hawaii Co.	(30)	$ 349,720	$ 577,826
Honolulu	(575)	6,965,863	16,498,916
Maui Co.	(18)	192,182	704,042
Total	**(623)**	**$ 7,507,765**	**$ 17,780,784**
GRAND TOTAL	**(30,498)**	**$368,901,676**	**$638,461,648**

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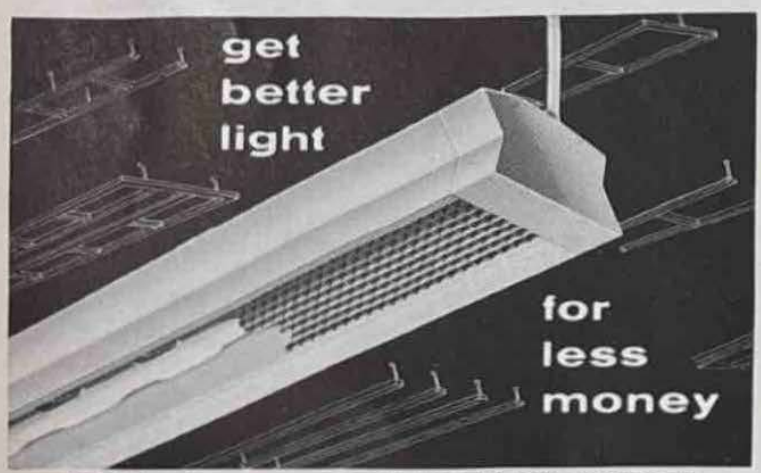
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no 7: a few thoughts on architectural criticism

The subject of architectural criticism is such a complex and controversial one that only a superficial treatment can be attempted here. But it does give us an opportunity to state our position on the matter, with the understanding that at some later date we'll explore it further, possibly incorporating reader opinion.

It appears that architectural criticism is here to stay, whether we like it or not—and apparently many architects give lip service to the idea as long as their own work is not being subjected to the grill. Popular magazines and the daily press are devoting more and more space to architecture and while much of what they report is really not a critical analysis in the professional sense, it has the effect of being so to the layman. Only a handful of quality publications and dailies have responsible architectural critics. Therefore, the profession and its press must work hand in hand to take the lead in this area; it is a serious responsibility that cannot be cast aside.

The question follows then, who is to criticize? Some of our colleagues have at least implied that editors are not qualified to assume this role. We take the stand that those of us (and our staff includes a practicing architect) who day to day review and study buildings, talk with architects and their clients about specific projects and scan the vast volume of published material surely do have the proper background, training and sensitivity to make candid and constructive evaluations.

Having said this, we hasten to add that what is to be criticized is an equally important matter. Two factors come into play: the significance of the building itself and the influence of the architect on his profession and perhaps on his community. After all, the drama critic does not treat a college production in the same light as a Broadway show.

It is the policy of Architecture/West to incidentally make critical comments in the normal presentation of a building when such observations are essential to the honest reporting of the job. As for outright criticism, the closest we have come to it thus far was our handling of the University of California Student Center (Oct. '61). In this particular case we were concerned with a well-publicized project, the subject of an invitational competition among six firms of considerable stature, located on an influential campus. What we did here was to pose three questions to the architects, whose replies were woven into the article itself. As a result we received a letter from the designers which said in part:

"We feel that you have been fair in your appraisal of our work. It is only through criticism that attention can be directed to the differences of opinion which manifest themselves in architecture today."

Architectural criticism which produces that kind of a response certainly is valid and makes a genuine contribution to the profession. But there are legal aspects to be considered and this will be our next topic. R.E.K.

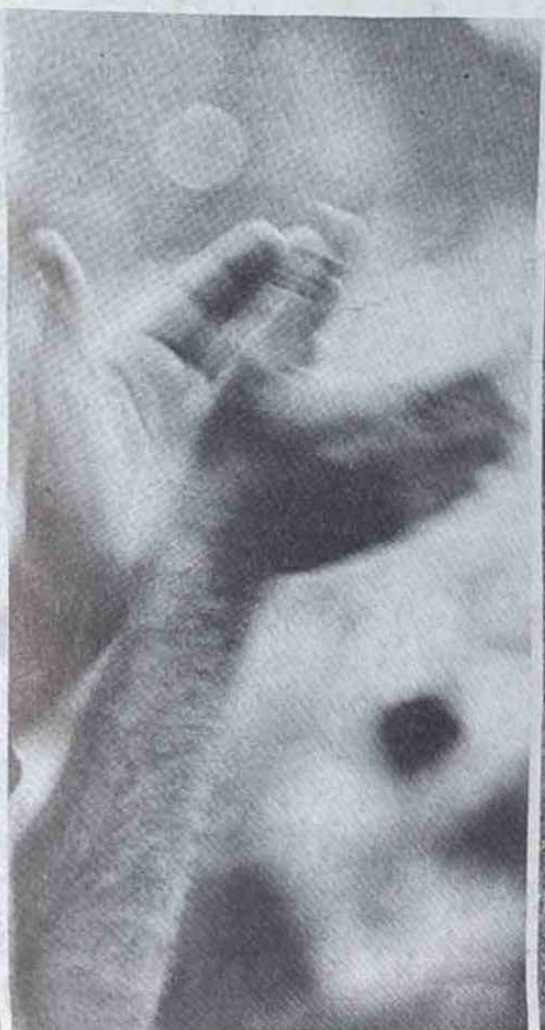
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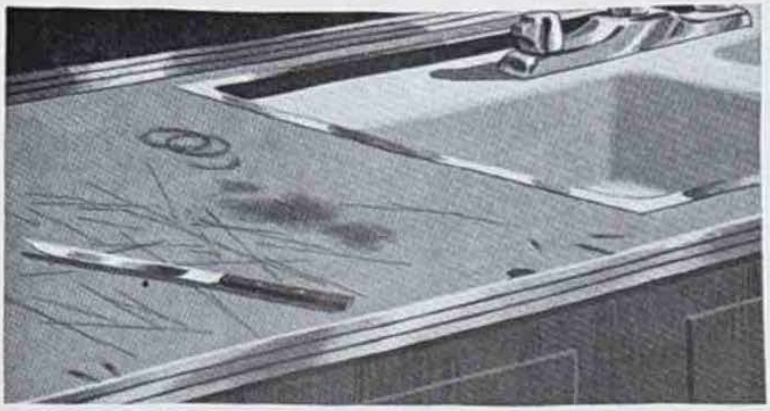
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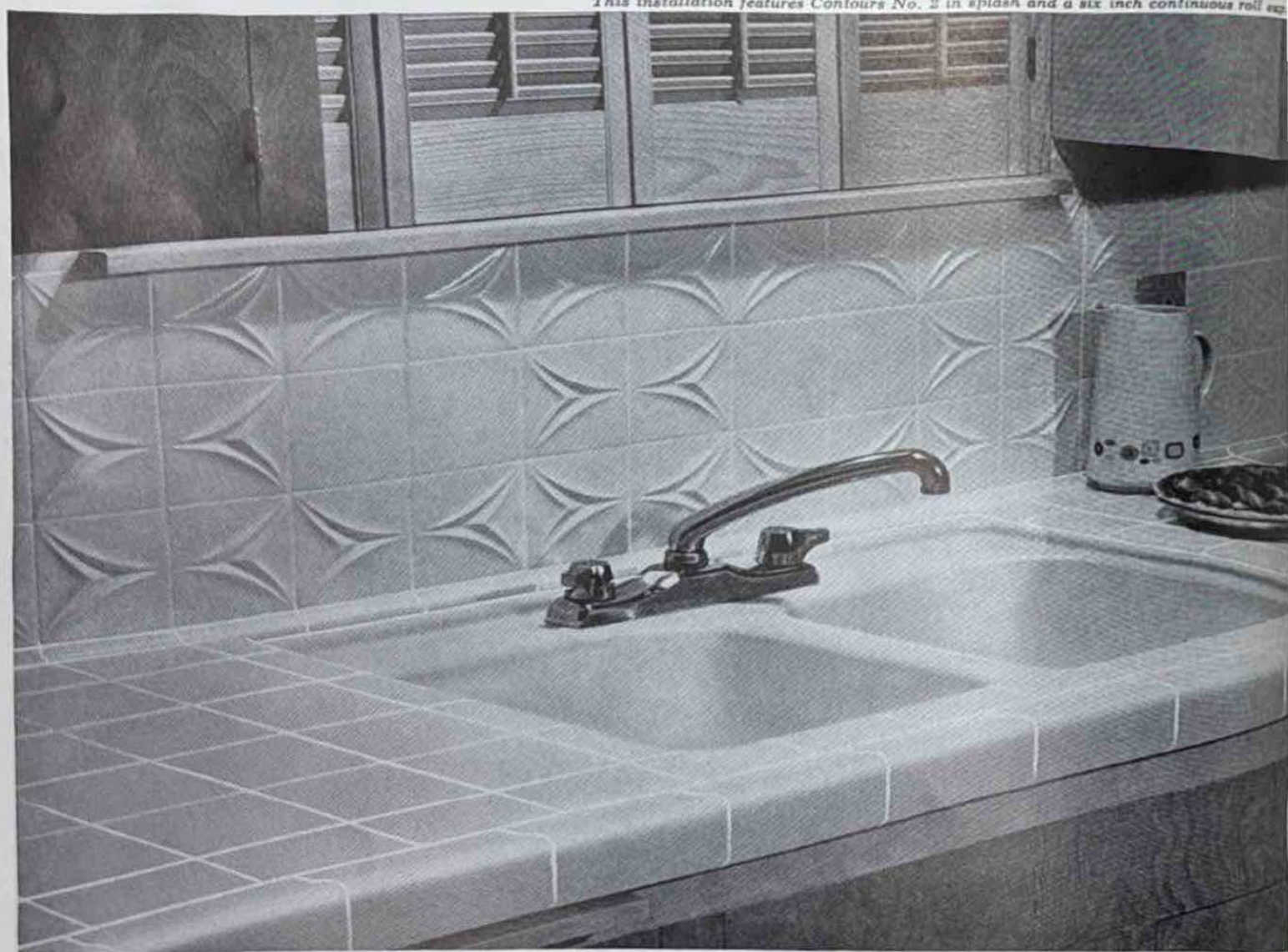
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Business data on page 38

Cover: Symbolic scenes from Art Hupy's photographic portfolio of his seven-year coverage of the International Design Conference in Aspen, Colo. (p. 20.)

ABOUT THIS ISSUE: August is a somewhat off-beat number in terms of content, we must admit, but there is no particular reason why A/W must subscribe to the same format month after month. Consequently, our major presentation deals with conferences and the stimulating annual Aspen affair in particular. Hayakawa's provocative lead-off paper on "How to Attend a Conference" is good reading for any convention-goer—and that includes just about all of us these days. For the first time in eight years photographer Art Hupy didn't make the International Design Conference, but he has been shooting in the Aspen area of late. Hence we've reviewed his complete files to do our version of Aspen: the community and the conference.

We haven't deliberately planned this to be a Hupy issue, but in returning to the Seattle World's Fair, Art has captured a number of interesting sidelights that the more casual observer might easily overlook.

With the showing of the Air Force Academy Chapel interiors, we introduce our "Progress Report," a feature to run whenever a project is important enough to merit some coverage before its completion date. On deck, for instance, is Frank Lloyd Wright's Marin County Civic Center.

COMING IN SEPTEMBER: The spotlight will be on San Diego, a portion of the West that seems to have been neglected by the architectural press in recent months. We'll present a very sensitively and dramatically designed marina hotel project and two residences which the architects have planned for their own families. How high-performance prestige engineering and office space was achieved on a remarkably low budget will be described in a methods article.

THE BUILDING MONTH

THE BUILDING WEST—Construction starts in the West so far this year have confounded most experts and prophets with their vigor and volume. Building permits issued by 500 agencies in the 13 western states surveyed by Architecture/West have totaled $3,460,632,244 for the first six months of 1962. This is an increase of $485 million, or 16%, over the same period last year. Early predictions had been for a slight decline in 1962 or at best a break-even situation. Surprisingly, residential work, which was expected to fall a little flat, has accounted for nearly all the gain, both in dollar volume and in number of units. Residential volume for the six months was $1,925,657,176, up $368 million; number of permits was 163,739, compared with 117,137 last year. Leading the parade of increases was California, up $204 million; Washington, up $51 million; Nevada, up $36 million. Only Arizona and Montana showed decreases, both slight. (For a complete tabulation of June permits, see pp. 36-37.)

TOP TWENTY-FIVE—Hottest spots in the West for June (in millions): **1.** Los Angeles, $62; **2.** Los Angeles County, $27.4; **3.** San Diego, $19.6; **4.** Honolulu, $19.3; **5.** Seattle, $11.5; **6.** King County, Wash., $10.6; **7.** Las Vegas, $8.9; **8.** San Francisco, $8.9; **9.** San Jose, $8.2; **10.** Ventura County, Calif., $7.5; **11.** Sacramento, $7.3; **12.** Aurora, Colo., $7; **13.** Sacramento County, $6.5; **14.** San Bernardino County, $6.2; **15.** Arapahoe County, Colo., $5.7; **16.** Phoenix, $5.6; **17.** Denver, $5.6; **18.** Riverside County, $5.5; **19.** Orange County, $5.3; **20.** Long Beach, $5.1; **21.** Santa Barbara, $5.1; **22.** Orange, Calif., $4.9; **23.** Huntington Beach, Calif., $4.7; **24.** Greeley, Colo., $4.7; **25.** Spokane County, $4.7.

CONSULTING THE CALENDAR—The American Concrete Institute will hold its 15th fall convention in Seattle September 28-29. General chairman is Charles H. Knight, 903 Seaboard Bldg., Seattle 1, Wash. . . . The World Conference on Shell Structures is expected to draw participants from 25 countries to San Francisco September 30-October 4. For further details, write University Extension, University of California, Berkeley 4, Calif.

Highlights & Sidelig

CONCERNING COMMISSIONS—The job of master pla ning the $28 million development of Lafayette Squa opposite the White House in Washington, D.C., h been given to the San Francisco firm of John Ca Warnecke & Associates. The proposal includes co struction of an Executive Office Building and t Court of Claims and Court of Customs and Pate Appeal Building. The architects will be requested "maintain the historic character of the square, w new structures possessing a harmonious relationsh with the existing buildings, thereby providing a qu and dignified setting for the White House."

DESIGNING FOR DEFENSE—A West Coast - headqua tered consulting engineering firm, T. Y. Lin & Asso ciates, has been selected by the Department of Defen to prepare a manual that will tell architects and eng neers how to prepare design and cost estimates f prestressed concrete protective shelters, how to redu overall costs and how to take into account all th necessary features peculiar to this building type. Th guide will consist of about 64 pages of text, drawing and other appropriate instruction. The firm, inter nationally recognized in the design of prestressed con crete construction, has offices in Los Angeles (Va Nuys), Berkeley, Dallas, Chicago and Caracas, Vene zuela.

GEORGETOWN AND THE GHOST—Back in the 186 Georgetown was mighty proud as Colorado's thir largest city and the world's greatest silver produce But the bubble burst when the metal lost its valu in 1896, resulting in an almost deserted town. Now Santa Fe International has acquired substantially al of the undeveloped property within the city limits to redevelop Georgetown, which boasts six major sk areas within a 40-minute drive, to produce a "new type boom town."

COMPARATIVE TOTALS FOR 13 WESTERN STATES—FIRST HALF 1962

State	1962 Residential Only	1961 Residential Only	1962 Res. Units	1961 Res. Units	1962 Total $ Volume	1961 Total $ Volume
California	$1,297,583,322	$1,093,618,493	110,441	94,075	$2,272,387,301	$2,032,165,44
Oregon	73,148,674	51,153,456	4,748	4,067	146,798,708	115,416,43
Washington	137,974,989	86,611,704	10,626	6,272	261,543,720	197,973,57
Alaska	3,491,560	1,946,168	191	106	14,900,445	8,424,22
Idaho	7,490,013	5,623,564	582	432	19,219,708	17,044,33
Montana	7,523,047	10,374,394	609	895	15,348,440	15,854,84
Wyoming	7,811,275	5,983,739	688	459	16,174,232	13,926,85
Colorado	113,404,987	95,379,257	9,508	9,742	242,703,759	172,379,68
Utah	37,030,211	32,572,153	3,164	3,095	56,501,688	67,370,27
Nevada	66,612,096	30,970,615	5,826	2,651	109,652,554	52,887,35
Arizona	85,755,175	87,622,122	10,068	9,570	138,589,988	161,826,53
New Mexico	26,718,185	22,561,173	2,088	2,257	55,732,972	46,084,73
Hawaii	61,133,642	33,363,033	5,200	2,987	111,078,729	74,543,34
Total	$1,925,657,176	$1,557,779,871	163,739	117,137	$3,460,612,244	$2,975,898,43

ARCHITECTS' DIRECTORY ISSUED

Second edition of the American Architects' Directory contains 3,600 more listings than the 1955 issue, including a separate section of multi-principal firms. Published under the sponsoring of the AIA, the directory is available to members for $15 if the order is accompanied by payment, $17 if charge is billed. Address orders to R. R. Bowker Co., 62 W. 45th St., New York 36, N.Y.

EDUCATING ENGINEERS—The increasing power and responsibility being shouldered by engineers today demands that engineering, like law and medicine, become a postgraduate discipline. This controversial suggestion came from Dr. Richard C. Bradley, Colorado College physics professor, speaking at the 70th annual meeting of the American Society for Engineering Education at the U.S. Air Force Academy. The engineer, he declared, "goes out into the world with tremendous power but very little perspective. He is fully capable of moving mountains and performing miracles, but no one has ever told him, and so he has no way of knowing and will probably not think to ask, whether such actions might have far reaching and deleterious consequences for all who follow him."

MASTERFUL MASTER PLAN—El Dorado Hills, one of America's largest master-planned communities located east of Sacramento near Lake Folsom, will combine efficiency of land use with unusual efforts to maintain the native beauty of the oak-studded Sierra Nevada foothills. Victor Gruen Associates are the architects-engineers-planners; Lindsay & Co., the developers. . . . Century City, urban development in West Los Angeles adjacent to Beverly Hills, will award more than $50 million in construction work within the next six months. Slated to get underway: a second office building, the Century Square regional shopping center and two high-rise luxury apartment houses.

REGARDING RAPID TRANSIT—Monorail trains which carry passengers between downtown Seattle and the World's Fair will continue to run after the October 21 closing. Sixten Holmquist, president of Alweg Rapid Transit System of Washington State, Inc., reports the "length of time will depend on the amount of traffic." But his proposal to investigate automatic operation has met with immediate protests from local union officials. Holmquist also has announced that Alweg International will build an 8.2-mile monorail between the Tokyo International Airport and the downtown area in time for the opening of the 1964 Olympic Games.

FIGHTING FALLOUT—What is reported to be the first underground school and fallout shelter has been dedicated in southeastern New Mexico. Designed by Frank Standhardt, the Abo School in Artesia cost $2 per square foot more than conventional construction. It will house 540 pupils this fall, but in the case of a nuclear attack, the school immediately is ready to shelter 2,000 persons. On the surface, Abo is visible only as a big concrete slab on which is built an L-shaped parking shed for cars and bicycles. The 35,865-sq. ft. structure consists of steel and concrete. The steel doors, nearly an inch thick, weigh 1,800 lb. each and can be bolted shut.

TO THE POINT

CROSSES OF THE AGES; DESIGN AIDS FOR YOU

Christianity's Sacred Symbol—the cross—has been pictured in over 140 of its variations in a new booklet published for architects by Overly.

Entitled "*The Cross*," the new booklet is a product of over five years of research. It separates the cross designs according to their time of origin and includes a historical review of their religious significance and usage.

A separate section catalogs all of the basic cross forms, including crosses from the ancient civilizations, crosses from the early church and the crosses from heraldry. Additional information is offered on how Overly crafts these religious symbols and the important data the architect needs to know when ordering a cross.

These cross designs will be useful to architects in designing church interiors, in selecting the altar cross or in providing external ornamentation for contemporary religious buildings.

"*The Cross*" is available to all architects on letterhead request. Send for your copy today.

* * *

***Another U/L Testing Breakthrough** has been achieved by Overly in the recent fire test of a pair of Overly doors, 7' x 7' in size, for a U/L "A" label of 3 hours of fire resistance. These larger doors use new Von Duprin Concealed Fire Exit Hardware, giving the architect U/L labeled doors a full foot wider than heretofore available with the aesthetic advantage of concealed hardware. For more information, write to Manager of U/L Labeled Products, Overly Manufacturing Company.*

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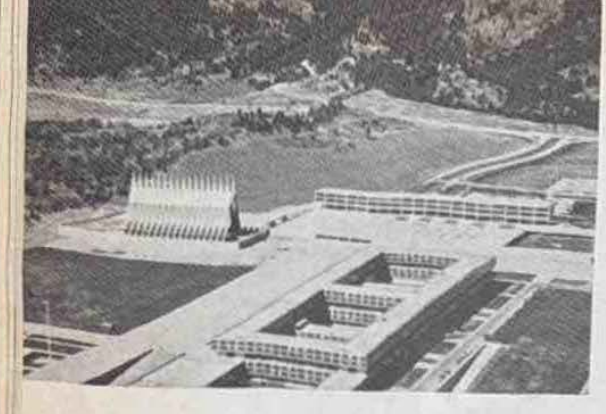
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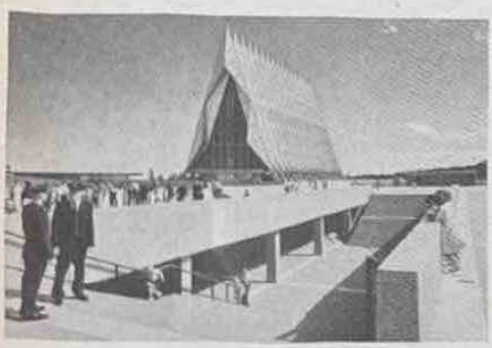
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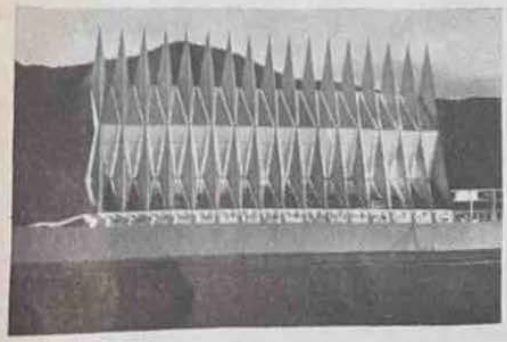
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Progress report

Chapel dedication draws near at Colorado Springs

A look at early color photography reveals the interior of the U.S. Air Force Academy Chapel near Colorado Springs, Colo., whose end-of-July dedication has been delayed by construction difficulties, will be a symphony of brilliant hues as sunlight filters through stained glass panels extending to the peaks; and reports from first-hand observers suggest that even some of the most outspoken critics will temper their comments upon viewing the completed project.

Because a problem developed in sealing the tri-faith Chapel's roof, the firm of Robert E. McKee, General Contractor, Inc., at its own expense, is conducting a series of tests to determine the cause of the leaks and a remedy for them, according to a spokesman for the academy's construction agency. As soon as further tests indicate acceptance can be assured, a new dedication date will be announced.

Skidmore, Owings & Merrill have provided separate chapels for Protestant, Catholic and Jewish fa within one structure.

Flanking each side of the Protest nave, located above the terrace lev are 36 pews with a seating capac of 900 cadets.

The Catholic area, sited on the te race level, is essentially rectangular character. Its exterior walls are pr cast concrete panels with stained gla inserts similar to those in the Prote tant worship area. Twenty-one pew flank each side of the chapel, seatin 500 cadets. The sacristy, vestry an altar are placed in the north end.

The circular Jewish worship cente is located on the same level as th Catholic chapel, directly north of it It is enclosed by vertical wooden up wrights with inserts of white opales cent glass opening into four separate vestibules. Three groups of pews fac ing the east seat 100 cadets.

The Protestant chapel posed the most difficult problem since the architects had to ask themselves these questions: What does a Baptist, Presbyterian, Methodist, Lutheran, Episcopalian or Evangelical chancel look like? What physical expression of the aspirations of religious belief and practice is central in ecumenical Protestant thinking?

It is obvious that no one can speak with a single voice for all American Protestant groups. And yet, the designers comment, there was an amazing unanimity of opinion expressed as to the major objective of worship when the heads of departments of religious architecture (representing various major denominations) met to discuss this subject.

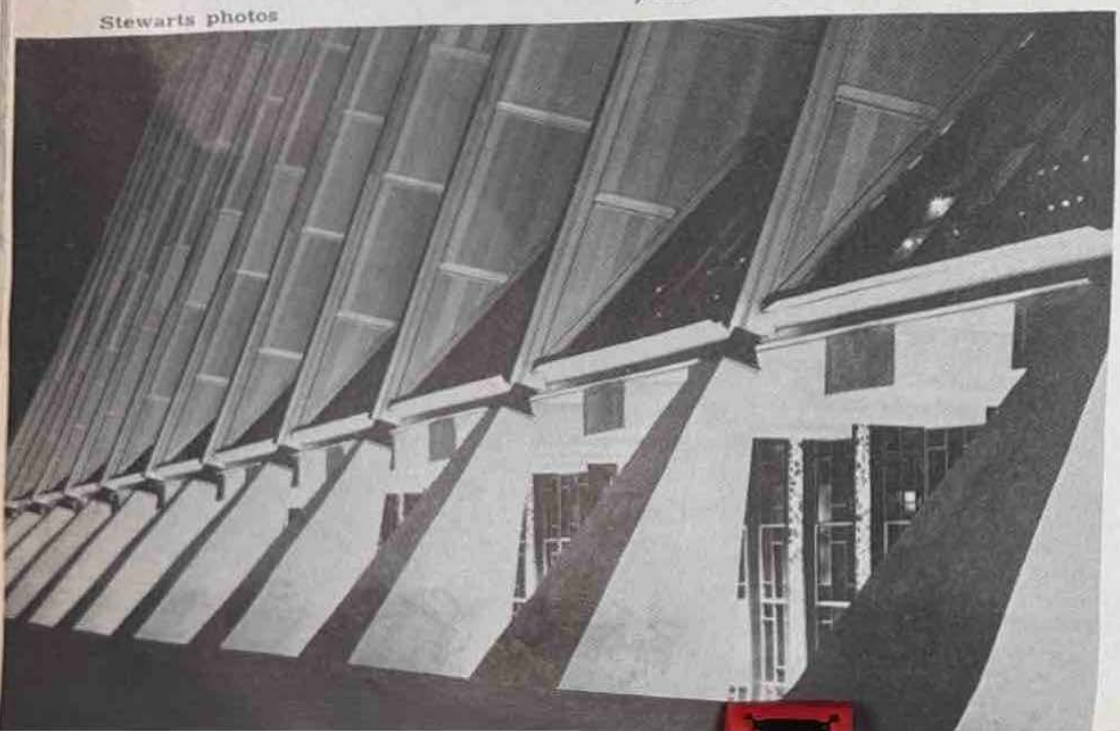
With almost a single voice, it was agreed that the Holy Table should serve as a focal center for the structure. A free-standing single slab of marble 15 ft. long, the curvilinear form, in the shape of a ship, is symbolic of the church. It is supported on four travertine marble legs.

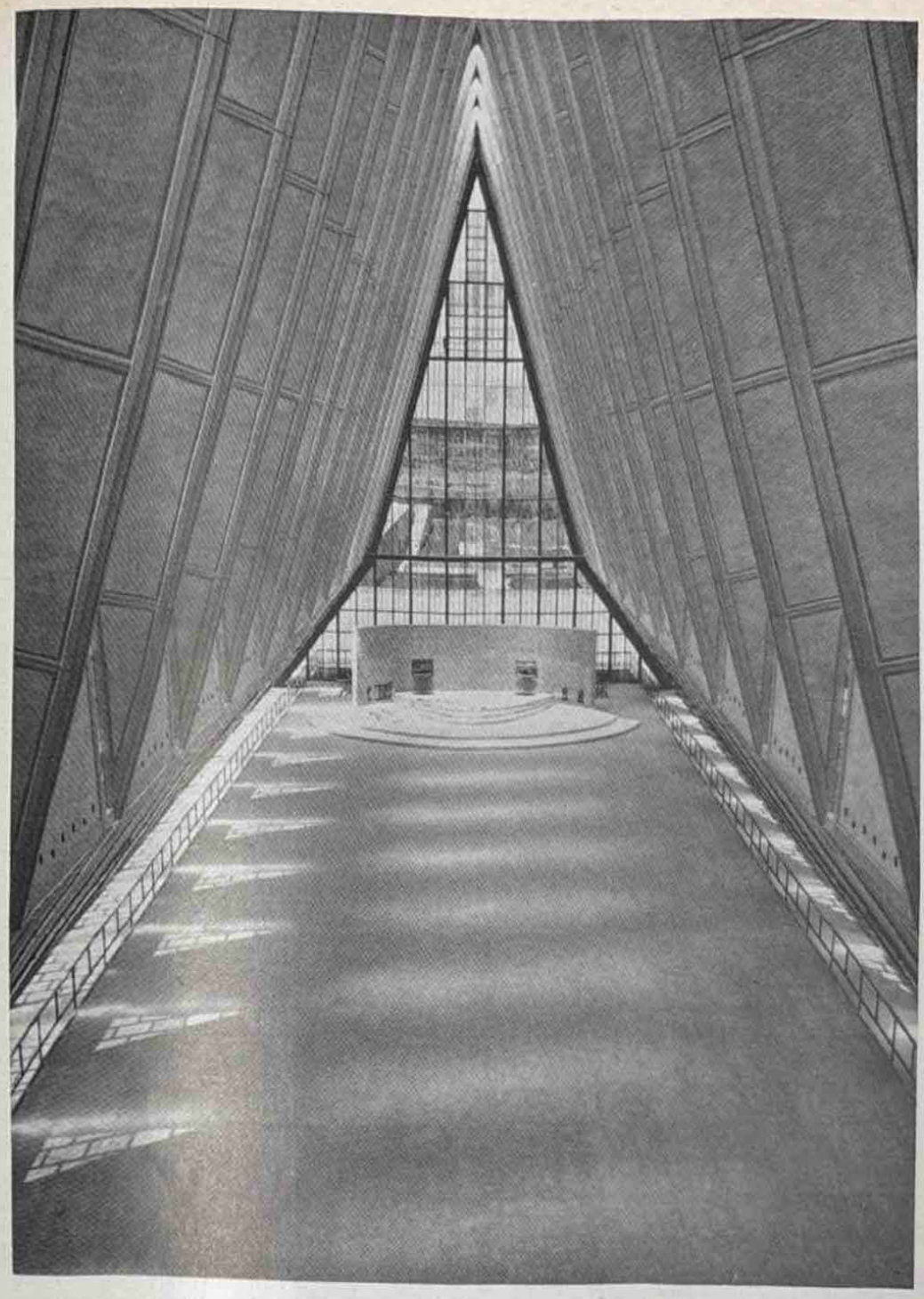
Since more than one Protestant denomination will use the chapel, the table accoutrements will vary. Two candlesticks, 3 ft. 8 in. high including the candles, are provided for those who wish them. They can be varied in height and also can serve as flower holders.

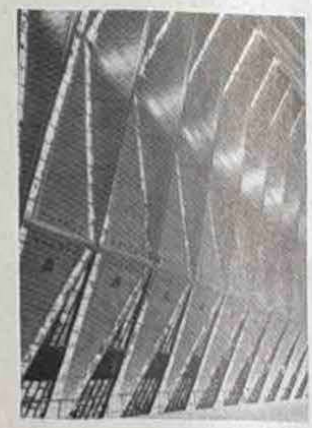
Behind the Holy Table is the reredos silhouetted against a backdrop of semi-transparent black glass. Together with the floating aluminum cross, 46 ft. 2 in. high, it forms a focal point as it brings attention to the table-altar area.

Chapel's 17 aluminum-covered spires rise to 150 ft., making it commanding structure of academy complex. Protestant nave is above terrace level, with broad flight of steps leading to vestibule of nave. Catholic and Jewish chapels on lower level have separate approaches. Terrace level sloped walls adjacent to sandblasted concrete abutments have diamond patterns of hand-set random-sized stones. Heavy texture is relieved by fine exposed aggregate plaza and granite-faced retaining wall.

Stewarts photos

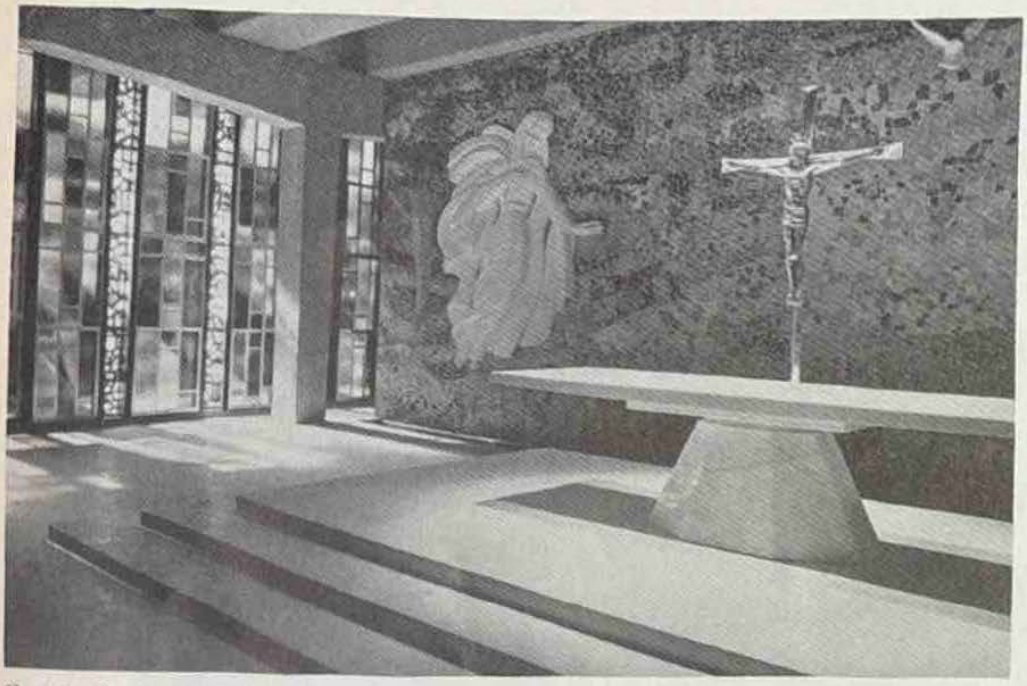




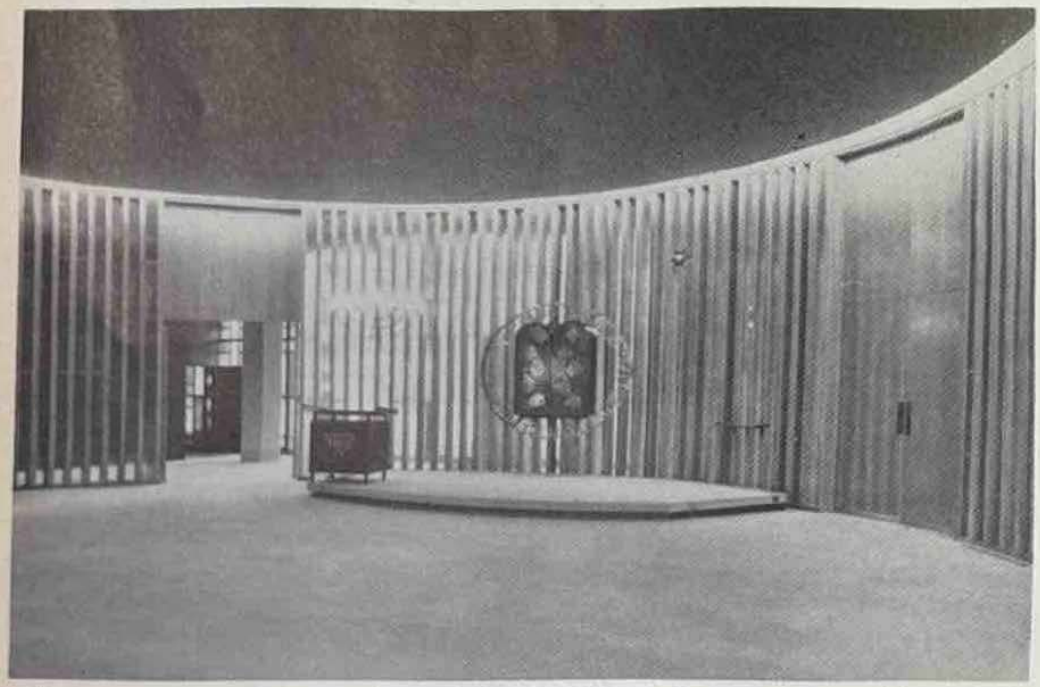


Amber glass in triangular sections diffuses sunlight. Stained glass strips extend to rooftop. Altar area is directly below bright yellow panels. Reredos, 14 ft. high and covered with marble mosaic, will form backdrop for Holy Table, single slab of marble, 15 ft. long.

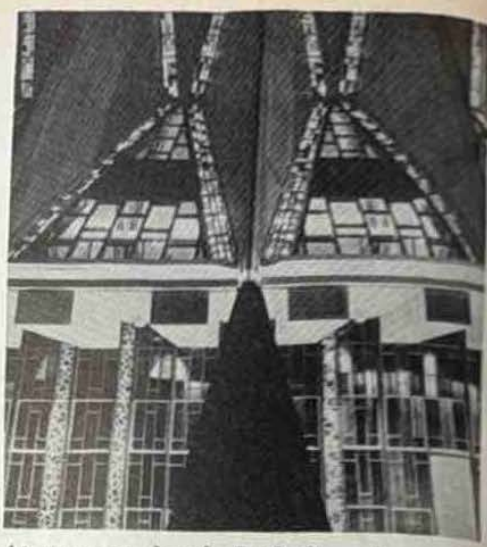




Our Lady is represented as floating vertical figure on left side of Catholic altar mural against abstract red, white and blue sky—red representing blood of Christ. Guardian Angel at right also is executed in marble relief.



All objects in Jewish chapel are round to differentiate it from Catholic and Protestant areas. Ark that houses Terah Scrolls is mounted from vertical cedar mullions, with Ten Commandments superimposed on doors. Eternal Light, hanging in front of Ark, is nestled in star formed by three six-pointed Star of David.



At terrace level Catholic chapel has aluminum sash glazed with seeded amber dalles in three tints and precast concrete panels incorporating 1-in. faceted dalle glass in five colors.

The circular pulpit is cut from solid blocks of marble. But the lectern — important to some, not so important to others — is removable. The top is made from Muntz metal executed in sculptural form and the body is walnut.

The credence shelves are made from walnut, laminated with African sapele. They are situated in niches, recessed into the reredos. The niches are partly marble mosaic, partly metal. This metal protrudes beyond the face of the reredos to form a holder for candelabra, which can be removed for those denominations whose rites do not demand this feature.

Highlighting the Catholic chapel is the 18x45-ft. altar mural done in mosaic and marble bas-relief, with two 15-ft. figures of Our Lady and the Guardian Angel. Both pieces, as well as the 14 Stations of the Cross, were cut from Ravaccione marble in Carrara, Italy, by the New York artist, Lumen Martin Winter.

The Jewish chapel is designed in the form of a circle within a square. All objects are round to differentiate this area from the Catholic and Protestant ones. The foyer is paved with Jerusalem stone, a gift of the Israeli Air Force.

To indicate close rapport between the officiating chaplain and the assembled worshippers, the Jewish lectern is designed so as to overflow the pulpit down into the congregation. Special carpeting has been woven for the pulpit. Under one of the two Menorahs superimposed on the wall is mounted a small utility table on which will be a tray with candlesticks and a Kiddush cup for the holy days.

We selected Haughton Elevators for the new Penn Towers . . . to provide speed with comfort"

. . . says Mr. Sylvester J. Lowery, President, Penn Towers, Inc.





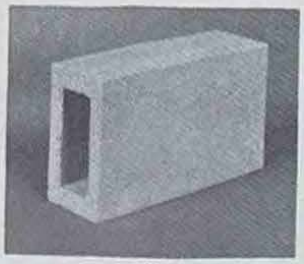
nn Towers, Philadelphia, Pa., Samuel J. Oshiver Associates, Architects and Engineers, Gilbane Building Company, General Contractors

Combining the features of a luxurious apartment hotel and modern office building, the new Penn Towers in Philadelphia will have the most advanced system of electronically-controlled elevators, keyed to the age of automation. ■ Eight Haughton Operatorless Elevators will transport passengers with uncanny speed and comfort along the glass-enclosed vertical highways that bisect the front of this striking new building. ■ An automatic electronic computer will constantly receive and analyze data pertaining to amount and character of traffic, and make adjustments to match traffic needs exactly. ■ Such is the magic of Haughton Elevonics* . . . key to new standards in elevator performance. ■ Incorporate the advantages of Haughton Elevators in your plans. ■ Contact your Haughton sales office (listed in the yellow pages), see Sweet's File 4a/Ha, or write: Haughton Elevator Company, Div. of Toledo Scale Corporation, Toledo 9, Ohio. ■ Passenger and Freight Elevators, Escalators, Dumbwaiters.

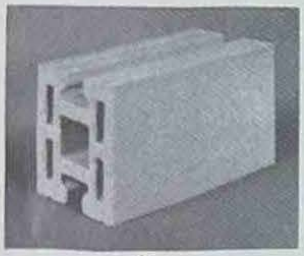
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T-SQUARE TALK

new offices, partnerships

L. Gale Abels, formerly with W. C. Muchow & Associates, Denver, has opened his own architectural office at 1226 Pennsylvania Ave., Boulder, Colo. After receiving degrees from the University of Minnesota and the Harvard Graduate School of Design, he joined the Michigan office of the late Eero Saarinen in 1954, where he remained until he moved to Boulder four years later.

Charles Marland Johnson, architect, has opened his own office for the practice of architecture at 2971 South Coast Highway, Laguna Beach, Calif.

Bruce Lionel Johnson has established an architectural office at 2426 Taraval St., San Francisco, after 10 years with Masten, Hurd & Gwathmey.

Chancy Miles Lott, architect, has opened a new office at 7188 Sunset Blvd., Hollywood, Calif. He formerly was affiliated with Richard Dorman & Associates and earlier with Albert C. Martin & Associates.

Vincent R. Bonfanti has left Kenneth Lind & Associates to establish his own architectural firm at 11959 Rivera Road, Santa Fe Springs, Calif.

R. Fred von Niederhausern has opened his own office for the practice of architecture at 17 Main St., Logan, Utah, having been with Schaub & Haycock & Associates for the past four years.

John McWilliams and Theodore Kessler have formed the new architectural firm of McWilliams & Kessler at 38 Mason St., San Francisco, succeeding the partnership of Choy & McWilliams.

Frederick Noel and John Robert Henderson have formed an architectural partnership of Noel-Henderson at 309 W. Carrillo, Santa Barbara.

Herman D. Ruth and Abraam Krushkhov have formed a partnership at 2409 Telegraph Ave., Berkeley, known as Ruth & Krushkhov, to serve as city and regional planning consultants.

new partners

John Graham & Co., architects-engineers, have named Alvin B. Harrison as a partner in the Seattle office.

firm changes

The firm of Evans, LaMont & Cole, Billings, Mont., architects, has been dissolved. Lewy Evans Jr. will continue in private practice at 220 Hedden Bldg.; James C. LaMont at 307 Electric Building.

new addresses

Donald P. Polsky, architect, to 9350 Hazen Drive, Beverly Hills, Calif.

William Ollinger, architect, to 1577 Shrader St., San Francisco.

Tallie B. Maule, architect, to 2445 Mason St., San Francisco.

Stanley M. Pauch, architect, to 1448 El Camino, Burlingame, Calif.

Peter Ficker, architect, to 577 E. Pasadena, Pomona, Calif.

Theodore T. Boutmy, architect, to 1736 Stockton, San Francisco.

C. Neal Carpenter, architect, to 2021 Clubhouse Drive, Greeley, Colo.

Beland, Gianelli & Associates, architects, to 2121 Redwood St., Vallejo, Calif.

William Wright (former firm name: Wm. Ronald Wright), architect, to 290 Fillmore St., Denver.

elections, appointments

Seattle Chapter, AIA, has elected this slate of officers: A. O. Bumgardner, president; John L. Wright and Dan F. Miller, vice presidents; David A. McKinley Jr., secretary; William J. Bain Jr., treasurer.

Salem Chapter, AIA, which makes the third for the state of Oregon, has named Louis Schmerber as its initial president. John Groom is vice president; Warren Carkin, secretary; Benjamin Cave, treasurer.

Sacramento Chapter, Construction Specifications Institute, has chosen Hal Okholm as president; Jack D. Nopp and Cecil Mark, vice presidents; Thomas A. Miller, secretary-treasurer.

Seattle architect Stephen Richardson has been appointed to serve for three years on the City Planning Commission.

Richard W. Norman, Portland architect, has been named to serve a five-year term for the Oregon State Board of Examiners.

Victor Gruen, Beverly Hills, Calif., has been named chairman of the architect and planning committee of the National Planning Association Development Program, which will establish a Center for Priority Anaylsis in Washington, D.C., to forecast costs of our national goals in dollars and in terms of absorption of resources.

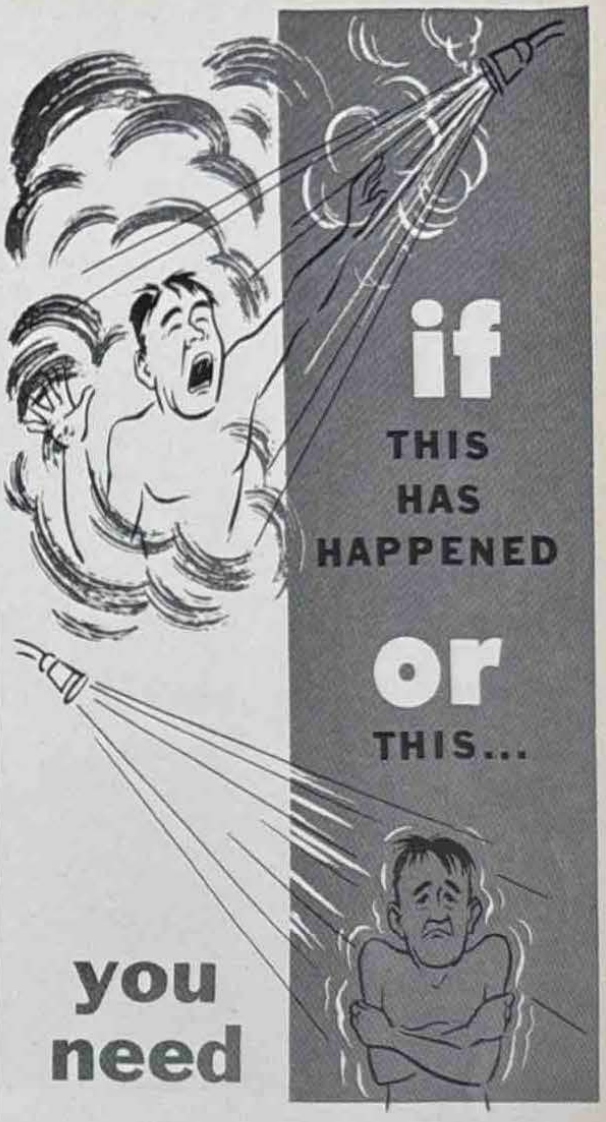
Mexico City to host Pacific Rim in '63

Mexico City will be host to the second Pacific Rim Architectural Conference next year when U.S. and Mexican architects come together to stimulate the exchange of professional knowledge and inspiration during the October 12-18 sessions.

The California Council, AIA, will sponsor the conference as it did the original one in Honolulu in 1959. It will follow the general assembly and executive committee meeting of the Union Internationale des Architectes, scheduled to begin October 5 in Mexico City.

Mexico's Carlos Contreras has joined four Californians —Lee B. Kline, Pasadena, chairman; George Vernon Russell, Los Angeles; George T. Rockrise, San Francisco; and George P. Simonds, Oakland—in planning the professional program.

Further information about the conference and special travel arrangements can be obtained by writing Melton Ferris, Executive Director, California Council, AIA, 916 Kearny St., San Francisco 11, Calif.

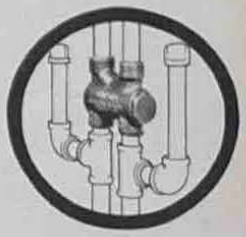


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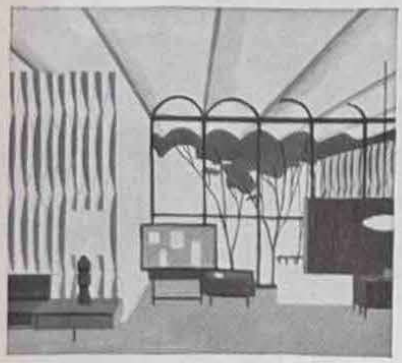
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New headquarters building, Purex Corp., Lakewood, Ca

"Packaging" space the easy way... with sculptured concrete curtain walls



Graceful concrete shells, cast in place, serve as roof and ceiling for a 2½ story lobby. The 4-inch-thick shells cantilever 10 feet beyond the entry to reflect in the adjacent pool. Architects: Anthony & Langford, Whittier, Calif. Project Consultant: William Garvey, Whittier, Calif. Gen. Contractor: Oltmans Const. Co., Monterey Park, Calif. Structural Engr.: Douglas H. Beetham, Whittier, Calif.

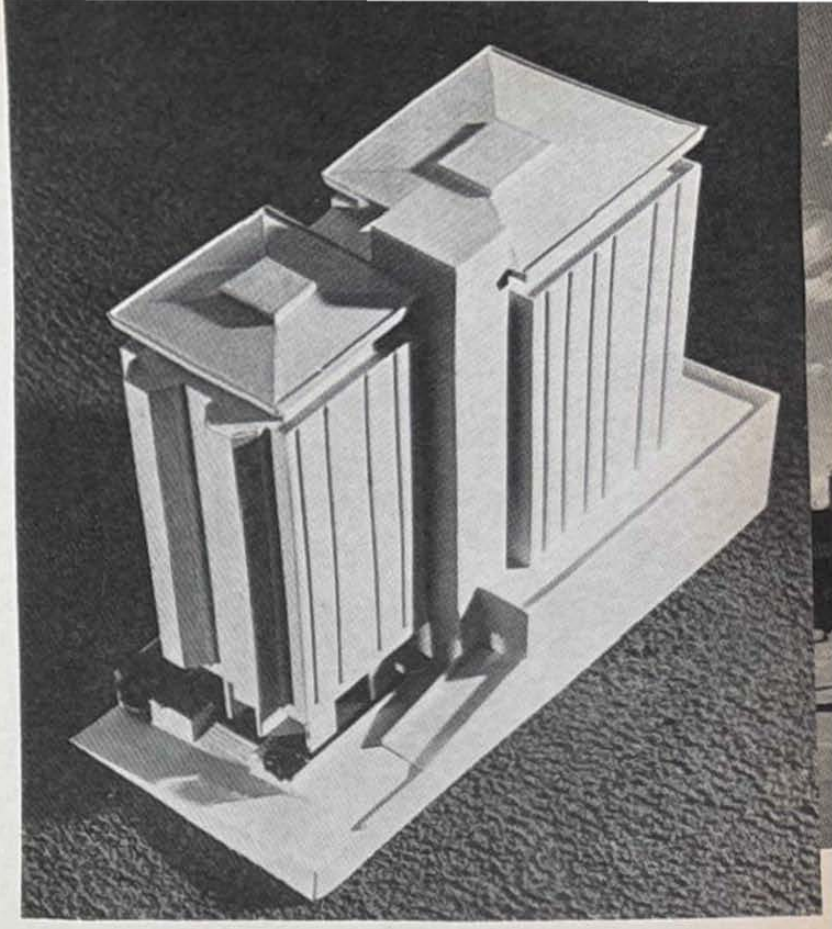
From broad, vaulted lobby to spacious top-floor executive offices, this ne headquarters building reflects Purex Corporation's regard for moder efficient packaging of their products.

62,000 feet of floor space were enclosed with only forty panels of preca concrete fastened directly to the 3-story frame. Sculptured curtain wa panels, cast from an original leaf design by artist John Edward Svenso point up the beautiful effects possible with modern concrete. Reusabl molds will provide identical panels for future expansion of the buildin

Today, architects find distinctive design and advanced constructio techniques grow readily from concrete's infinite versatility.

PORTLAND CEMENT ASSOCIATION

816 West Fifth Street, Los Angeles 17, California • 903 Seaboard Bldg., Seattle 1, Washin ton • 235 Montgomery Street, San Francisco 4, California • 721 Boston Bldg., Denver Colorado • 2727 North Central Avenue, Phoenix, Arizona • 304 Executive Bldg., Salt Lak City 11, Utah • Mezzanine-Placer Hotel, Helena, Montana • 120 Madeira Drive N. E Albuquerque, New Mexico.



Building will terminate in dominant roof overhang, identifying two penthouse suites individually designed to owners' requires. Living-dining room in each case will occupy corner for maximum view potential, with large bay window.



Sculptural towers for cooperative apartment dwellers

Two vertical reinforced concrete masses have been grouped around a central elevator and service core for the 755 Green Street Apartments to be built on San Francisco's Russian Hill.

Architects Chan-Rader & Associates have further enhanced the sculptural quality through the expression of the bay windows and the arrangement of other windows. Chin & Hensolt are the structural engineers.

A maximum of 34 cooperative apartments will be available with a variety of two-, three- and four-bedroom types, studio units and two penthouse suites. Sited in an excellent weather area centrally located to shopping and transportation, the building will take advantage of views of both the city and the Bay.

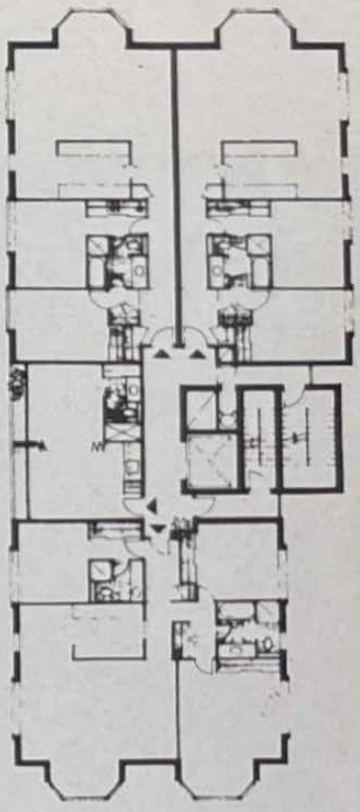
Eight large piers which form the two-story lobby space will support the Green Street side of the structure. The piers will rest on a landscaped garden base elevated above the street. The south group of apartments will have as a base a platform raised two levels higher. Private terraces will be accessible for all units at this level.

For those arriving by car, entrance will be direct from one of the garage levels where a parking space is reserved for each apartment. Separate storage areas and a common laundry facility will be housed on the level below the lobby.

Elevator, stair and lobby space on each floor has been expressly designed to the smallest possible dimensions to provide an intimate scale at the entrance of each apartment, which will be completely carpeted except for baths and kitchen. Basic wall finish will be plaster on which wood paneling or any other material can be applied. Acoustical plaster will be generally used for the ceilings. Electric heating will be thermostatically controlled in each apartment and in each room to the owners' individual requirements.

Kitchens and dining alcoves will be located just off the living room. Counters will be in plastic laminate and cabinets in hardwood paneling. Double sinks are of stainless steel.

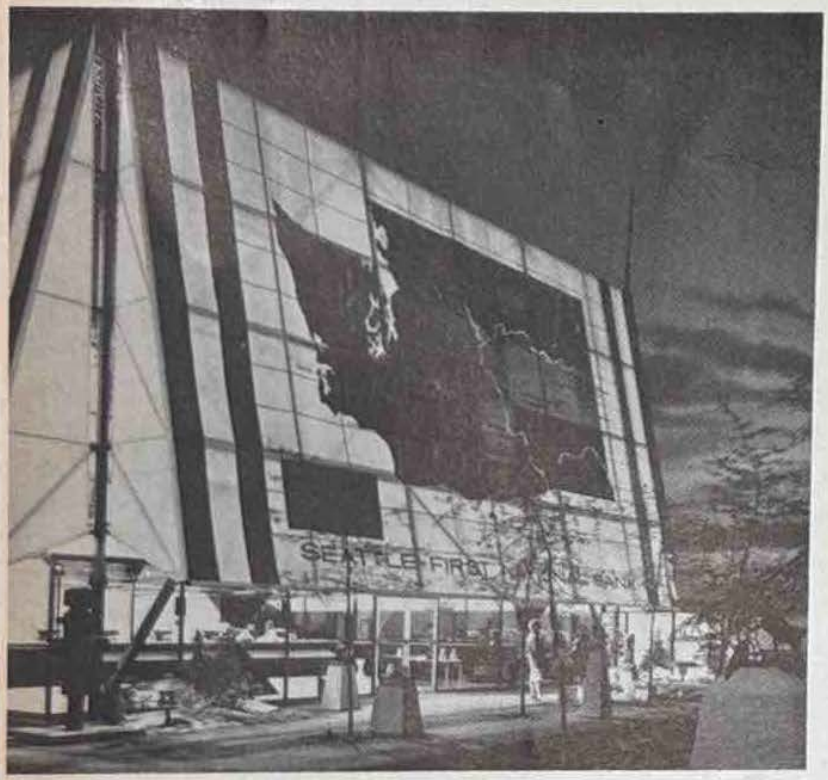
Bathrooms as a rule will contain a ceramic tile-enclosed stall shower, tile-enclosed bath with shower head, separate toilet compartment and built-in countertop lavatory. Bedrooms for the most part will offer entrance from the hall and provide convenient access to baths without having to re-enter the hall.



Typical floor can be rearranged to consist of one two-, one three- and one four-bedroom apartments around elevator lobby by dividing original studio unit.

Mall before Federal Science Pavilion is truly nighttime spectacular.

SEATTLE WORLD'S FA



Gay bank building looks out on good sculpture show.



IBM Pavilion is tastefully done with definite attempt to subjugate machine by overwhelming environment of natural forces.



Plaza of the States is workable as such but not very practical for public ceremonies with seats among 50 flagpoles.

EVISITED

Photos and captions by ART HUPY

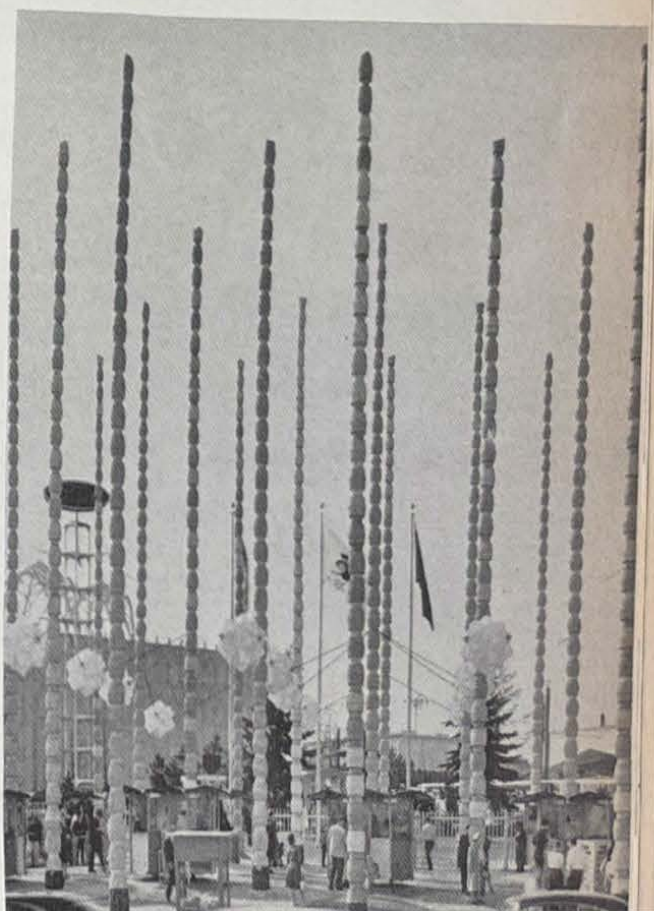
Seeing is an art—an art, that is, when the observer discriminates between the beautiful and the ugly, the appropriate and the inappropriate, the genuine and the phony. But few of us possess the sensitivity displayed by photographer Art Hupy.

It is somewhat paradoxical that Hupy, one of the Seattle World's Fair's harshest and most unrelenting critics, has discovered the delightful spaces, retreats and the like shown here—and it is these amenities which, in the final analysis, give meaning to the design-oriented fairgoer.

As for the most publicized aspects of the fair, Hupy takes a rather dim view. He sees the Federal Science Pavilion as monumental by day, spectacular by night, but hastens to add: "It does not belong in the Northwest as a permanent building with its windy court and large expanses of uncovered walking area. One also wonders at the cathedral significance of the arches for a scientific exhibition."

Hupy calls the state taxpayer-sponsored look into Century 21 and its Bubblelator as "one good example of our prevelant philosophy of 'the bigger the better.'

"I think Seattle will live to rue the day that it started its mass import of culture and the tourist dollar. Seattle cannot be like San Francisco or New York or Las Vegas and should not want to be. We must develop our own character with our own talent utilized to its fullest and influenced by its surrounding environment."



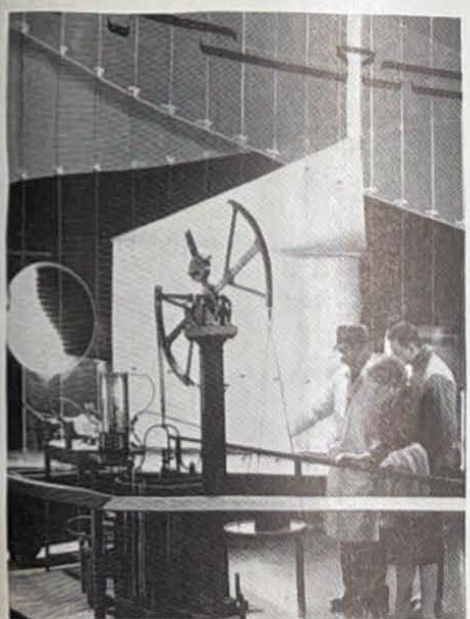
Entrance totems afford no protection from rain or sun but are fitting nonetheless with architect-designed fixtures.

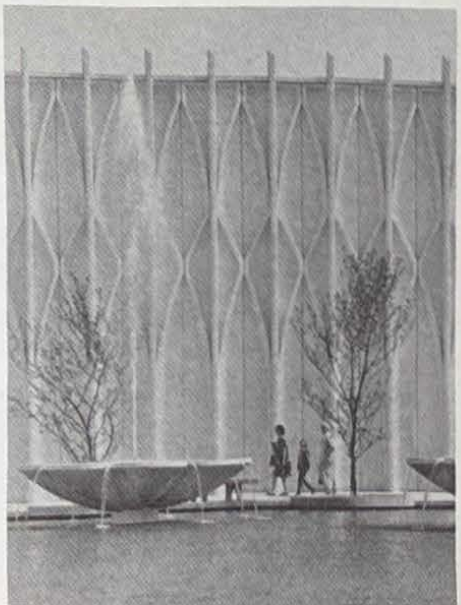
Oregon's exhibit says that nature and wood are synonymous in neighboring state—a real oasis in tightly packed site.

Beautifully executed arches roof International Commerce & Industry displays, some of exposition's best, but Philippines is only exhibitor who tried to design for height.

Denmark means quality with a capital "Q."

A wonderful walk in the sun and a wealth of scientific data impossible to absorb in one day.







Seattle's compromise civic center: Opera House (above); Exhibition Hall and delightful Playhouse court (below).





Design credits

Federal Science Pavilion: Minoru Yamasaki and Naramore, Brady & Johanson; Seattle - First National Bank: Paul Thiry; IBM Pavilion: Carlo Sklaroff Design Associates, Charles Broudy, Karl Linn; South Entrance: Bassetti & Morse; Oregon State Exhibit: Robert Bosworth; International Commerce & Industry Buildings: Walker & McGough; Danish Pavilion; Erik Sorensen; Opera House: Priteca & Chiarelli; Exhibition Hall and Playhouse: Kirk Wallace, McKinley & Associates; International Fountain: Katsuhiko Matsushita & Hideo Shimizu; Space Needle: John Graham & Co.; Concession Kiosks: Wendell Lovett and Ted Bower.



International Fountain–best from afar.



Construction or obstruction?





Everett DuPen's fountain–best close at hand.



Century 21?



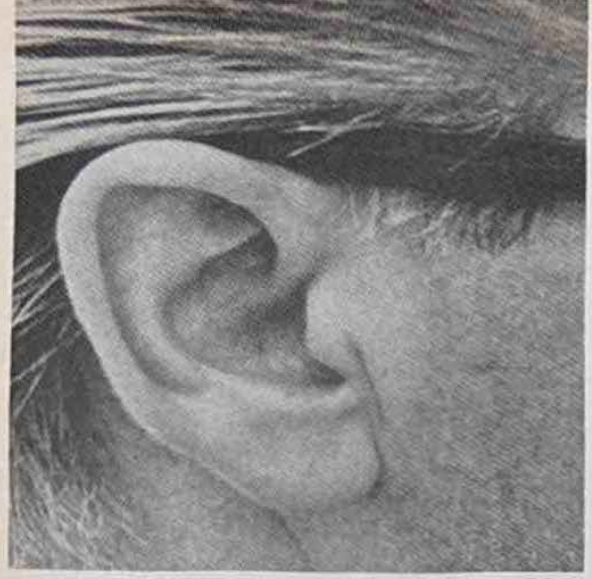
Designed for what?

James FitzGerald's fountain–rewarding from any point of view.



Slaves to the machine?





How to attend a conference

by S. I. HAYAKAWA

THE PURPOSE of the International Design Conference is, of course, the exchange of ideas, the enrichment of our own views through the support of the challenge provided by the views of others. It is a situation created specially for the purposes of communication.

Since I am a student of semantics and therefore a student of the processes of communication, the program committee has suggested that I try to place at the disposal of this conference whatever ideas I may have which might facilitate the communicative process. This is indeed a big order and perhaps it is presumptuous of me to attempt it. Nevertheless, I find the suggestion to be a challenge, so I am going to venture some observations on the process of communication in the hope that, whether my observations are correct, the very fact that I make them may at least help to make us all aware of the problems of communication that confront us here in addition to the problems inherent in the subject matter of the conference.

There are two aspects to communication. One is the matter of output—the speaking and writing, involving problems of rhetoric, composition, logical presentation, coherence, definition of terms, knowledge of the subject and the audience, etc. Most of the preoccupation with communication is directed toward the improvement of the output, so that we find on every hand courses in composition, in effective speaking, in the arts of plain or fancy talk and how to write more dynamic sales letters.

But the other aspect of communication, namely, the problem of intake—especially the problem of how to listen well—is relatively a neglected subject. It does not avail the speakers to have spoken well if we as listeners have failed to understand or if we come away believing them to have said things they didn't say at all. If a conference such as this is to result in the exchange of ideas, we need to pay particular heed to our listening habits.

A common difficulty at conferences and meetings is what might be called the *terminological tangle*, in which discussion is stalemated by conflicting definitions of key terms. What do such terms as "romanticism," "classicism," "baroque," "organic," "functionalism," etc., really mean? Let us put this problem into the kind of context in which it is likely to occur. For example, a speaker may talk about "the romanticism so admirably exemplified by the Robey House by Frank Lloyd Wright." Let us imagine in the audience an individual to whom the Robey House exemplifies many things, but *not* "romanticism." His reaction may well be, "Good God, has he ever *seen* the Robey House?" And he may challenge the speaker to *define* "romanticism"—which is a way of asking, "What do *you* think 'romanticism' really is?" When the speaker has given his definition, it may well prove to the questioner that the speaker indeed doesn't know what he's talking about. But if the questioner counters with an alternative definition, it will prove to the speaker that the questioner doesn't know what *he* is talking about. At this point it will be just as well if the rest of the audience adjourns to the bar because no further communication is going to take place.

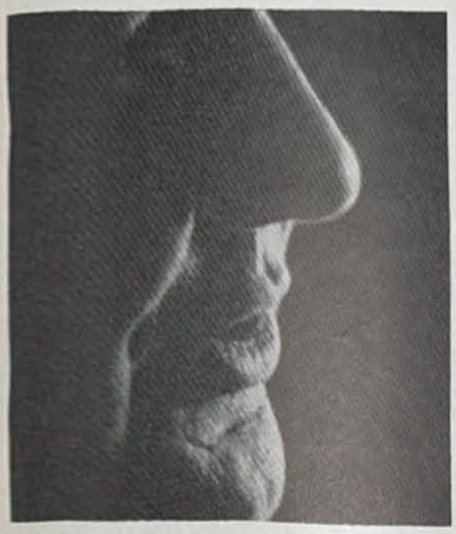
How can this kind of terminological tangle be avoided? I believe it can be avoided if we understand at the outset that there is no ultimately correct and single meaning to words like "romanticism" and "functionalism" and "plastic form" and other items in the vocabulary of art and design criticism. Within the strictly disciplined contexts of the languages of the sciences, exact or almost exact agreements about terminology can be established. When two physicists talk about "positrons" or when two chemists talk about "diethylene glycol," they can be



Professor of language arts at San Francisco State College. Mr. Hayakawa delivered this paper at an earlier Aspen conference.

presumed to have enough of a common background of controlled experience in their fields to have few difficulties about understanding one another.

But most of the words of artistic discussion are not restricted to such specialized frames of reference. They are part of the language of everyday life—by which I mean that they are part of the language in which we do not hesitate to speak across occupational lines. The artist, dramatist and poet do not hesitate to use such words in speaking to their audiences; nor would the physician, the lawyer, the accountant and the clothing merchant hesitate to use these



words to one another if they get into a discussion of any of the arts.

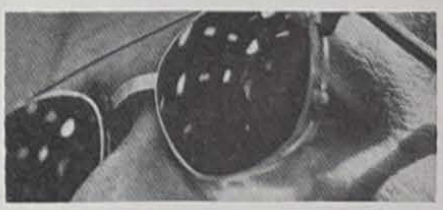
In short, the words most commonly used in the discussion of the arts are public property—which is to say that they mean many thing to many people. This is a fact neither to be applauded or regretted; it is simply a fact to be taken into account. They are words, therefore, which either have to be defined anew each time they are seriously used—or, better still, *they must be used in such a way, and with sufficient illustrative examples, that their specific meaning in any given discourse emerges from their context.*

Hence it is of great importance in a conference such as this to listen to one another's statements and speeches and terminology without unreasonable demands. And the specific unreasonable demand I am thinking of now is the demand that everybody else *should* mean by such words as "romanticism" what I would mean if I were using them. If, therefore, the expression, "the romanticism of the Frank Lloyd Wright Robey House" is one that, at first encounter, makes little sense to us, we should at once be alerted to special attentiveness. The speaker, by classifying the Robey House as "romantic," is making an unfamiliar classification—a sure sign not that he is ill-informed but that he has a way of classifying his data that is different from our own. And his organization of his data may be one from which we can learn a new and instructive way of looking at the Robey House, or at "romanticism," or at whatever else the speaker may be talking about.

Since a major purpose of this conference is to provide ample opportunity for conversational give-and-take, perhaps it would be wise to consider the adoption, formally or informally, of one basic conversational traffic rule which I have found to be invaluable in ensuring the maximum flow of information and ideas from one person to another and in avoiding the waste of time resulting from verbal traffic snarls. The rule is easy to lay down, but not always easy to follow: it is that *we refrain from agreement or disagreement with a speaker and refrain from praise or censure of his views until we are sure what those views are.*

Of course, the first way to discover a speaker's views is to listen to him. But few people, other than psychiatrists and women, have had much training in listening. The training of most oververbalized professional intellectuals (i.e., people who attend conferences of this kind) is in the opposite direction. Living in a competitive culture, most of us are most of the time chiefly concerned with getting our own views across and we tend to find other people's speeches a tedious interruption of the flow of our own ideas. Hence it is necessary to emphasize that listening does not mean simply maintaining a polite silence while you are rehearsing in your mind the speech you are going to make the next time you can grab a conversational opening. Nor does listening mean waiting alertly for the flaws in the other fellow's arguments so that later you can mow him down. Listening means trying to see the problem the way the speaker sees it—which means not sympathy, which is *feeling for* him, but empathy, which is *experiencing with* him. Listening requires entering actively and imaginatively into the other fellow's situation and trying to understand a frame of reference different from your own. This is not always an easy task.

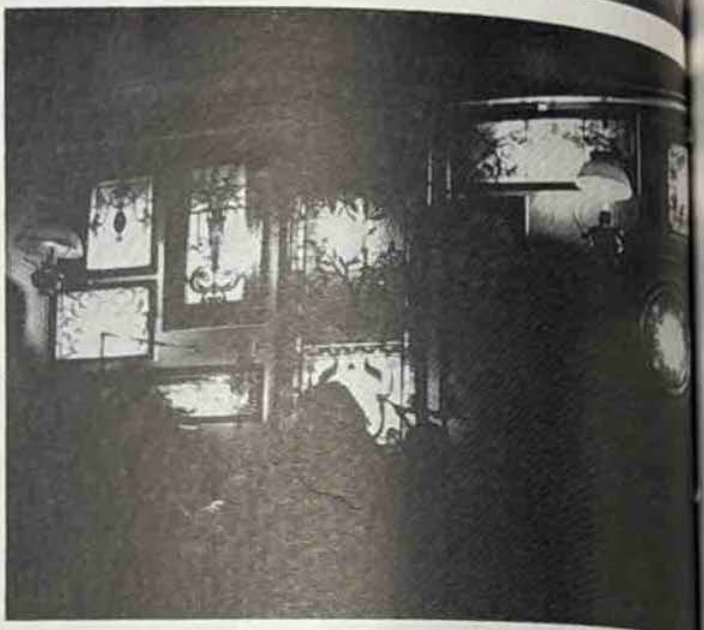
But a good listener does not merely remain silent. He asks questions. However, these questions must avoid all implications

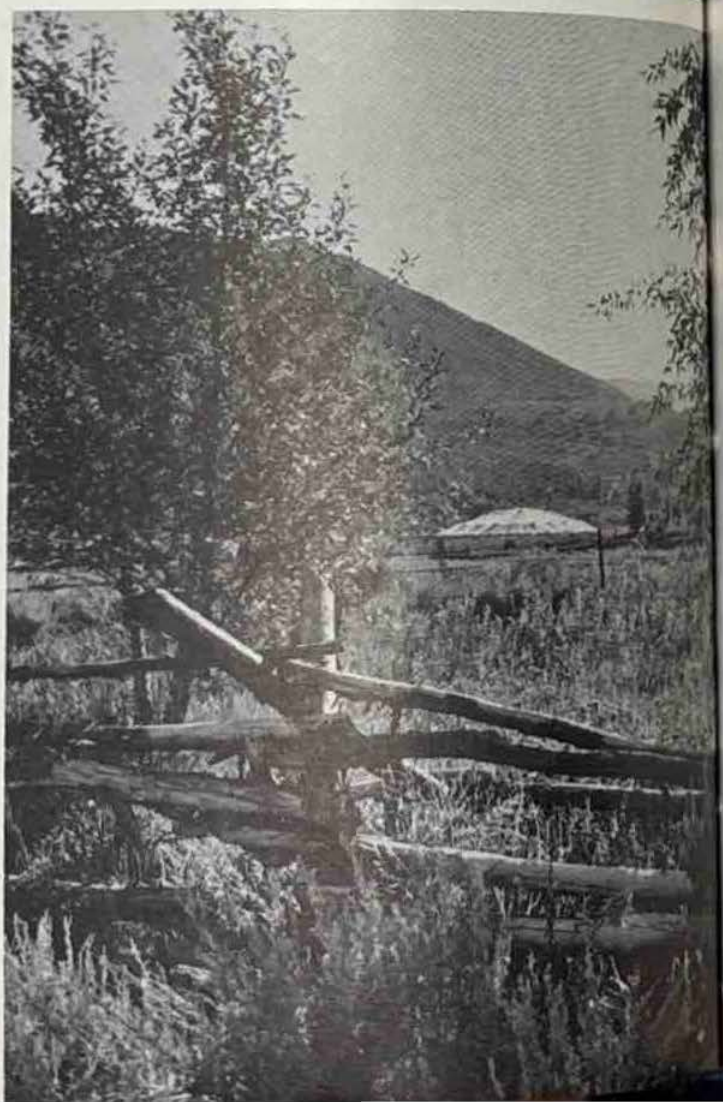


(whether in tone of voice or in wording) of skepticism or challenge or hostility. They must be clearly motivated by curiosity about the speaker's views. Such questions, which may be called "questions for clarification," usually take the form, "Would you expand on that point . . .?" "Would you mind restating that argument about . . .?" "What exactly is your recommendation again?" Perhaps the most useful kind of question at this stage is something like, "I am going to restate in my words what I think you mean.





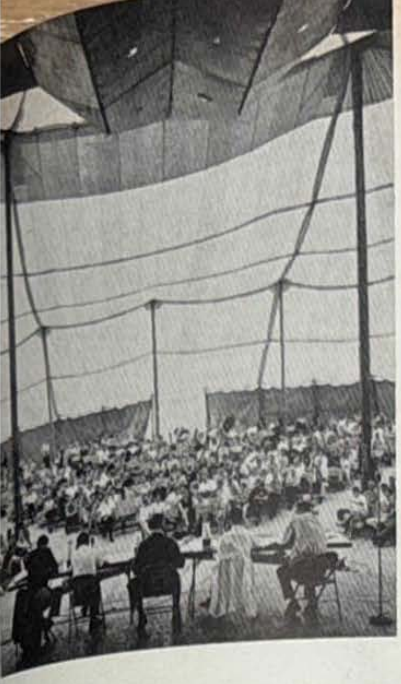




Then would you mind telling me if I've understood you correctly?"

The late Dr. Irving J. Lee of Northwestern University has suggested another form of questioning which he describes as "the request for information concerning the uniqueness of the particular characteristics of the condition or proposal under consideration." I shall simply call these questions "questions of uniqueness." All too often, we tend to listen to a speaker or his speech in terms of a generalization, "Oh, he's just another of those progressive educators," "Isn't that just like a commercial designer?" "That's the familiar Robjohn-Giddings approach," "That's the old Bauhaus pitch," etc. It is a curious and dangerous fact—dangerous to communication, that is—that once we classify a speech in this way, we stop listening because, as we say, "We've heard that stuff before." But *this* speech by *this* individual at *this* time and place is a *particular* event, while the "that stuff" with which we are classifying this speech is a generalization from the past. Questions of uniqueness are designed to prevent what might be called the functional deafness which we induce in ourselves by reacting to speakers and their speeches in terms of the generalizations we apply to them.

Questions of uniqueness take such forms as these: "How large is the firm you work for and do they make more than one product?" "Exactly what kind of synthetic plastic did you use on that project?" "Are your remarks on abstract expressionism and Jack-



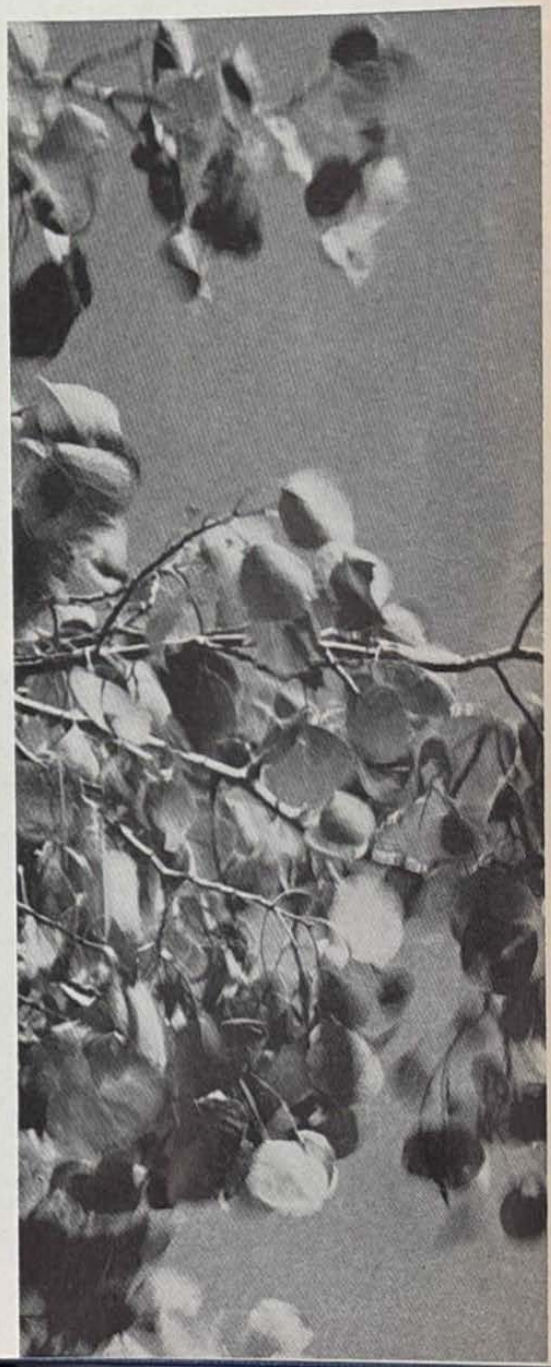
son Pollock intended to apply equally to the work of De Kooning?"

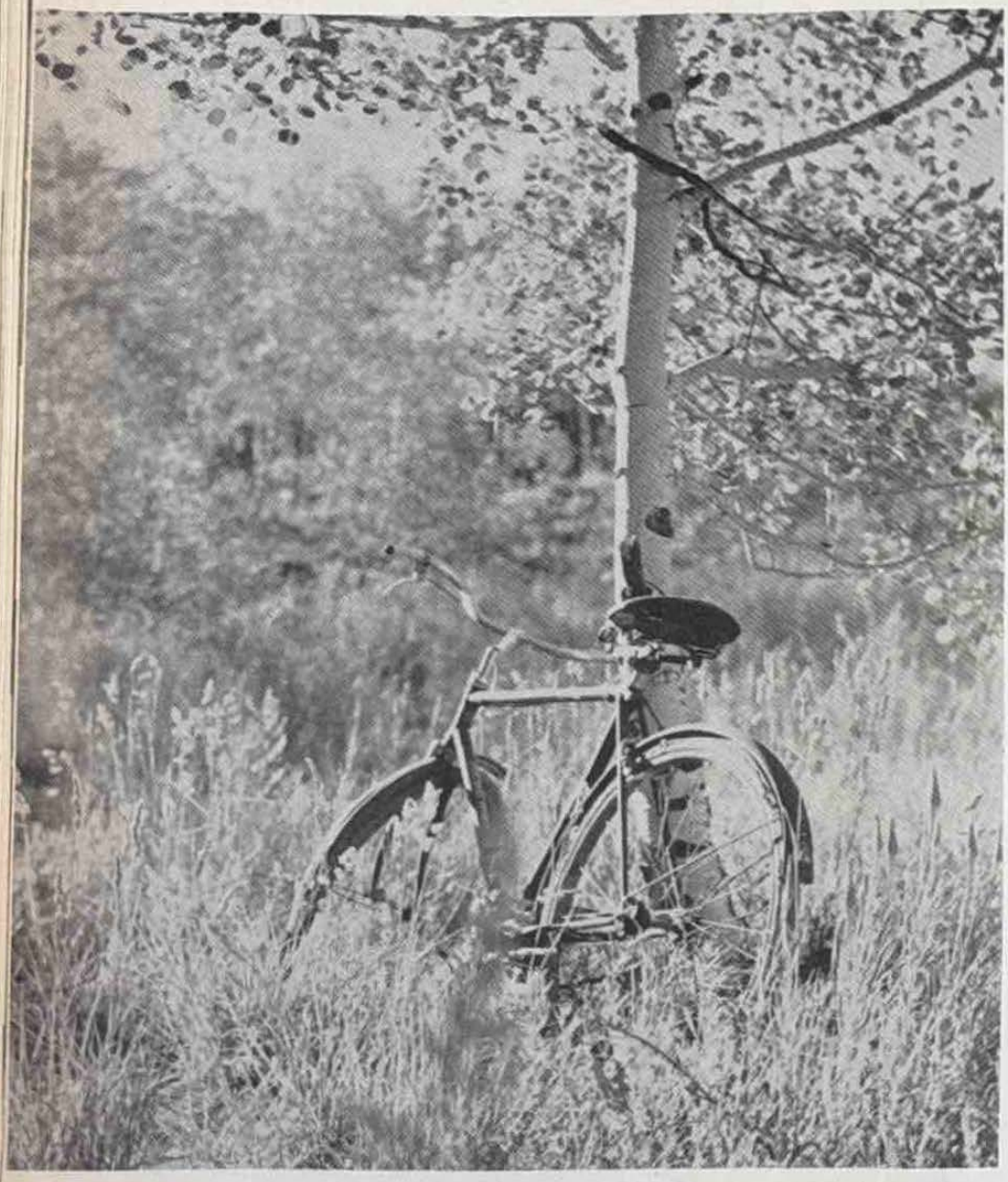
Something else that needs to be watched is the habit of overgeneralizing from the speaker's remarks. If a speaker is critical of, let us say, the way in which design is taught at a particular school, some persons in the audience seem automatically to assume that the speaker is saying that design shouldn't be taught at all. When I speak on the neglected art of listening, as I have done on other occasions at other places, I usually am confronted with the question, "If everybody listened, who would do the talking?" This type of misunderstanding may be called the "pickling in brine fallacy," after the senior Oliver Wendell Holmes's famous remark. "Just because I say I like sea bathing, that doesn't mean I want to be pickled in brine." When Alfred Korzybski found himself being misunderstood in this way, he used to assert with special forcefulness, "I say what I say; I do not say what I do not say." Questions of uniqueness, properly chosen, prevent not only the questioner but everyone else present from projecting into a speaker's remarks meaning that were not intended.

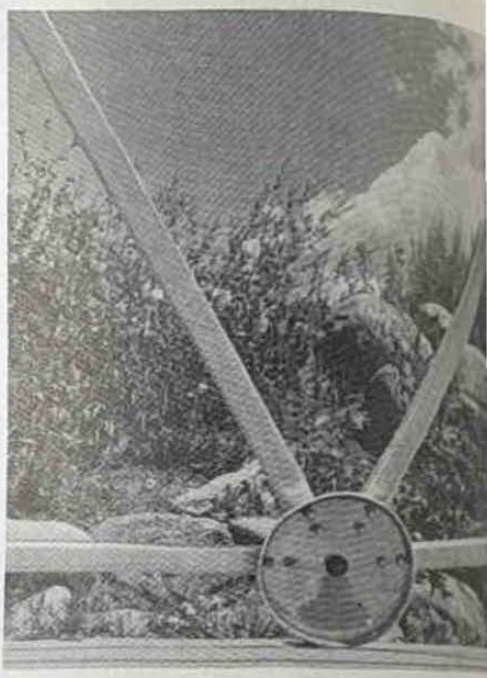
All too often, the fact that misunderstanding exists is not apparent until deeper misunderstandings have already occurred because of the original one. We have all had the experience of being at meetings or at social gatherings at which Mr. X. says something, Mr. Y believes Mr. X to have said something quite different and argues against what he believes Mr. Y to have said. Then Mr. X, not understanding Mr. Y's objections (which may be legitimate objections to what Mr. X didn't say), defends his original statement with further statements. These further statements, interpreted by Mr. Y in the light of mistaken assumptions, lead to further mistaken assumptions, which in turn induce in Mr. X mistaken assumptions about Mr. Y. In a matter of minutes, the discussion is a dozen miles away from the original topic. Thereafter it can take from 20 minutes to two hours to untangle the mess and restore

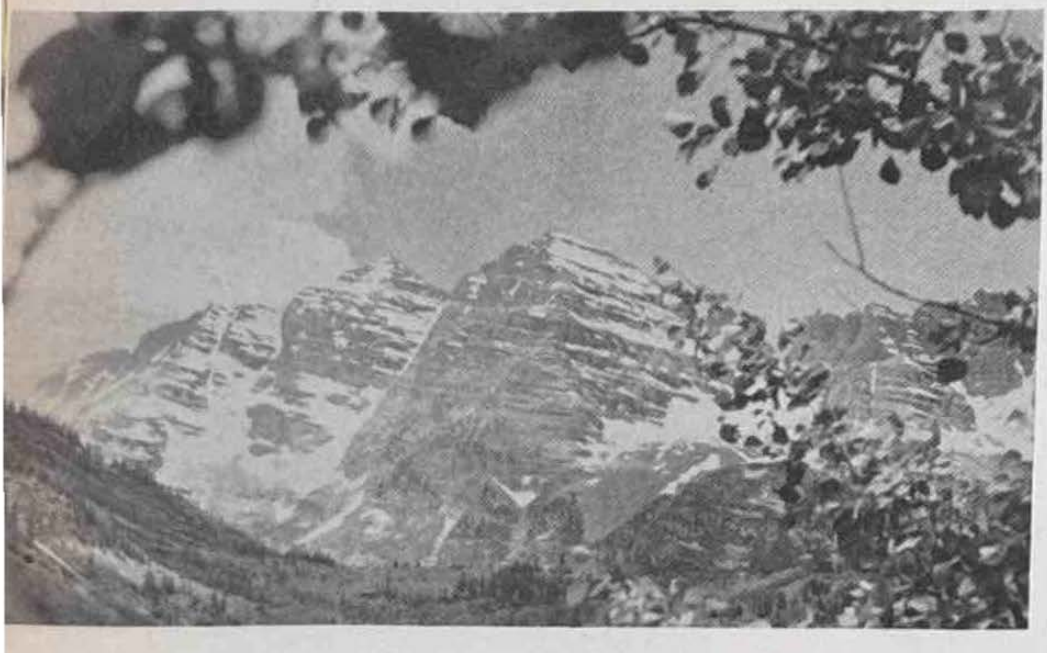
the discussion to a consideration of Mr. X's original point. This is the kind of time-wasting which I should like to help avoid.

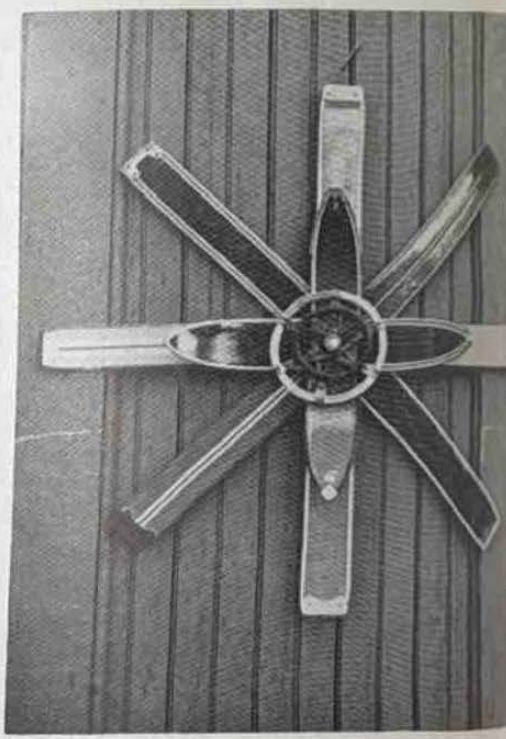
All this is not to say that I expect or wish this conference to avoid argument. But let us argue about what has been said and not about what has not been said. And let us discuss not for victory but for clarification. If we do so, we shall find, I believe, that ultimately agreement and disagreement, approval and disapproval, are not very important after all. The important thing is to come away from the conference with a fund of information—information about what other people are doing and thinking and why. The result of communications successfully imparted is self-satisfaction, the result of communications successfully received is self-insight. It is my hope that this conference will mean for all of us not only increased self-satisfaction but also increased self-insight.













Locating a conference in a stimulating atmosphere is as important to its success as the caliber of the participants on either side of the podium. Aspen provides this excitement with its genuine casualness and its contrasts: the Victorian-inspired designs vs. the contemporary architecture, but tastefully integrated for the most part; the unmolested natural beauty on the one hand and the sophisticated urban night life on the other. One of the extremes can be found in the town's wonderful old cemetery where the tombstone of the late Walter Paepke, founder of the Aspen Institute for Humanities, stands near a marble headstone of 1880 vintage. (For earlier coverage of the cultural and recreational center of Colorado's western slope, see the award-winning Fredric Benedict Residence, Sept. '60, and yearly reports of the conference sessions, particularly A/W's initial one in Aug. '58.)





ARTHUR DREXLER

Director, Department of Architecture and Design
Museum of Modern Art, New York

"Architecture is the representation of what man thinks to be the order of the universe and his relation to God. There is already an audience for good architecture, but the world has not become more beautiful, nor do we have more good architecture, nor has the audience for good architecture become larger. Instead the world has become uglier. . . . Technology is in the factory. The whole world is becoming a factory. One way for man to perfect himself is to perfect what he makes and how he makes it. An architect's design belongs to him, but the nature of architecture does not.

DANIEL HAVKIN

Architect, Israel

There exist three types of a
tecture: futuristic architec
this being an esthetic adve
that requires a formalistic
proach; visionary architec
this presenting the needs o
ciety; realistic architecture
being the transposition of th
ary architecture into a rea
. . . Culture is a product of
town and cities. There is
more spontaneity and poetry
our cities because of zoning
the lack of consideration
human life. We are really
phisticated cannibals.

Environment Aspen 1962

ENVIRONMENT is the totality of man's experience. Whatever we see, hear, touch, smell or feel is determined by the environment in which we find ourselves. Thinking itself—though it may soar to the outermost gallaxies — can never hope to break wholly free of the leash that ties man to his environment. Man cannot escape environment, but he can and does fashion it—often in ignorance or shortsighted greed, but sometimes, too, with magnificent vision. We must look to those who are most sensitive and most perceptive to what is happening to every part of our environment. Along with the poet's and artist's visions, we need the interpretations of the architect and engineer, the physicist and biologist, the psychologist and anthropologist, the geographer and demographer, the politician and the lawmaker, the teacher and communicator. By hearing their voices, not in unrelated isolation but in unison and awareness of their dependence on one another, man can act to conserve all that he has attained and to achieve new and better controls and understanding of himself and his environment.

ROBERT WEAVER

Administrator, Housing and Home Finance Agency
Washington, D.C.

Find out what the people want. One of the government's basic policies is to provide maximum choice in shelter and transportation for the American family: the choice of houses for sale and for rent, the choice between comfortable mass transit and automobile, between good houses in town or in the suburbs. Maximum choices are possible, and if these choices are not provided, the situation becomes restrictive. We have to include in the planning of urban growth all the people, not segments. We should provide the "D" for design as well as the "D" for dollar in our development of the urban area.

DR. KARL MENNINGER

The Menninger Foundation
Topeka, Kansas

Man is injuring society and h
self because of a self-destruct
trend in society and in the in
vidual. Help mental health
Design! This can be done in t
design of parks: parks that a
made useable through prop
planning. Design pedestri
ways and bicycle paths a
quiet recreation areas for publ
retreat. Recreation is basic f
mental health. Beauty is not
luxury but a psychologic
necessity.

LOUIS I. KAHN

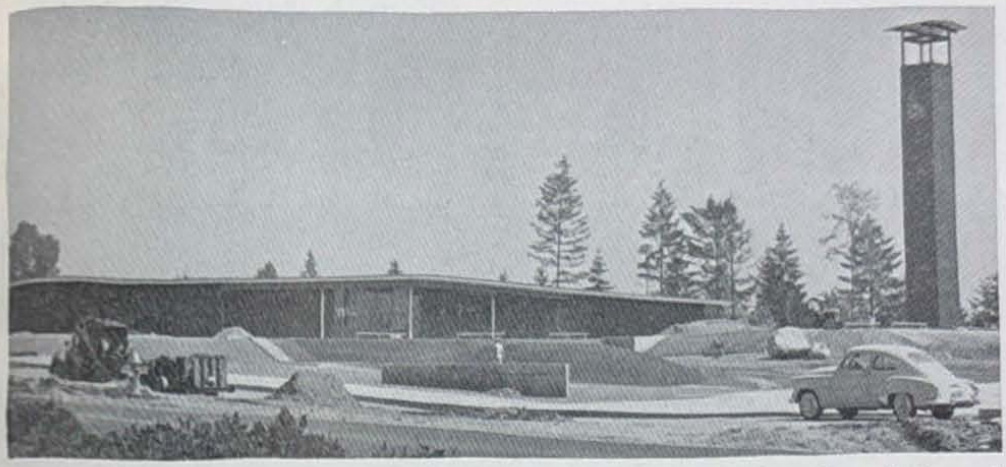
Architect, Philadelphia

The highest moment in thought is philosophy, the greatest feeling is religion. The combination of the highest moment in thought with the greatest feeling is the most worthwhile, and the moment of realization is thus the greatest moment in life. . . . In regard to our cities, law is relentless and has no feeling, but rule has. Law is always present and cannot change, but rule is debatable and can be changed. . . . Architecture is a world within a world and has its own personality. I do not think an architect can design something contemporary. . . . Los Angeles is just one big parking garage.

BALKRISHNA VITHALDAS DOSHI

Architect, India

Most of the architecture that is being done in India today is done by the main-structure type of architecture. In the design of apartments, barns, etc., the principal structural elements are built and then the tennants fill in their own partitions, etc., to suit their own tastes. In this way each apartment, each living area, each barn has its own individuality. If mass-produced housing is used throughout, then man will lose his identity and will therefore also lose his environment.



Six one-story units are dominated by 80-ft. wooden bell tower, whose base is located in reflection pool.



Installation time for roof insulation reduced 50% at Tacoma high school

A REDUCTION of almost 50% in the time required for installing insulation on large area roofs was recently demonstrated as being feasible under a wide range of conditions during the construction of the Mount Tahoma High School in Tacoma, a project involving six buildings with a combined roof area of over a quarter of a million feet.

The rapid installation of insulating material on the wooden built-up roofs of the $2½ million campus-style school was achieved by using Dow Chemical Co.'s Styrofoam 22.

The decision to use expanded polystyrene on the roofs was based on several factors, architect Robert B. Price explains. Because electric heat was to be used in each building, a highly efficient insulation was needed to assure the maintenance of stable temperatures throughout the interior of each structure. To meet this requirement, a 1½-in. thick layer of Styrofoam was selected.

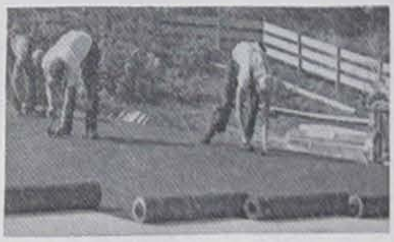
Other reasons for specifying the material, Price says, included its resistance to the elements during construction and ease of handling.

In preparing plans for his schools, Price prefers to place the insulation on the exterior of wood roofs wherever possible. On industrial buildings he frequently leaves an opening around the edge of the ceiling so that the attic area will have the same temperature as other parts of the interior.

The insulation is then placed on the exterior of the roof, making venting of the attic unnecessary. Furthermore, this eliminates the time-consuming placement of insulation in the cramped quarters of an attic or a similar area where access and working conditions are difficult. With a vapor barrier material, therefore, exterior insulation offers significant savings because of the reduce labor in making the installation, while providing complete protection against the formation of condensation and the detrimental effects which would subsequently develop.

Installation began with sheets of Visqueen being laid over the plywood decking to protect it from any moisture that might accumulate during construction. The plastic was then tacked to the edges of the deck. Following this, Styrofoam boards, 2 ft. in width and 9 ft. in length, were stacked in large piles on the roof of each building.

Installation of each board was simply a matter of placing it firmly against the preceding piece and securing it with six nails. A factor in the rapid laying of the insulation was the light weight of the boards, which made it possible for one man to easily carry from 180 to 200 bd. ft. of Styrofoam from the stockpile to his working area.



Foam boards and 40-lb. roofing sheet are secured by nailing directly into wooden decking with 2-in. striated nails.



Carrying well over 100 sq. ft. of boards, two roofers demonstrate how light weight of plastic foam speeds installation because of ease of handling.

After laying and securing the boards, a 40-lb. roofing sheet was placed over the insulation. It was secured with 2-in. striated nails with 1-in. caps (the nails being placed 6 in. apart) in rows at 12-in. intervals, beginning at the seam of each board. The result was that each board has three rows of nails which secures both the roofing sheet and Styrofoam to the wooden deck. This sheet was them hot mopped and followed by three 6-lb. sheets of Permaply, each layer being hot mopped. The hot mopping of the top sheet was followed by graveling of the entire roof.

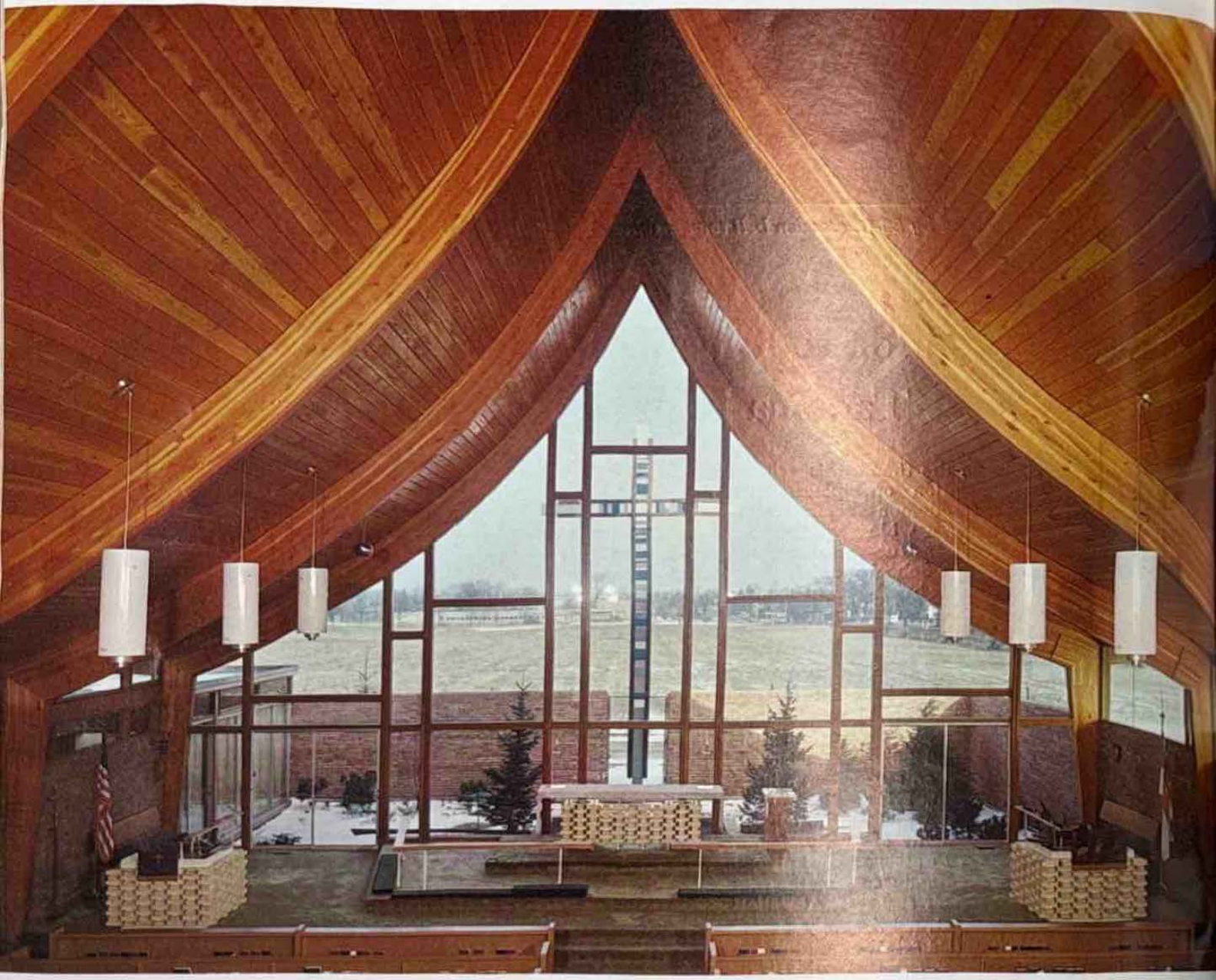
Trimming or cutting a board to fit a particular shape was easily solved by the roofing contractor, Yost Construction Co., by sharpening the blade of a 10-in. butcher knife to a fine edge and using it to slice the insulation to obtain exact fits.

In making the transition strips which extend from the insulation to the edge of the deck, Yost also substituted Styrofoam for wood. After running pieces through a bench saw to obtain the desired bevel, the stips were rapidly nailed into place without any further cutting or trimming.



St. Johns Episcopal Church, Plymouth, Michigan. Architects-Engineers: Daniels Associates, Ann Arbor, Michigan. Contractors: Burger Construction Company, Plymouth, Michigan.

Space provided: nave with seating for 340 worshippers; 48′ x 64′ fellowship hall; kitchen; robing room; ladies' parlor; office; study; mailing and storage; men's and women's rooms; choir loft and storage rooms. *Roof construction:* heavy timber decking supported by glued laminated rigid frames with curved arm members; glued laminated beams in the fellowship hall and other areas. *Area:* 10,580 square feet. *Cost:* $14.50 a square foot.



Glued laminated timbers, formed to the unusual shapes prescribed by the architects, combine with heavy timber decking to create a warm, naturally beautiful place of worship that no other structural material can equal. Forthright construction keeps costs within the limitations of the budget.

For outstanding examples of churches with structural framing of timber ask for the brochure, "Beauty for Your Church."

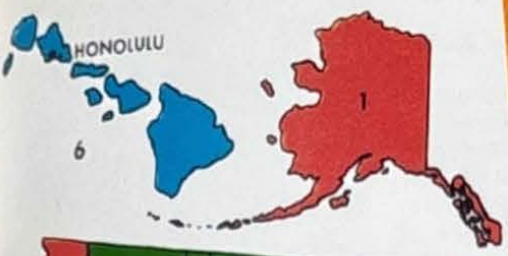
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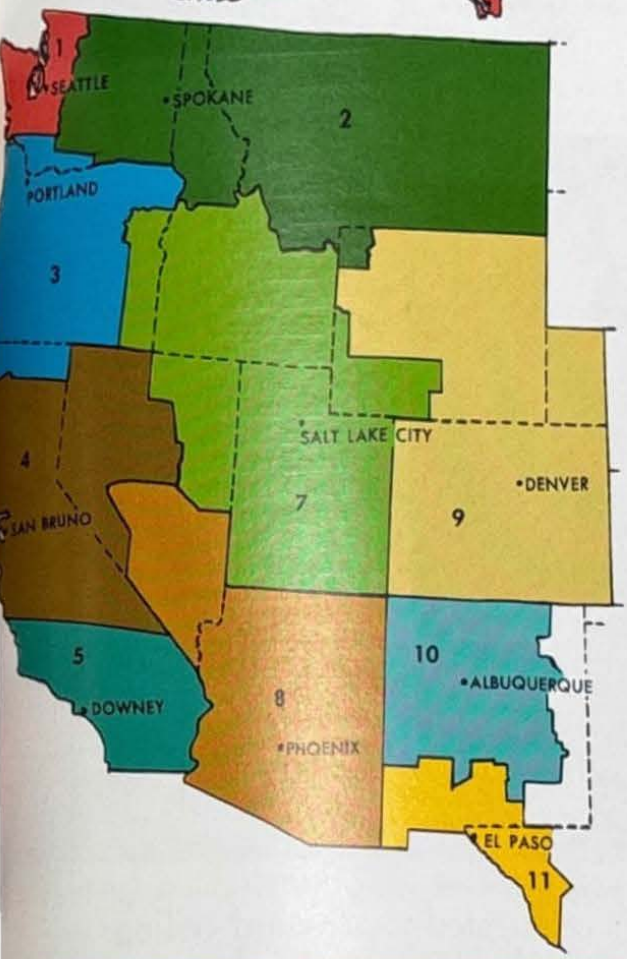
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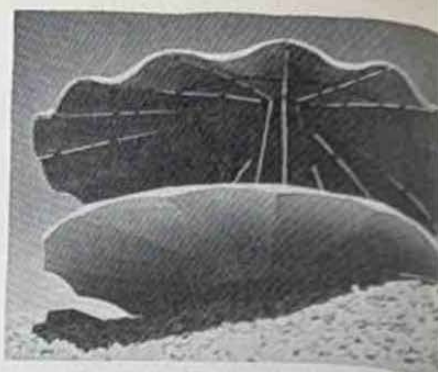

M. L. Hutchins

For summer fun: 100 tons of precast concrete

USING ONLY THREE MOLDS, a 100-ton summer house was constructed of precast concrete in Los Altos, Calif.

Both roof and floor were formed with precast concrete, both structurally independent of the walls. They hang umbrella-like and derive their support from the circular 10-ft. pier and a 6-ft. column in the center, which also doubles as a fireplace chimney.

The roof, which weighs 32 tons, is made from 16 pieces of pie-shaped precast concrete, all formed in a single precast mold; the floor system is similarly composed. Being structurally independent and installed in sliding grooves, the exterior glass walls are not rigid stationary but are free to "give" wi slight movements of the house.



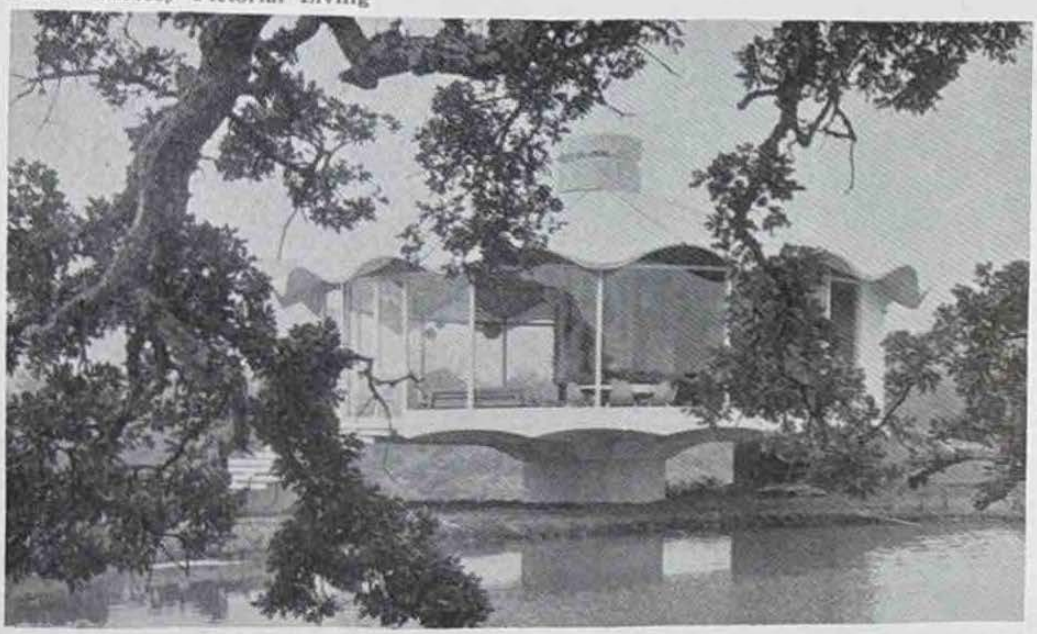
Structure "grows out" of concrete pa

Precasting of the concrete member was done at the Sun Valley, Calif., pla of Wailes Precast Concrete Corp. Wh the roof and floor members were form ed, a white quartz surface was precas into the underside of each floor un and top side of each roof unit.

Overall usable area, sufficient to en tertain 40-50 guests, is 1,200 sq. ft. Th ceiling is sprayed with acoustical plas ter, is 18 ft. high at the center an slopes to 10 ft. at the eaves. The inte ior areas consist of a large kitchen wit illuminated ceiling, spacious livin room, bar and two bathrooms.

Louis Corbetta, owner of the hous and a 40-year veteran in concrete con struction, devised the original desig concept, with structural engineerin provided by Richard R. Bradshaw.

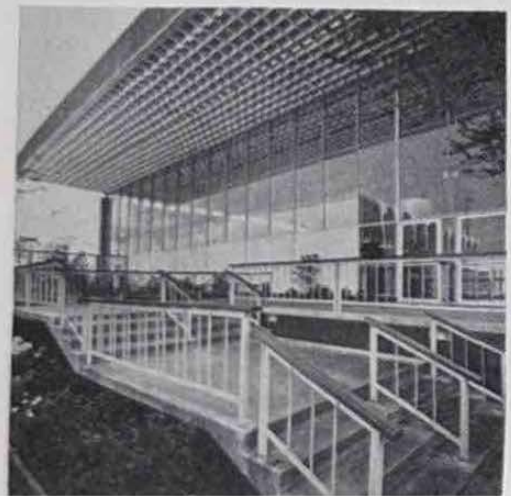
Photo courtesy Pictorial Living



Party house overlooks man-made lake which overflows into pool for purification.

For the fair: corrugated paperboard ceiling





CORRUGATED PAPERBOARD that does not support combustion and has passed all requirements of the Seattle Fire Department, including a blowtorch test, was used in the construction of a false ceiling over an area of more than 60,000 sq. ft. in the Industry and Commerce Building.

Scored and slotted sheets were formed into ribs in a honeycomb pattern which partially conceals the fluorescent lighting fixtures mounted under a steel panel roof without obstructing light. The corrugated ribs were preassembled in 8x8-ft. sections, then hoisted into place and wired to the supporting trusses.

The building enclosure is 640x85 ft., but there is a roof overhang of 23 ft. o either end—5 to 8 ft. on the north sid and a uniform 2 ft. on the south. Th false ceiling extends through the cur tain walls to the outside overhang, cov ering the entire roof area.

Honeycomb ceiling extends through curtain walls to outside overhang, covering entire roof area of display building which forms southern boundary of Century 21 Exposition.

Architects Waldron & Dietz took their idea of a decorative false ceiling to Container Corporation of Americ which quickly developed an acceptable design and method fabrication; but the structural design department had t work closely for several months with the company's paperboard mill in Ta coma to perfect a means of obtainin adequate fire-retardant characteristics in the finished corrugated board.

The final solution was to treat the paper with a chemical fire-retardant ad ditive during the papermaking proces at the mill. Then, after the paper was manufactured into corrugated board in the Seattle plant, it was sprayed with a white fire-retardant paint.

For the fair: glistening white 'blacktop' paving

VIADON white "blacktop" paving has been applied to a street at the Seattle World's Fair in one of the first major applications of the new asphalt-like material in the West.

Pavements in white, red, blue, green and yellow are possible with this binder course developed by Enco and marketed by Humble Oil & Refining Co.

In this case, the main approach to the Federal Science Pavilion was an old existing city street of cement concrete, with curbs on each side. For safety reasons it was desired to eliminate the curbs, since fair visitors tend to walk with their eyes in the sky seeking the Space Needle and other wonders of Century 21. Black asphalt was applied to the edges of the street to slope up to curb level.

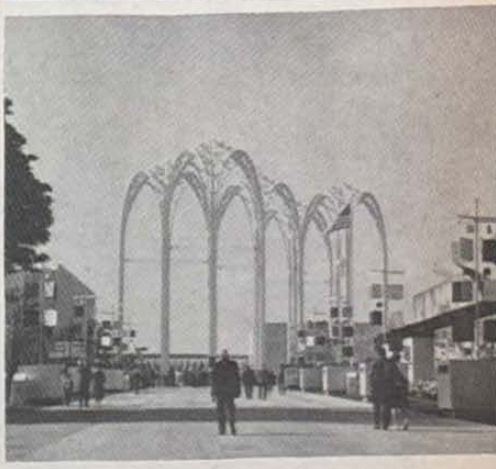
This made an unsightly approach to the gleaming white arches and facades of the Federal Science complex, so the exposition primary architect, Paul Thiry selected white Viadon to pave the entire 1,350-sq. yd. city block in glistening white.

A 1-in. thick binder course was applied exactly as asphalt mixes are applied, mixed in a pugmill of the Washington Asphalt Co., placed with a Blaw-Knox paver and rolled with an 8-10-ton breakdown roller and a small vibratory roller.

The result is a carpet-smooth, white street that is reputed to have approximately twice the strength characteristice of ordinary asphalt. Viadon is a flaky material of petroleum polymers and resins which is added with plasticizing oils and pigment to rock and sand in place of the usual asphaltic binder. Rock is 1/4-in. minus to provide a smooth texture and the whitest sand possible is used to improve the brilliancy of colors.

Street is transformed overnight, work starting at 6 a.m. and ready for gate opening three hours later.







Dome section is erected in 10 working days, completed structure in seven months.

For Arizona: geodesic dome banking facility

LATEST ENTRY in the trend to commercial geodesic-type structures is the Valley National Bank in Tempe, Ariz., the first building of its kind in the state. Constructed of gold-anodized aluminum, it measures about 90 ft. in diameter and 23 1/2 ft. at its highest point, providing cover for more than 6,400 sq. ft. of floor space.

The height of the dome itself is 16 1/2 ft. and eyebrow-shaped arches between supporting piers curve up to 13 ft. Curtain walls under the perimeter utilize stone, glass and colored porcelain.

The dome eliminates the need for support columns or weight-bearing walls, thus permitting architects Weaver & Drover complete freedom in planning the interior layout of the structure and enabling the user to place every facility where it will be most convenient from the standpoint of customer service.

Although it appears to be only a single piece of gold sheet, the dome actually is built of over 100 diamond-shaped panels interlocked with more than 10,000 fasteners specially designed by Huck Manufacturing Co. The heads of the fasteners, which are exposed to the elements, were anodizd to a gold color to withstand temperature changes and blend in with the gold plates which cover the structure.

Standard size Huckbolt fasteners were used to "button up" the underside of the dome.

R. C. McMahon Construction Co. used pneumatic tools on most of the erection except in web areas where clearance was a problem. In such areas, Huck hand tools were used to gain proper clearance. Redden Construction Co. was the general contractor.

Despite the light appearance of the geodesic structure, it weighs several tons and is capable of withstanding tremendous structural pressures. In tests, dome designs have been able to resist hurricane winds up to 125 mph.

Fasteners are easily and quickly installed by two-man teams—one worker applying bolt, second adding collar and handling pneumatic tool.



Architects term the construction method a geodesic "space truss" because geodesic geometry is employed to subdivide the surface of the sphere into nearly equilateral triangles. In construction, the triangles become the diamond-shaped hexagonal modules. To assure optimum strength, each is braced three-dimensionally with a tubular strut.

A rectangular native stone and glass section west of the dome is attached to the main structure by an arched roof extending over drive-in window approaches. This additional area presently provides rental space.

dormitory clutter control

Designed for dormitories, the Eames Contract Storage System is a modular five-unit complex of closets, study compartment, dressing unit and folding bed that provides in a single wall ample space for the average student's clothing and gear. When the doors of the unit are closed and the Murphy bed is folded into the wall, only the hardwood doors are visible and maximum floor space is available. More



modules may be added for increased storage or fewer units used where dimensions are limited.—Herman Miller, Inc., Zeeland, Mich. (No. 1)

film-finished laminates

Laminates of Tedlar PVF film and standard structural materials, after years of field testing, are now in production. The abrasion-resistant plastic film by Du Pont is bonded permanently to substrates to form decorative surfaces with a predicted maintenance-free life of from 15 to 30 years. Product types include siding panels, curtain wall units, accent panels, prefabricated built-up roofing and pressure-sensitive tapes. Available in standard lengths and widths, in white and three color shades (more colors coming in fall), the laminates reportedly resist fading and weathering at least three times better than lacquers or enamels.—E. I. du Pont de Nemours & Co., Wilmington 98, Del. (No. 2)

roll-on roof

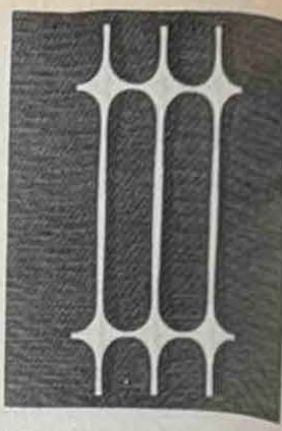
Expected to be in production soon, Bitumagic is a mastic tape 3 ft. wide, designed to waterproof built-up roofs. It is applied cold to flat or sloping surfaces. The tape is a prefabricated waterproof membrane system composed of asbestos or glass mat, impregnated and covered with a special mastic tar formulation. A disposable release paper prevents the material from adhering to itself in packaging. Bitumagic is said to bond firmly and permanently to concrete, brick, wood, steel or insulation. After application of the tape, a cold-applied emulsion top coating is brushed on.—Koppers Co., Inc., Koppers Building, Pittsburgh 19, Pa. (No. 3)

bumper brackets

Customers won't have to step over the parking lot bumper bracket made by Northwest. Brackets extend from wheel to wheel of even the widest cars, but no further. The barriers can be arranged in a straight line, at an angle or for staggered parking to make best use of parking area space. The brackets raise the bars high enough to permit drainage and cleaning of lot, low enough to contact tires. —Northwest Tube & Metal Fabricators, Box 2310, Portland, Ore. (No. 4)

compatible coating

A "button-down" color and smooth texture may be desired for public buildings; brighter shades and perhaps a casual finish can accent resort and recreational centers. Both effects can be achieved with the same material, called Bostik Architectural Coating. It is a polyurethane-based masonry facade coating which is mixed in midair with aggregate. Its appearance can range from that of fine sandpaper to rough, pebbly, untroweled terrazzo and it can be blended to any desired hue.—B. B. Chemical Co., 784 Memorial Drive., Cambridge, Mass. (No. 5)



double-faced treillage

Sentry is the name of the Julius B pattern shown here. This design, others in the contemporary grou available in malleable iron to eli ate breakage and in aluminum fo where light weight is essential. treillage may be used indoors or side to form screens, railings, divi or partitions. Patterns are do faced to facilitate free-standing in lations.—Julius Blum & Co., Carlstadt, N.J.

high-rise window washer

Roof-mounted Mayco system is answer to the problem of win washing of high-rise buildings. unit features a streamlined alumin finished gondola which blends the building when the equipment use; when not in service, it may drawn over the roof line and hid from view. All components of system are standardized, making pensive custom-design equipment necessary. Pushbutton controls in two-man gondola provide for h zontal or vertical travel on all sides the buiding.—Tubular Structures, Sperry St., Los Angeles, Calif. (N



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structural facing tile

Kla-All, manufactured in the Northwest from natural burned clay, incorporates all the advantages of brick masonry in a more economical installation. The units are 4, 6 and 8 in. wide with a large 6x12-in. nominal face size. They may be used in combination with brick, furred, plastered direct or left exposed on both faces.—Builders Brick Co., 3800 Ninth Ave. S., Seattle 8, Wash. (No. 8)

shower mirror

Safety glass is used in Amerada's two-sided, full-lengh mirror for shower doors and tub enclosures. Mirror glass provides privacy for bathers, while permitting the bathroom to double as a dressing room for other members of the family. One-sided reflection units are also available, backed by a "highly decorous" white opaque panel. The mirrors are guaranteed against flaking or dulling because of excessive moisture in the bathroom through a unique process of silvering between two layers of glass.—Amerada Glass Corp., 3301 S. Prairie Ave., Chicago 16, Ill. (No. 9)

clean ceilings

Scrubbable acoustical tile? Armstrong has developed a new line of Mylar-faced ceiling materials designed to withstand heavy and repeated washings, even with detergents. The polyester membrane eliminates passage of dirt-laden air through the acoustical material which can result in dusty, dirty ceilings. The washable ceiling line includes incombustible Minaboard and acoustical Fire Guard in 24-in. squares or 24x48-in. panels and can be installed quickly and inexpensively in an exposed grid suspension system.—Armstrong Cork Co., 4205 Watson St., Lancaster, Pa. (No. 10)

aluminum railings

Cinch-Rail permits the designer to develop his own railing, using tubular, oval or modern square sections. The system features a completely adjustable base with concealed anchor bolts. It is designed for fast, low-cost erection and includes both economy extruded brackets and deluxe forged brackets which cinch to handrails at any point and lock with recessed stainless steel setscrews.—Michel & Pfeffer Iron Works, Inc., 212 Shaw Road, South San Francisco, Calif. (No. 11)

insulated glass

Depending on your specification, Therm-O-Proof insulating glass can be used to cut down on light, heat or sound. Gray glass, heat-absorbing glass and sandblasted glass help control sunlight and glare. Used in a 1-in. thickness, Therm-O-Proof is said to be a more effective noise barrier than ¼-in. plate glass. By blocking heat transmission, it also cuts heating and air conditioning costs. Glass is available in special combinations.—Thermoproof Glass Co., 4815 Cabot Ave., Detroit 10, Mich. (No. 12)

water closet

The manufacturer of Silhouette, a one-piece vitreous china water closet, says the fixture will not overflow even if the trapway is completely clogged. If something is blocking normal flow, water levels in the tank and bowl will equalize and automatically shut off the incoming water before the closet can overflow. The Silhouette will operate at water pressures as low as 15 lb. or as high as 150 lb. and is available in a wide color range including black.—Case Manufacturing, 1078 Pine St., Robinson, Ill. (No. 13)



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• **Scandiline, Furniture, Inc.:** A showroom for the architect and his client, displaying Scandinavian teak and oil walnut furniture, has been opened at 8421 W. Third St., Los Angeles.

• **Kawneer Co.:** One of the largest anodizing facilities in the U.S. has been installed at the Richmond, Calif., plant. It is designed to anodize aluminum sheets and extrusions with the Kalcolor process by which color is created through conversion of alloying elements in the metal itself, rather than through the use of organic dyes.

• **Prescolite Manufacturing Corp.:** New $1 million headquarters in San Leandro, Calif., besides providing manufacturing and office facilities, was designed to showcase the residential, commercial and industrial lighting fixtures made by the firm.

• **Dyna Therm Chemical Corp.:** An architectural service department, located in Burbank, is being formed to counsel customers and coordinate overall efforts of the corporation.

• **Riverside Cement Co.:** Walter H. Price, international authority on concrete technology, now heads the technical services department in Los Angeles.

• **Drayer-Hanson:** Traveling regional managers have been assigned as part of a sales and assistance development program for the Los Angeles air conditioning manufacturer. West Coast representative is W. F. (Fred) Henke.

• **Kaiser Gypsum Co., Inc.:** Handling sales of gypsum and insulating board products in a territory south and east of Seattle is Norman J. McFerran.

• **Minneapolis-Honeywell Regulator Co.:** Plans are underway for a $2 million electronic research and development facility in West Covina, Calif. First phase of proposed construction, office space for administration and engineering staffs, is tentatively scheduled for August.

• **E. A. Thompson Co., Inc.:** Northern California representative is Charles C. Parker, formerly a wholesale distributor in the Bay area.

• **Celotex Corp.:** Thomas M. Durham is headquartering in San Francisco as assistant regional manager of the western region. . . . Robert W. Jones has been appoined a gypsum sales representative for the Denver territory.

• **Soule' Steel Co.:** The company's steel structures division is being managed by Charles B. Alvord in the San Francisco office.

• **Globe Illumination Co.:** A new plant, designed for large-scale production of fluorescent luminaires, has opened in Gardena, Calif.

• **Weyerhaeuser Co.:** The wood products division has moved its Rocky Mountain sales office from Boise to Denver, bringing it closer to the market center of the area.

• **The Payne Co.:** Personnel changes include promotion of Joseph H. Hoff to field sales manager and Richard P. Judson to manager of sales in Southern California and addition of Larry Christiansen to the field sales staff. The LaPuente, Calif., company has expanded its line of commercial heating and air conditioning units.

• **American Air Filter Co., Inc.:** The firm has expanded the product representation of its Denver branch office to include AAF's entire line of commercial, industrial and institutional products.

• **Zeigler-Harris Corp.:** The steel sink manufacturer recently doubled the size of its facilities in San Fernando, Calif.

• **Rheem Manufacturing Co.:** The Tillman-Booth Co., Inc., Eugene, has been named distributor of Ruud commercial and LP-gas water heaters.

• **Washington Steel Products, Inc.:** Ted Cormier has been appointed supervisor of industrial sales for the Tacoma-based Ekco subsidiary building products firm.

ASSOCIATIONS

• **West Coast Lumbermen's Association:** G. Cleveland Edgett has been named executive vice president, succeeding H. V. Simpson who had held the post since 1946.

• **California Redwood Association:** The field promotion division, which assists in the development of new markets for redwood lumber, has added Robert L. Leslie to its staff. He will call on architects and builders throughout the U.S. and Canada.

• **Tile Council of America:** [illegible] schools added to its architectural scholarship program include Montana State College and the University of Oregon. Western schools previously selected for the three-year scholarships are the Universities of Southern California, Utah and Washington and Washington State University.

• **American Hardboard Association:** Following the semiannual meeting in Portland, the final draft of commercial standards for hardboard was presented to the U. S. Forests Products Laboratory to study and comment, marking completion of a seven-year committee project. A four-year study, just starting, involves engineering data for hardboard and a two-year panel research program is currently under way.

• **Concrete Products Association of Washington:** At their 33rd annual meeting, members elected John Hutsell, Everett, to serve as president; Glen W. Schultz, vice president; Thomas K. Breitfuss, secretary; and Elmer R. Baumgartner, treasurer, all of Seattle.

• **Western Red Cedar Lumber Association:** Reelected officers are Harry E. Morgan Jr., president; G. Noel Harrison, vice president; M. J. Buff, treasurer; and Donald W. Pleier, secretary-manager.

• **Intermountain Chapter, Producers Council, Inc.:** New president is Donald B. Alder; vice presidents, Richard A. Ridges, and Melvin W. Dalebout; secretary, Robert G. Warath; and treasurer, Donald Irvine.

• **Douglas Fir Plywood Association:** Recently expanded 80-man field promotion department includes Barton Bennion, Salt Lake City; Gregory Moats, Phoenix; and Ronald L. Pyeatt, Seattle. . . . Combining the former special projects and publicity departments, a new public relations department is being headed by Donald Jeanicke. George C. Cheek, former assistant head of publicity, becomes information manager under Jaenicke handling activities formerly conducted by Thomas C. Sias who now is western public relations manager for United States Plywood Corp.

• **American Institute of Timber Construction:** At its 10th annual meeting the group elected William B. Linberg, Tacoma, as president.



V-LOK framing interlocks without nuts, bolts or rivets. The Plaza Restaurant and Cocktail Lounge, one of the eight buildings with V-LOK framing, is shown below.



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Boullon & Williams, Seattle
PLANNING ENGINEER
Steve McCandliss, Century Concessions, Seattle
GENERAL CONTRACTOR
Rudy Simone (Dick Ziegler, Project Engr.), Seattle
ERECTOR & SUPPLIER
Taft Structurals, Inc., Seattle

How the V-LOK® framing system helped the Seattle World's Fair beat the clock

Century Concessions, the Seattle World's Fair major food service concession and their architects chose V-LOK framing for eight separate food service buildings. They total 13,488 square feet of roof area. These buildings went up in record time and symbolized the type of construction expected by the Fair's theme, "Century 21."

Ordered December 26, 1961 . . . all up and decked by February 1962 because of V-LOK's pre-fitted standardized steel members that fit together rapidly without nuts, bolts or rivets. A sledge hammer blow securely sets the interlocking deep end connections, and exclusive V-Section chords are available for faster, easier decking.

These buildings forcefully demonstrate the wide design latitude and functional beauty of exposed steel as a compatible feature in modern decor and finishing.

Macomber also supplied V-PURLINS for the Perimeter Buildings and the Gay Way.

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First Column Figures in Parentheses are Number of Residential Units • Second Column is Dol

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	# Res.	$ Value	Total $
Alameda	(96)	$ 849,497	$ 966,152
Alameda Co.	(98)	1,108,525	2,292,031
Albany	( )	Nil	47,295
Alhambra	(40)	327,900	2,950,500
Anaheim	(120)	1,149,270	4,548,930
Antioch	(3)	40,606	73,968
Arcadia	(270)	2,903,204	3,178,252
Arroyo Grnde	(17)	235,620	262,435
Artesia	(11)	95,690	160,740
Atherton	(2)	97,500	179,360
Atwater	(1)	13,630	14,630
Auburn	(11)	143,530	182,174
Avalon	( )	Nil	9,950
Azusa	(12)	88,000	173,128
Bakersfield	(72)	822,410	1,176,410
Baldwin Park	(30)	326,700	776,280
Banning	(14)	157,482	167,129
Barstow	(4)	39,400	256,818
Bell	(22)	173,650	348,380
Bellflower	(83)	660,400	867,780
Bell Gardens	(30)	234,850	317,935
Belmont	(26)	417,100	475,045
Benicia	(1)	16,878	45,467
Berkeley	(2)	43,000	1,620,324
Beverly Hills	(1)	89,000	415,006
Bradbury	( )	Nil	Nil
Brawley	(2)	9,000	18,620
Brea	(3)	64,405	235,580
Buena Park	(2)	24,290	1,018,598
Burbank	(25)	192,000	1,330,222
Burlingame	(3)	87,350	507,617
Butte Co.	(136)	1,056,385	1,212,885
Calexico	(1)	10,000	47,800
Campbell	(71)	763,150	956,305
Carlsbad	(4)	68,088	106,472
Carmel	(1)	8,201	24,550
Chico	(6)	90,306	256,521
Chino	(21)	259,061	367,831
Chula Vista	(2)	34,579	1,948,647
Claremont	(6)	140,700	219,860
Coalinga	(6)	95,650	105,150
Colton	(2)	15,968	112,341
Commerce	(12)	90,750	1,455,128
Compton	(19)	108,500	460,489
Concord	(71)	1,098,190	1,902,420
Cntra Csta Co.	(181)	3,032,623	4,365,433
Corona	(7)	76,606	191,081
Coronado	( )	No Reply	No Reply
Corte Madera	(7)	117,096	137,045
Costa Mesa	(246)	2,152,144	2,576,706
Covina	(85)	1,024,295	1,336,743
Cudahy	(31)	250,600	302,840
Culver City	(2)	46,000	447,528
Dairy Valley	(1)	8,200	23,600
Daly City	(12)	182,400	286,537
Davis	(38)	469,000	530,363
Delano	(25)	256,500	286,600
Downey	(29)	306,770	996,528
Duarte	( )	Nil	20,700
El Cajon	(3)	36,390	883,230
El Centro	(3)	25,000	218,790
El Cerrito	(20)	187,525	258,065
El Dorado Co.	(104)	1,443,464	1,784,596
El Monte	( )	No Reply	No Reply
El Segundo	(1)	2,750	470,771
Emeryville	( )	Nil	1,675
Escondido	(7)	93,456	528,252
Eureka	(3)	39,000	302,621
Fairfield	(14)	118,221	293,008
Fillmore	(1)	10,400	12,918
Fontana	(12)	126,590	170,998
Fremont	(112)	1,534,987	1,842,222
Fresno	(117)	1,009,032	1,795,435
Fresno Co.	(64)	763,851	1,329,900
Fullerton	(192)	3,309,377	4,203,707
Glendale	(138)	1,536,970	2,297,585
Glendora	(6)	108,800	307,825
Half Moon Bay	(3)	36,000	87,200
Hanford	(1)	14,690	49,740
Hawthorne	( )	No Reply	No Reply
Hayward	(15)	134,600	287,906
Hemet	(136)	1,365,900	2,036,338
Hermosa Bech	(5)	91,121	104,347
Hidden Hills	(2)	57,300	77,770
Hillsborough	( )	Nil	103,300
Holtville	(2)	23,889	31,439
Humboldt Co.	(42)	791,397	937,215
Huntingtn Bch	(293)	3,845,539	4,745,939
Huntington Pk	(37)	309,850	438,345
Imperial Co.	( )	Nil	21,300
Indio	(12)	193,733	362,848
Industry	( )	Nil	81,444
Inglewood	(52)	426,970	1,160,079
Irwindale	( )	Nil	5,947
Kern Co.	(158)	1,850,296	3,268,376
Laguna Beach	(16)	356,300	412,046
La Habra	(8)	72,000	183,750
Lakewood	(8)	181,700	455,965
La Mesa	(4)	79,850	157,095
La Mirada	(25)	175,500	640,767
La Puente	(36)	269,300	320,414
La Verne	(3)	55,000	83,790
Lawndale	(38)	345,980	380,850
Lindsay	(1)	7,286	62,750
Livermore	( )	No Reply	No Reply
Lodi	(11)	133,350	269,200
Lompoc	(115)	1,645,460	1,708,777
Long Beach	(214)	1,537,070	5,108,938
Los Altos	(9)	202,000	302,950
Los Angeles	(2,441)	25,533,544	62,040,580
Ls Angls Co.	(1,573)	21,440,490	27,392,800
Los Gatos	(15)	309,500	386,700
Lynwood	(39)	273,350	387,770
Madera	(4)	55,342	72,908
Madera Co.	(14)	127,325	204,325
Mnhattn Bech	(15)	278,300	421,968
Manteca	(9)	93,000	401,717
Marin Co.	(104)	1,565,250	1,884,693
Martinez	(18)	195,668	206,078
Marysville	(4)	74,700	314,500
Maywood	(2)	8,900	70,388
Menlo Park	(30)	464,000	664,911
Merced	(8)	99,351	231,715
Merced Co.	( )	No Reply	No Reply
Millbrae	(18)	361,500	407,745
Mill Valley	(23)	341,500	378,810
Modesto	(72)	971,500	1,354,619
Monrovia	(19)	168,546	358,797
Montclair	(36)	306,600	391,090
Montebello	(123)	2,072,072	2,383,373
Monterey	(11)	162,500	196,025
Monterey Co.	(65)	913,495	1,574,020
Monterey Park	(11)	163,700	410,445
Mountin View	(133)	998,156	1,600,054
Napa	(27)	251,632	350,396
Napa Co.	(22)	357,535	502,276
National City	(95)	384,867	543,110
Newport Bech	(73)	1,766,980	2,283,329
N. Sacramento	(33)	217,634	258,006
Norwalk	(8)	43,000	324,790
Novato	(1)	112,500	200,537
Oakdale	( )	Nil	44,425
Oakland	(299)	2,432,758	3,928,502
Oceanside	(69)	865,000	1,063,000
Ojai	(2)	38,100	89,890
Ontario	(30)	254,494	518,696
Orange	(362)	4,105,070	4,893,209
Orange Co.	(259)	3,884,374	5,313,343
Oroville	(11)	124,912	245,342
Oxnard	(220)	2,410,407	2,622,268
Pacifica	(33)	381,900	865,200
Pacific Grove	(2)	22,000	49,000
Palm Springs	(14)	439,000	3,106,075
Palo Alto	(22)	232,400	1,281,525
Pls Vrds Estts	(14)	538,600	772,670
Paramount	(71)	557,900	752,620
Pasadena	(146)	1,805,554	3,180,118
Paso Robles	(4)	52,007	64,207
Pico Rivera	( )	No Reply	No Reply
Piedmont	(1)	36,000	58,542
Pinole	(24)	654,535	673,385
Pittsburg	(2)	26,772	114,122
Placentia	(24)	499,340	507,840
Placer Co.	(77)	1,076,053	1,374,735
Pleasanton	( )	No Reply	No Reply
Pomona	(103)	1,316,730	1,884,582
Porterville	(3)	42,000	91,218
Port Hueneme	( )	No Reply	No Reply
Red Bluff	(2)	21,703	40,448
Redding	(5)	99,500	301,360
Redlands	(20)	225,200	316,906
Redondo Bech	(52)	469,310	1,081,472
Redwood City	(42)	485,890	946,812
Richmond	(33)	265,800	673,207
Riverside	(85)	1,334,980	2,406,500
Riverside Co.	(347)	4,501,386	5,508,628
Rolling Hills	(1)	28,500	55,315
Rlng Hlls Ests	(7)	199,200	249,555
Rosemead	(2)	19,000	288,695
Roseville	(34)	305,881	351,512
Sacramento	(69)	1,036,100	7,341,100
Sacramnto Co.	(469)	5,011,014	6,506,719
St. Helena	(1)	22,960	26,760
Salinas	(21)	221,500	391,525
Sn Bernardino	(66)	1,040,177	1,534,304
S. Brnrdno Co.	(490)	4,559,753	6,197,3
San Bruno	(1)	21,000	259,3
San Carlos	(9)	192,980	353,6
San Clemente	(24)	467,868	568,1
San Diego	(447)	5,898,463	19,606,2
San Diego Co.	(228)	3,405,500	4,422,3
San Dimas	(29)	379,300	695,1
San Fernando	(6)	38,000	84,2
San Francisco	(330)	5,019,755	8,874,3
San Gabriel	(28)	280,738	358,6
Sanger	(6)	76,040	276,8
San Jacinto	(1)	7,800	11,2
Sn Joaquin Co.	(52)	579,636	1,336,5
San Jose	(593)	6,098,750	8,135,7
San Leandro	(16)	215,975	362,6
Sn Luis Obspo	(49)	731,663	849,6
S. Ls Obsp Co.	(36)	445,153	562,3
San Marino	( )	Nil	92,6
San Mateo	(71)	992,000	1,288,6
San Mateo Co.	(53)	932,350	1,317,7
San Pablo	(141)	1,105,100	1,382,9
San Rafael	(162)	2,380,423	2,738,2
Santa Ana	(178)	2,375,800	3,229,8
Santa Barbara	(102)	1,224,800	1,334,9
Snt Brbra Co.	(339)	4,289,200	5,098,4
Santa Clara	(127)	949,000	1,345,5
Snta Clara Co.	(92)	1,663,000	2,831,3
Santa Cruz	(16)	192,799	1,100,6
Santa Cruz Co.	(124)	1,534,755	3,108,4
Snt Fe Springs	(1)	12,000	248,4
Santa Maria	(161)	1,554,671	2,218,8
Santa Monica	(129)	2,539,380	3,025,8
Santa Paula	(1)	11,000	91,3
Santa Rosa	(90)	866,550	1,091,5
Sausalito	(9)	136,000	146,3
Seal Beach	(464)	3,271,788	3,403,3
Seaside	(23)	132,000	142,3
Selma	(3)	38,000	43,6
Shasta Co.	(39)	517,122	788,7
Sierra Madre	(6)	62,275	104,5
Solano Co.	(13)	150,757	246,4
Sonoma Co.	(99)	1,054,007	2,057,8
South Gate	(30)	245,810	531,4
So. El Monte	(4)	32,800	233,5
So. Pasadena	(22)	288,477	419,6
S. Sn Frncisco	(7)	83,350	813,6
Stanislaus Co.	(24)	284,232	725,8
Stockton	(27)	461,210	897,9
Sunnyvale	(195)	2,577,200	3,739,3
Temple City	(5)	57,100	126,8
Torrance	(264)	2,814,395	3,306,1
Tracy	(1)	15,000	53,3
Tulare	(5)	43,540	81,8
Tulare Co.	(127)	936,507	1,213,8
Turlock	(1)	5,496	16,2
Ukiah	( )	Nil	76,1
Upland	(45)	730,200	947,3
Vacaville	(9)	42,800	63,3
Vallejo	(36)	202,200	330,2
Ventura	(8)	171,100	343,8
Ventura Co.	(581)	6,720,910	7,497,8
Visalia	(10)	173,925	496,1
Walnut	(2)	33,800	33,8
Walnut Creek	( )	No Reply	No Reply
Wasco	(5)	174,000	187,0
Watsonville	(7)	100,000	119,3
West Covina	(6)	117,340	1,518,3
Whittier	(64)	1,007,700	1,666,5
Woodland	(5)	70,120	134,4
Woodside	(2)	76,000	151,6
Yolo Co.	(72)	568,859	941,8
Yreka	(9)	105,000	191,6
Yuba City	(29)	163,485	393,1
Yuba Co.	(27)	229,319	308,5
Total	**(19,173)**	**$218,852,013**	**$372,789,8**

OREGON

Albany	(11)	$ 136,820	$ 327,1
Ashland	(7)	142,500	273,6
Astoria	(1)	14,000	296,1
Baker	(4)	36,000	39,8
Beaverton	(8)	144,890	372,6
Bend	(8)	80,000	199,2
Central Point	(8)	85,500	87,8
Clackamas Co.	(50)	794,940	903,6
Coos Bay	( )	Nil	39,9
Corvallis	(23)	290,000	958,3
Dallas	(1)	7,500	81,1
Douglas Co.	(5)	29,500	378,3
Eugene	(40)	453,400	1,736,3
Forest Grove	(6)	60,500	74,3
Grants Pass	(10)	119,000	587,6
Gresham	(7)	113,250	153,1

*Complete figures not available

Western States for June

Residential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hermiston	(1)	14,810	27,848
Hillsboro	(6)	96,800	154,900
Hood River	( )	Nil	2,096
Klamath Falls	(5)	94,000	1,615,054
La Grande	(4)	56,628	701,438
Lake Oswego	(14)	318,285	341,344
Lane Co.	(116)	1,167,817	1,544,664
Lebanon	(3)	49,000	59,572
Marion Co.	(51)	800,928	1,196,140
McMinnville	(3)	41,000	60,685
Medford	(13)	131,050	664,234
Milin-Freewtr	(1)	10,000	12,600
Milwaukie	(22)	300,008	315,888
Mitnomah Co.	(163)	2,354,306	3,406,808
Newberg	(1)	11,000	26,844
Newport	(3)	22,000	34,600
North Bend	(2)	25,912	71,059
Ontario	(1)	11,000	236,600
Oregon City	(5)	53,300	90,899
Oswego	(14)	318,285	341,344
Pendleton	(12)	86,000	266,281
Portland	(79)	1,003,800	4,635,580
Roseburg	(2)	31,291	62,228
St. Helens	(3)	39,500	56,625
Salem	(33)	326,904	386,058
Seaside	(1)	10,000	21,490
Springfield	(16)	148,774	327,492
The Dalles	( )	Nil	10,250
Washingtn Co.	(107)	1,913,200	2,245,235
Total	**(870)**	**$ 11,943,398**	**$ 25,126,566**

WASHINGTON

Aberdeen	(4)	$ 57,432	$ 90,830
Anacortes	(1)	8,500	26,821
Auburn	(19)	189,000	248,350
Bellevue	(7)	120,500	1,992,350
Bellingham	(11)	128,000	385,559
Bremerton	(4)	57,500	130,365
Camas	( )	Nil	53,035
Centralia	(1)	10,000	54,099
Chehalis	( )	No Reply	No Reply
Clark Co.	(52)	722,700	923,200
Clarkston	(1)	18,000	52,795
Edmonds	( )	No Reply	No Reply
Ellensburg	(4)	65,000	169,385
Enumclaw	(2)	24,000	26,825
Ephrata	( )	Nil	17,960
Everett	(4)	49,350	171,678
Grys Hrbr Co.	(9)	62,000	76,920
Hoquiam	( )	No Reply	No Reply
Island Co.	(16)	125,335	144,235
Kelso	(3)	33,250	52,666
Kennewick	(5)	104,000	147,050
Kent	(14)	259,800	490,379
King Co.	(579)	8,364,917	10,629,274
Kirkland	( )	No Reply	No Reply
Longview	(6)	86,000	201,896
Lynnwood	(2)	23,500	115,386
Mercer Island	(37)	808,074	1,021,750
Moses Lake	(6)	52,400	73,950
Mntlk Terrace	(44)	470,300	515,475
Olympia	(5)	70,500	934,357
Pasco	(3)	46,000	141,233
Pierce Co.	(141)	1,814,286	2,450,546
Port Angeles	(4)	54,300	65,250
Pullman	(7)	108,514	299,137
Puyallup	(9)	89,390	115,840
Renton	(11)	163,601	460,365
Richland	(17)	318,100	525,770
Seattle	(494)	5,207,110	11,541,257
Shelton	(1)	16,000	38,550
Spokane	(23)	610,900	1,343,648
Spokane Co.	(40)	671,170	4,659,628
Sunnyside	(2)	33,500	44,080
Tacoma	(89)	960,900	2,455,843
Thurston Co.	(40)	342,500	367,750
Vancouver	(14)	191,100	438,451
Walla Walla	(5)	75,000	428,459
Walla Wlla Co.	(2)	30,000	68,500
Wenatchee	(4)	58,500	77,498
Yakima	(10)	113,500	437,921
Total	**(1,752)**	**$ 22,814,429**	**$ 44,706,316**

ALASKA

Anchorage	(95)	$ 1,450,910	$ 2,545,322
Fairbanks	(5)	166,500	1,405,900
Juneau	(1)	35,000	82,650
Ketchikan	( )	Nil	18,925
Total	**(101)**	**$ 1,652,41(**	**$ 4,052,797**

IDAHO

	# Res.	$ Value	Total $
Alameda	(4)	$ 42,000	$ 1,389,525
Blackfoot	(4)	49,244	125,733
Boise	(27)	197,600	669,194
Burley	(2)	23,256	53,456
Caldwell	(12)	221,700	304,580
Coeur d'Alene	(2)	33,940	395,794
Idaho Falls	(22)	258,055	385,651
Jerome	(1)	10,000	16,000
Lewiston	(1)	18,000	130,923
Moscow	(7)	118,000	411,198
Nampa	(11)	130,000	195,465
Payette	(1)	17,000	18,000
Pocatello	(12)	191,750	532,280
Sandpoint	( )	Nil	141,674
St. Maries	( )	Nil	Nil
Twin Falls	(9)	90,000	107,400
Total	**(115)**	**$ 1,400,545**	**$ 4,876,873**

MONTANA

Anaconda	( )	$ Nil	$ 3,000
Billings	(50)	678,000	941,977
Bozeman	(2)	25,500	33,700
Butte	( )	Nil	7,400
Cut Bank	( )	Nil	9,000
Glasgow	(6)	76,000	88,500
Glendive	(1)	14,000	228,200
Great Falls	(56)	511,286	652,216
Havre	( )	No Reply	No Reply
Helena	(13)	179,900	357,293
Kalispell	( )	Nil	226,825
Lewistown	(10)	101,000	103,200
Livingston	(1)	8,000	11,740
Malta	( )	Nil	Nil
Miles City	( )	No Reply	No Reply
Missoula	(2)	27,900	108,773
Total	**(141)**	**$ 1,621,586**	**$ 2,771,824**

WYOMING

Casper	(20)	$ 308,000	$ 1,510,393
Cheyenne	(110)	1,173,000	2,253,366
Cody	( )	Nil	2,250
Laramie	(5)	44,900	101,215
Rawlins	(3)	44,500	70,995
Riverton	(52)	570,000	589,800
Rock Springs	(9)	132,000	158,000
Sheridan	(2)	16,350	61,336
Total	**(201)**	**$ 2,288,750**	**$ 4,747,355**

COLORADO

Adams Co.	(156)	$ 2,121,000	$ 2,630,030
Alamosa	(4)	44,500	68,875
Arapahoe Co.	(304)	4,938,500	5,733,440
Arvada	( )	No Reply	No Reply
Aspen	( )	No Reply	No Reply
Aurora	(94)	1,109,076	6,950,955
Boulder	(221)	1,933,735	2,882,292
Boulder Co.	(30)	410,200	496,835
Clrado Springs	(42)	547,680	1,267,711
Cortez	( )	Nil	28,600
Denver	(116)	1,588,403	5,631,472
Durango	(1)	12,452	120,961
El Paso Co.	(44)	726,290	1,046,382
Englewood	(5)	72,500	319,597
Estes Park	(4)	21,960	21,960
Fort Collins	(32)	514,000	770,773
Fort Morgan	(2)	26,380	404,877
Golden	(9)	130,420	139,375
Grnd Junction	(1)	12,000	60,905
Greeley	(29)	316,068	4,685,620
Jefferson Co.	(240)	3,068,995	4,360,460
La Junta	( )	No Reply	No Reply
Lamar	( )	No Reply	No Reply
Littleton	(13)	202,000	510,575
Longmont	(46)	482,628	589,008
Loveland	(23)	253,445	270,490
Monte Vista	( )	Nil	1,920
Montrose	(2)	28,300	41,652
Pitkin Co.	(5)	78,500	83,250
Pueblo	(28)	303,440	499,040
Pueblo Co.	(7)	80,000	188,900
Sterling	(2)	22,000	76,100
Trinidad	(22)	224,400	265,140
Walsenburg	( )	Nil	13,665
Westminster	( )	No Reply	No Reply
Total	**(1,482)**	**$ 19,268,872**	**$ 40,160,860**

UTAH

	# Res.	$ Value	Total $
American Fork	( )	$ Nil	$ 8,615
Bountiful	(24)	371,600	666,936
Brigham City	(11)	133,500	463,479
Cedar City	(1)	11,000	36,200
Clearfield	(4)	42,000	79,800
Davis Co.	(9)	144,311	205,305
Kaysville	(5)	35,200	41,500
Layton	(13)	169,000	175,000
Logan	(38)	382,708	399,108
Murray	(31)	268,500	306,750
Ogden	(25)	414,000	546,600
Orem	(4)	45,000	1,857,513
Price	( )	Nil	Nil
Provo	(14)	221,000	360,140
Salt Lake City	(67)	651,100	1,236,666
Salt Lake Co.	( )	No Reply	No Reply
S. Slt Lke City	( )	Nil	6,050
Spanish Fork	(4)	60,000	65,750
Tooele	(92)	1,028,793	1,078,853
Utah Co.	(7)	88,370	101,000
Weber Co.	(4)	45,000	65,100
Total	**(353)**	**$ 4,111,082**	**$ 7,700,365**

NEVADA

Boulder City	( )	$ Nil	$ 36,997
Clark Co.	(147)	1,941,654	4,576,147
Elko	( )	No Reply	No Reply
Las Vegas	(681)	7,053,304	8,897,867
No. Las Vegas	(121)	1,297,592	1,432,792
Reno	(39)	406,800	951,171
Sparks	(17)	210,300	322,167
Washoe Co.	(24)	381,270	1,015,480
Total	**(1,029)**	**$ 11,290,920**	**$ 17,232,621**

ARIZONA

Buckeye	( )	$ Nil	$ 10,500
Casa Grande	(4)	30,200	37,500
Chandler	(4)	33,274	55,928
Douglas	(8)	68,300	129,410
Flagstaff	(62)	277,416	318,322
Florence	(1)	1,200	1,200
Glendale	(35)	312,000	609,370
Maricopa Co.	(84)	821,017	1,589,248
Mesa	(45)	474,475	1,249,200
Phoenix	(364)	3,125,125	5,647,559
Pima Co.	(363)	2,966,479	3,625,176
Prescott	(5)	53,800	177,127
Scottsdale	(30)	351,610	2,890,909
Tempe	(231)	1,503,226	2,023,672
Tucson	(163)	1,766,479	3,625,176
Wickenburg	( )	Nil	4,017
Winslow	( )	No Reply	No Reply
Yuma	(5)	44,000	78,615
Total	**(1,404)**	**$ 11,828,601**	**$ 22,072,929**

NEW MEXICO

Alamogordo	(2)	$ 10,000	$ 24,525
Albuquerque	(127)	1,913,757	4,113,566
Artesia	(2)	6,900	87,045
Carlsbad	(14)	164,500	238,950
Clovis	(21)	247,232	318,814
Deming	(3)	24,400	33,790
Farmington	(4)	80,000	322,410
Gallup	(5)	44,000	334,600
Hobbs	(12)	169,689	225,849
Las Cruces	(8)	101,125	248,875
Las Vegas	(1)	3,000	5,500
Lovington	(1)	3,000	116,250
Raton	( )	Nil	49,300
Roswell	(69)	631,200	1,749,818
Santa Fe	(19)	169,550	860,436
Silver City	(1)	8,500	20,400
Truth or Consequences	( )	No Reply	No Reply
Tucumcari	(7)	55,000	78,500
Tularosa	(2)	15,360	15,360
Total	**(298)**	**$ 3,647,213**	**$ 8,843,988**

HAWAII

Hawaii Co.	(25)	$ 310,257	$ 616,243
Honolulu	(789)	9,914,475	19,309,060
Maui Co.	(32)	364,069	654,728
Total	**(846)**	**$ 10,588,801**	**$ 20,580,031**

GRAND TOTAL	**(27,765)**	**$321,308,620**	**$575,662,016**

• **Scandiline, Furniture, Inc.:** A showroom for the architect and his client, displaying Scandinavian teak and oil walnut furniture, has been opened at 8421 W. Third St., Los Angeles.

• **Kawneer Co.:** One of the largest anodizing facilities in the U.S. has been installed at the Richmond, Calif., plant. It is designed to anodize aluminum sheets and extrusions with the Kalcolor process by which color is created through conversion of alloying elements in the metal itself, rather than through the use of organic dyes.

• **Prescolite Manufacturing Corp.:** New $1 million headquarters in San Leandro, Calif., besides providing manufacturing and office facilities, was designed to showcase the residential, commercial and industrial lighting fixtures made by the firm.

• **Dyna Therm Chemical Corp.:** An architectural service department, located in Burbank, is being formed to counsel customers and coordinate overall efforts of the corporation.

• **Riverside Cement Co.:** Walter H. Price, international authority on concrete technology, now heads the technical services department in Los Angeles.

• **Drayer-Hanson:** Traveling regional managers have been assigned as part of a sales and assistance development program for the Los Angeles air conditioning manufacturer. West Coast representative is W. F. (Fred) Henke.

• **Kaiser Gypsum Co., Inc.:** Handling sales of gypsum and insulating board products in a territory south and east of Seattle is Norman J. McFerran.

• **Minneapolis-Honeywell Regulator Co.:** Plans are underway for a $2 million electronic research and development facility in West Covina, Calif. First phase of proposed construction, office space for administration and engineering staffs, is tentatively scheduled for August.

• **E. A. Thompson Co., Inc.:** Northern California representative is Charles C. Parker, formerly a wholesale distributor in the Bay area.

• **Celotex Corp.:** Thomas M. Durham is headquartering in San Francisco as assistant regional manager of the western region. . . . Robert W. Jones has been appoined a gypsum sales representative for the Denver territory.

• **Soule' Steel Co.:** The company's steel structures division is being managed by Charles B. Alvord in the San Francisco office.

• **Globe Illumination Co.:** A new plant, designed for large-scale production of fluorescent luminaires, has opened in Gardena, Calif.

• **Weyerhaeuser Co.:** The wood products division has moved its Rocky Mountain sales office from Boise to Denver, bringing it closer to the market center of the area.

• **The Payne Co.:** Personnel changes include promotion of Joseph H. Hoff to field sales manager and Richard P. Judson to manager of sales in Southern California and addition of Larry Christiansen to the field sales staff. The LaPuente, Calif., company has expanded its line of commercial heating and air conditioning units.

• **American Air Filter Co., Inc.:** The firm has expanded the product representation of its Denver branch office to include AAF's entire line of commercial, industrial and institutional products.

• **Zeigler-Harris Corp.:** The steel sink manufacturer recently doubled the size of its facilities in San Fernando, Calif.

• **Rheem Manufacturing Co.:** The Tillman-Booth Co., Inc., Eugene, has been named distributor of Ruud commercial and LP-gas water heaters.

• **Washington Steel Products, Inc.:** Ted Cormier has been appointed supervisor of industrial sales for the Tacoma-based Ekco subsidiary building products firm.

ASSOCIATIONS

• **West Coast Lumbermen's Association:** G. Cleveland Edgett has been named executive vice president, succeeding H. V. Simpson who had held the post since 1946.

• **California Redwood Association:** The field promotion division, which assists in the development of new markets for redwood lumber, has added Robert L. Leslie to its staff. He will call on architects and builders throughout the U.S. and Canada.

• **Tile Council of America:** New schools added to its architectural scholarship program include Montana State College and the University of Oregon. Western schools previously selected for the three-year scholarships are the Universities of Southern California, Utah and Washington and Washington State University.

• **American Hardboard Association:** Following the semiannual meeting in Portland, the final draft of commercial standards for hardboard was presented to the U. S. Forests Products Laboratory to study and comment, marking completion of a seven-year committee project. A four-year study just starting, involves engineering data for hardboard and a two-year paint research program is currently underway.

• **Concrete Products Association of Washington:** At their 33rd annual meeting, members elected John L. Hutsell, Everett, to serve as president; Glen W. Schultz, vice president; Thomas K. Breitfuss, secretary; and Elmer R. Baumgartner, treasurer, all of Seattle.

• **Western Red Cedar Lumber Association:** Reelected officers are Harry E. Morgan Jr., president; G. Noel Harrison, vice president; M. J. Butler, treasurer; and Donald W. Pleier, secretary-manager.

• **Intermountain Chapter, Producer's Council, Inc.:** New president is Donald B. Alder; vice presidents, Richard A. Ridges, and Melvin W. Dalebout; secretary, Robert G. Warath; and treasurer, Donald Irvine.

• **Douglas Fir Plywood Association:** Recently expanded 80-man field promotion department includes Barton E. Bennion, Salt Lake City; Gregory L. Moats, Phoenix; and Ronald L. Pyeatt, Seattle. . . . Combining the former special projects and publicity departments, a new public relations department is being headed by Donald A. Jeanicke. George C. Cheek, formerly assistant head of publicity, becomes information manager under Jaenicke, handling activities formerly conducted by Thomas C. Sias who now is western public relations manager for United States Plywood Corp.

• **American Institute of Timber Construction:** At its 10th annual meeting the group elected William B. Lindberg, Tacoma, as president.



V-LOK framing interlocks without nuts, bolts or rivets. The Plaza Restaurant and Cocktail Lounge, one of the eight buildings with V-LOK framing, is shown below.



ARCHITECTS
Boullon & Williams, Seattle
PLANNING ENGINEER
Steve McCandliss, Century Concessions, Seattle
GENERAL CONTRACTOR
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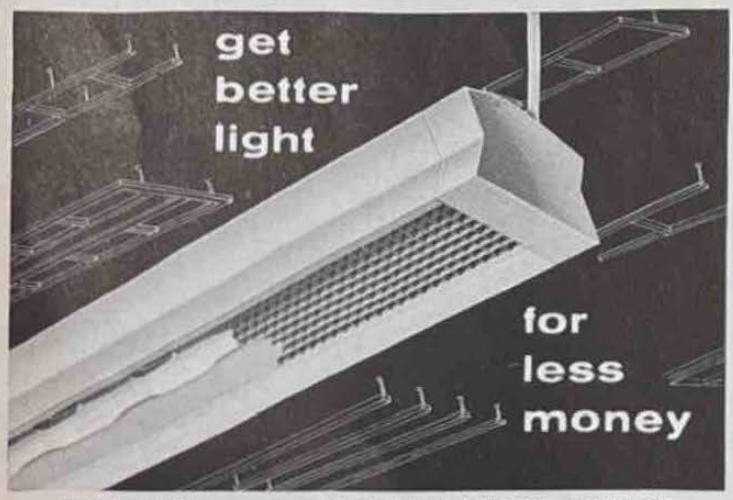
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And indeed it does, as we have found out the past year or two. It takes courage because, despite the ever-increasing clamor for criticism, there are those who are ready to turn to their legal counsel at the slightest provocation. This eagerness, which seems to be curtailing the freedom of the American press at every level, is more than disheartening; it reflects, in our opinion, the oversensitivity of a society that must conform at every turn of the corner, that cannot bear to stand up under any kind of scrutiny.

Now we consider ourselves to be responsible journalists and never have employed malice against any individual or organization. Yet the fact remains that if we are to do any kind of service for the architectural profession, then we must take a stand on important issues; we must be allowed to present some honest evaluations, to provide some interpretative reporting.

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We have sincerely endeavored to perform that function and, generally speaking, the applause of our readers has been most gratifying. But alas, how often the hand-clapping has been tempered by irate letters from disgruntled parties and threats of libel suits from their attorneys.

We do not mean to imply there is only one side of this coin. When we have erred by publishing incorrect or possibly misleading information, or when the frailty of our judgment allows a serious blunder, we are most willing to admit our error and to do whatever we can to rectify the situation. Perhaps we might take our editorial credo from Cicero: "We should never so entirely avoid danger as to appear irresolute and cowardly. But, at the same time, we should avoid unnecessarily exposing ourselves to danger, than which nothing can be more foolish."

What we are really trying to say is that we believe the professional people who design, engineer and construct our buildings and who more than any other segment of our population influence the environment, good or bad, in which we live, should willingly accept constructive criticism; and we think the profession as a whole has a responsibility to help promote the kind of journalistic climate in which this can be candidly done.

Thus we end this series on the "Care & Feeding of a Magazine." We hope our comments over these past eight months have given you a better understanding of publishing in general and of Architecture/West in particular.

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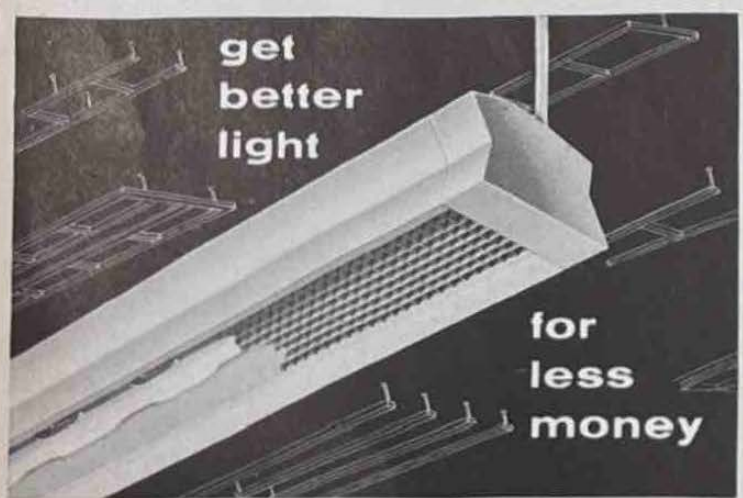
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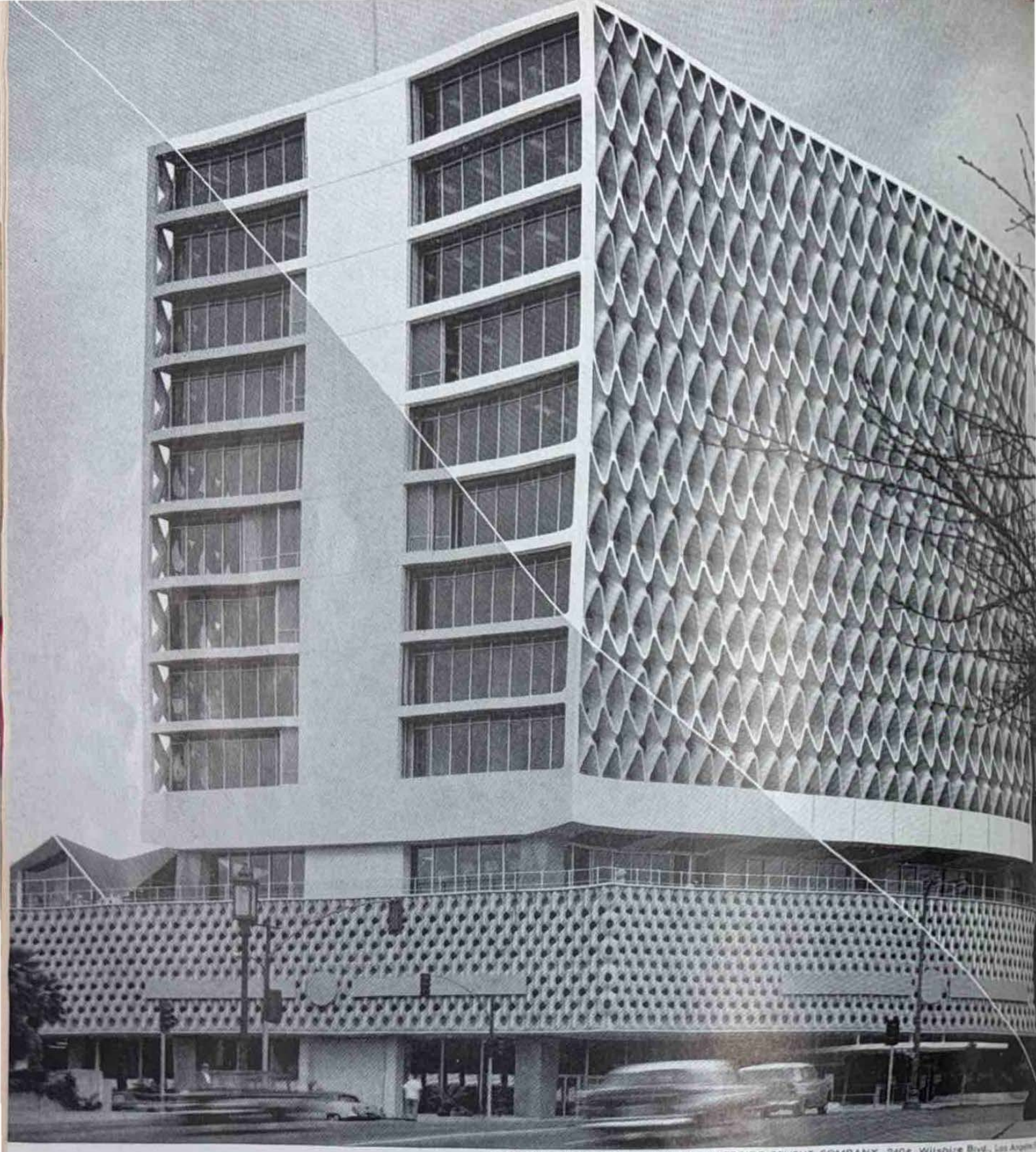
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IF RIVERSIDE WHITE CEMENT COSTS SO LITTLE MORE THAN GRAY, WHY DIDN'T WE USE IT IN OUR OWN BUILDING?

Because we couldn't get any, that's why. Our white cement plant wasn't quite finished at the time. Now, however, Riverside White is available to everyone, and we wonder: how would our building have looked in white? (Check the retouched photo above.) How much more would it have cost in white? $12,000, according to the contractor—which is only 1/3 of 1% of the total $3,500,000 outlay. Too bad we couldn't wait. Of course we could still paint it white, but that would run just about as much and we'd have to do it all over again every few years. So we think we'll leave it just the way it is. After all, we make a pretty fine gray cement too.



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Business data on page 34

Cover: Islandia Hotel and Restaurant Area, Keynote to San Diego's Mission Bay Aquatic Park Development (p. 12)

ABOUT THIS ISSUE: In 10 years San Diego hopes to have completed the nation's largest aquatic park, 6,400 acres of land devoted to fun in the sun and the spray. To assure that such an enterprise, developed piecemeal by private leaseholders, will be both successful and a credit to the city, control of development has been commissioned to a board of architects and planners who are setting stringent ground rules. They have taken a sensible approach, and the first buildings have set so perfect a keynote, that so far as we are concerned this puts the "Spotlight on San Diego" this month. Two outstanding San Diego area residences also share the 12-page spotlight starting on page 12.

A "low budget office space" methods article promised in this column last month, has been postponed one issue. In its place we present on page 23 a method-material note that is not necessarily significant, but that certainly contains a novel thought – precast concrete floors lifted into place on concrete block bearing walls, an economical method for certain uses, and undeniably the only instance we know of a lift slab job being clear span.

If the pace continues, 1962 will break all records for building permits in the West. Through the first seven months, we are 18% ahead of last year. Full details appear in The Building Month.

COMING IN OCTOBER: Plywood and panel systems. More shapes and forms than you can imagine, with details, methods and some remarkable designs. Selections from material that has been six months in preparation.

THE BUILDING MONTH

THE BUILDING WEST—If the present pace of building in the West continues, the year 1962 is going to chalk up a place all by itself on top of the record book. The month of July continued a torrid pace, with permits issued in 500 communities totaling $592,627,995 (the tabulation appears on pages 32-33 of this issue). This is 22% greater than the July figure one year ago. July, added to the first six months of the year, brings the total for the year to $4,053,260,239, 18% ahead of the first seven months of 1961. The breakdown by type of work is residential, $2,254,210,046, up 24%; and all other than residential, $1,799,050,193, up 9.6%. A word of caution in basing future plans on this present trend—the last three or four months of 1961 were unusually, unseasonally high months. Volumes in the last few months this years are not apt to top them. We predict a leveling off, with the increase for the full year being 14 or 15%.

TOP TWENTY-FIVE—California cities continue to dominate the list of hottest building areas in the West, but Arizona is well up in the picture this month, while Washington cities dropped a bit from their normal positions. Here they are (in millions): **1.** Los Angeles, $47.7; **2.** Los Angeles Co., $23.5; **3.** San Francisco, $15.1; **4.** Fremont, $13.7; **5.** Phoenix, $12.4; **6.** Oakland, $9.7; **7.** Tucson, $9.7; **8.** Sacramento Co., $9.5; **9.** Honolulu, $9.4; **10.** San Diego, $9.0; **11.** Anaheim, $8.2; **12.** Santa Barbara Co., $8.1; **13.** Riverside Co., $7.9; **14.** San Jose, $7.6; **15.** Denver, $6.9; **16.** El Segundo, $6.8; **17.** Seattle, $6.3; **18.** Orange Co., $6.0; **19.** Huntington Beach, $5.8; **20.** Portland, $5.7; **21.** Washington Co., $5.6; **22.** San Diego Co., $5.4; **23.** Ventura Co., $5.3; **24.** Arapahoe Co., $5.3; **25.** Las Vegas, $5.1.

CONSULTING THE CALENDAR—The **Western Mountain Regional Conference, AIA,** expects 300 at Sun Valley September 27-29. Theme of the session is Architecture—its Influence. Intermountain Chapter, Producers Council will meet concurrently. . . . **The American Concrete Institute** will hold its 15th fall convention in Seattle September 28-29. General chairman is Charles H. Knight, 903 Seaboard Bldg., Seattle 1, Wash. . . . The **World Conference on Shell Structures** is expected to draw participants from 25 countries to San Francisco September 30-October 4. Write University Extension, University of California, Berkeley 4, California.

Highlights & Sidelights

. . . The **17th Annual Convention, California Council, AIA,** will present six internationally prominent architects in "World Search" at the Monterey County Fairgrounds, Monterey, October 3-7. Write California Council, AIA, 916 Kearny St., San Francisco 11. . . . **Structural Engineers Association of California** meets at the Hotel del Coronado near San Diego in 31st annual convention, October 4-6. Walter Norris is general convention chairman, c/o 2808 Temple St., Los Angeles 26. . . . The **Northwest Regional Potlatch (AIA)** is scheduled for October 10-13 at Surftides Beach Resort on the Oregon coast. Robert Wilmsen, Eugene, is chairman.

NIX ON CORRIDORS—Edward Stone shook up the country a bit last month via United Press International when he announced that he was going to eradicate corridors from buildings. "They're a lousy 20th century invention that has proved boring and tedious and unnecessary." Stone himself for many years has been utilizing the charm of space, by building around courtyards, pools and gardens, with entry to high rise buildings being from courtyard decks. He also took a crack at glass, or rather at the mis-use of glass which is so evident in many skyscrapers and which even the glass manufacturers deplore. He is reducing glass by two-thirds in new designs for office buildings.

ANOTHER MONORAIL — The first "built-in-America" monorail of any scope will go into action this month at the Los Angeles County Fair. It is an on-site transportation unit as well as amusement attraction and entirely different from its more celebrated cousins at Disneyland and at the Seattle World's Fair. Built by American Crane & Hoist Co. in its plant at Downey, Calif., this one will have 14 aluminum cars suspended from an overhead singular track. Each car is designed for 24 passengers and 90% of the passenger area is Plexiglass to afford riders an unobstructed view of the fair. The route is one mile long. Most significant is that this is but the second stage in the firm's plans for monorail construction. The first stage was an amusement ride at Santa's Village. The third, about to come

Analysis of Various Types of Building in Typical Major Western Cities

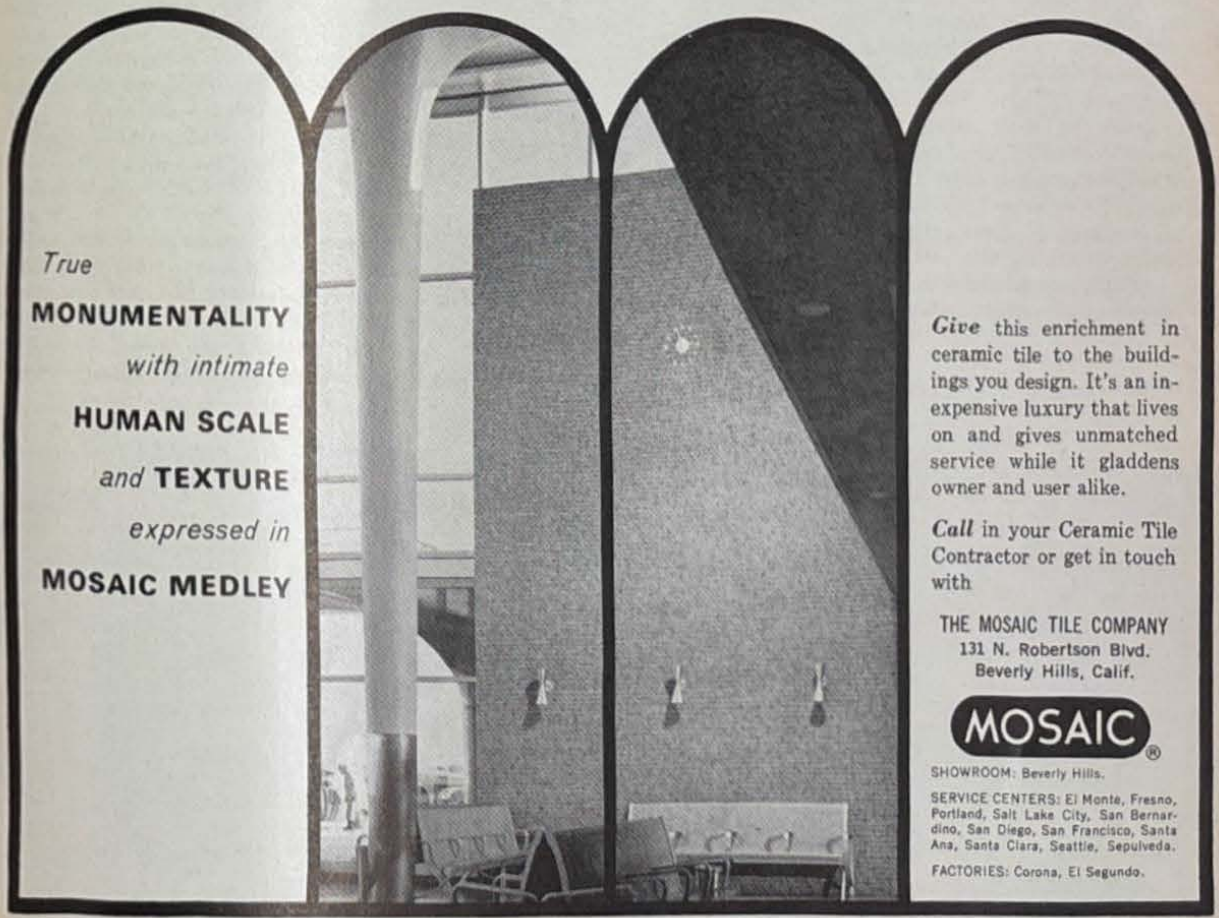
CITIES	Single Family Dwelling Units	Dollar Volume	Multi-Family Dwelling Units	Dollar Volume	Public Buildings	Dollar Volume	Commercial Buildings	Dollar Volume	Industrial Buildings	Dollar Volume
Denver	73	$ 1,104,220	118	$ 529,872	2	$ 152,950	10	$ 549,386	2	$ 21,000
Honolulu	254	3,426,971	31	221,400	30	3,867,036	18	1,108,364	4	89,500
Kern County, Calif.	97	1,168,567	14	104,483	1	32,000*	4	202,083	1	100,000
King County, Wash.	661	8,882,605	19	254,300	8	502,000	11	1,254,000	2	92,500
Las Vegas	227	3,078,885	203	943,073	—	—	12	688,890	—	—
Los Angeles	428	8,929,347	1,697	15,702,229	10	3,476,011	40	2,378,000	22	965,450
Los Angeles County, Calif.	992	15,708,933	416	3,005,571	14	617,290	24	536,470	16	741,500
Multnomah County, Ore.	125	1,897,144	3	122,500	2	39,000	7	146,700	4	535,000
Sacramento County, Calif.	357	4,895,594	67	1,272,615	7	781,658	16	1,308,160	5	116,500
Seattle	49	856,800	298	2,819,000	—	—	2	310,000	3	463,000
	3,263	$49,949,066	2,866	$24,975,043	74	$9,467,945	144	$8,482,053	59	$3,134,450

*does not include schools

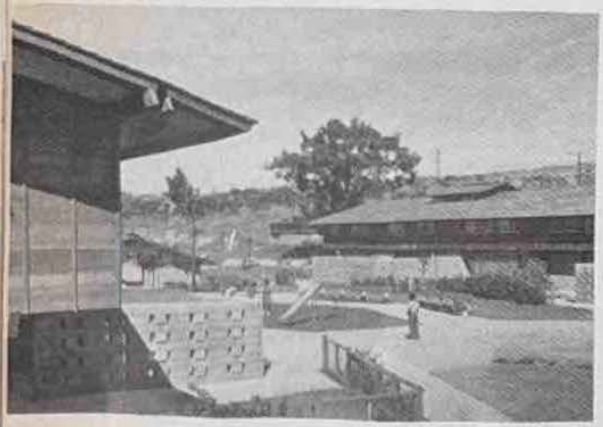
off the drawing boards, is a shuttle unit for downtown business and commercial areas. A fourth stage, going onto the boards, is a train for mass rapid transit.

MOUNTAIN PARK PLAN UNVEILED—The long awaited master plan for development of Mountain Park in the Santa Monica Mountains has just been made public by Lantain Park Corp. and William L. Pereira & Assoc. In theory it envisions the ideal in planning—the area resisted all hodge-podge development in the past and now lies fallow, ready to grow under a strong hand of supervision. It is 11,300 acres, three times larger than adjacent Beverly Hills, occupying a region from Sullivan to Topanga Canyons between Sunset Boulevard and Mulholland Drive. The Pereira plan, according to its author, is predicated on preserving the unique character and rugged beauty of the area by concentrating development in "village centers," leaving a large part of the entire property in its natural state. New architectural and engineering techniques will be utilized to permit hillside construction, even on sharp gradients, instead of carving up the majestic mountains into "rice-paddy" homesites. By providing all the facilities of a balanced and largely self-sufficient group of communities, moreover, the plan avoids the need for a vast network of streets, roads and highways that would be required for a population composed predominantly of commuters. Eleven separate but interrelated villages would each occupy one of the prominent topographic areas into which Mountain Park is naturally divided, and include not only its own residential, commercial, educational and recreational facilities but, in some cases, its own employment center as well. These individual communities, many of them reminiscent of the picturesque hillside villages of the Mediterranean and, like them, commanding magnificent views of the sea and surrounding countryside, are planned to include many different kinds of housing to accommodate a wide variety of income levels, with schools, shops and other services immediately accessible to the residents of each village. These centers will be strategically located on sites best suited to development and might include, as well as predominantly residential communities, a major cultural or exposition center, a luxury resort, a graduate research center sponsored by a major university, and certain employment-generating facilities. Within the outskirts of several of these communities, moreover, provision has been made for research and development centers and light industries that would provide employment.

CITY PLANNER RESIGNS—A technicality in the city charter of San Francisco has forced resignation of Architect George Rockrise from the City Planning Commission. Rockrise himself raised the question of his eligibility when he discovered a clause concerning conflict of interest. His firm is retained by a private group working on a project on Market Street and also by the University of California building a campus on Mt. Sutro. Both clients may have to ask the planning commission for variances from the building code. Unfortunately in this position it is not legal for a member of the commission merely to abstain from voting on any matters where such a conflict might lie. Mayor George Christopher has accepted the resignation "with distress" and now is faced with finding an outstanding architect living in the city but not working there.



WATCHDOGS OF THE PUBLIC PURSE . . . Were they overzealous?



In Marin County, across the Golden Gate from San Francisco, a public housing project that appears to have been especially well done has aroused claims of wastefulness in a report to Congress by the General Accounting Office.

It has tile roofs and outside balconies that have attractive precast concrete grille railings, outside access corridors and sliding glass doors from living rooms to the balconies, and concrete block walls around the drying yards — presumably instead of wooden fences — all subject to criticism by the financial analysts.

Marin City Federal Low Rent Housing Project was designed by architects Aaron G. Green and John Carl Warnecke, associated. Ironically it was built well within the allocated budget, and probably would never have been brought to public attention had it been more institutional and dull in appearance.

In any event the project seems to have been opened to public review, and this is what we find:

With the money allocated the architects seem to have been able to achieve the very desirable goal of constructing with low maintenance materials. Concrete block screens are not subject to repainting and replacement costs, and the same is true of precast concrete grillework as used on the balcony railings. Properly applied roof tiles last forever without maintenance, and in this instance they guard against the very real possibility of fire, as the project roofs are tightly adjacent to woodland. Insurance rates probably are lower.

In temperate climates such as that of Marin County, balconies are not considered a luxury, but rather are a way of life and have the effect of adding another, lower cost, room to the unit. Sliding doors are little more expensive than walls or window walls, and they provide both the light and ventilation required by building codes.



Undoubtedly the first cost of certain features, such as the roof and the fences was greater than the normal standard, but this may well have been offset in other areas where design permitted economies. For instance, the architects utilized a sloping site to provide five-story structures without elevators, with ground level entry to every floor.

The design placed many buildings at right angles to the site contours to minimize soil erosion problems and the need for expensive terracing, complicated drainage systems and retaining walls.

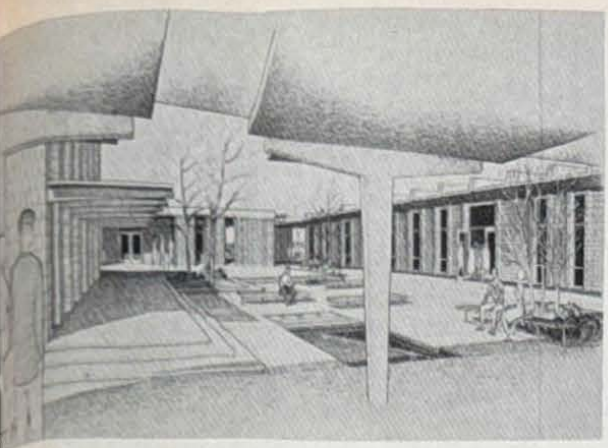
And there was a basic element to treatment of the entire project that probably does not appear on any analysis sheet. The site was one of long controversy, disfigured with the remains of a wartime temporary housing project. Citizens of Marin County were militantly opposed to any construction that would not remove blight and add something of lasting value to the community.

Since the GAO criticism, public housing officials and others at both the local and national levels have risen to its defense on grounds such as those cited here. It is to be hoped that the GAO will take another look at its rulebook, to differentiate between "quality" and "lavishness".

Major criticisms of Marin City low cost housing project appear in the two smaller pictures. Concrete block screening walls were labeled more costly than wood. Precast concrete railings for balconies and outside corridors, tile roofs also upped the bill. But the picture below shows a pleasing, non-institutional blending with the landscape, and buildings set economically at right angles to the hill to eliminate drainage, terracing, walls and to provide ground level entry to all of the five levels.

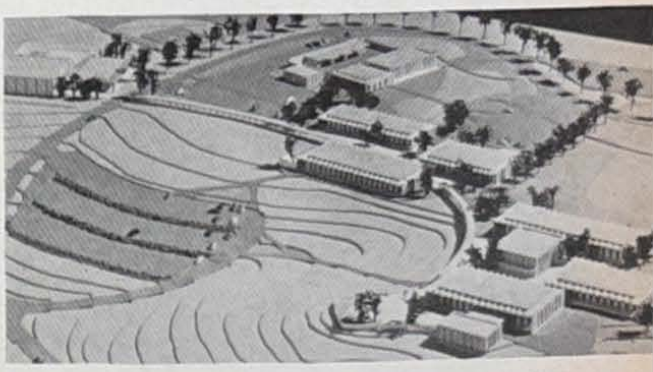
Gerald Ratto photos





Shade, water, green internal landscaping, concrete forms and solid masonry masses with minimum fenestration will characterize campus complex.

Initial campus with 13 buildings, utilities, site improvements, fixed equipment and architectural-engineering fees will cost about $2.2 million, exclusive of site acquisition.



Arizona's new junior college curriculum finds design prequisite in Yuma campus



Planned for 600 students at start, site development will ultimately accommodate 2,000.

First project in Arizona's junior college program will get underway in late September on a 640-acre sand mesa near Yuma, overlooking the verdant Gila Valley.

As conceived by architects Cain, Nelson & Wares, Yuma County Junior College will be strongly regional, even local, in character. The extreme desert climate with its intense sun and frequent winds, the availability of native materials, the forms of the surrounding landscape and the architectural character of the city itself all have had particular influences on the design.

The initial campus will consist of a homogeneous grouping of separate but closely related buildings in four landscaped complexes. These areas, connected by a curving covered walk, will be arranged along the north edge of the mesa with a commanding view of the immediate valley and the distant mountains. While the arrangement will be integrated and orderly, it also will be somewhat informal in order to be responsive to the desire of the young students for a new freedom of action and responsibility.

In keeping with the character of the desert, all buildings will be flat roofed and one story in height. Prestressed concrete T-beams supported on short, integrally colored concrete block wall sections alternating with dark transparent and opaque panels, open masonry screens and interrupted parapet walls will form the basic design expression.

Maximum flexibility and economies in construction will result from the use of this single construction system, the employment of an 8-ft. 4-in. module for each building and easily removable nonbearing interior partitions.

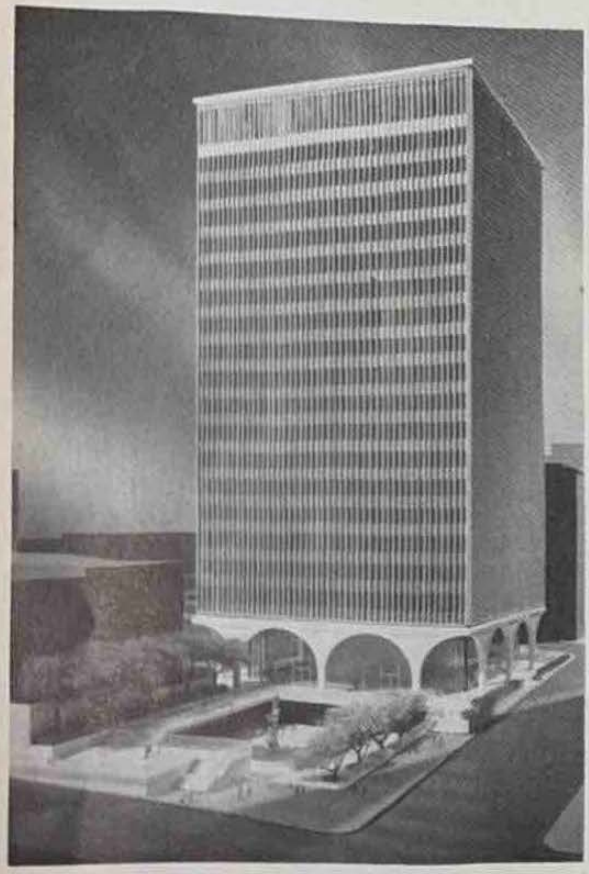
The necessity for minimal operating costs of the air conditioning system during eight months of the year has called for shaded walls, recessed windows, use of 14% gray glass, efficient roof and wall insulation and control of ground glare by planting. An underground utility tunnel will service each building from a central heating and cooling plant.

Parking for students and faculty, visitors and spectators at sports events will be provided by four areas located so as to eliminate vehicular traffic from circulating in the central campus area.



SCIENCE IN PORTLAND

The first increment of a two-building complex, the Portland State College Science Building will be located on a new site near present campus. To house Physics, Chemistry, Biology, Bacteriology and Zoology departments, structure will occupy approximately 72,000 sq. ft., cost an estimated $1,650,000, and is expected to be ready for occupancy in January 1964. Architects: Skidmore, Owings & Merrill.

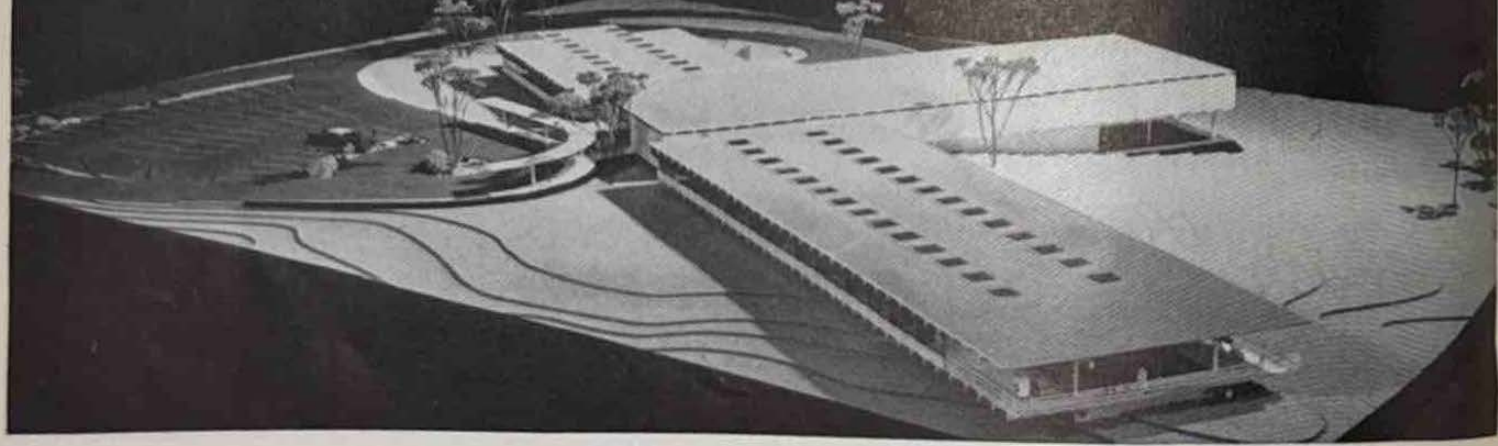


FROM TERRACE TO TOWER IN SEATTLE

The IBM Building, a 20-story tower rising from the center of a landscaped terrace, will provide orderly and dramatic expansion of the already established 10-acre tract known as Metropolitan Center, the heart of downtown Seattle. Located across from the Olympic Hotel, the site area will be a series of terraces and plazas, fully landscaped with pools and fountains. The multi-level plaza will include distinctive retail shops. Total office rental space will be 190,000 sq. ft. Space for a 200 car garage has been included in plans. Completely air conditioned and free of interior columns, the IBM Building will be serviced by six high-rise passenger elevators. A central core, housing mechanical equipment, will be surrounded by office space. Built of reinforced concrete, exterior of building will be of white exposed aggregate and grey aluminum spandrels. Completion of the $8 million structure is set for summer of 1966. International Business Machines will be major tenant. Architects: Minoru Yamasaki & Associates of Detroit; Naramore, Bain, Brady & Johanson, Seattle.

NURSING FACILITIES COMBINED IN DAVENPORT, WASHINGTON

Separate wings will house both hospital and nursing home facilities under one roof in the Lincoln Hospital at Davenport. The left wing will accommodate 25 hospital beds, the right wing 40 nursing home beds, with the central wing containing common facilities. Considerable use will be made of precast concrete. Floors will be pre-stressed T-beams and all roof structures will be T-beams on reinforced concrete bearing walls and columns. Extensive glass areas are planned. Total area: 33,790 sq. ft. Architects: Grant, Copeland & Chervenak.



T-SQUARE TALK

new offices

W. J. Wellenstein has opened architectural offices at 2804 Northern Lights Blvd., Anchorage. He had been with Edward B. Crittenden Architects since 1952.

Vincent R. Bonfanti has opened architectural planning and engineering offices at 11959 Rivera Road, Santa Fe Springs. Associate architect for the firm will be Donald J. Lawrence.

Perry Pyle, architect and designer, has opened his own offices at 109 Enterprises Bldg., Denver. He had previously been associated with The Martin Co. in Denver.

Ronald Cameron, has opened architectural offices in the Holtzinger Building in Yakima.

Westlin, Norton & Siegenthaler has opened an architectural office at 6323 200th Ave. S.W., Lynnwood.

Bonham-Jones Associates has opened offices at 600 North Sepulveda Blvd., Los Angeles. William N. Bonham and Arthur C. Jones were formerly in independent architectural and engineering practice, respectively.

William Austin and his design associate, Richard Culton, have opened offices of their new architectural firm at N. 811 Jefferson, Spokane.

Rodney L. B. Smith has established architectural offices at 312 Center St, Chula Vista.

new addresses

Ray Donley & Associates, architects, to 8320 Melrose Ave., Los Angeles.

Allan & Olsson, architects, to Suite 200, Mayer Central Bldg., Phoenix.

Lewis Crutcher and his associate, Charles E. Johnson, architects, to 2349 N.W. Flanders, Portland.

new partners

George Agron has been named as contract and planning research officer of Stone, Marraccini and Patterson, San Francisco. He will continue his responsibilities as a director of the firm.

Arthur C. Evans, Robert E. Brown, and E. Kurt Steinmann were recently named principals of Ruhnau, Evans, Brown and Steinmann, located in Riverside. James E. Calkins was named an associate.

Ernest A. Jacobs recently joined the firm of Rochlin & Baran & Associates, Los Angeles, as an associate in charge of the firm's hospital planning division.

firm changes

Daniel, Mann, Johnson & Mendenhall, Los Angeles architects and engineers, has added Peter De Francisci to the staff as commercial projects director.

Burke, Kober & Nicolais, Los Angeles architectural and engineering firm, has announced opening of a new Orange County office at 1823 E. 117th St., Suite 17, Hillview Bldg., Santa Ana . . . the Los Angeles office has added Irving Rector to its staff as director of school planning and design.

David A. Johnston and Felix M. Campanella have announced that Terry T. Murakami and Robert S. Burns, former associates in the firm of Johnston-Campenalla & Associates, are now full partners in the organization retitled as Johnston-Campanella and Co., Renton.

HAWS

...SPECIFIED FOR *MORE* THAN BEAUTY

To be sure, this semi-recessed, slim design vitreous china Model 77 has the beauty every Architect demands! But Haws provides even more...

Service ease! Maintenance is virtually nil, with extra-durable vitreous china (in color too!). All fittings are easily accessible from under the bowl—there's no access panel required.

Lifetime parts availability! There's no "planned obsolescence" at Haws. We carry parts in stock for fountains old or new to assure *lasting* client satisfaction for your client. It's to your advantage to standardize with Haws!



Illustrated below is Haws Model 77 as installed in corridors of the new **Tidewater Oil Building,** Los Angeles, California. (Architect: Claud Beelman, A.I.A., and Associates.) It is semi-recessed in brilliant marble walls, adjacent to the elevators. Haws Model 77 is a classic of good design.

See Haws in Sweets File—or write for the complete Haws Catalog.

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T-SQUARE, continued

Leonard J. Hunter has joined John Carl Warnecke and Associates, architects and planning consultants in San Francisco, as executive vice president and partner. Hunter recently resigned as chief architect of the General Services Administration.

elections, appointments

McCown E. Hunt, partner of Folsom and Hunt, Salt Lake City architectural and engineering firm, has been elected president of the Utah Society of Professional Engineers.

Don Curlee, San Francisco, has been appointed executive assistant of the California Council, AIA. He will be responsible for carrying out the Council's public relations program.

Kenneth Helms, a principal in the Seattle firm of Jones, Helms, Lovegren & Jones, architects, has been appointed to the Jury of Fellows of the Construction Specifications Institute.

The University of Oregon has named a dean and an acting dean of the School of Architecture and Allied Arts. Acting dean is Marion Dean Ross.

Dr. Walter L. Creese, architectural historian and professor of architecture at the University of Illinois, has been appointed dean, subject to approval of the state board of higher education, effective July 1, 1963. He is a graduate (magna cum laude) of Brown University, and received his master of arts and doctor of philosophy degrees from Harvard. His teaching career started at Harvard Radcliffe in 1944.

Fred Hannaford was named executive secretary of the school.

Seattle architect Paul Thiry has been named as one of four architect members of a ten-man advisory council to undertake studies for development of the north side of Pennsylvania Ave., the major arterial thoroughfare connecting the White House and the nation's Capitol buildings in Washington, D. C. Thiry will be working in association with Nathaniel Owings, partner in the architectural firm of Skidmore, Owings & Merrill, and chairman of the council; Minoru Yamasaki, Seattle-educated Detroit architect who planned the Federal Science exhibit buildings at the Seattle World's Fair; and Ralph Walker, New York architect and member of the Fine Arts Commission.

The immediate problem will be to develop the basic designs for replacing temporary and obsolete buildings along one side of the street by construction of federal buildings.

awards

Peter Voulkos, art instructor at the University of California in Berkeley, has been named winner of the $5,000 sculpture competition sponsored by Tishman Realty & Construction Co., Inc. The finished 18-ft. sculpture, entitled "Cascade," will be placed in front of a reflected pool at Tishman's new 25-story apartment house in Nob Hill.

Douglas Meyer, second-year student at the USC School of Architecture, was awarded the Daniel, Mann, Johnson and Mendenhall fifth annual Mentorship Award in architecture. The program includes an interest-free loan of $1,200 per year, canceled upon successful completion of a year's training at DMJM.

Winner of the Architectural Student Design Award sponsored by the Koppers Co., Inc., was LeRoy B. Riddle, West Point, Va., a fourth-year advanced design student at the University of California, Berkeley. The $800 award is presented annually to the UC fourth-year student who best illustrates the use of flat roof designs employing built-up construction. Koppers makes similar awards annually in six other U. S. architectural schools.

Active architects and those in related fields are eligible to apply for the $5,000 Arnold W. Brunner scholarship, offered by the New York Chapter of the AIA. Candidates are free to choose their subject of study. Application blanks and further information can be obtained from the New York Chapter, AIA, 115 East 40th St., New York 16. Deadline for submitting applications is January 15.

KOEHLER TO OCTAGON

Robert E. (Bob) Koehler, who as editor for the past six years has done so much to develop Architecture/West to its present industry-wide significance, has moved to a staff position with the AIA at the Octagon in Washington, D.C.

Among his duties will be fulfillment of the position of associate editor of the AIA JOURNAL.

He will continue his association with the West Coast for a period as advisory editor of A/W, working with Albert O. Bumgardner, AIA, consulting editor, and with Roscoe E. Laing, general manager of the publishing firm, who will serve as managing editor until a successor is named.

Relta Gray, long time member of the Pacific Builder & Engineer publishing staff, has assumed responsibilities as assistant editor of A/W.

OFFICE AIDS

drafting portfolio

The traveling architect will want to consider the PDQ. This compact 9½x13½-in. portfolio kit holds a drawing pencil and graph pad, a 30/60- and a 45/90-deg. triangle, a laminated protractor, a French curve and a 12-in. calibrated T-square with inch and millimeter scales.—C Thru Ruler Co., 823 Windsor St., Hartford 1, Conn.

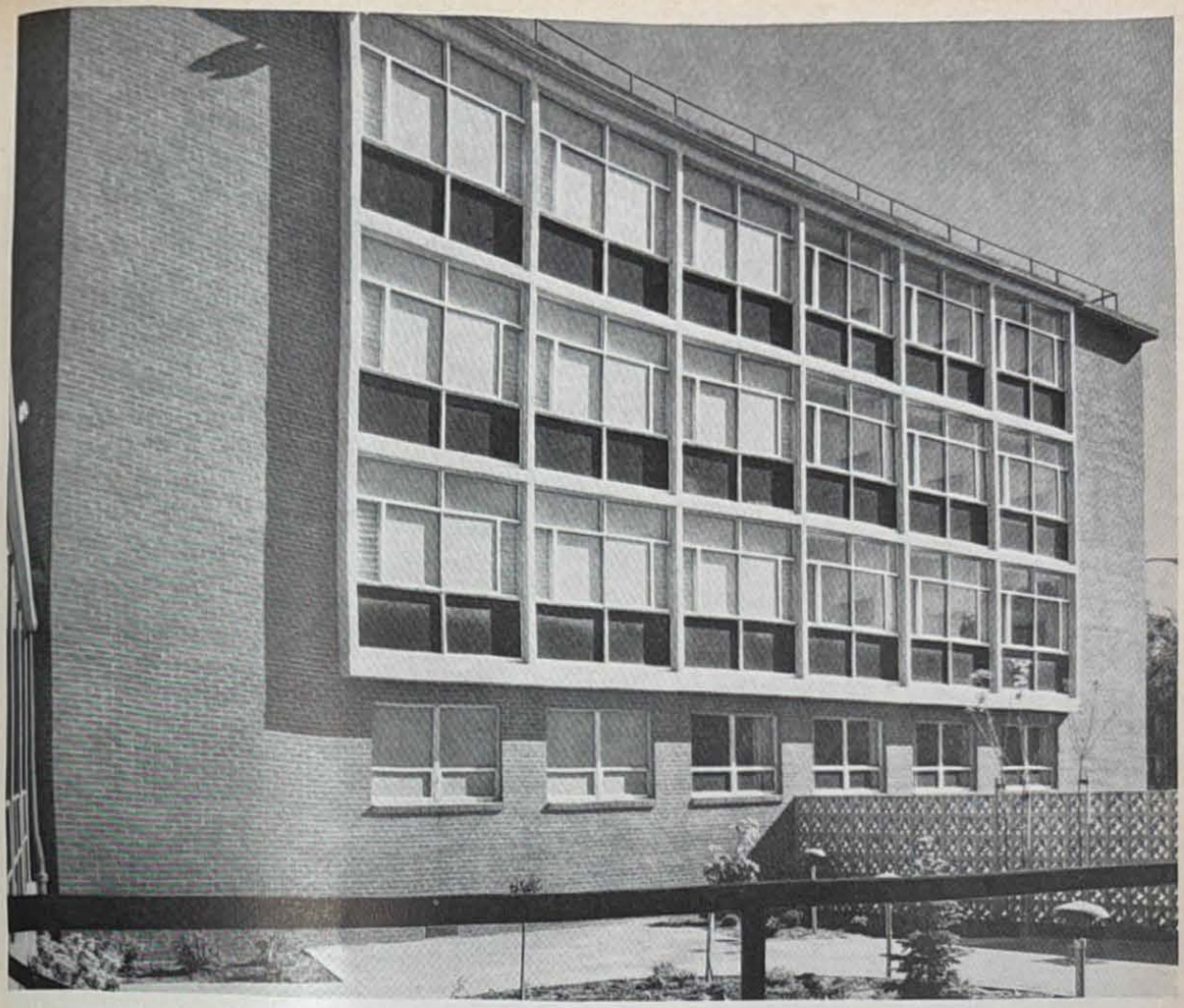


big board machine

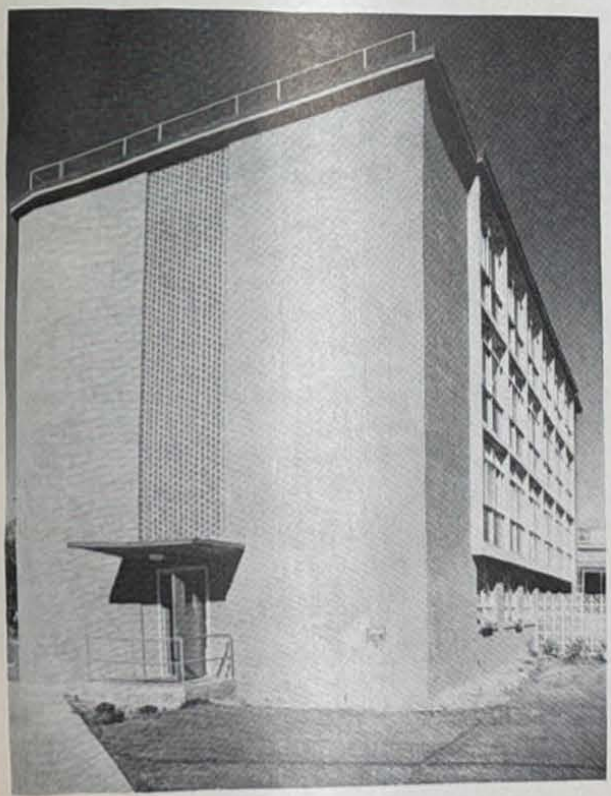
Back to the drafting board? If the job is bigger than you are, Glideline suggests its precision drafting machine designed for vertical layout and horizontal lofting over large drawing areas. Standard models range from 5x8 through 8x30 ft. The Model 6 drafting machine is said to be easily operated, eliminating the "fatigue factor" usually associated with large scale drawing. The protractor head of the unit provides for push-button indexing every 15 deg.; intermediate settings can be made manually by rotating the index control. Only the scale touch the drawing.—Glideline Corp., Waynesboro, Pa.

color fan

FireHood prefabricated fireplace can be placed anywhere in the home, the literature says. How will it look with the client's furnishings? Condon-King's color chip fan shows the fireplace in Inca gold, green olive, purple iris and six other decorator shades. The color chips fan out for easy matching or blending.—Condon-King Co., Inc., 1247 Rainier Ave., Seattle 44, Wash.

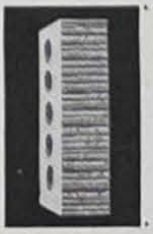


Why do so many schools build with brick?



Fine schools from Maine to California traditionally build with brick. Not merely for beauty and lasting good looks. Minimum maintenance and low insurance rates conserve hard-pressed budgets. Summer coolness and winter warmth mean classrooms in which better work is done, dormitories in which students live more comfortably.

University of Oregon's new dormitory #4 (pictured) was built at Eugene with 140,000 GMcB 8″ Red Standard Mission face brick. GMcB precision pressing assures brick that always lays and looks the way it should. And GMcB offers the greatest range of shapes, sizes, colors, and textures available. For face brick *summa cum laude*, specify "GMcB." Always competitively priced.



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FACE BRICK

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SPOTLIGHT ON SAN DIEGO

- *Islandia Hotel and Restaurant*
- *Robert E. Jones Residence*
- *Richard George Wheeler Residence*



San Diego has many inherent advantages which give cause for an optimistic view of the future, such as wonderful climate, a locale replete with natural beauty and areas rich in historical tradition. Bordered on the east by mountains, the west by the rough cliffs and sandy beaches of the Pacific and traversed by rugged canyons, broad valleys and rolling hills, the development of the San Diego area presents a diversified challenge to architects.

Climate is an important design factor. With an average high temperature of 70.2 deg. and a low of 54.6 deg., the indoor-outdoor environment can be developed and enjoyed year round, provided that sun, wind, moderate rain and diversified terrain are integrated into a solution as assets, not liabilities.

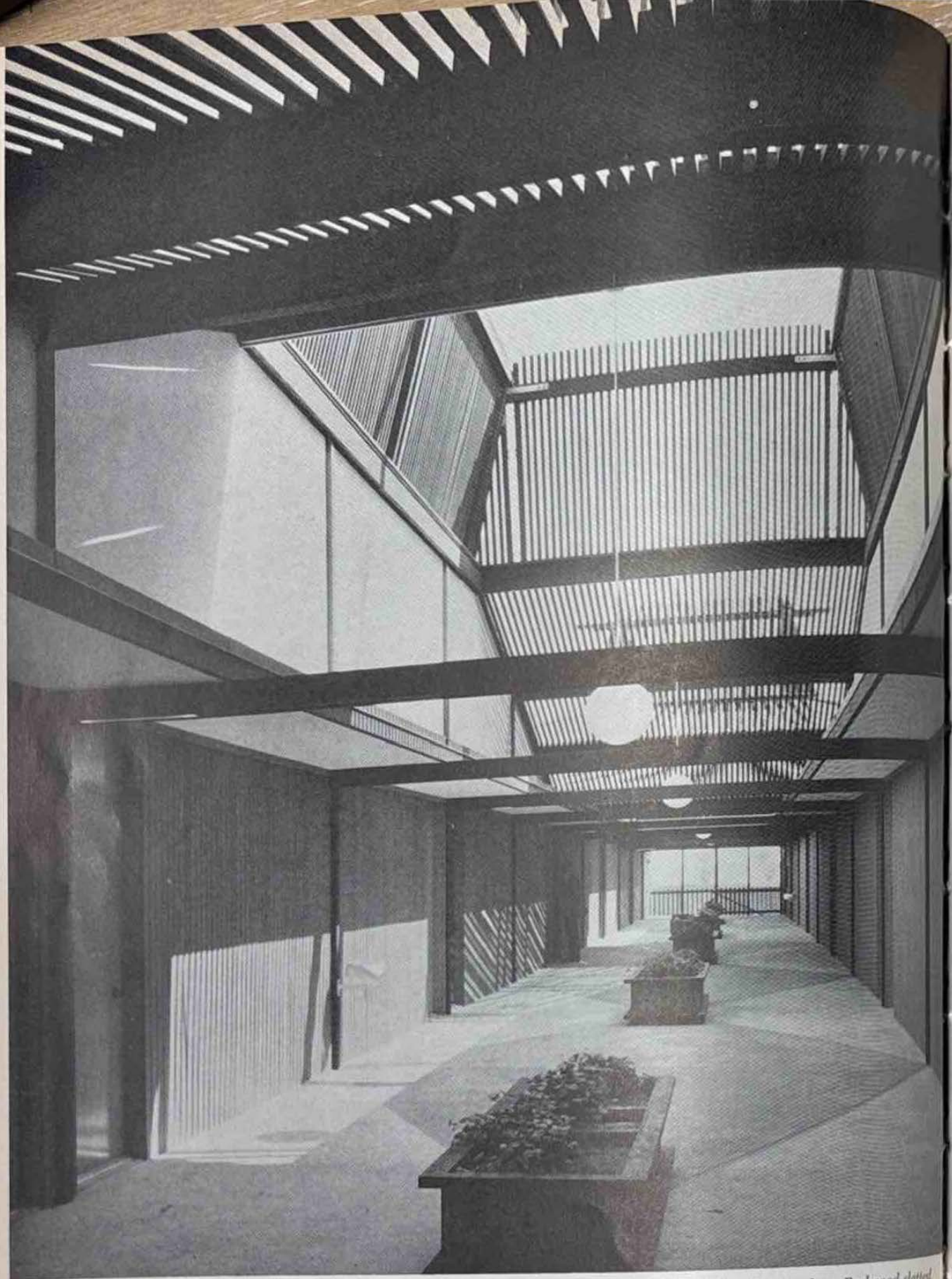
At present San Diego is experiencing a renaissance in building construction and design due in large measure to a public awareness of the physical environment in which it works and plays, and to the architect's utilization of natural



and man-made assets, including many new building techniques. Public, governmental and professional evaluation of San Diego's physical and economic potential has stimulated the planning of eight major downtown buildings, five in excess of 20 stories; continued development of Mission Bay Park for public and private recreational use; development of San Diego harbor for both commerce and recreation; and redevelopment of Balboa Park.

In the midst of these exciting developments, contributions of significant architecture existing and soon to emerge will be lost or obscured if the design professions, governmental agencies and citizens of San Diego do not continually strive for a total environment, inspired in concept, practical in approach and efficient in use. Like most communities of Southern California, we are at war with ugliness, the automobile and urban sprawl.

—James W. Bird, president, San Diego Chapter, AIA



An open, resort-like atmosphere is combined with the utility of a hotel corridor in this second floor areaway which provides both guest entrance and maid service to upper rooms which line the walls of Islandia. Redwood-slatted cupolas, repeated down the "spine" of the hotel group, lend a gay identity both to the interior and exterior of the group.

Islandia Challenging Nucleus for Aquatic Park

After displaying so casual an attitude towards growth for so many years—possibly because it wasn't growing much at all—and then undergoing a growth explosion almost as uncontrollable as wildfire, the city of San Diego has finally buckled down to strict planning.

In one area in particular—Mission Bay—the results show noteworthy promise.

Mission Bay is a 6,400 acre recreation area expected to be the largest aquatic park in the nation when completed. Although developed by individual leaseholders, it will not grow topsy turvy because the city searched out a group of architects, planners and landscape architects to formulate basic regulations for development as a unit called Community Facilities Planners. Theirs is the authority within this area to recommend uniformity in materials, colors, signing, setbacks, traffic flow, utilization of view, as well as to develop the official master plan for locating of facilities.

The desirability of such overall planning is unquestioned, but performance (or results) in so many other attempts elsewhere in the nation have left much to be desired. At Mission Bay the first results have been handsome. Possibly because the need in San Diego was so evident, the first architects and builders have cooperated perfectly in their interpretation of the basic demands.

The Islandia Hotel and Restaurant complex in the Quivira Basin seems so successful, architecturally, that it appears destined to set the tone for all other development on the 6,400 acres.

SOME OF THE BASICS

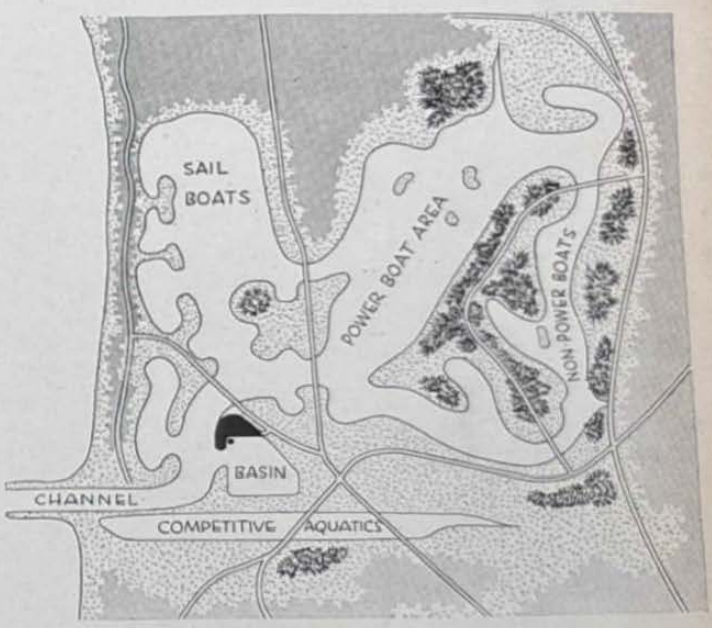
It was determined that all of the park should be "a beautiful and wonderful place, as exciting to look at as it is to play in." That one and two story buildings might well be all heart redwood stained vertical boards; roofs, shingle or shake, redwood or cedar. Colors to be turquoise, persimmon, white and charcoal. A minimum 15-ft. continuous promenade along all waterfronts, buildings set back at least 40 ft. from all roads, signs no higher than 20 ft. Everything in the park to be "water oriented;" an emphasis on foot traffic by land, the automobile relegated to another world.

This digest of ground rules a strange combination of philosopy and science requiring sensitive interpretation by thoughtful leaseholders.

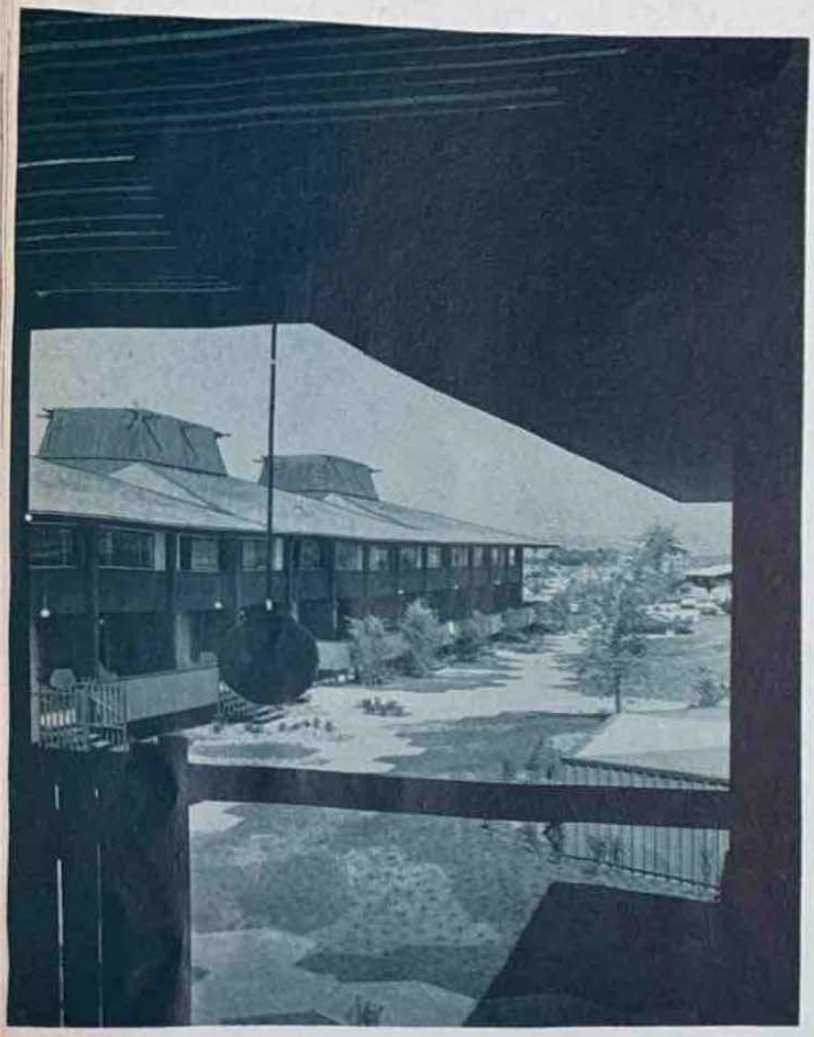
ISLANDIA HOTEL

The Islandia architects, commissioned to utilize land for an original 120 rooms and suites, dining facilities for 200 to 250, bar for 75, and a sidewalk coffee shop, set out to interpret the spirit of the planners, and added a few ground rules of their own for their own complex. They wanted to create an environment that was stimu-

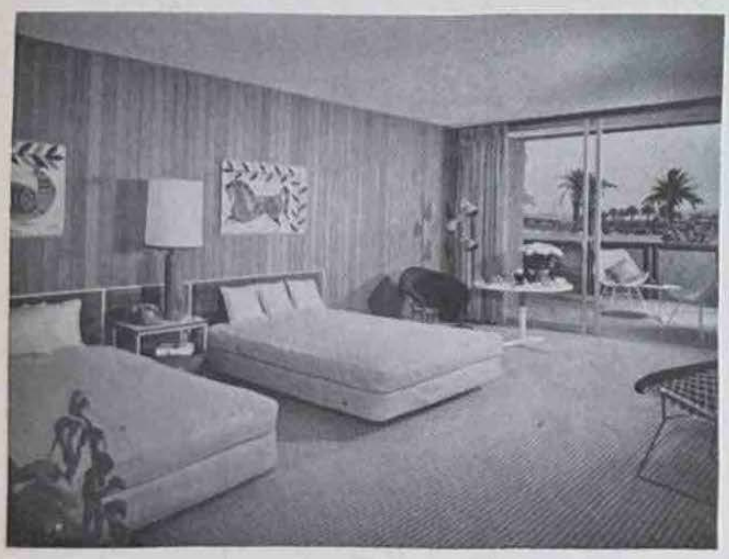
MISSION BAY DEVELOPMENT, San Diego/Community Facilities Planners—*Simon Eisner*, city planner; *Smith & Williams*, architects; *Eckbo, Dean & Williams*, landscape architects



ISLANDIA HOTEL AND RESTAURANT, Mission Bay/*Eugene Weston Jr.*, architect; *Eugene Weston III*, architect, and *Frederick Liebhardt/Trepte Construction Co.*, general contractor.



Everywhere the view is interesting, yet even the ground floor rooms (below) have privacy.



Julius Shulman photos

lating and gay, yet relaxed and restful—an environment to serve the gregarious and the retiring equally well. And in a wise move to stimulate maximum participation in all facilities, they designed to bring people into view of all the surrounding marine activity.

Land area was restricted, so the restaurant and hotel were separated, with the restaurant moved out over the water on piling. The hotel was designed as a reasonably compact grouping of large buildings, rather than scattered small ones, but with "see-through" paths (from public street to water) between the buildings.

Within the individual hotel buildings a scheme was adopted combining the advantages of a single loaded scheme with the land and money economies of back to back or central corridor schemes.

The buildings are 2-story, with the first floor 3 ft. above grade: The first floor has decks at the outer walls, then the rooms, with bathrooms back to back down the centerline; the second floor has rooms at the outer walls, without decks, and with the deck space relegated to a wide areaway down the centerline of the building for access to the rooms.

The decks, being 3 ft. above grade, give visual privacy with minimum view sacrifice to first floor guests as sightlines from the deck are above the heads of pedestrians at ground level. Entrance to the ground floor rooms is by individual stairways to the decks. Maid circulation is on the deck level so that wheeled carts may be used.

The second floor areaway is wide and open to the sky (through slatted cupolas), giving an indoor-outdoor atmosphere, avoiding an enclosed feeling, yet delivering the same virtues as would a corridor.

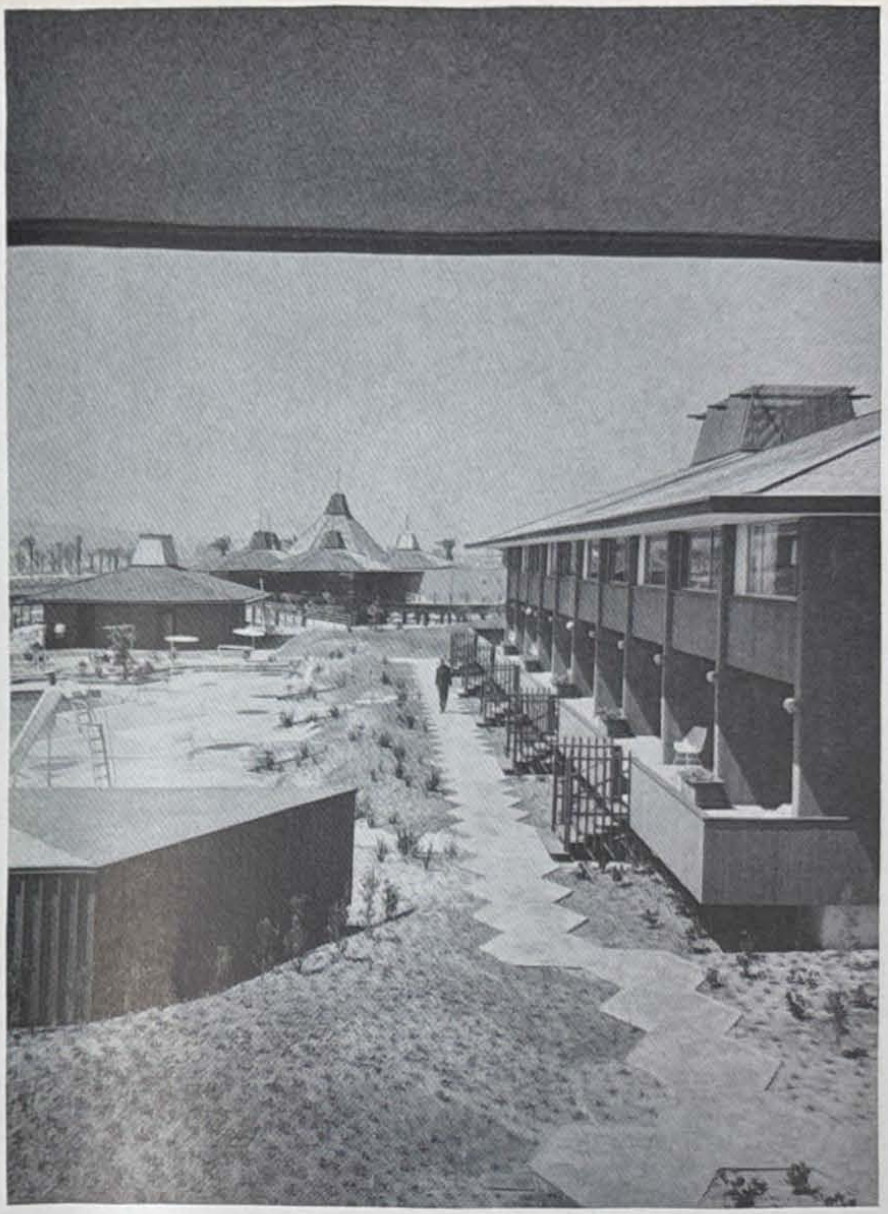
In exterior appearance the buildings present the warmth of their redwood and a stimulating grouping of unusual rooflines, strong yet almost frivolous, befitting a vacation attitude.

ISLANDIA RESTAURANT

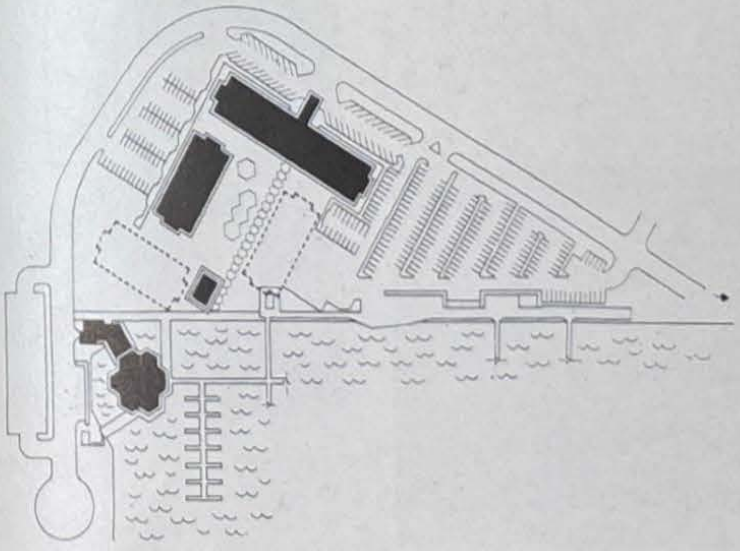
Hexagonal shapes are a symbol of the Quivira Basin complex, utilized in walkways and many other places, and they are the basic shape of the restaurant which consists of seven hexagons. The central hex is a bar and cocktail lounge, four are for dining spaces, one houses the kitchen and one serves for office, wash rooms and lobby. All are on a structure of piling, completely surrounded by water. Again the material is redwood, and the shake roofs are topped with cupolas that identify with those atop the hotel.

The basic planning philosophy worked to the advantage of the restaurant. A transitional walk from land to the pier gives the individual a chance to view the area as a pedestrian, to absorb the marine atmosphere and bridge the gap to a recreational feeling. The restaurant thus gains an image as an additional facility independent of the hotel.

As individual units, or as part of the total complex, the Islandia buildings are both stimulating and "comfortable."

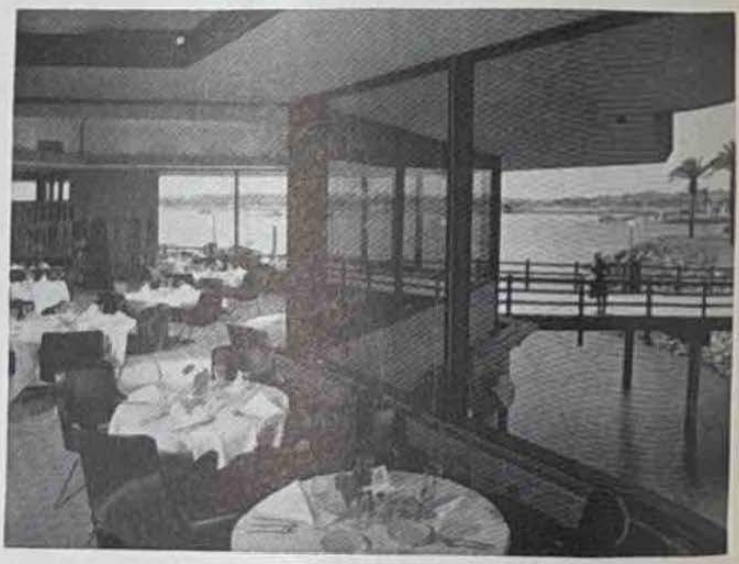


From the hotel, a hexagonal sidewalk leads to the seven hexagons that form the restaurant. Deck rails are above the pedestrian sightline, but allow view from decks.



Julius Shulman photos

Seven little hexagons, but two are hidden in the photo above, form Islandia Restaurant—a charming group that in materials, colors and form identifies with the hotel, yet is inviting also as a separate facility completely surrounded by water. At right and below, the view is pleasant, and hanging lights cluster in the cupola over the lounge.





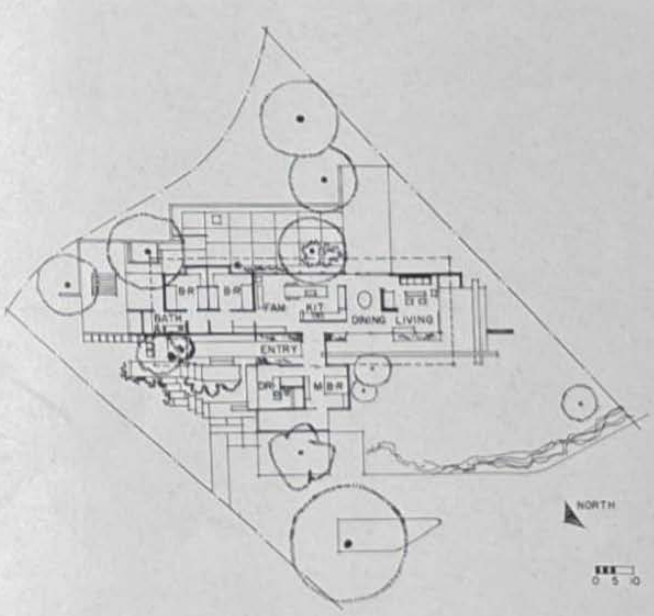
ROBERT E. JONES RESIDENCE, Del Mar/*Robert E. Jones*, AIA, *Hester-Jones & Assoc.*, architect/*Herbert Turner*, contractor.



The Most Fortunate Ones

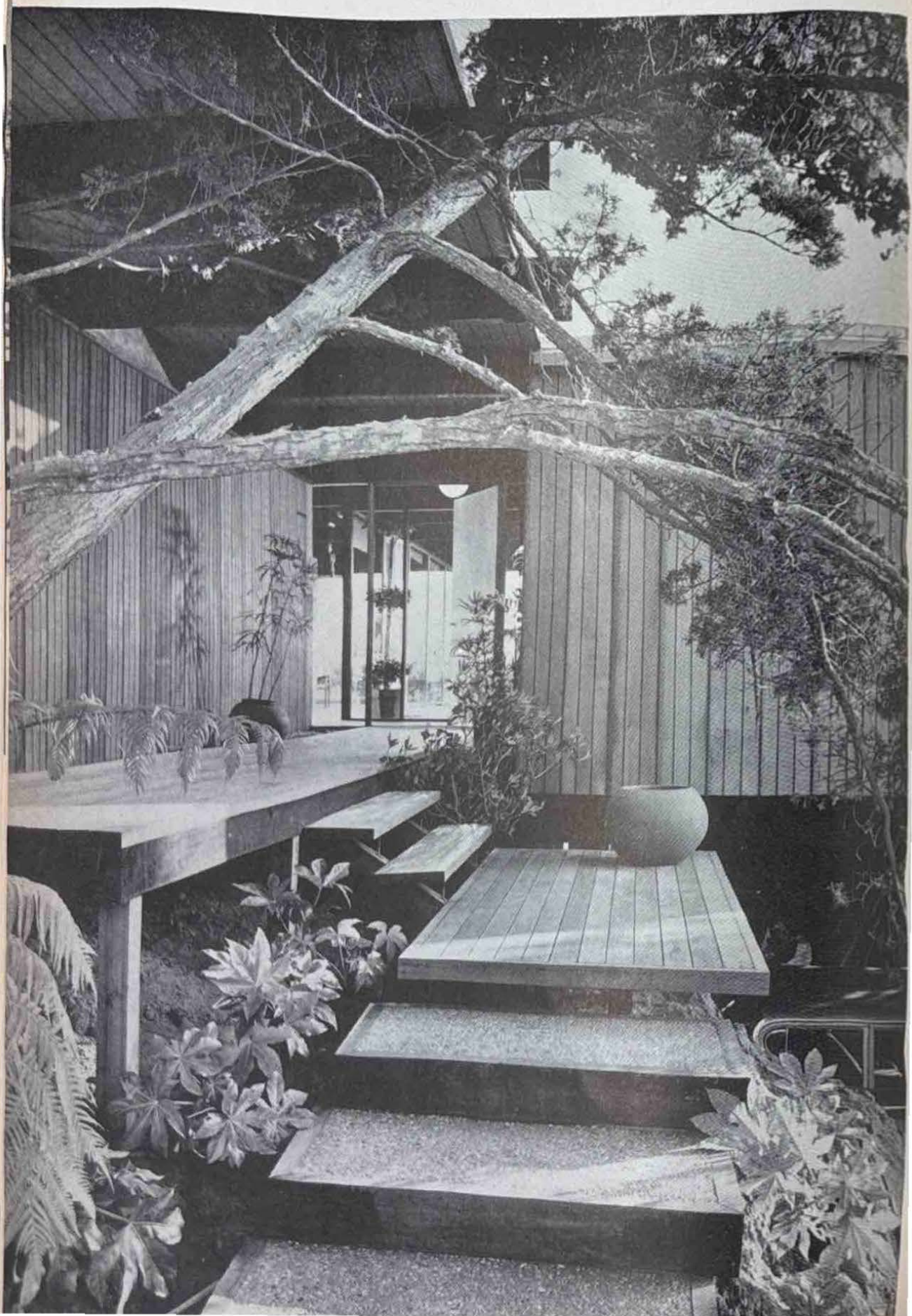
We often feel that the most fortunate of all peoples are those living in climates and surroundings that permit nature to be their shelter. The ancient Hawaiians were probably the world's happiest people, spreading mats upon the sands and rearranging palm fronds and other leaves to shelter them from the elements. Occasionally we do this in the United States today, albeit on a grander scale, and surely these homes must house *our* most happy people. —The Editors.

The architect-owner of this home in Del Mar obviously loves his native sandstone and heavy stands of eucalyptus, Torrey pine and Monterey cypress trees. He has built in and around them on a hillside slope



THE JONES RESIDENCE

Douglas Simmonds photos



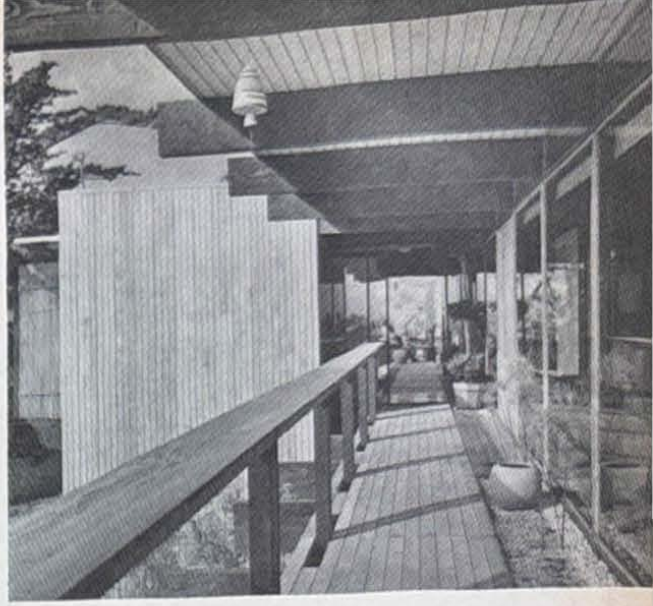
that drops 25 ft. from front to back and looks down a valley towards the Pacific Ocean.

From Northern California he has brought the native redwood for his major shelter material, and with a little concrete and a lot of glass he has blended his home with nature.

The home was designed to give maximum psychological space with a minimum of enclosed space, bringing the natural landscape into the design. The orientation of the site evolved from the location of existing trees and utilization of existing contours of land to dramatize the view. Portions of the house that do not directly rest upon the ground are suspended above it so as to let the space created by Nature flow under the structure.

Sufficient in its present state, the plan still allows for three important future expansions. The family living area may be expanded as the children grow to teen age and need an entertainment area of their own. Another thought for the future is the addition of a dining room for more formal dining, and conversion of the present dining area to a music room and bar. A studio guest room may be added beneath the living room, with access separate from the rest of the house.

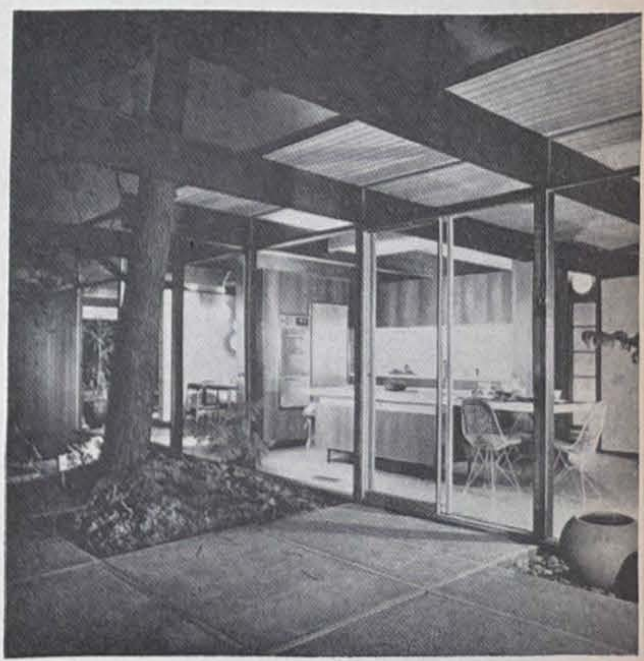
San Diego architects selected this home for a well deserved Award of Excellence in the 1962 contest of the local AIA chapter.



Redwood out and redwood in



Kitchen work space and eating island, lower than most.



GENERAL SPECIFICATIONS

Structure: frame, half on reinforced concrete slab, half over posts on concrete pads; 4x16 timber floor beams; 4x12 timber roof beams, 6 ft. o.c.

Exterior Finish: redwood vertical siding, 1x12 in. with special milling.

Roof Surfacing: 2x12 in. Cabotized cedar, with ½-in. glass fiber insulation and composition.

Patio Surfaces and Walks: Redwood decks and concrete with exposed aggregate.

Interior Finish: gypsum board and redwood walls; 2x12 t&g cedar ceiling; vinyl cork flooring; walnut plywood cabinetry; laminate plastic self-edged counter tops.

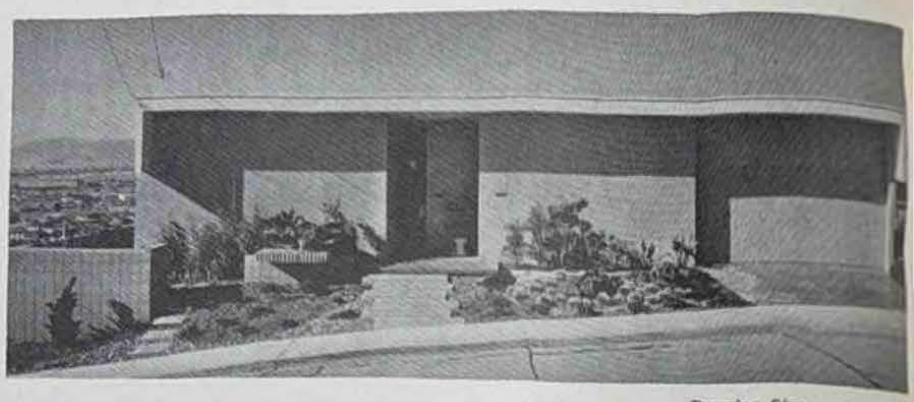
Heating: Lennox perimeter forced air.

Misc.: Trimview sliding glass doors; Grid-block fireplace.

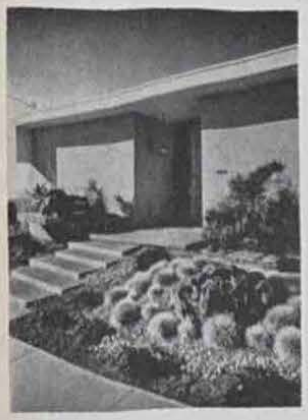
Total Area: 1,600 sq. ft.

Date of Completion: 1961.

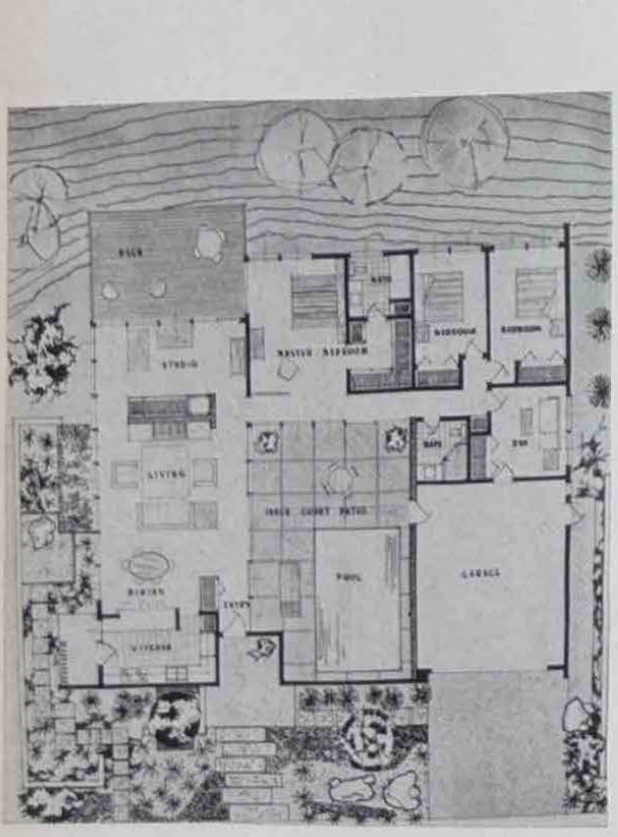
RICHARD GEORGE WHEELER RESIDENCE, *San Diego/Richard George Wheeler, AIA,* architect/*Henry L. Wheeler,* contractor.



Douglas Simmonds photos



"PRIVATE WORLD" OPENS TO AN OCEAN VIEW



As San Diegans seek view and breeze there is such a scramble for hillside lots that every potential cranny is utilized and expansive ideas about the amount of land required for a suitable home tend to contract.

Here we find an impressive home with swimming pool, unobstructed view and total privacy on a hillside of uncompacted fill just 70x100 ft. surrounded by neighbors. These factors in one package hardly seem compatible without closer inspection.

An atrium-type plan achieved the desired results, featuring a central living court with swimming pool surrounded by three bedrooms, two bathrooms, kitchen, dining-living area and studio, and a two-car garage. As a bonus: two maintenance-free outdoor living areas and a roofed view deck. And complete privacy without a great sense of enclosure.

The front elevation is entirely without windows, presenting a sophisticated town house facade to the street—this heightened by a dramatic front entry having a 11-ft. door.

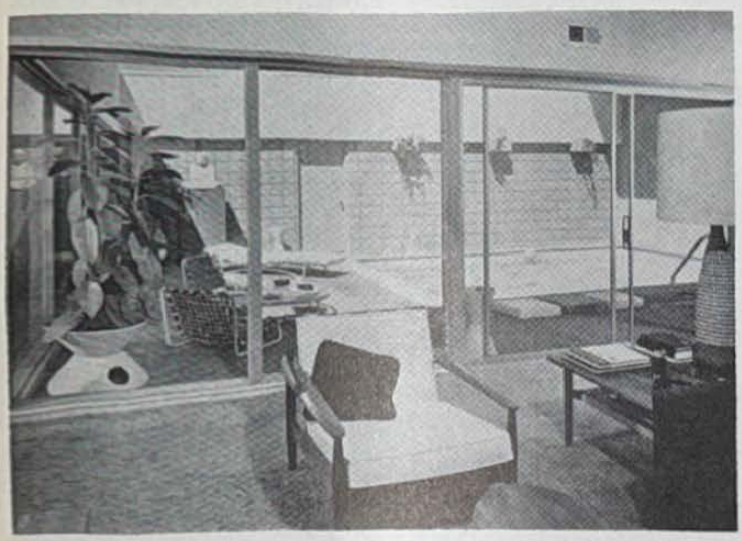
Yet immediately inside there is a startling transition to an impact of openness and distance, with the atrium pool court to the right and a wide expanse of glass walls extending all around the house to give uninterrupted views up and down the San Diego coastline.

The sense of spaciousness is made possible by an

open-plan interior in the living area, with glass for some partitions and only a free-standing block fireplace separating the living room from the studio. On one side of the house a long and narrow garden held in at the perimeter of the lot by a low concrete block wall is a delightful visual experience through the floor to ceiling glass wall. The garden is of low maintenance materials selected for variety and texture—white sand, blue Mexican beach pebbles, volcanic rock and planting, the work of Fred Aker, landscape architect.

Privacy, on the other hand, is accrued through the screening wall on one side, the garage beside the pool, and by a completely roofed over, broad rear view deck cantilevered high out over the sloping hillside.

As for the more utilitarian aspect: A rather undesirable uncompacted fill area was utilized by sinking ten 2-ft. diameter reinforced concrete columns through the fill and building on an integrated concrete grade beam foundation and floor. Frame and stucco materials were used to keep the dead load to a minimum.



Atrium-type inner pool is accessible through sliding doors from living room and bedroom.

Across the dining and living area to downtown San Diego and the sea, from within a private world.



GENERAL SPECIFICATIONS

Structure: integrated concrete grade beam foundation and floor on 2 ft. diameter concrete piles in uncompacted fill, frame superstructure with wood joist flat roof.

Exterior Finish: stucco and glass walls. Some concrete block, redwood decking.

Roof Surfacing: composition over glass fiber insulation over wood planking.

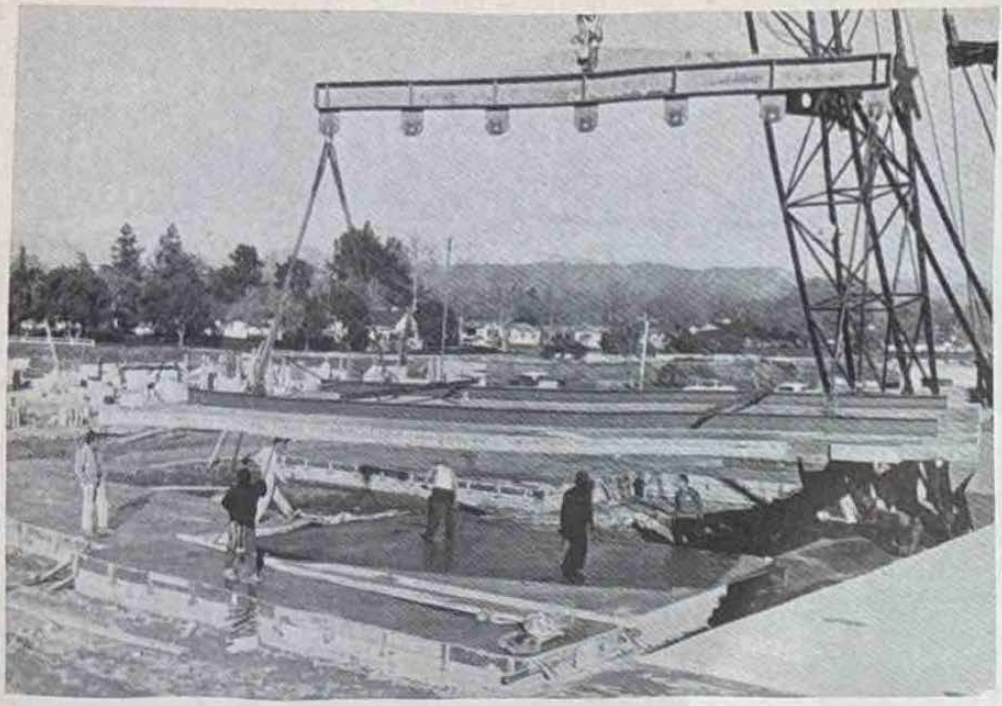
Interior Finish: plastered walls and ceilings, carpeted floors. Floor-to-ceiling glass walls stopped in wood; aluminum sliding glass doors; block fireplace wall.

Total Area: 1,700 sq. ft.

Total Cost: $29,000.

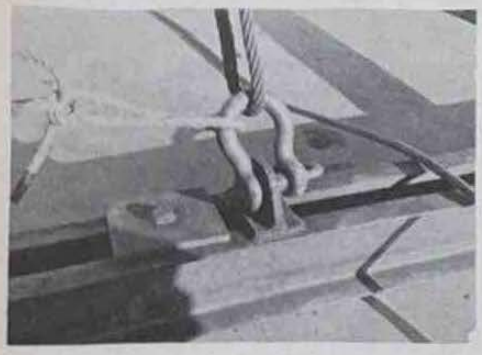
Date of Completion: 1961.

Precast floor slabs speed California hotel project



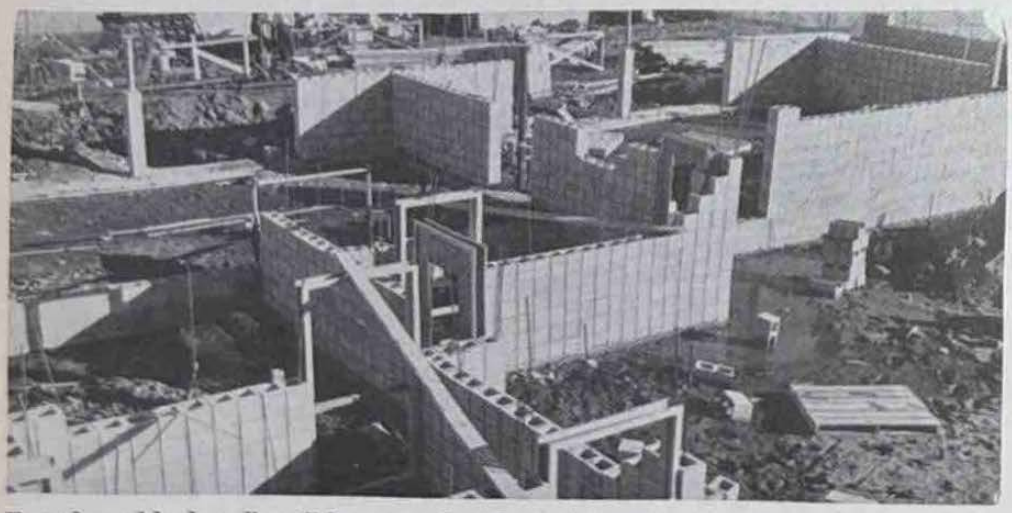
Slabs are poured and cured sandwich style with bond breaker between, as in lift-slab operation; are picked up one at time and placed by crane, as in tilt-up.

Strongback rails are bolted to slab.



Eye, lift line and guide line are ready to maneuver during pickup and placing.





Four-hour block walls will be topped with mortar bed to receive precast floor slabs.

ALL-CONCRETE BLOCK HOTEL that combines lift-slab and tilt-up techniques is now under construction in North Hollywood, Calif.

The Sportsmen's Lodge Hotel, being built adjacent to the famous restaurant of the same name, will be the largest in the San Fernando Valley, with 200 guest rooms in the 100,000-sq. ft. structure.

The concrete blocks were made to the specifications developed by structural engineers Mackintosh & Mackintosh and produced by Fred-Lite Block Co. Subjected to strenuous tests for shrinkage, tension and compression, they are four-hour blocks approved by the Concrete Masonry Association under its new quality control program.

Flooring is of precast concrete reinforced with steel. The slabs average 5 in. in thickness, 14 ft. in width, 30½ ft. in length and weigh an average of 8½ tons. There will be 223 such slabs used in the construction of the hotel.

The operation calls for the slabs to be formed in precasting boxes on the ground, one slab beneath the other. Each is separated only by a thin film of special material. The bond breaker is laid first, then the outer edge is formed. Inserts, such as outlets or openings for utilities, are positioned for each slab pouring.

Next, steel is placed in position and six pickup points for the attachment to cranes are set while concrete is poured and finished. Meanwhile, a shoring system has been prepared to receive the slab. This system remains in place until the bond beam on each side wall and the mortar bed which bonds the slab to the wall are prepared.

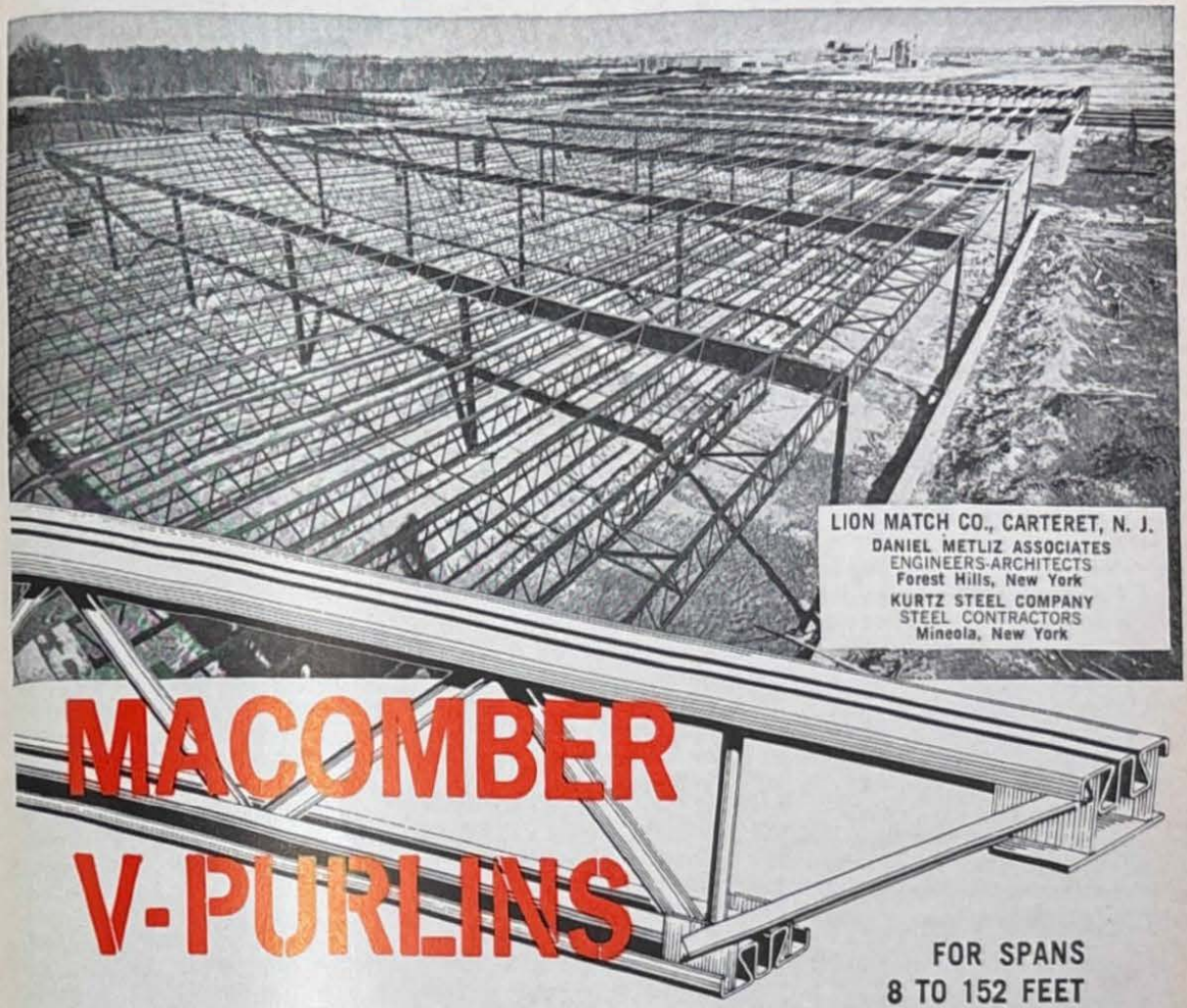
The slab is then set in place. It bears on all four concrete block walls, three of which are reinforced with steel, a normal arrangement in concrete block construction. Slabs are actually cantilevered from one exterior wall to provide patio decks for each room.

Since all slabs are precast, they are ready to be set as soon as side walls are completed at each level, enabling the completion of a floor every two weeks.

Use of the precast slab flooring system is believed to be the first time such a technique has been employed in a five-story, all-concrete building without structural columns or other interior framework.

Cap Gaspare, manager of western operations for Chuckrow Construction Co., teamed up with the structural engineers in developing the building method.

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prefab fountains

Decorative fountains can be inexpensive. Jabon Studios has developed a line of prefabricated reflection pools, fountains and waterfalls made of a combination of fiberglass and natural crushed stone. The fountains require only the addition of water plus an electrical outlet for its recirculation and special lighting effects. Simple pedestal shapes and sculptured wall fountains are available.—Jabon Studios, 14847 Bessemer St., Van Nuys, Calif. (No. 1)

woven metal grills

Architects can specify spacing, width of metal strips and color of Kurtzon woven metal grills. The finished product is the same on both sides and can be used as a room divider. Since spacing can be varied, the grills can also be used for air flow and ventilation. The color and woven texture are more pleasing than conventional punched or stamped grills. — Morris Kurtzon, Inc., 1420-30 S. Talman, Chicago 8, Ill. (No. 2)

post and panel partitions

No tools are needed to assemble a new line of office partitions, the manufacturer reports. The movable partitions feature precut panels and posts that are attached by a speed latch. Speed latches are completely concealed by assembly, and do not require installation of batten strips over the joints to hide unsightly hardware. Each aluminum post has screw holes drilled on all four sides to permit universal use at corners or intersections. Unused holes are capped with plastic plugs which may be removed when required. The bottom of each post is fitted with a rubber-footed jack screw to compensate for uneven floor conditions. Panel finishes include a prefinished sandalwood hardboard, painted Masonite, Marlite in pastel shades or wood grains, and vinyl fabrics.—Movable Walls Corp., P. O. Box 248, Covina, Calif. (No. 3)

plastic piping

Plastics may eventually replace metal pipelines in homes and commercial and public buildings. Experimental installations, designed to demonstrate advantages of rigid plastic components, are being made in key cities to convince code bodies that it's time to modernize their regulations. Plastic piping weighs one-third to one-tenth as much as its metal counterparts, can be cut with a hand saw and joined with liquid cement. The vinyl material won't conduct electricity or support combustion; its smooth internal surfaces lessen the possibility of clogging; it has low thermal conductivity that minimizes heat loss and sweating pipes. Tube Turns Plastic, Inc., Louisville 11, Ky. (No. 4)

tile-like coating

Designed to serve many of the uses of ceramic tile, Aroflint forms a plastic film that adheres to concrete, plaster, metal, wood, plastic, wallboard and other surfaces. Long-lasting and economical, it is especially recommended for hard-use areas of public buildings. The coating is a two-component system mixed in equal parts at the time of application. It can be sprayed, rolled or brushed on.—Archer Daniels Midland Co., 733 Marquette Ave., Minneapolis 40, Minn. (No. 5)

automatic monitor

An automatic monitoring system designed for nursing homes and senior citizen retirement center is offered by DuKane. Preselected rooms are monitored individually and automatically on a predetermined time cycle. The monitoring system may be interrupted at any time by incoming calls. Patients may use the system to call for information or service by pressing a call cord button which activates the corridor light, registers an audible signal and lights and annunciator light at the master station. The system can also be used to provide emergency, security or warning systems or transmit music.—DuKane Corp., St. Charles, Ill. (No. 6)

no-backup paneling

Custom-thickness Craftwall is a 7/16-in. thick prefinished hardwood paneling, priced to compare with other hardwoods only ¼-in. thick. The new paneling is said to eliminate the need for costly backing or furring strips, adds insulation value and reduces sound transmission. Offered in elm, oak, cherry, mahogany, birch, maple and walnut, plus color tones of sherwood oak, pastel cherry, silver birch and white oak, Craftwall is available in lengths to 10 ft., and in random V-grooved, V-grooved, cross-scored and pegged styles. — Weyerhaeuser Co., Tacoma, Wash. (No. 7)

ventilating tile

Acoustical tile can do more than cover the ceiling and cut down noise. Lo-Tone tile will also permit air distribution, changing the air in a room from five up to 40 times per hour. The tile is applied like a conventional concealed suspension system, using the same components. The only major change in application is the sealing and insulation of the plenum area. Three patterns are available—fissured, random drilled and micro-perforated Constellation.—Wood Conversion Co., First National Bank Bldg., St. Paul 1, Minn. (No. 8)

rainbow louvers

Fern green, teal and viking blues, desert tan and mandarin orange are among twelve colors, ranging from white to gloss black, in which aluminum door louvers may be supplied. The manufacturer will also match colors on request. The line includes special soundproof, lightproof and sightproof units, and various blade and frame styles and a range of louver depths are also made available.—Construction Specialties, Inc., 55 Winans Ave., Cranford, N.J. (No. 9)

screened balcony walls

Open balcony apartment buildings tend to take on a cluttered, busy look, reflecting the varied furnishing tastes and living patterns of individual tenants. Architects can help maintain a total facade design and the original relation of the balcony areas to other design elements by specifying Fiber-

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glas screening. Applied in aluminum frame panels, the screen permits those in the shaded area to see outside clearly, yet shields the balcony from outside view. Fiberglas screening is composed of fibers of pure glass coated with weather-resistant vinyl to form colored yarns, which are then woven into screen cloth. Color range includes pastels, neutrals, and metallic finishes.—Owens Corning Fiberglas Corp., National Bank Bldg., Toledo, Ohio. (No. 10)

private telephone exchange

Designed for private telephone systems in schools, hospitals, offices or wherever internal systems are needed, the Kelex 2000 is the forerunner of a family of electronic switchboards that will include private automatic branch exchanges and community dial offices. The transistorized system has no moving parts, gears or contact points. Convenience services of the system include direct paging, automatic paging, and conference circuits. Call forwarding (automatic transfer of incoming calls to another telephone in the system) is under development and will be available next year.—International Telephone and Telegraph Corp., 320 Park Ave., New York 22, N. Y. (No. 11)

safe night light

A new aluminum outdoor bracket light can provide up to 200 watts of widespread light distribution with a low bright, asymmetric prismatic pyrex glass refractor. The light is recommended where efficient illumination of entrances, walkways, driveways and parking areas is desired. An optional cast aluminum guard can be provided in areas where fixtures may be subjected to mechanical abuse and vandalism.—mcPhilben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y. (No. 12)

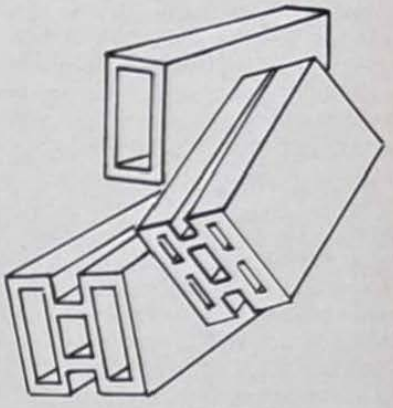
problem-solving plastic

A new reinforced plastic called eXtren, light in weight but strong, hard and corrosion resistant, can be formed in any extruded shape. The manufacturer has produced double wall sections and introduced foam and reinforcing members in the same operation. Sandwich roof sections, double-wall exterior siding, tongue-and-groove sandwich flooring sections and load-bearing interior wall panels in a wide selection of colors will be available soon. — Universal Moulded Fiber Glass Corp., Bristol, Va. (No. 13)

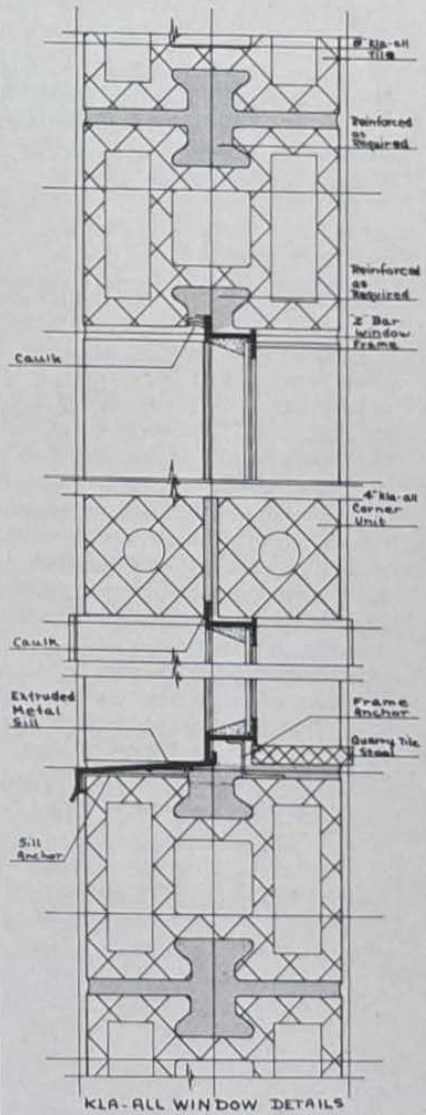
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LITERATURE

Liquid Foils: discusses general physical and chemical properties of colorful elastomeric plastics in fluid form, especially suitable for roofing on concrete decks; 16 pp.—Permalume Plastics Corp., 2000 E. Columbia Way, Vancouver, Wash.

Rolling Doors (AIA 16-D): indexes rolling doors, grills, fire doors, counter shutters, bi-fold doors, all of aluminum or steel; 36 pp.—Kinnear Manufacturing Co., 1742 Yosemite Ave., San Francisco 24, Calif.

Weatherstripping (AIA 35P-6): covers methods of soundproofing, light-proofing and weatherstripping; 24 pp.—Pemko Manufacturing Co., 5755 Landregan St., Emeryville, Calif.

Concrete for Stadiums, Auditoriums: relates solutions to concreting problems encountered here and abroad, including case histories of jobs at the Orange Bowl and Rose Bowl; 20 pp.—Master Builders Co., Cleveland 18, Ohio.

Shingle Manual: revises standards of application of asbestos-cement shingles; 12 pp.—Asbestos-Cement Products Association, 509 Madison Ave., New York 22, N.Y.

Exterior Siding: describes washable, pastel asbestos-cement panels that need no painting, no nail holes to drill; 12 pp.—Pabco Roofing Division, Fibreboard Paper Products Corp., 475 Brannan St., San Francisco, Calif.

Vandal-Proof Comfort Stations: illustrates prefabricated, maintenance-free rest rooms for parks, camp sites, swimming pools, beaches (some models include showers); 10 pp. Super Secur Comfort Stations, Box 1026, Burlingame, Calif.

General Lighting Design: contains basic information about the "lumen" method of lighting design; recommends illumination for various tasks; 16 pp.—General Electric, Nela Park, Cleveland 12, Ohio.

Doors and Frames (AIA 16-A): lists commercial standards for steel doors and frames, gives proposed American standard nomenclature and includes literature from cooperating manufacturers. — Steel Door Institute, 2130 Keith Bldg., Cleveland 15, Ohio.

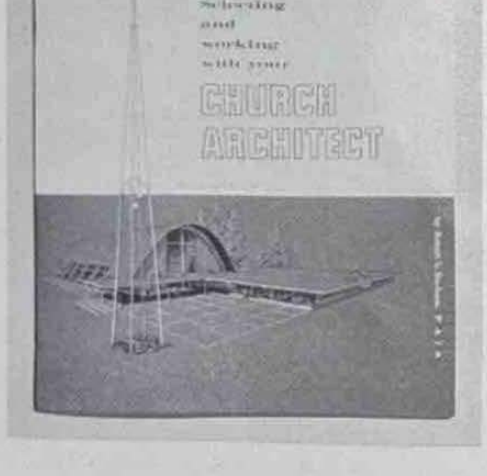
School Lighting: devotes special sections to lighting of classrooms, sports areas, corridors, etc.; presents solutions to problems of lighting for television viewing, audio-visual activities; 16 pp.—General Electric Co., Nela Park, Cleveland 12, Ohio.

Plywood Rigid Frame Design (AIA 19-F): includes 770 practical rigid frame design combinations, vertical and slant leg shapes; also covers planning considerations, layout and fabrication, wind and snow load charts; has many sketches, charts, photographs; 72 pp.—Douglas Fir Plywood Association, 1119 A St., Tacoma 2, Wash.

Aluminum Prime Windows: presents the revised specifications issued by AAMA; 36 pp.—Architectural Aluminum Manufacturers Association, 35 E. Wacker Drive, Chicago, Ill.

pick of the month

"Selecting and Working with your Church Architect" has been written by Seattle's Robert L. Durham to assist lay building committees of all denominations in their church building programs. The brochure discusses the responsibility of the architect as counselor, artist, planner, etc., and suggests how the church committee should investigate an architect and judge his work. Explanations of stages in construction such as preparing the master plan, preliminary drawings, working drawings, selection of contractor and supervision of construction are helpful to the inexperienced church committee and useful to the architect who wants to replace confusion with cooperation.—14 pp.—Weyerhaeuser Co., Tacoma Bldg., Tacoma 1, Wash.



Controlled Air Entrance: spells out advantages and cost savings possible with revolving doors, with 10 graphs showing effects of traffic, temperature and building height; 54 pp.—International Steel Co., Evansville 7, Ind.

Furniture Guide: illustrates in 84 photographs the Knoll contemporary collection, including Saarinen table and pedestal chairs, Schultz' petal tables with scaled line drawings of individual pieces; 35 pp.;—Knoll Associates Inc., 320 Park Ave., New York, N.Y.

Hydromechanics Handbook: catalogs mechanical piping systems, including drains, valves, and hydrants; 164 pp.—Hydromechanics Division, Zurn Industries, Inc., Erie, Pa.

Entrance Manual (AIA 16-E): describes the latest in entrance packages utilizing swinging or sliding doors, gives complete specifications, test information, detail drawings; 28 pp.—Kawneer Co., Niles, Mich.

M-Floors and Cellular Sub-Floors (AIA 17-A): covers steel cellular sections that provide electrical availability in every square foot of floor, includes load tables, installation procedures; 16 pp.—R. C. Mahon Co., Detroit 34, Mich.

Insulating Board (AIA 37-B): contains color photos, specifications, illustrations on structural insulating board roof insulation and acoustical insulating roof deck; 12 pp.—Simpson Timber Co., Washington Bldg., Seattle 1, Wash.

Industrial Fixtures: displays line incorporating the Power Groove lamp which uses parabolic reflectors for light control; shows surface-mounted, recessed, and pendant-mounted lights; 10 pp. — Solar Light Manufacturing Co., 1990 N. Mannheim Road, Melrose Park, Ill.

Movable Partitions (AIA 35H-6): pictures installations and furnishes specifications for custom and standard partition designs, with information on hardware, electrical wiring, and sound control; 32 pp. Aetna Steel Products Corp., 730 Fifth Ave., New York 19, N.Y.

Aluminum Sliding Glass Doors (AIA 16-E): contains the industry's first specifications; covers general requirements, specific residential and commercial applications and hurricane specifications; 16 pp. — Architectural Aluminum Manufacturers, Association, 35 E. Wacker Drive, Chicago, Ill.

LITERATURE

Classroom Comfort Conditioning: presents colorful line of American-Standard unit ventilators for schools; matching cabinets and furniture also available; 12 pp.—American Radiator & Standard Sanitary Corp., 40 W. 40th St., New York 18, N.Y.

Elastic Roof Flashing: describes Nervastral 600 flexible flashing sheet; lists test data, typical installation; 4 pp.—Rubber & Plastics Compound Co., Inc., Time & Life Bldg., Rockefeller Center, New York 20, N. Y.

Evaporative Condensers: features tabulated "Selec-Tables" for speedy selection of condensers, 5 to 130-ton capacity; includes cutaway exposures, photos, typical specifications; 12 pp.—Drayer-Hanson, Division of Hi-Press Air Conditioning of America, Inc., 3301 Medford St., Los Angeles 63, Calif.

AC Switches: discusses and explains the design, construction, operation and application of alternating current switches; illustrated with diagrammatic charts; 12 pp.—Harvey Hubbel, Inc., Bridgeport, Conn.

Hardwood Plywood: features close-up color photos of Lustre-Sheen smooth furniture and cabinet plywood line; 8 pp.—Evans Products Co., 1029 S.W. Alder St., Portland 5, Ore.

Freedom from Distraction: provides concise report on the new ASTM acoustical standard and can serve as a guide for effective acoustical performance specifications; 8 pp. (accompanying recording explains how sound transmission loss is measured and reported)—Hough Mfg. Corp., Janesville, Wisc.

Gravel Stops: shows how to add glamour to gravel stops, using C/S Econostop in three anodized finishes, 12 different color coatings; 4 pp.—Construction Specialties, Inc., 55 Winans Ave., Cranford, N.J.

Air Diffusers: offers complete diffuser selection and performance information; illustrated chart describes 15 different air distribution patterns obtainable with KS Series diffusers; 24 pp.—Connor Engineering Corp., Danbury, Conn.

Powder-Driven Fasteners (AIA 17-F): explains advantages of Ramset austempered fasteners; applications are diagrammed, photos of complete installations shown; 12 pp. — Ramset, Winchester-Western Division of Olin, New Haven 4, Conn.

Polarizing Panels: describes polarization, recommended uses and benefits of polarized light; includes photometric data on the 45 polarizing panel; 8 pp.—Day-Brite, Lighting, Inc., 6261 N. Broadway, St. Louis 15, Mo.

Perforated Metal: suggests applications and shows commercial and decorative designs in perforated steel and aluminum; specifications and ordering information included; 20 pp.—National-Standard Co., Niles, Mich.

Residential Recessed Lighting: (AIA 31-F): presents a collection of fixtures in full color (show your client how it will look); 12 pp.—Marvin Electric Mfg. Co., 6100 S. Wilmington Ave., Los Angeles 1, Calif.

Prefab Stairs: illustrates with photos and diagrams Stairbuilder's line of one-piece, prefab steel stair forms for concrete or terrazzo stairs; examples of installed units are also shown; 12 pp.—Stairbuilders, Route 66, McCook, Ill.

Pressure-Treated Wood: covers wood destroyers, remedial action, materials, treatments, specifications; an architect's guide, written to establish best uses for wood in locations normally vulnerable to deterioration; 8 pp.—Western Wood Preserving Operators Association, 1410 S.W. Morrison St., Portland 5, Ore.

Roofing Specifications & Data (AIA 12-A-31): cover standard, standing seam, bermuda seam, flat-locked seam, ribbed or batten construction, for seamless Terne roofing; shows step-by-step directions for installation; 12 pp.—Follansbee Steel Corp., Follansbee, W. Va.

BOOKS

Wood in Architecture. By Finn Monies. F. W. Dodge Corp., 119 W. 40th St., New York 18, N.Y. 1961. 111 pp. $6.95.

Newly translated book's first concern is the esthetic possibilities inherent in wood construction, with over 100 illustrations of Danish architecture.

Materials for Architecture. By Caleb Hornbostel. Reinhold, 430 Park Ave., New York 22, N.Y. 1961. 624 pp. $20.

Encyclopedic format for reference by architects, engineers, contractors. Covers major, minor and accessory materials, giving standards, physical and mechanical properties, recommended applications; discusses fabricated forms of materials, construction processes, finishing processes.

Plastic and Elastic Design of Slabs and Plates. By R. H. Wood. Ronald Press Co., 15 E. 26th St., New York 10, N.Y. 1961. 344 pp. $12.

Reflects major developments in ultimate load theories, based on the idealized theory of perfectly plastic structures.

Moment Distribution. By Edgar Lightfoot. John Wiley & Son, Inc., 440 Park Ave. S., New York 16, N.Y. 1961. 363 pp. $11.

An up-to-date treatment of this special method for the analysis of rigid-jointed structures, practical in approach.

Construction Estimates from Take-off to Bid. By Norman Foster. F. W. Dodge Corp., 119 W. 40th St., New York 18, N.Y. 1961. 246 pp. $11.75.

Devoted to the daily work of the construction estimator, this volume shows the step-by-step procedures to be followed in developing an accurate estimate; presents the fundamentals of taking-off, pricing and putting together a general contractor's bid.

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MANUFACTURERS/SUPPLIERS

• **Weyerhaeuser Co.:** The wood products firm has moved its Rocky Mountain area sales and service office to Denver and named R. H. Southwood to a newly created position of sales-service supervisor there.

• **United States Gypsum Co.:** New Seattle district sales manager is Morley R. Turner.

• **Anadite, Inc.:** Fade-resistant decorator color in aluminum architectural products are due for national marketing under an agreement recently signed between Northrop Architectural Systems and the South Gate, Calif., firm, developer of the color process.

• **Concrete Tie:** Jack Williams has returned to Southern California to assist in the introduction of new products, such as Debondene, for the Los Angeles-based firm.

• **Shalda Manufacturing Co., Inc.:** William H. H. Reeder has been named sales manager of the Burbank manufacturer of outdoor lighting equipment.

• **Basalt Rock Co., Inc.:** Flexicore precast, prestressed concrete floor and roof elements, made with Basalt's expanded shale aggregate, are now being manufactured in the West and marketed in central and northern California.

• **Marvin Electric Manufacturing Co.:** A new 100,000-sq. ft. production and office facility for the manufacture of recessed lighting equipment has been completed.

• **Kimball Manufacturing Corp.:** A new company, Kalwall-Pacific Corp., will manufacture and sell translucent wall and skylight units, operating as a division of the San Rafael, Calif., firm.

• **B. B. Chemical Co.:** Frank E. Connell & Son, Inc., San Francisco, has been named distributor-applicator for a new masonry facade coating for the northern half of California, as far south as Fresno.

• **Marvin Electric Mfg. Co.:** New advertising and merchandising director for the Los Angeles company is Ruben J. Lomeli.

• **Producer's Council, Hawaii Chapter:** New president is Clinton Hallsted, Honolulu Wood Treating Co.; vice president, Fred Barron, Hawaii Builders Supply Co., Ltd.; secretary, John Sommer, Owens-Corning Fiberglas Corp.; treasurer, John Lowsen, Aloha State Sales Co., Inc.

• **Movable Walls Corp.:** The Covina manufacturer has appointed Lee J. Etzkorn assistant sales manager as part of a major program for national expansion of distribution.

• **Riverside Cement Co.:** Charles H. Hobson has joined the firm as a consulting architect assigned to promoting the use of white cement, white concrete and related products in architectural design and expression.

• **Armco Steel Corp.:** The Middletown, Ohio, firm has announced the appointment of Frank R. Ditmars as Los Angeles district sales manager.

• **Pomona Tile Mfg. Co.:** Keith George has been appointed division manager of the Salt Lake City branch and warehouse, replacing C. C. Featherstone who recently retired from the position after many years with the company.

• **Robertshaw-Fulton Controls Co.:** William L. Stuewe has joined the company as manager of the mountain region office. He will headquarter in Salt Lake City, serving the territory of Utah, Montana, Idaho, Wyoming and Nevada, and will handle marketing and contracting arrangements for the company's line of comfort control systems.

• **Hawaiian Cement Corp.:** James P. Giles, president of American Cement Corp., has been elected chairman of the board. Howard Starke succeeds Walter C. Russell, who has retired, as president of the firm.

• **Vancouver Plywood Co.:** James E. Sullivan has been named manager of the firm's sales force serving the Southern area of the United States.

• **Scaffolds and Equipment, Inc.:** A new Seattle distributor headed by K. L. Hazelton, a former Beatty Safway and American Pecco man, will serve Washington, Oregon, Idaho and Alaska. Major line will be scaffolds and materials handling cranes manufactured by David F. Beatty in San Francisco, as well as shoring, grandstands, stages and specialty equipment.

• **Knoll Associates, Inc.:** A newly created position of Western divisional salesmanager will be filled by Robert B. Cadwallader. He will head the new Western sales division of the New York firm, encompassing the nine far western states.

• **Design Carpets:** The San Francisco firm, a division of Design Distributor Corp., has added John Dodd and Douglas Emerson to its sales staff. The company sells custom carpeting to decorators, designers and architects.

• **General Electric:** The Silicone Products Department has announced that Lysander T. Ashlock will be its sales representative in Downey, California.

ASSOCIATIONS

• **Consulting Engineers Association of Washington:** Charles R. Lyon was installed as president; Joseph LaMont, Jr.; vice president; Norman G. Jacobson, Jr., secretary; and Allen E. Hill, treasurer. Peter H. Hostmark, whose firm did the structural design for the Coliseum at the World's Fair, was named consulting engineer of the year.

• **Association of Women in Architecture:** new president of the Los Angeles chapter is Barbara M. Elwood; vice-president, Ann Warren; recording secretary, Emilie White; corresponding secretary, Jane Yamamoto; treasurer, Margot Spencer.

FILMS

Better Lath and Plaster Performance. Gypsum Association, 201 North Wells Ct., Chicago 6, Ill. Sound-slide, 25 min.

Provides the designer with information that will permit him to predict the ultimate performance of lathing and plastering systems with a much higher degree of accuracy. The film shows relative performance of different combinations of lath and plaster and give specific recommendations for plastering.

A is for Architecture. International Film Bureau Inc., 332 South Michigan Ave., Chicago 4, Ill. Color, 30 min.

Illustrates the story of man's urge to perpetuate in stone and metal the pride and spirit of his day. The film reveals changing concepts in architecture from ancient temples on the Nile to the towering skyscrapers of today and shows how they reflect the values of each age.

Building Permit Totals fo

First Column Figures in Parentheses are Number of Residential Units • Second Column is Dollar

	# Res.	$ Value	Total $
CALIFORNIA			
Alameda	(13)	$ 136,900	$ 256,233
Alameda Co.	(227)	1,955,150	2,962,888
Albany	(8)	67,794	129,248
Alhambra	(54)	453,950	3,444,985
Anaheim	(244)	4,483,650	8,162,565
Antioch	(41)	355,770	378,152
Arcadia	(6)	148,445	319,019
Arroyo Grande	(29)	440,478	444,398
Artesia	(80)	1,133,500	1,147,100
Atherton	(2)	215,000	365,457
Atwater	(39)	167,800	205,232
Auburn	(1)	15,000	34,960
Avalon	( )	Nil	8,000
Azusa	(8)	65,900	176,935
Bakersfield	(62)	768,800	1,202,670
Baldwin Park	(25)	261,200	308,540
Banning	(11)	140,806	312,268
Barstow	(5)	34,500	67,634
Bell	(8)	56,274	85,554
Bellflower	(72)	494,000	596,340
Bell Gardens	(33)	249,950	307,945
Belmont	(8)	165,750	341,815
Benicia	( )	Nil	8,048
Berkeley	(4)	75,200	2,095,502
Beverly Hills	(25)	484,000	3,582,281
Bradbury	(1)	27,000	32,254
Brawley	(5)	30,000	85,270
Brea	(5)	99,701	157,974
Buena Park	(3)	28,068	191,149
Burbank	(100)	628,978	1,437,325
Burlingame	(3)	68,000	1,338,416
Butte Co.	(133)	1,093,280	1,225,380
Calexico	(1)	11,500	61,750
Campbell	(127)	1,635,726	1,783,787
Carlsbad	(6)	105,770	192,070
Carmel	(5)	96,200	118,180
Chico	(25)	315,119	341,869
Chino	(5)	71,735	131,716
Chula Vista	(101)	989,200	1,260,110
Claremont	(69)	1,083,900	1,120,770
Coalinga	(7)	81,750	85,650
Colton	(2)	13,652	102,354
Commerce	(3)	32,200	691,675
Compton	(7)	63,100	285,680
Concord	(120)	1,589,820	2,094,065
Cntra Csta Co.	(5)	86,768	512,746
Corona	(107)	1,042,496	1,069,456
Coronado	( )	No Reply	No Reply
Corte Madera	(5)	61,125	93,525
Costa Mesa	(113)	1,471,537	2,162,276
Covina	(51)	902,545	1,230,960
Cudahy	(18)	168,900	196,150
Culver City	( )	No Reply	No Reply
Dairy Valley	( )	Nil	12,060
Daly City	(26)	364,601	711,143
Davis	(10)	168,000	385,395
Delano	(5)	60,500	74,960
Downey	(67)	506,590	1,145,827
Duarte	(3)	62,500	251,725
El Cajon	(27)	334,000	598,200
El Centro	(6)	48,000	367,750
El Cerrito	(9)	151,810	194,471
El Dorado Co.	(100)	1,224,338	1,753,069
El Monte	( )	No Reply	No Reply
El Segundo	(3)	29,500	6,784,507
Emeryville	( )	Nil	70,314
Escondido	(6)	77,038	463,138
Eureka	(4)	45,000	220,879
Fairfield	(95)	934,415	966,320
Fillmore	(13)	131,072	156,372
Fontana	(18)	244,923	281,431
Fremont	(322)	4,353,523	13,743,513
Fresno	(149)	1,369,470	2,742,928
Fresno Co.	(50)	506,894	816,867
Fullerton	(176)	2,884,748	3,532,382
Glendale	(335)	3,063,081	3,688,487
Glendora	(13)	202,700	282,235
Half Moon Bay	(11)	150,000	150,000
Hanford	(1)	7,000	48,325
Hawthorne	(73)	601,800	1,445,545
Hayward	(123)	1,016,790	1,317,423
Hemet	(4)	56,200	191,855
Hermosa Bech	(10)	146,993	207,127
Hidden Hills	( )	Nil	8,950
Hillsborough	(6)	292,500	381,700
Holtville	( )	Nil	8,725
Humboldt Co.	(45)	847,934	989,712
Hntingtn Bech	(334)	4,458,380	5,754,591
Hntington Prk	(8)	74,820	181,765
Imperial Co	( )	Nil	11,200
Indio	(2)	24,300	207,120
Industry	( )	Nil	266,460
Inglewood	(24)	221,230	1,069,982
Irwindale	( )	Nil	110,150
Kern Co.	(111)	1,273,050	1,806,588
Laguna Beach	(15)	355,500	467,213
La Habra	(47)	420,702	678,847
Lakewood	(58)	792,600	993,450
La Mesa	(5)	107,930	170,416
La Mirada	( )	Nil	98,500
La Puente	(51)	811,600	1,093,505
La Verne	(2)	45,500	62,425
Lawndale	(13)	126,400	240,600
Lindsay	( )	Nil	4,400
Livermore	(29)	274,500	305,390
Lodi	(63)	635,570	1,181,665
Lompoc	(65)	618,949	678,397
Long Beach	(242)	1,665,825	4,956,744
Los Altos	(11)	264,000	582,989
Los Angeles	(2,125)	24,631,576	47,744,481
Ls Angls Co.	(1,408)	18,714,504	23,494,963
Los Gatos	(28)	519,500	856,910
Lynwood	(26)	132,500	528,307
Madera	(2)	25,000	259,357
Madera Co.	(16)	126,700	213,700
Mnhattn Bech	(11)	155,500	280,669
Manteca	(15)	145,500	187,021
Marin Co.	(149)	2,309,780	2,567,796
Martinez	(14)	140,816	3,075,660
Marysville	(2)	33,500	70,385
Maywood	(12)	77,380	120,715
Menlo Park	(9)	225,000	832,130
Merced	(4)	58,517	104,648
Merced Co.	(12)	160,095	270,414
Millbrae	(57)	1,183,500	1,405,050
Mill Valley	(8)	172,000	203,075
Modesto	( )	No Reply	No Reply
Monrovia	(19)	172,619	425,838
Montclair	(165)	1,418,500	1,453,860
Montebello	(96)	1,596,260	2,102,178
Monterey	(4)	77,000	252,400
Monterey Co.	(183)	2,606,275	3,532,542
Monterey Prk	(24)	303,050	553,470
Mountin View	(86)	1,122,774	1,665,846
Napa	(35)	643,159	1,021,816
Napa Co.	(24)	389,946	1,241,221
National City	(31)	136,923	200,345
Newport Bech	(107)	1,820,081	2,236,092
N. Sacramento	(28)	131,166	209,171
Norwalk	(96)	640,700	862,660
Novato	(23)	487,860	934,100
Oakdale	(3)	20,450	119,872
Oakland	(491)	4,315,592	9,726,703
Oceanside	(15)	160,000	375,243
Ojai	(2)	21,370	245,224
Ontario	(43)	376,592	458,578
Orange	(121)	1,969,030	3,057,361
Orange Co.	(258)	4,794,269	5,962,950
Oroville	(43)	235,000	435,245
Oxnard	(57)	518,644	1,051,580
Pacifica	(16)	179,300	304,210
Pacific Grove	(23)	360,000	829,654
Palm Springs	(11)	475,000	1,128,903
Palo Alto	(20)	285,255	1,417,783
Pls Vrds Estts	(16)	621,390	690,564
Paramount	(30)	265,400	716,350
Pasadena	(61)	794,329	1,482,095
Paso Robles	(2)	41,671	147,343
Pico Rivera	(90)	560,000	1,039,630
Piedmont	( )	Nil	75,016
Pinole	(8)	61,633	113,408
Pittsburg	(22)	271,030	345,599
Placentia	(70)	1,245,540	1,253,150
Placer Co.	(72)	1,003,012	1,881,121
Pleasanton	(3)	56,851	112,541
Pomona	(66)	632,348	910,299
Porterville	(1)	18,500	152,969
Prt Huneme	(123)	1,615,000	1,622,960
Red Bluff	( )	Nil	54,106
Redding	(5)	102,500	455,025
Redlands	(54)	769,050	916,092
Redondo Bech	(58)	486,800	2,328,000
Redwood City	(14)	195,380	562,976
Richmond	(142)	1,363,330	2,008,768
Riverside	(44)	664,950	1,673,755
Riverside Co.	(660)	6,603,253	7,931,531
Rolling Hills	(3)	116,000	159,280
Ring Hlls Estts	(5)	157,900	201,300
Rosemead	(5)	71,400	86,561
Roseville	(13)	139,145	377,755
Sacramento	(200)	2,077,300	4,390,600
Sacramnto Co.	(424)	6,168,219	9,529,467
St. Helena	( )	Nil	Nil
Salinas	(20)	247,500	654,081
Sn Bernardino	(55)	743,068	
Sn Brnrdn Co.	(388)	3,191,709	
San Bruno	(57)	723,900	
San Carlos	(12)	241,977	
San Clemente	(44)	812,501	
San Diego	(469)	5,404,542	
San Diego Co.	(266)	3,932,500	
San Dimas	(86)	982,500	
San Fernando	(14)	120,200	
San Francisco	(290)	4,267,155	
San Gabriel	(5)	53,150	
Sanger	(20)	214,060	
San Jacinto	(11)	93,000	
Sn Joaqin Co.	(49)	611,505	
San Jose	(594)	6,573,099	
San Leandro	(113)	880,020	
Sn Luis Obispo	(37)	476,299	
Sn Ls Obsp Co	(144)	1,721,169	
San Marino	( )	Nil	
San Mateo	(8)	136,000	
San Mateo Co.	(89)	1,483,900	
San Pablo	(50)	433,116	
San Rafael	(69)	703,353	
Santa Ana	(94)	940,018	
Santa Barbara	(38)	515,000	
Snta Brbra Co.	(100)	1,765,400	
Santa Clara	(392)	3,196,500	
Snta Clara Co.	(32)	631,700	
Santa Cruz	(20)	222,650	
Santa Cruz Co.	(128)	1,478,345	
Snta Fe Sprngs	( )	Nil	
Santa Maria	(185)	1,819,885	
Santa Monica	(158)	1,459,126	
Santa Paula	(3)	54,035	
Santa Rosa	(81)	847,112	
Sausalito	(6)	66,000	
Seal Beach	(8)	65,450	
Seaside	(26)	81,000	
Selma	(2)	22,750	
Shasta Co.	(46)	580,014	
Sierra Madre	(2)	41,500	
Solano Co.	(6)	70,579	
Sonoma Co.	(118)	1,231,174	
South Gate	(41)	248,525	
South El Mnte	(1)	8,200	
South Psadena	(4)	104,885	
S. Sn Francsco	(4)	45,150	
Stanislaus Co.	(35)	467,720	
Stockton	(81)	713,075	
Sunnyvale	(183)	2,817,500	
Temple City	(32)	364,600	
Torrance	(240)	2,221,735	
Tracy	(45)	397,000	
Tulare	(16)	114,100	
Tulare Co.	(75)	900,807	
Turlock	(1)	14,474	
Ukiah	( )	Nil	
Upland	(308)	3,026,000	
Vacaville	(64)	622,750	
Vallejo	(65)	547,000	
Ventura	(32)	512,500	
Ventura Co.	(437)	4,472,200	
Visalia	(10)	165,668	
Walnut	(92)	1,287,200	
Walnut Creek	(196)	784,170	
Wasco	(4)	29,500	
Watsonville	(4)	56,000	
West Covina	(6)	156,590	
Whittier	(27)	416,200	
Woodland	(18)	285,100	
Woodside	( )	Nil	
Yolo Co.	(31)	390,168	
Yreka	(3)	39,390	
Yuba City	(3)	49,000	
Yuba Co.	(48)	263,517	
Total	**(19,366)**	**$227,054,053**	**$394,394,594**
OREGON			
Albany	(4)	$ 63,720	$ 125,303
Ashland	(7)	84,500	99,250
Astoria	(1)	69,290	113,543
Baker	( )	Nil	11,850
Beaverton	(35)	439,620	480,560
Bend	(13)	148,500	347,629
Central Point	(4)	33,500	34,534
Clackamas Co.	(37)	492,408	656,905
Coos Bay	( )	Nil	37,561
Corvallis	(17)	215,000	633,734
Dallas	(3)	43,450	55,145
Douglas Co.	(5)	45,000	54,230
Eugene	(49)	488,880	946,230
Forest Grove	(6)	92,800	443,170
Grants Pass	(5)	90,000	160,570
Gresham	(4)	57,500	360,000

*Complete figures not available

Western States for July

Residential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hermiston	(4)	58,770	72,606
Hillsboro	(8)	123,300	158,925
Hood River	( )	Nil	8,770
Klamath Falls	(2)	33,060	68,710
La Grande	(3)	40,000	89,248
Lake Oswego	(17)	342,400	412,400
Lane Co.	(122)	1,271,424	1,413,483
Lebanon	( )	Nil	5,157
Marion Co.	(52)	612,540	930,771
McMinnville	(2)	25,000	57,669
Medford	(49)	359,000	678,139
Miltn-Freewtr	( )	Nil	2,976
Milwaukie	(30)	558,386	1,272,099
Multnomah Co.	(128)	2,019,644	3,010,829
Newberg	(1)	11,000	69,975
Newport	(2)	21,000	30,900
North Bend	(3)	33,695	1,305,915
Ontario	(6)	49,000	59,700
Oregon City	(5)	48,200	71,045
Oswego	(17)	342,400	412,400
Pendleton	(5)	40,000	974,000
Portland	(110)	1,228,480	5,729,600
Roseburg	(3)	37,302	55,584
St. Helens	(3)	33,500	503,930
Salem	(32)	286,338	1,516,830
Seaside	(1)	9,500	26,595
Springfield	(10)	82,568	366,114
The Dalles	( )	Nil	40,435
Washingtn Co.	(102)	1,808,450	5,551,059
Total	**(907)**	**$ 11,840,025**	**$ 29,449,010**
WASHINGTON			
Aberdeen	(2)	$ 30,560	$ 359,859
Anacortes	(1)	51,000	175,716
Auburn	(66)	670,800	771,350
Bellevue	(13)	242,400	1,048,370
Bellingham	(5)	59,500	234,301
Bremerton	(1)	25,000	122,340
Camas	( )	Nil	20,000
Centralia	(1)	10,000	46,660
Chehalis	( )	Nil	57,922
Clark Co.	(48)	613,700	829,650
Clarkston	( )	Nil	6,215
Edmonds	(16)	287,100	382,775
Ellensburg	(3)	44,500	80,829
Enumclaw	(1)	10,000	61,300
Ephrata	( )	Nil	6,720
Everett	(16)	234,150	404,061
Grys Hrbr Co.	(9)	96,050	108,130
Hoquiam	(1)	11,000	72,398
Island Co.	(27)	152,250	169,930
Kelso	( )	Nil	36,772
Kennewick	(7)	97,500	192,050
Kent	(6)	122,800	204,775
King Co.	(680)	9,136,905	13,164,665
Kirkland	( )	No Reply	No Reply
Longview	(5)	89,900	1,448,492
Lynnwood	(1)	11,000	94,265
Mercer Island	(22)	493,649	546,369
Moses Lake	(3)	35,980	126,368
Milke Terrace	(46)	490,090	544,689
Olympia	(9)	135,400	483,022
Pasco	(4)	53,150	101,464
Pierce Co.	(176)	1,840,633	2,215,547
Port Angeles	(4)	34,500	122,050
Pullman	(6)	67,526	267,069
Puyallup	(9)	109,100	122,445
Renton	(8)	103,571	824,518
Richland	(13)	249,400	357,992
Seattle	(347)	2,819,000	6,292,719
Shelton	(1)	11,500	90,100
Spokane	(24)	658,750	1,127,361
Spokane Co.	(34)	431,100	594,420
Sunnyside	(3)	49,500	56,150
Tacoma	(74)	983,400	1,774,690
Thurston Co.	(26)	118,800	203,427
Vancouver	(8)	135,917	374,180
Walla Walla	(3)	32,500	155,872
Walla Wlla Co.	(5)	56,000	227,835
Wenatchee	(1)	12,000	40,563
Yakima	(7)	99,500	182,833
Total	**(1,742)**	**$ 21,017,081**	**$ 36,931,228**
ALASKA			
Anchorage	(46)	$ 1,015,363	$ 5,091,199
Fairbanks	(8)	198,324	2,491,060
Juneau	(1)	35,000	112,200
Ketchikan	(2)	52,000	56,000
Total	**(57)**	**$ 1,300,687**	**$ 7,750,459**
IDAHO			
Alameda	(5)	$ 57,800	$ 348,215
Blackfoot	(3)	40,000	50,220
Boise	(17)	145,600	684,540
Burley	(3)	80,100	85,250
Caldwell	(8)	132,000	157,644
Coeur d'Alene	(4)	46,394	72,403
Idaho Falls	(23)	296,522	1,619,785
Jerome	( )	Nil	4,280
Lewiston	(5)	91,900	318,349
Moscow	(8)	125,400	135,850
Nampa	(4)	54,500	501,415
Payette	(1)	14,000	118,300
Pocatello	(3)	38,000	522,000
Sandpoint	( )	Nil	26,000
St. Maries	( )	Nil	Nil
Twin Falls	(11)	117,000	156,300
Total	**(95)**	**$ 1,239,216**	**$ 4,800,551**
MONTANA			
Anaconda	( )	$ Nil	$ Nil
Billings	(37)	507,800	669,822
Bozeman	(3)	66,000	228,050
Butte	( )	Nil	5,150
Cut Bank	( )	No Reply	No Reply
Glasgow	(1)	11,000	23,400
Glendive	(1)	22,000	25,740
Great Falls	(42)	412,526	539,155
Havre	(1)	17,000	31,875
Helena	(11)	175,650	291,643
Kalispell	( )	Nil	42,150
Lewistown	( )	Nil	2,500
Livingston	( )	Nil	6,000
Malta	( )	Nil	34,000
Miles City	( )	Nil	46,732
Missoula	(5)	103,880	776,096
Total	**(101)**	**$ 1,315,856**	**$ 2,722,313**
WYOMING			
Casper	(32)	$ 429,500	$ 692,575
Cheyenne	(13)	185,500	511,346
Cody	( )	Nil	6,250
Laramie	(9)	82,100	269,979
Rawlins	(3)	44,500	297,300
Riverton	(5)	56,000	78,400
Rock Springs	(2)	29,000	182,000
Sheridan	(1)	11,000	271,864
Total	**(65)**	**$ 837,600**	**$ 2,309,714**
COLORADO			
Adams Co.	(275)	$ 3,328,500	$ 3,891,005
Alamosa	(4)	38,800	69,400
Arapahoe Co.	(124)	2,394,900	5,273,673
Arvada	(63)	809,000	1,238,235
Aspen	(1)	22,500	164,400
Aurora	(106)	1,077,574	1,250,038
Boulder	(82)	836,700	1,989,669
Boulder Co.	(24)	253,900	2,064,940
Colrdo Springs	(103)	1,297,576	1,646,628
Cortez	( )	Nil	8,580
Denver	(192)	1,642,092	6,935,604
Durango	(3)	40,190	40,190
El Paso Co.	(61)	963,800	2,066,075
Englewood	(2)	27,000	231,085
Estes Park	(3)	25,100	27,400
Fort Collins	(26)	311,500	893,173
Fort Morgan	(3)	36,262	57,531
Golden	(5)	294,150	302,050
Grnd Junction	(1)	6,500	40,990
Greeley	(43)	466,218	629,217
Jefferson Co.	(264)	3,465,331	4,165,772
La Junta	(4)	78,700	87,555
Lamar	(4)	44,000	50,500
Littleton	(13)	211,485	335,065
Longmont	(43)	387,200	555,042
Loveland	(25)	278,680	312,405
Monte Vista	(1)	15,000	22,150
Montrose	(2)	28,500	69,006
Pitkin Co.	( )	No Reply	No Reply
Pueblo	(19)	203,463	539,700
Pueblo Co.	(22)	190,000	229,900
Sterling	( )	Nil	131,250
Trinidad	( )	No Reply	No Reply
Walsenburg	( )	Nil	4,975
Westminster	(16)	139,279	233,893
Total	**(1,534)**	**$ 18,913,900**	**$ 35,557,096**
UTAH			
American Frk	(3)	$ 31,000	$ 33,140
Bountiful	(10)	158,400	180,935
Brigham City	(25)	318,860	603,390
Cedar City	( )	Nil	17,050
Clearfield	( )	No Reply	No Reply
Davis Co.	(10)	165,887	191,015
Kaysville	(4)	29,240	37,540
Layton	( )	No Reply	No Reply
Logan	(8)	101,856	122,356
Murray	(13)	150,500	202,875
Ogden	(34)	654,010	792,510
Orem	(7)	86,600	272,295
Price	( )	Nil	64,500
Provo	(3)	43,000	4,606,480
Salt Lake City	(61)	576,650	1,664,077
Salt Lake Co.	( )	No Reply	No Reply
S. Slt Lke City	(1)	24,000	42,200
Spanish Fork	(3)	40,000	48,375
Tooele	(22)	251,369	291,189
Utah Co.	(9)	140,070	1,892,825
Weber Co.	(3)	38,000	40,400
Total	**(216)**	**$ 2,810,442**	**$ 11,103,152**
NEVADA			
Boulder City	(2)	$ 32,950	$ 46,590
Clark Co.	(181)	2,783,135	5,039,629
Elko	( )	No Reply	No Reply
Las Vegas	(430)	4,021,957	5,104,992
N. Las Vegas	(121)	1,973,550	1,879,548
Reno	(62)	602,104	1,216,577
Sparks	(47)	541,000	640,224
Washoe Co.	(27)	591,974	865,422
Total	**(870)**	**$ 10,546,670**	**$ 14,792,982**
ARIZONA			
Buckeye	(1)	$ 9,400	$ 16,115
Casa Grande	(5)	31,300	37,050
Chandler	(16)	160,565	226,865
Douglas	(1)	6,500	179,127
Flagstaff	(65)	191,915	624,840
Florence	(2)	10,100	12,100
Glendale	(57)	572,300	612,439
Maricopa Co.	(168)	1,510,676	2,376,410
Mesa	(59)	592,330	1,460,278
Phoenix	(662)	7,619,650	12,364,409
Pima Co.	(157)	1,912,955	3,275,214
Prescott	(7)	80,800	132,080
Scottsdale	(16)	190,600	1,303,294
Tempe	(201)	1,996,112	2,247,064
Tucson	(887)	7,396,333	9,696,553
Wickenburg	(1)	10,000	16,700
Winslow	( )	No Reply	No Reply
Yuma	(17)	112,000	141,000
Total	**(2,322)**	**$ 22,403,536**	**$ 34,721,538**
NEW MEXICO			
Alamogordo	( )	$ Nil	$ 44,292
Albuquerque	(143)	2,183,316	2,680,738
Artesia	(4)	47,000	577,797
Carlsbad	(7)	73,000	152,600
Clovis	(30)	1,013,343	1,100,378
Deming	(6)	48,000	71,700
Farmington	(6)	58,977	165,093
Gallup	(6)	110,400	199,214
Hobbs	(15)	200,702	355,442
Las Cruces	(14)	206,350	406,822
Las Vegas	(1)	3,000	9,500
Lovington	(2)	30,000	47,750
Raton	(1)	12,000	27,150
Roswell	(53)	530,300	677,357
Santa Fe	(27)	192,385	308,527
Silver City	(2)	21,000	24,000
Truth or Consequences	( )	No Reply	No Reply
Tucumcari	(5)	76,060	80,800
Tularosa	( )	No Reply	No Reply
Total	**(322)**	**$ 4,805,833**	**$ 6,929,160**
HAWAII			
Hawaii Co.	(39)	$ 523,530	$ 936,444
Honolulu	(285)	3,648,371	9,357,515
Maui Co.	(33)	296,070	871,843
Total	**(357)**	**$ 4,467,971**	**$ 11,165,802**
GRAND TOTAL	**(27,954)**	**$328,552,870**	**$592,627,995**

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A large advertisement in a Seattle daily paper has reminded us of a warning we published in these pages just two years ago.

The nation's largest chain retail and mail order house advertised tempered SAFETY GLASS sliding doors. The emphasis was on hazard and safety. The price $40 greater than similar crystal glass doors. All this in recognition of legislation that requires some type of safety glass in all such doors installed in most communities in the Seattle area.. And also because the public has been aroused by the newspaper accounts of a death a few months ago, numerous injuries, a lawsuit against a builder and his supplier, and a weekly box score of reported hospital treatments following sliding door accidents (90 in the Seattle area in 11 months, 58 of the victims being under 15 years of age).

Two years ago we foresaw these happenings and urged the building industry to accept the responsibility for assuring that sliding patio doors—a delightful part of western living—be made safe, to the benefit of both the public and the industry.

We reiterate that this is important. We'll go further . . . now it is an economic necessity. Safety glass requirements for sliding doors will become universal just as surely as every automobile sold in the United States today has a safety glass windshield.

To those still reluctant to climb aboard the bandwagon (admittedly it is difficult to become seriously concerned with the problem until you have witnessed or been closely associated with such an accident) we cite the above figures and the actions of Tempered Glass Sales, Inc.; Amerada Corp.; Sun Valley Industries, Pittsburgh Plate Glass Co. and others, in promoting safety glass installations. They are actively bringing the doors and replacement glass onto the market in the West, and we can expect them to be actively advertising to the trade. The most enlightened builders will in turn be advertising that *their* homes have *safety* glass patio doors. Surely the market won't be turned over to Sears Roebuck entirely by default!

OUR ADVERTISERS

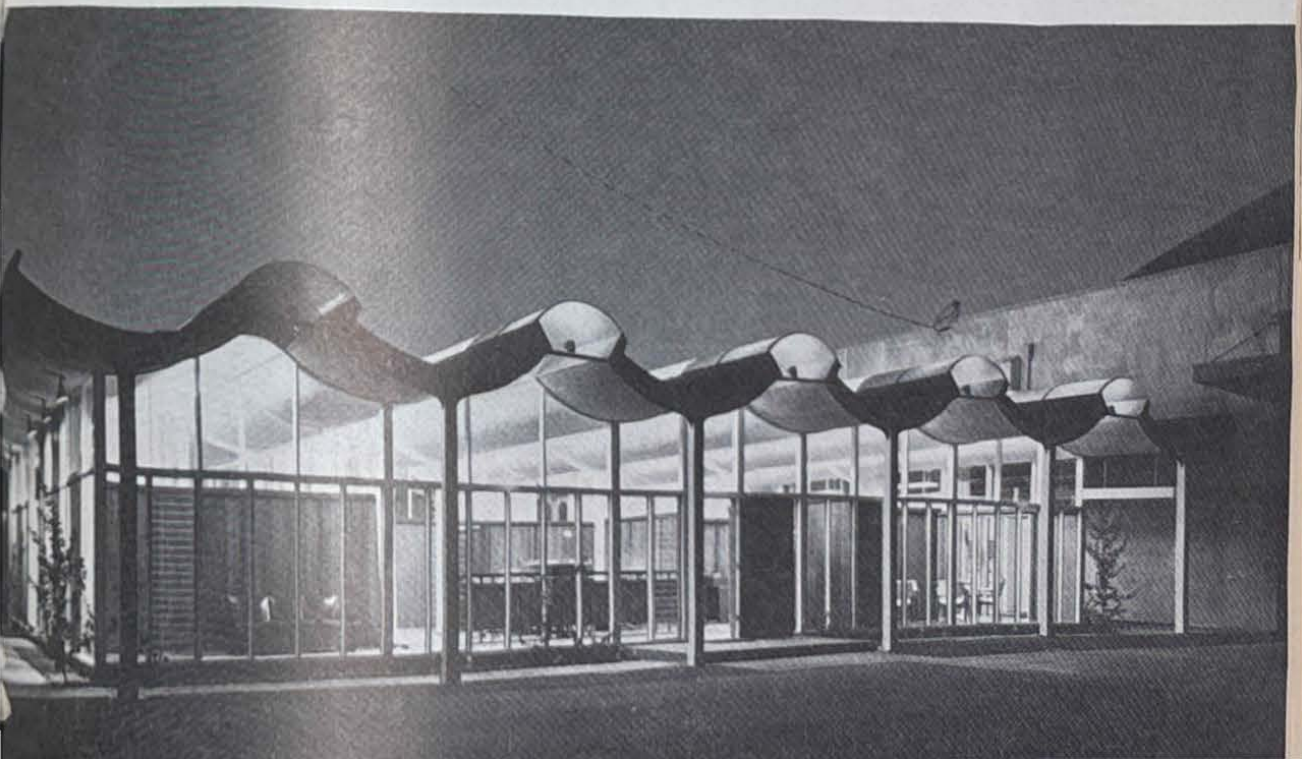
. . . and where you will find their messages

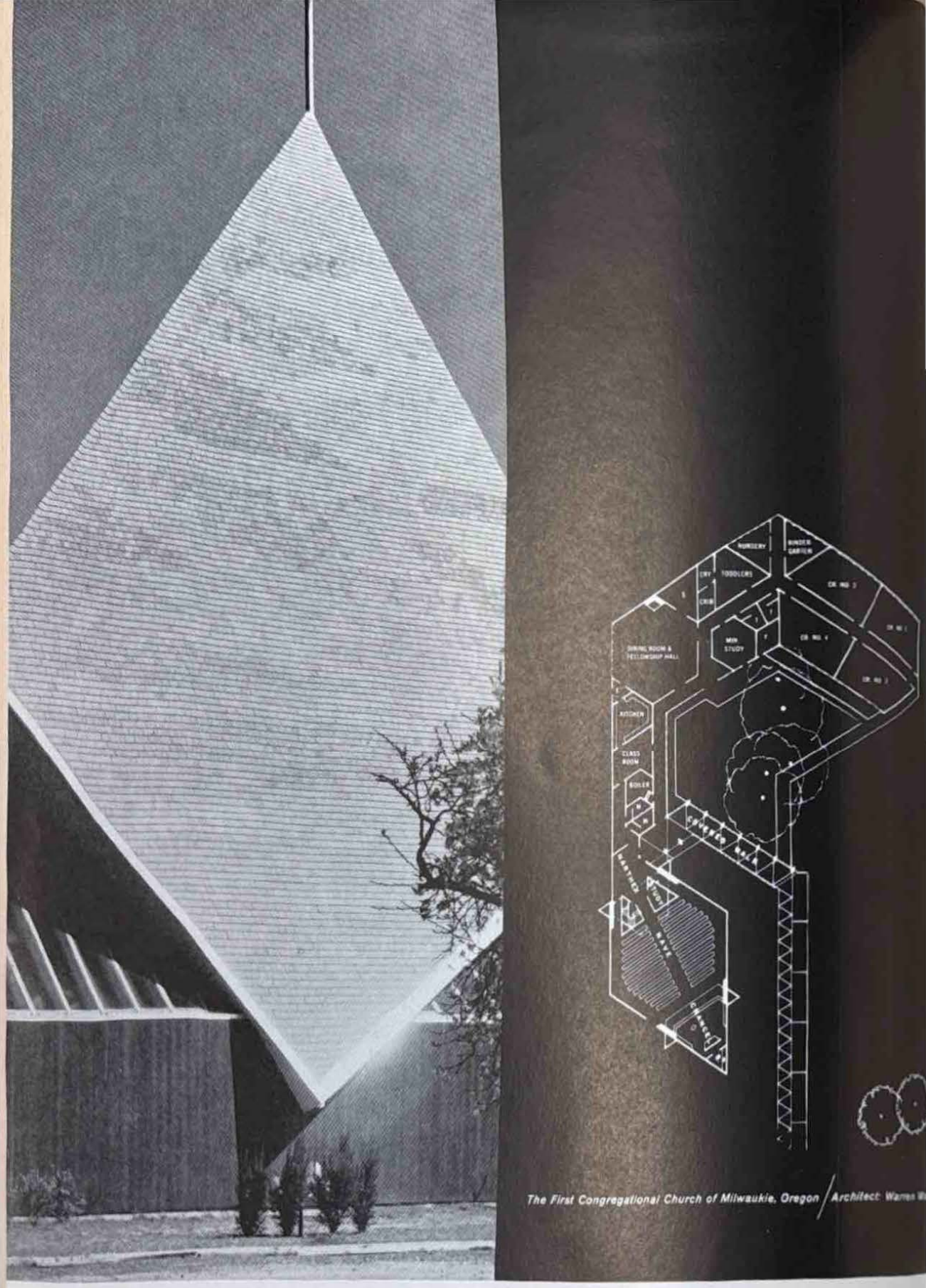
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COVER: Method and Result—U. S. Plywood Co. Office, Seattle/Gideon Kramer, Industrial Designer (p. 13)

ABOUT THIS ISSUE: Most architects are inclined to believe that the only really successful components on the market today are the many types of movable interior office partitions. They are nearly right. In the light building and home packaging industries there are many successful plants jigging out standard roof trusses, and a start may have been made at prefabricating plumbing units for residences. But standardized components for larger and universal use just aren't in the picture yet—possibly because there are no standards. So the Panelbild Story, starting on page 13 of this issue, may be surprising and certainly should stir some imagination. CUSTOMIZED *components are* feasible, and careful treatment at the design stage may provide economies that will get some of those projects plagued by budget problems off the boards and under construction. A dozen different and interesting uses are pictured and described as they have been successfully tested in completed jobs.

Pictures of Frank Lloyd Wright's controversial Marin County project (has there ever been a FLW project *not* controversial at some stage?) have not been widely published. We're happy to bring these early views of completion in a news story on page 9.

Don't fail to check building permit statistics on page 4 and pages 32-33. 1962 appears to be breaking all records, and the top 25 volume leaders are spread out all over the West. Curious about how Douglas County, Ore., became the No. 2 leader? Five large industrial plants totaled $32 million. Should be some residential and commercial growth there soon.

TO THE POINT

CROSSES OF THE AGES; DESIGN AIDS FOR YOU

Christianity's Sacred Symbol—the cross—has been pictured in over 140 of its variations in a new booklet published for architects by Overly.

Entitled *"The Cross,"* the new booklet is a product of over five years of research. It separates the cross designs according to their time of origin and includes a historical review of their religious significance and usage.

A separate section catalogs all of the basic cross forms, including crosses from the ancient civilizations, crosses from the early church and the crosses from heraldry. Additional information is offered on how Overly crafts these religious symbols and the important data the architect needs to know when ordering a cross.

These cross designs will be useful to architects in designing church interiors, in selecting the altar cross or in providing external ornamentation for contemporary religious buildings.

"The Cross" is available to all architects on letterhead request. Send for your copy today.

* * *

***Another U/L Testing Breakthrough** has been achieved by Overly in the recent fire test of a pair of Overly doors, 7' x 7' in size, for a U/L "A" label of 3 hours of fire resistance. These larger doors use new Von Duprin Concealed Fire Exit Hardware, giving the architect U/L labeled doors a full foot wider than heretofore available with the aesthetic advantage of concealed hardware. For more information, write to Manager of U/L Labeled Products, Overly Manufacturing Company.*

Overly

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Overly Manufacturing Company, Greensburg, Pa.

Please send the following literature:

☐ The Overly Cross Book ☐ 1962 Doors Catalog

☐ 1962 Spires & Crosses Catalog

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THE BUILDING MONTH

Highlights & Sidelights

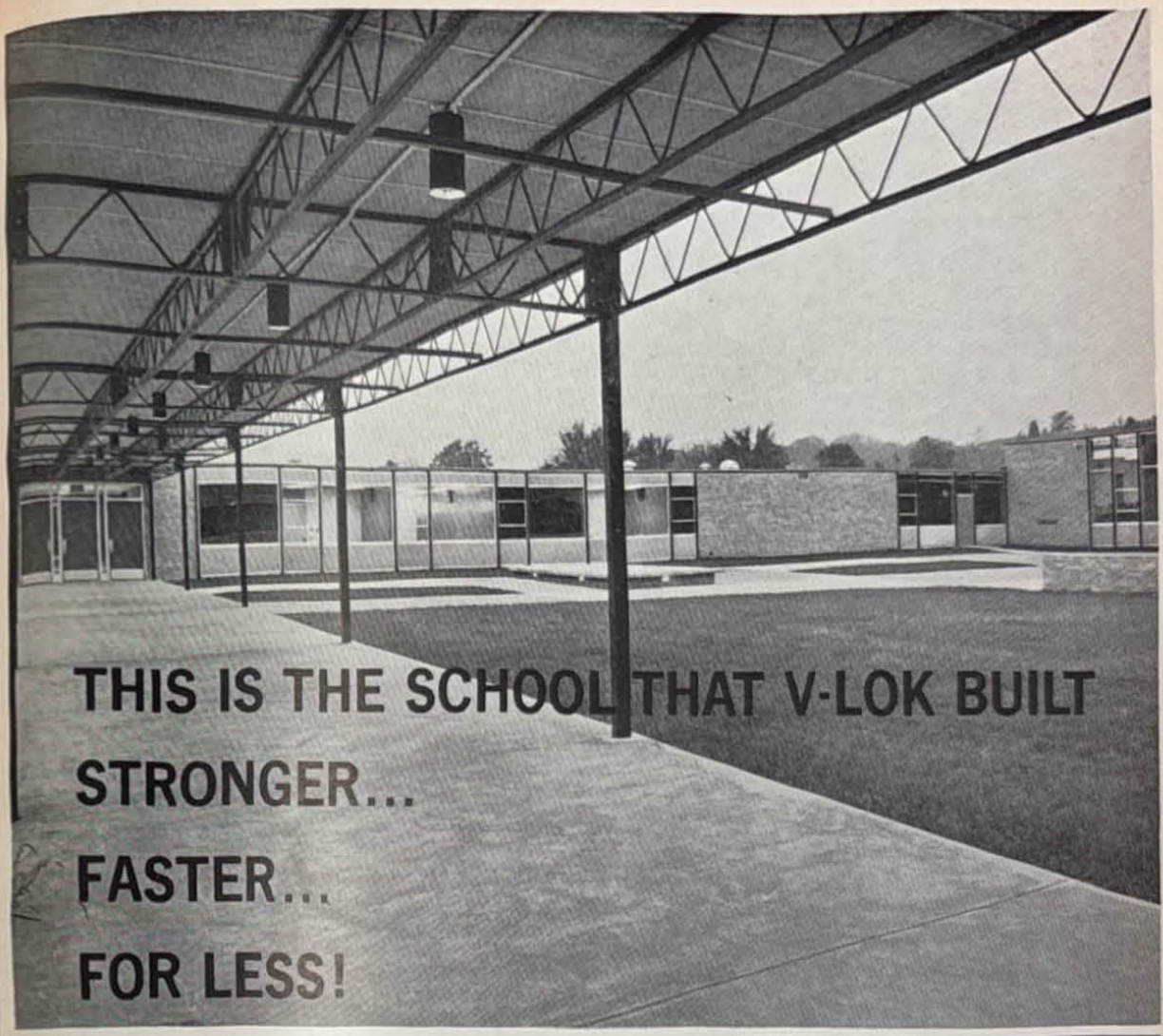
THE BUILDING WEST—There was no let down of the building permit pace in August. Permits issued by 16 communities in the West were 17% greater than in August a year ago, compared with a national average increase of only 7%. Permits totaled $631,075,121, with residential work accounting for $346,868,624 of the total. This brings the total for the year to date up to $4,684,335,360—$684 million and 17.1% greater than for the first eight months of last year. Residential permits account for much of the increase, are 23% higher than last year, while non-residential work is only 10% greater than last year. The complete statistics appear on pages 32-33.

THE BUILDING HOT SPOTS—Top 25 building permit totals were issued by (in millions): **1.** Los Angeles, $62.1; **2.** Douglas Co., Ore., $32.2; **3.** Los Angeles Co., $19.2; **4.** San Francisco, $13.6; **5.** San Diego, $13.3; **6.** Honolulu, $12.4; **7.** King Co., Wash., $11.7; **8.** Portland, $10.1; **9.** Phoenix, $8.8; **10.** Orange Co., $8.5; **11.** Seattle, $8.3; **12.** Arapahoe Co., $8.3; **13.** Santa Barbara Co., $8.0; **14.** Clark Co., Nev., $7.7; **15.** Las Vegas, $7.5; **16.** Orange, $7.5; **17.** Sacramento Co., $7.2; **18.** Riverside Co., $6.6; **19.** Reno, $6.3; **20.** Anaheim, $6.3; **21.** Huntington Beach, $5.8; **22.** Multnomah Co., $5.7; **23.** Salt Lake Co., $5.4; **24.** Glendale, $5.2; **25.** Beverly Hills, $5.1.

CONSULTING THE CALENDAR OF CONFERENCES—. . . The **17th Annual Convention, California Council AIA,** will present six internationally prominent architects in "World Search" at the Monterey County Fair grounds, Monterey, October 3-7. Write California Council, AIA, 916 Kearny St., San Francisco 11. . . . **Structural Engineers Association of California** meet at the Hotel del Coronado near San Diego in 31st annual convention, October 4-6. Walter Norris is general convention chairman, c/o 2808 Temple St., Los Angeles 26. . . . The **Northwest Regional Potlatch (AIA)** is scheduled for October 10-13 at Surftides Beach Resort on the Oregon coast. Robert Wilmsen, Eugene, is chairman. . . . not a conference, but certainly for the calendar, a one-man exhibition of the work of Professor Henry Charles Burge of the USC School of Architecture, in the upstairs gallery, Oct. 8-26.

GATEWAY GROUNDBREAKING—San Francisco's Golden Gateway project received so much preliminary promotional publicity that the really big story, the groundbreaking last month, seemed almost an afterthought. But the ground was broken, appropriately and officially, and the nation's biggest redevelopment project is under way. Phase 1, three apartment buildings and 38 maisonettes, will provide 794 living units to replace a portion of the city's bedraggled produce district.

URBAN RENEWAL "KNOW HOW"—Pomona, Calif., will play host November 16 and 17 to mayors and civic leaders from all over the nation who are eager to learn how Pomona so successfully developed a downtown pedestrian mall with private endeavor and capital. The two day meeting will study both the concept of such redevelopment and the legislation necessary to make it possible.



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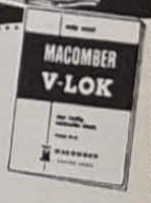
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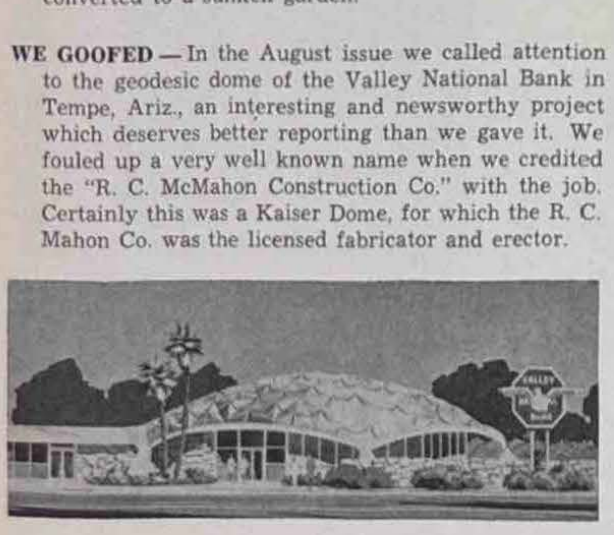
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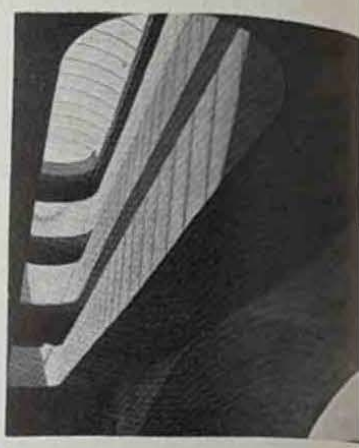
GAIN AND GLORY—Three award programs are in the news this month. Reynolds Aluminum has shifted the emphasis of its $25,000 annual memorial award, the largest in architecture. Revised criteria place prime emphasis on distinguished architecture in which sound, effective use is made of aluminum. Formerly emphasis was on the creative value of use. The Portland Cement Association has announced a scholarship awards program for top students and to encourage fresh use of concrete in design. Six scholarships will be awarded on a regional basis to the summer sessions at the Fountainbleau School of Fine Arts in Paris. Eligible are students in fourth or next to last year this fall at 52 accredited schools, submitting designs as part of regular class assignments, to their faculty who will make selections for forwarding to the PCA. Entries will be reviewed in the spring and winners announced in April. The American Iron and Steel Institute will shortly announce a program for designers, engineers and architects for the most imaginative use of eight broad categories of steel in design or re-design since January 1960. Submissions will be accepted prior to January 18, 1963.

PORTLAND SEES $500 MILLION SUBDIVISION—More or less an open secret for nearly four years, plans for a $500 million residential, commercial and industrial subdivision near Portland were announced officially last month. H. R. Watchie of Seattle is president of the developing corporation, Park City Corp. Involved are Victor Gruen & Assoc., Howard Harstad & Assoc., Larry Smith & Assoc. Site is in Washington County, about 10 miles west of Portland. Construction of utilities starts immediately. Next year will come 500 residential units, a golf course and more utilities.

ARCHITECTS CONTEST FOR CIVIC CENTER—Livermore, Calif., will invite leading architects on the West Coast to compete for the design of the city's proposed new 42-acre civic center. Details have not been completed, but the East Bay Chapter of AIA will direct the competition. First building to be built will be the city library, and architects will be asked to suggest a general plan for the entire area and a specific design for the library. A nine acre former gravel pit will be converted to a sunken garden.

WE GOOFED—In the August issue we called attention to the geodesic dome of the Valley National Bank in Tempe, Ariz., an interesting and newsworthy project which deserves better reporting than we gave it. We fouled up a very well known name when we credited the "R. C. McMahon Construction Co." with the job. Certainly this was a Kaiser Dome, for which the R. C. Mahon Co. was the licensed fabricator and erector.





Rolling Sh

Storm clouds that have hung low over the Marin hi
for more than five years began to thin out early th
spring and now in the soft autumn days are disappearin
over the horizon, leaving only a distant thunderhead an
rumble as a reminder.

Marin County officials are moving into their ne
Frank Lloyd Wright designed courthouse. They are smilin
and happy.

Craftsmen who worked with more than usual care o
the finishing touches, look back over their shoulders wi
pride and pleasure as they leave.

The public, toting up the $5 million bill, in genera
seems to realize that here is Art, like it or not, and without
exactly knowing how or why, but still, approving.

'Twas not ever so. There was a time when nobod
liked it. There was even a time, back in 1957, when th
architect didn't like Marin County. He liked the repetitiv
shapes of the rolling hills—repeated again in smalle
scale by the rounded shapes and shadows of the oak tree
In fact he liked them so well, and his concept of a buildin
that itself would contain rolling shapes, that he recon
sidered after storming out of a San Rafael meeting tha
would have finalized a contract to design the civic center
feeling that he had been insulted.

Later, no one understood his preliminary concept
but after a cooling off period it was accepted, and the

during construction a halt was called while consideration was given to completely abandoning or converting the building to a hospital.

Now it shines in the foothills, a gleaming blue and gold and red, with a roof shape to blend with the valley, and side arches and circular windows in the arcades that seem to march along with the trees and hills.

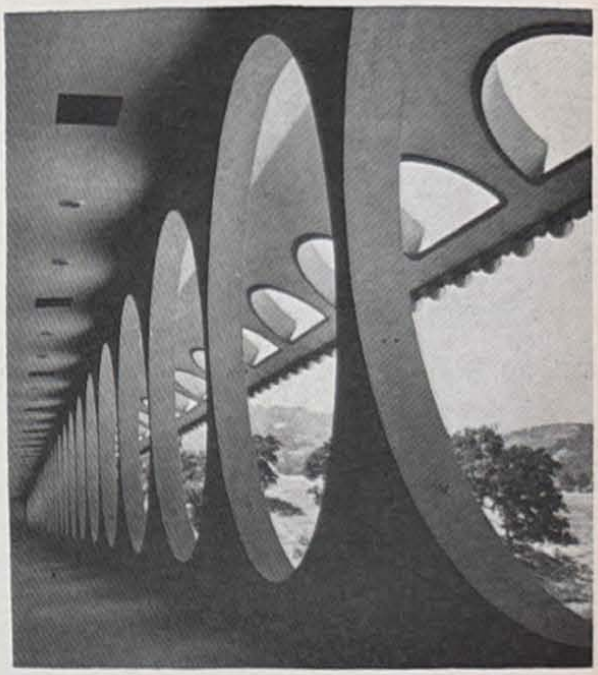
Basically rectangular, the 584-ft. long structure does not appear so; four stories high, it seems lower. Inside the ceilings are flat, floors are composition tile and terrazzo. Movable partitions define office spaces. Each floor has an open center, each opening larger than the one below it, so that there is an intimation of the spiraling ramps that were so controversial a feature of Wright's Guggenheim Museum in New York.

At one end the building is circular, with a dome shaped roof and an offset, towering spire that somehow relieves a tendency of the building to conform almost too neatly to its surrounding landscape.

In all, the building, within or without, is colorful and presents pleasing textures and patterns, makes a person feel comfortably at ease as a part of the building, which in turn is a part of the landscape.

Successful? Still more years must pass before a judgment can be given. But as Edward D. Stone said at the groundbreaking ceremonies, and after the death of Wright, "You people here in Marin County will have a great work of art, the best that our times can produce. It will be a source of inspiration and pleasure for generations to come."

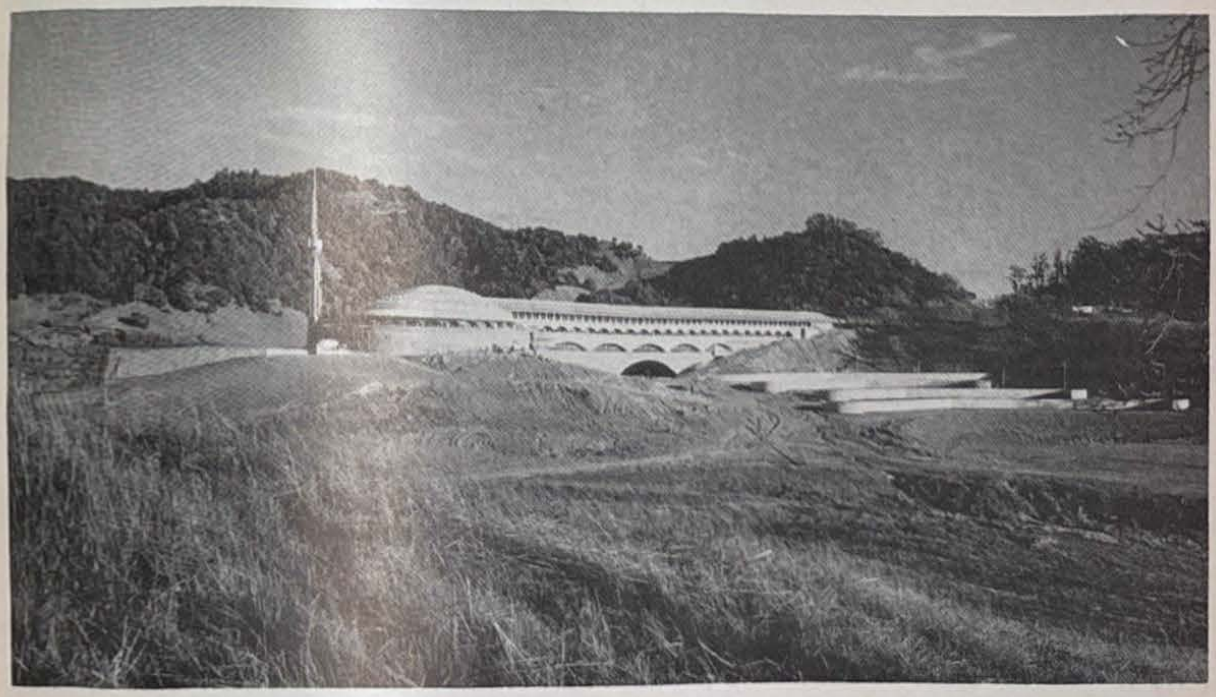
Under clear blue skies the people of Marin County this month are seeing the wisdom of those words.



Dandelet Photos

Within or without, the Marin County Courthouse building, principal structure in the civic center to be, offers shapes and frames to stir the imagination. Colors of blue and gold are accented with bright red.

r Rolling Marin Hills



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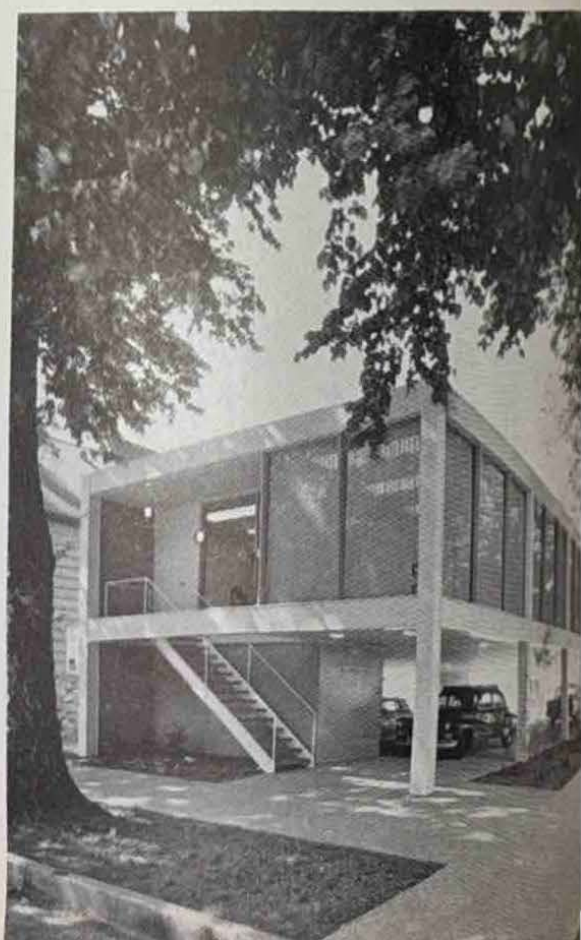
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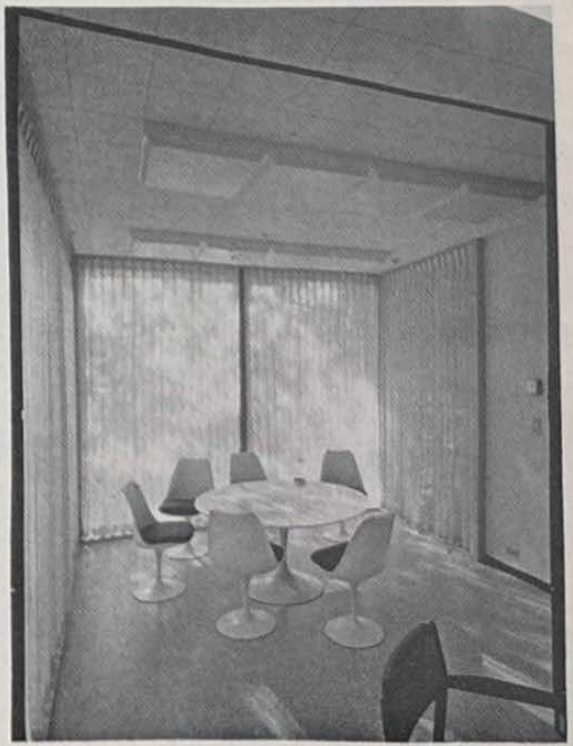
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WHERE THE ARCHITECTS HANG THEIR HATS

ARCHITECTURAL OFFICES, Sacramento/*Dreyfuss & Blackford*, architects/*Guth & Schmidt*, general contractors

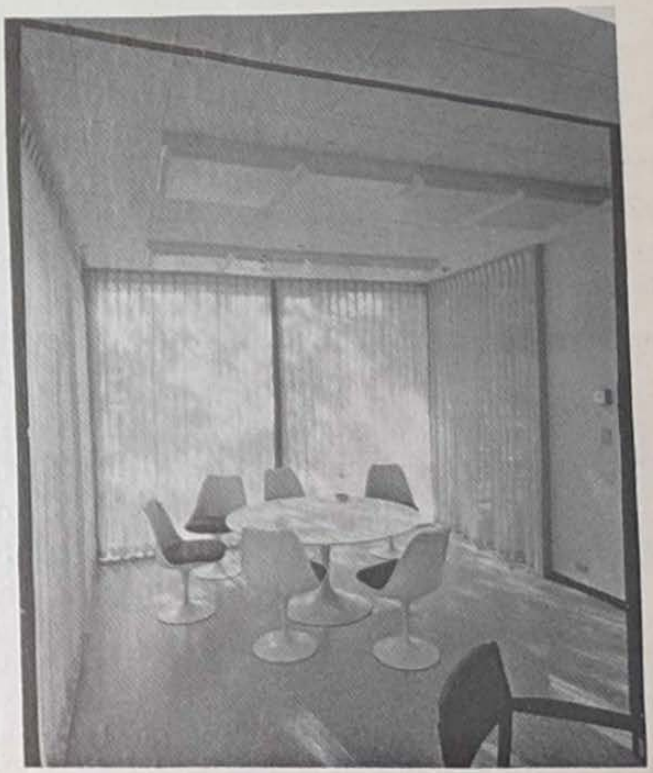


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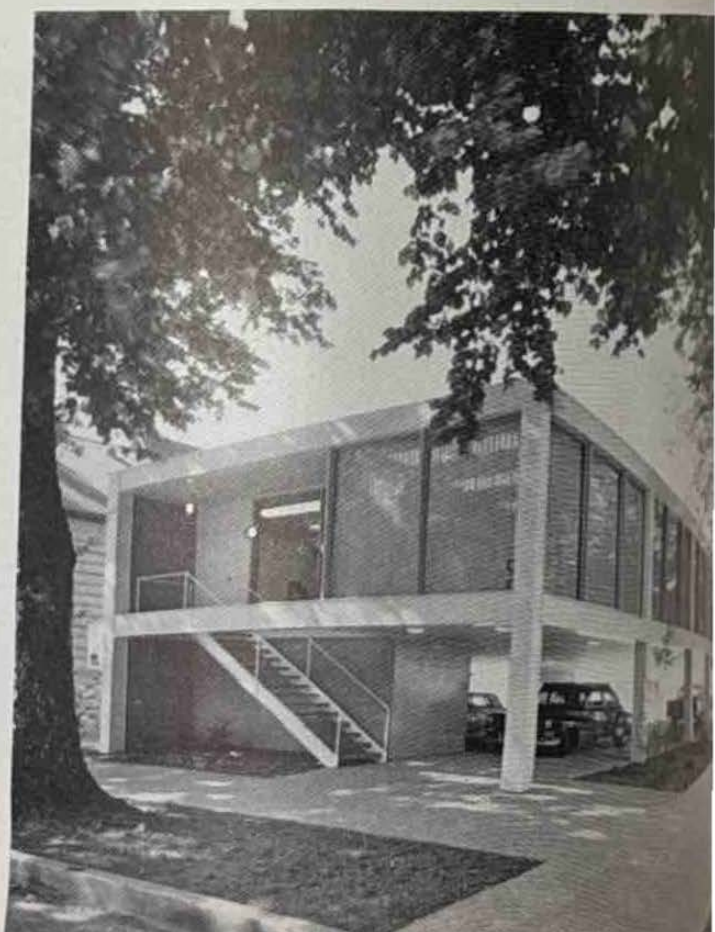
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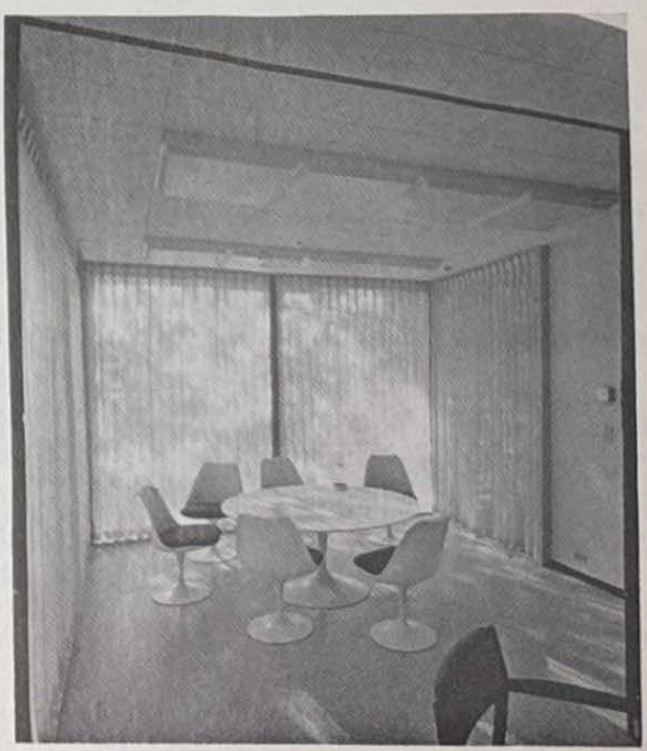
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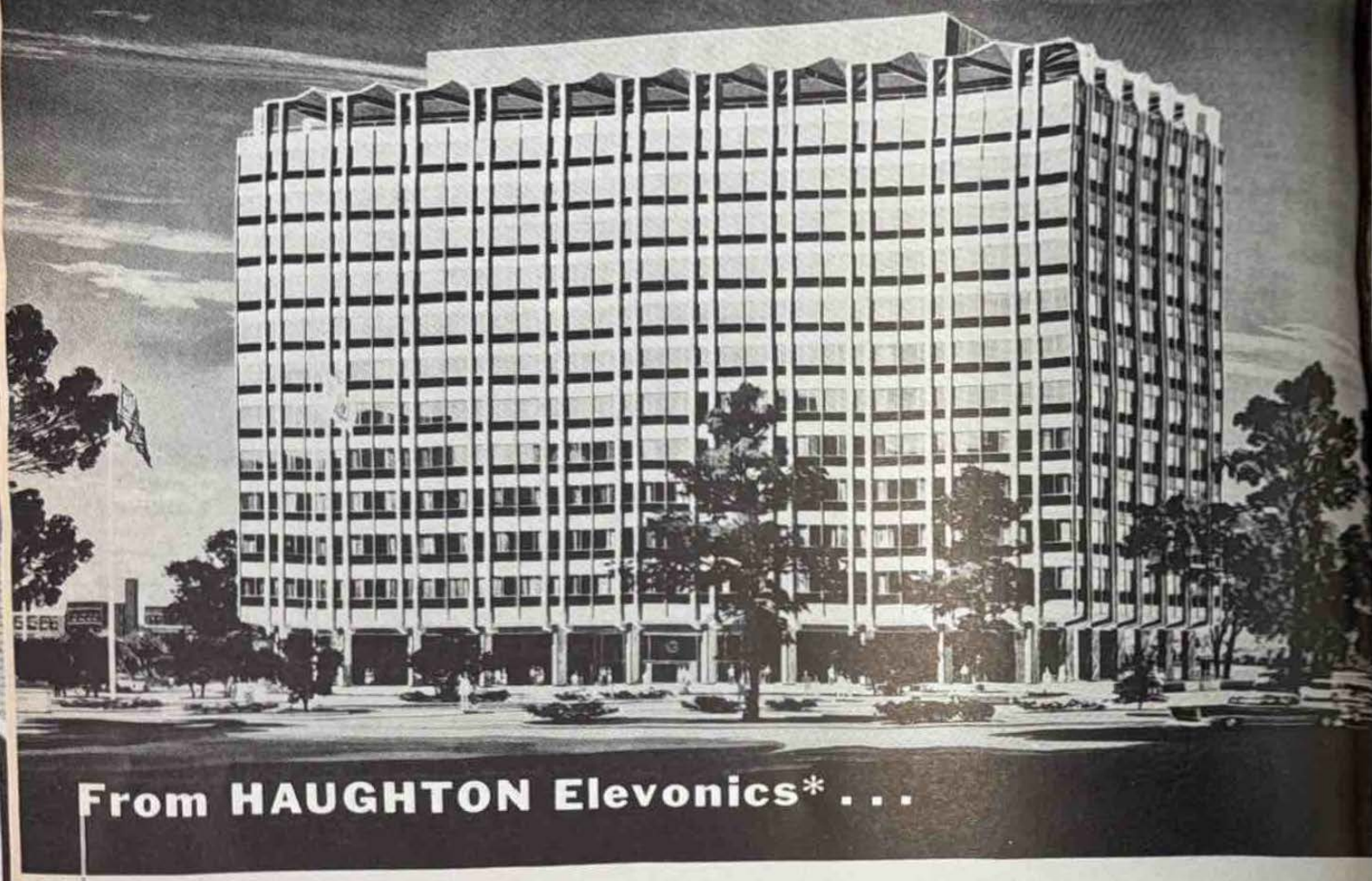
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State of New Jersey, Department of Labor and Industry Building, Trenton.
Architects : Frank Grad & Sons, Newark, New Jersey ■ Gen'l Contractor: Belli Construction Co., Trenton, New Jersey
Theodore J. Kauffeld, M.E., P.E., Consulting Engineer



From HAUGHTON Elevonics* . . .

exciting new concept in elevatoring for an exciting new build

Buildings are for people. ■ And people who use the elevators in Trenton's new Department of Labor and Industry Building will enjoy speed, comfort and convenience that can be provided only by Haughton Elevators under fully-automated electronic control. ■ Not even peak demands at "coffee breaks" or rush hours can cause service to deteriorate. ■ An automatic electronic computer constantly receives and analyzes data pertaining to amount and character of traffic, and makes adjustments to match traffic needs exactly. ■ Such is the magic of Haughton Elevonics*, key to superior elevator performance in new buildings and old. ■ For complete information on our design, modernization and maintenance capabilities, contact your Haughton sales office (listed in the Yellow Pages), or write: Haughton Elevator Company, Division of Toledo Scale Corporation, Toledo 9, Ohio. ■ Passenger and Freight Elevators, Escalators, Dumbwaiters.

EMBLEM OF EXCELLENCE IN VERTICAL TRANSPORTATION

* *Haughton's advanced program in systems research and engineering with specific emphasis on the creative application of electronic devices and instrumentation for betterment of systems design and performance. Registered in U. S. Patent Office.*



The new stainless steel sliding door by Carmel Steel Products, Downey, Calif., is being displayed to architects at the Calif. Council, AIA Convention, Oct. 3-7, Booth P, and the Texas Society of Architects meeting, Oct. 24-26, Booth 62.

Now STAINLESS STEEL opens doors to quality

Versatility. Good looks. Exciting design. Sound construction. Architects want all these in the sliding doors they specify for imaginative residential and commercial construction. But most of all they want quality—in the product and in the material it's made from. For the first time a sliding door of true quality is being made of stainless steel. There are technical reasons for architects to specify stainless here. The metal resists corrosion—its sturdy metallic surface doesn't flake off in annoying dust and doesn't discolor under wear. Stainless is strong and has a low coefficient of expansion—it doesn't bend or bind in the runners. Stainless is easy to clean. And most of all, stainless is recognized by owners as a metal that gives long and economical service. The latest in sliding doors is the stainless steel model shown above, now available from Carmel Steel Products of Downey, Calif. These are made from consistent quality stainless steel produced by J&L to meet the high standards of architecture. For more information about Carmel Steel's stainless doors, request information from Carmel Steel Products. And for more information on the superior metal they are made from, ask the specialists in architectural stainless steel at J&L. We'll all be glad to hear from you.

Jones & Laughlin Steel Corporation

STAINLESS AND STRIP DIVISION, DETROIT 34

STAINL

Down comes the old, up goes new CV facing

The ashes of the great fire that swept San Francisco in 1906 had barely cooled when the Crocker-Anglo Bank Building was erected at No. 1 Montgomery Street, "the Wall Street of the West."

The new home of California's oldest national bank was faced with limestone. Facing blocks were fitted tightly against each other, without the usual mortar joints. Instead, false joints were actually cut into the stone to simulate mortar. Typical of the period, steel shelf anchors carried the facing's weight vertically, while steel strap anchors tied it to the brick filler walls.

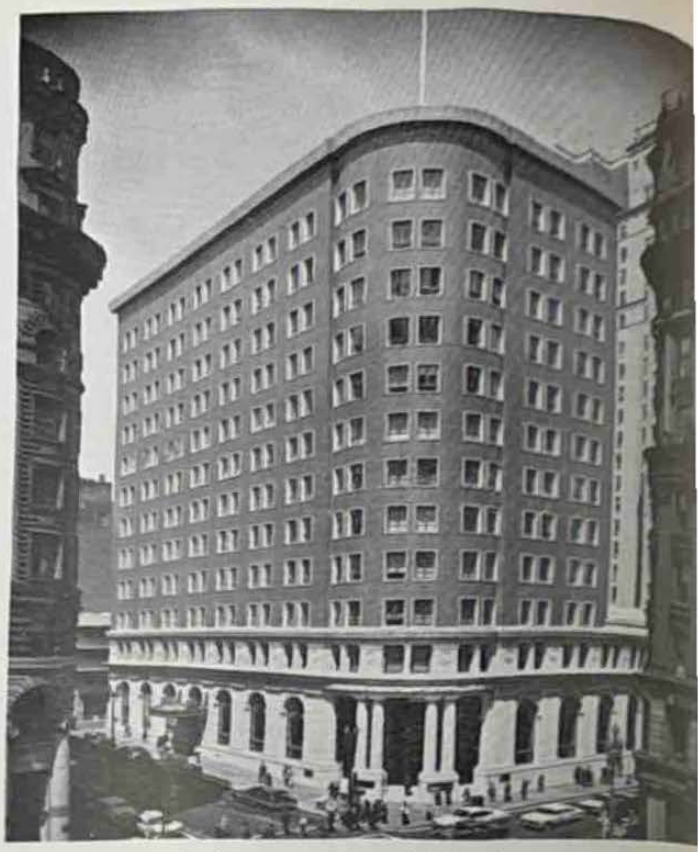


Remodeling Necessary Ultimately the steel anchors rusted away. Pressure on the facing stones from expanded rust created a hazard. Due to the building's prestige and basic structural soundness, remodeling rather than removal was indicated. Architect Milton Pfleuger created a new design with GMcB Ceramic Veneer.

Occupancy Continued During remodeling, the building was occupied continuously, and sidewalk and street traffic were relatively uninterrupted, a remarkable achievement by Dinwiddie Construction Co., general contractor, and George W. Reed Construction Co., masonry contractor.

Unusual Techniques Consulting Engineer Walter Steilberg was retained to supervise refacing. Under his direction, the curtain of steel in the veneer grout space was attached to the structural frame. Thus the ceramic veneer assembly is made to help hold filler walls against lateral forces.

Window surrounds were precast in four pieces, of three pieces of ceramic veneer each. This permitted setting to continue above the windows without having to support the heads with temporary shoring.



Custom Colors All CV is in custom colo developed by GMcB for this project. In kee ing with the character of the neighborhoo the field color is a mottled reddish brow varied slightly to give added interest und different lighting conditions. Window su rounds are mottled gray cream, to harmoni with the limestone lower stories and corni of exposed aggregate concrete. GMcB hig temp fired colors never fade or streak, wh the glazed facing repels airborne dirt, i easily washed clean, and requires no pain ing or expensive maintenance. Staining an efflorescence also are avoided, since CV i characteristically inert.

GMcB Ceramic Veneer is available in a almost infinite variety of colors, glazes an textures, in adhesion, anchored and hand pressed types. Compatible with all material it gives almost unlimited opportunity fo originality, versatility and dramatic effect For helpful technical data, see your GMcB Architectural Products representative. Phon or write Gladding, McBean & Co. in the citie listed below.



GMcB

Ceramic Veneer

Gladding, McBean & Co. LOS ANGELES · SAN FRANCISCO
SEATTLE · PORTLAND · SPOKANE · PHOENIX · SALT LAKE CITY



Customized Component Systems Today

. . . standardized tomorrow?

Architects in the Pacific Northwest have the particular good fortune of being able to solve some design or client-budget problems by utilizing customized components. This favor is being extended by two divisions of U. S. Plywood Corporation: in California Bay area and Los Angeles locales, by Weldwood Structures; and in the Northwest, by Panelbild Systems, who have been pioneering component systems for ten years. Panelbild's plant is in Lynnwood, Washington, north of Seattle. On the following pages, A/W takes a look at the performance of these customized shapes and panels in a wide variety of buildings already built. The text attempts to consider the future of components and packages, both customized and standardized, as viewed by Pete Bilder, Gideon Kramer and Al Bumgardner. Pete Bilder is the founder of Panelbild Systems, Gideon Kramer is a noted industrial designer, and Al Bumgardner is our consulting editor.—The Editors.

The scope of the customized component industry and the variety of buildings utilizing components successfully in the Pacific Northwest during recent years would amaze any architect or builder who has not studied the subject. They are eye openers. Viewing them may well be like taking a peek into the future of the building industry.

Even to the uninitiated, the advantages of presently available systems are immediately intriguing. One can see the possibility of economic savings where a job is big enough to have a volume of repetitive shapes. Time can be sliced—if it is important, and it usually is—by building units in the shop while site preparation is still under way. The bad weather man can be circumvented—finish your rough work today, crane up the completed roof and wall units tomorrow, then tackle the finish work under shelter.

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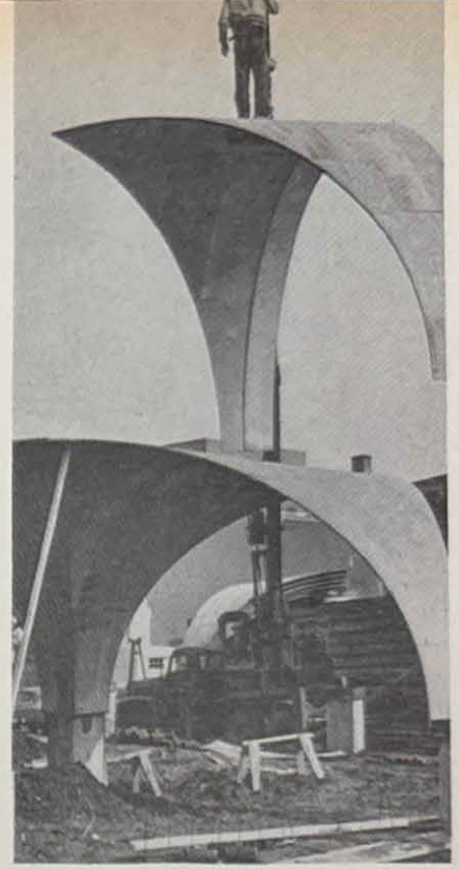
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U. S. PLYWOOD CORP., OFFICE, Seattle/*Gideon Kra-mer,* industrial designer / *Unipac Structures,* general contractor

"Hong Kong" roof system of six inverted plywood shells spanning 32 ft., placed 3 ft. apart and topped by five convex plastic skylight sections, all supported by slender columns with "T" fitted to the shape of the plywood components. Glass and Glasweld exterior curtain walls.

• • •

glazed and painted and ready to set on the foundation.

There are interesting and unconventional shapes–flattened domes, barrel vaults, folded plates, pyramidal domes, butterfly folded plates–all stressed skin plywood–that might not even be contemplated for normal field construction.

Among the completed buildings are schools and offices, banks and residences, warehouses, loading dock shelters, restaurants and even a ferry terminal.

These are not minimum shelter structures, not necessarily low budget projects. They don't bear the stigma of that nasty word "prefab". They are well designed and engineered permanent buildings of good architectural character.

They were built in this manner–obviously–because the architectural designs lent themselves to units that could be produced satisfactorily by machines, and because the contractors found they could purchase and install the components more economically than they could build them in place in the field.

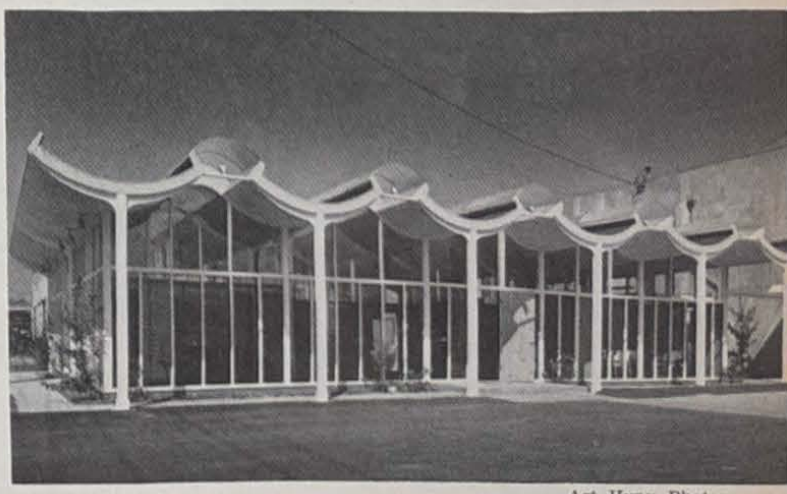
To this degree, customized componentizing is useful and successful, not yet adaptable to every project, but certainly worth the study of all architects and engineers and builders, both for today and for tomorrow. The real challenge lies in the future; the future standardization of many forms and shapes and units, the future volume of production that will follow standardization, and thus the reduction of complications and costs of all construction.

The present good volume of *customized* component work in the Puget Sound area is a tribute to Pete Bilder, founder of Panelbild Systems, who originally started out to produce *standardized* components. The custom business grew swiftly, but standardizing of stock units is more or less on dead center. "We are making 50 or 60 different components, each of which can be bought in almost any length," says Bilder. "But reducing a few of these to a common denominator which might be produced in volume and stockpiled for sale, is another matter. Yet therein lies the future of the industry."

Gideon Kramer, industrial designer who has done much work with components, goes much further "out" in his enthusiasm.

He sees the need for entrepreneurs (comprehensive designers) to return to man the creative involvement that specialists have

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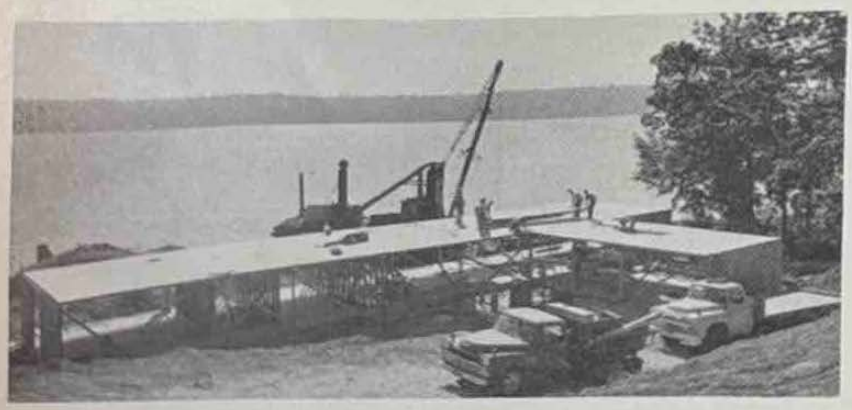


Art Hupy Photos



SIDOR RESIDENCE, Mercer Island, Wash./ *Gideon Kramer*, designer/*Unipac Structures*, general contractor.

Residence having 3,368 sq. ft. of floor space at a cost of $50,000 built in 1959 of all stressed skin plywood floor, wall and roof components.



MOWRY RESIDENCE, Seattle/*Charles A. Metcalf*, architect/*Norman H. Brunberg*/general contractor.

All stressed skin plywood construction of floor panels, roof panels, wall panels; walls form interior and exterior finish, add structural rigidity to post and beam construction. Built in 1959 at cost of $12,600.

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robbed him of. In his view, what is needed and possible today is a system – a total package including the financial as well as humanistic and technological considerations –the discipline of which will free man to reach to a greater degree of fulfillment.

"Through panels, through various movable parts, the opportunity to create can be enhanced. Components today are limited by enslavement to the machines that produce them, by the lack of standards that make them readily available. The industry will require an entrepreneur who will see that the standards are created, that machines are designed to produce to these standards, and that the volume market is thus created so that automation is possible and man can realize the full benefits of industrialization."

From the standpoint of architects there are obvious drawbacks to the usage of components, the development of standards.

An architect by nature and training first conceives his idea, and then makes materials work for him. He does not–as

Vern Green Photo



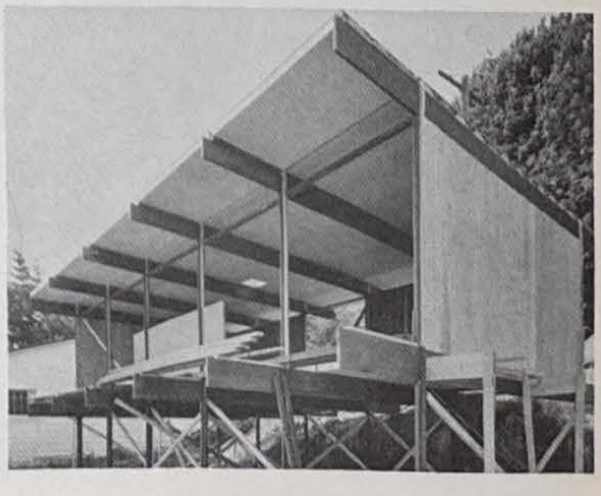
must do if he uses components—design around his materials. In visualizing standards and stockpiles of "common denominators" he can fear regimentation of design.

It is at this point that the component industry is slowed. Machines can be built to spew forth volumes—and some variety—of completed sandwich panels or structural members of almost any material, in almost any size or shape that is feasible. But *what*

• • •









LOADING DOCK, MEDOSWEET DAIRY, Seattle/ *Mandeville & Berge*, architects and engineers/*W. G. Clark*, general contractor.

Prefabricated plywood roof vaults on laminated wood beams, steel columns and concrete dock and foundations provide 20,000 sq. ft. of area.



FERRY TERMINAL, Anacortes, Wash./*Don L. McKee*, architect/*Art Anderson*, general contractor.

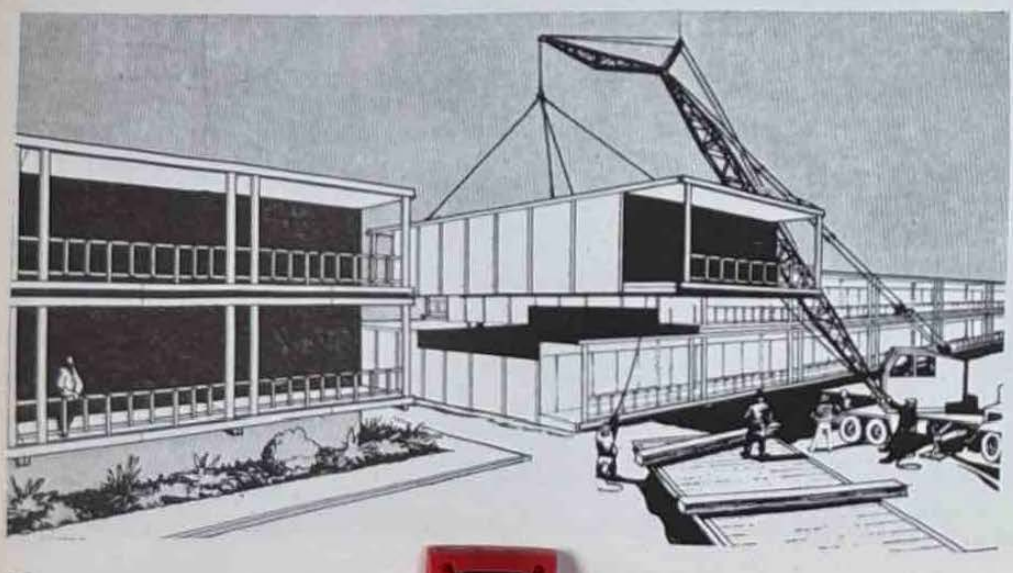
Truncated pyramidal domes were delivered in four sections each, assembled and lifted to place by crane. Supporting members are steel shapes. Walls and floors also are plywood prefabricated panels, enclosing 5,000 sq. ft. of facilities.

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material, *what* size, *what* shape? What sizes and shapes *can* architects use? What *will* they use? What do they *need?*

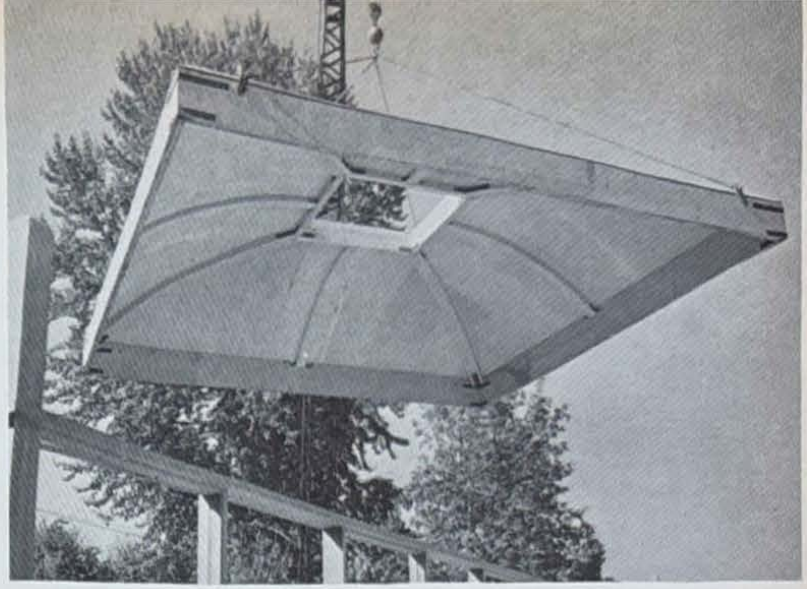
What cost-saving units do architects need, in what sizes and shapes, that all can work with, and utilize in their designs, without regimenting those designs, and so that volume can be developed to make all this worth while?

"This question," says Pete Bilder, "will have to be answered by a team under the direction



UNITEL/*Dean Latourell*, architect/*Unipac Structures*, builder

Stressed skin plywood motel unit completely prebuilt, each unit self contained, designed for joining and stacking in arrangements to fit any site. First installation proposed for Alaska



NELL HOYT PRIMARY SCHOOL, Tacoma/*Robert Billsbrough Price, AIA*, architect/*R. N. Phillips*, general contractor.

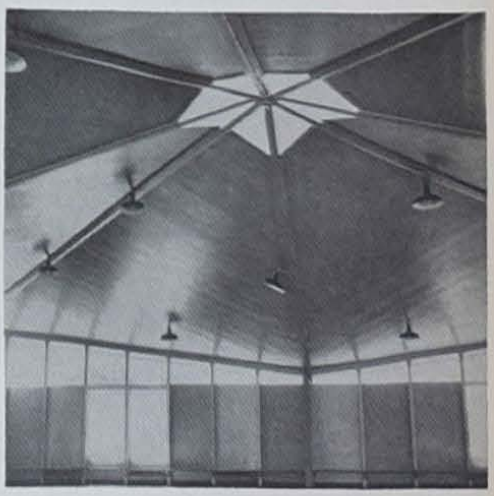


Flattened domes and a folded plate roof system; 3/4-in. plywood spans 32 ft. Laminated wood ribs reinforce intersection of vaults, edge beam is plywood box girder. Roof domes have pocket in intersection of edge beams, were dropped into place over posts.



of a coordinator (and, we might say, probably an architect) who is able to understand the totality of the problem. This includes an understanding of the needs of the architect and the client; the economic, transportation, and production problems; the rewriting of building codes; the erection, financing, plumbing, wiring, heating, and all other subcontractor relationships. When all of these factors properly relate to each other, at that point a good

• • •



NORTHWEST TACOMA ELEMENTARY SCHOOL, Tacoma, Wash./*Robert W. Evans, Gordon N. Johnston*, architects/*Smith & Murray*, engineers/*DFPA*, research/*Woodard Construction Co.*, general contractor.

Four butterfly folded plates cover 12 classrooms and a multipurpose area. Loads are transmitted to the valleys and thence to A-frames and footings; walls only stabilize the roofline. Wall columns support exterior stressed skin panels and carry inside interchangeable modular facings and fittings.





Fred Milkie Photo

• • •

product will be available to the building industry. Although this will be done progressively, and seems a Herculean task, yet it is the problem which lies ahead of us."

"Up to now," says Gideon Kramer, "men have tackled the matter of components from the standpoint of how they can be manufactured, what they will do in the way of withstanding stresses and strains and providing factors of insulation and fire retardance. These all are secondary problems. We have tried to accommodate the machine, and that is foolish because machines don't buy anything. We must make the machines accommodate us.

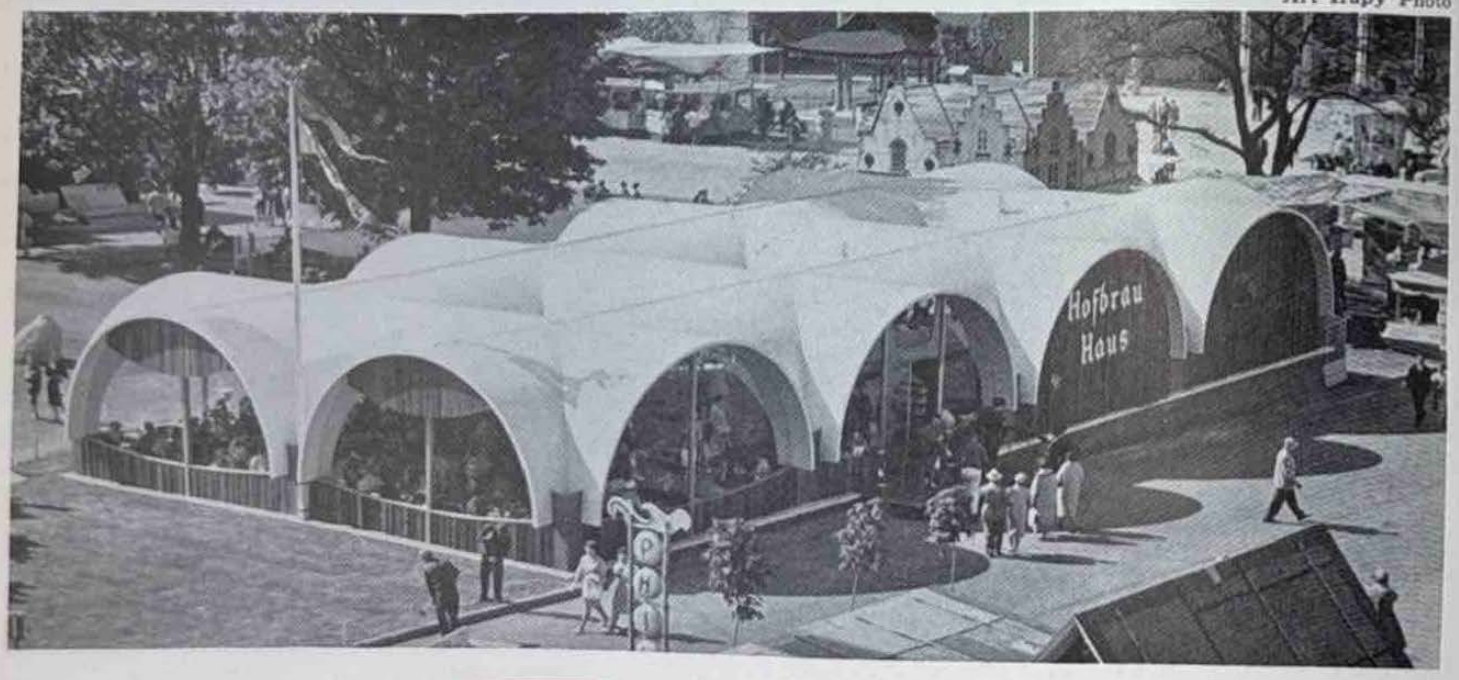
"Once we have discovered what "things" we can best use, we can turn the engineers loose to develop the proper characteristics and build the machines to make them.

"Then we can enter the age of a new humanism."

Meanwhile, as the pictures on these pages have shown, we already have taken giant strides in the field of customized components, and that's not so bad either.

■

Art Hupy Photo



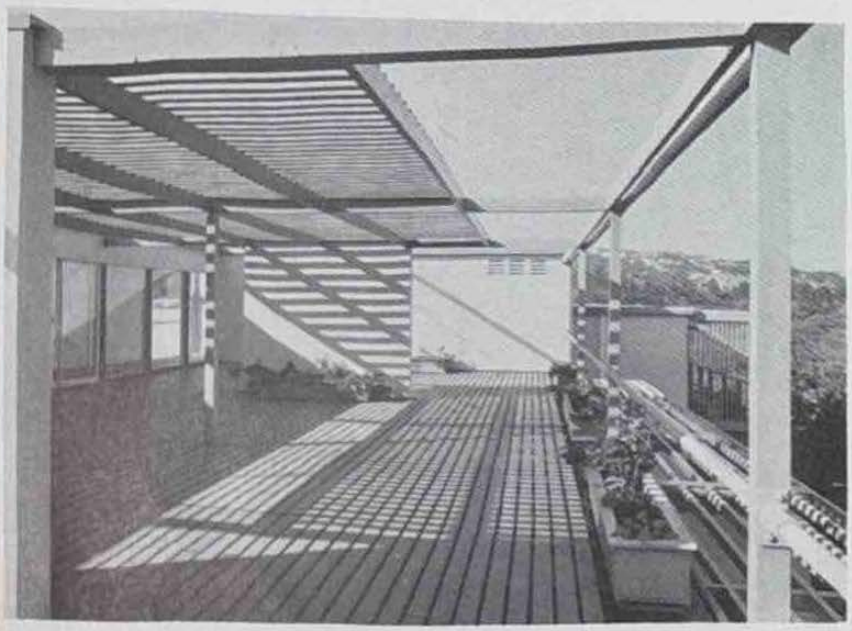


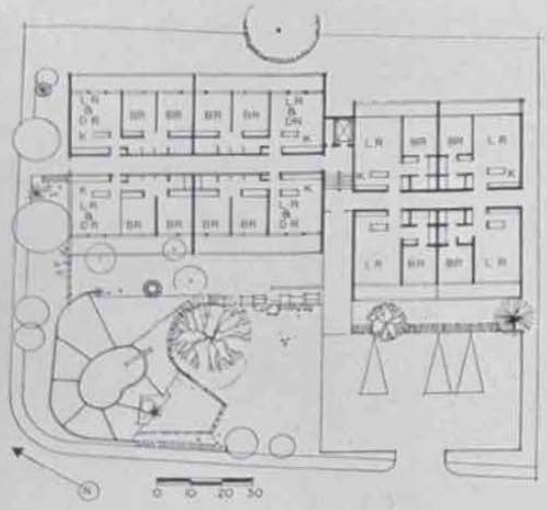
Maarten Photo

HOFBRAU HOUSE, Seattle/*John Graham & Co.*, architects-engineers/*Alan Gerard*, project designer/*John M. Anderson*, general contractor.

A thin-shell double groin vault stressed skin plywood structure that is self-supporting, demountable and designed for re-use after the Fair. Skin is 1 3/8 in. thick, vaults span 20 ft.; building is 4,670 sq. ft. plus a 600-ft. lower area at a cost of $12 per sq. ft.

CARLMONT OAKS–Fancy Name on a Finific Budget





In these days when apartment operators compete by outdoing each other in offering luxuries to attract tenants – and boost the rental rates accordingly – it is refreshing to find a small apartment building giving most of the appearances and some of the appurtenances of luxury at only $7.40 per square foot.

Carlmont Oaks was built in a grove of oak trees on a hillside, in two units to utilize the ground contours with a minimum of excavation. It rises three stories high and offers 10 one-bedroom apartments of 600 sq. ft. each, and 12 two-bedroom units of 800 sq. ft. each.

Each apartment has a large private deck or patio; all have the community usage of a patio area surrounding a swimming pool, and of a large roof terrace. One side gives a view of the pool-patio area, the other side has a view through and across the oak groves. A more mundane luxury is voluminous storage space in the basement area. Materials and finishes are not opulent, but certainly suitable and pleasing – plastered walls, sliding glass doors to decks, tiled and carpeted floors, hardwood cabinetry.

While economy was achieved partly through the selection of materials, major economies lie in the design and the usage of land. The 3/4-acre site slopes, so the three deck building was set over an above-grade utility and storage core, with parking under the overhang on the downslope side. Excavation and grading were thus held to a minimum. All dimensions were matched to standard precut lumber dimensions; plumbing was laid out to minimize the number of stacks; the entry stairway was placed between the two units, enclosed in glass and covered by an extension of the roof of one of the units. A second stairway is outside the building, glass enclosed, stopped in wood.

GENERAL SPECIFICATIONS

Structure: Concrete footings and foundation walls, some slab on grade; all superstructure frame stud and joist.

Exterior: Sand finish stucco walls; wood decks, railings and trim; sliding glass doors to decks.

Exterior Stairwell: Wood stairs enclosed in glass stopped in wood.

Roof: Composition build up.

Interior: Plastered walls and partitions.

Floors: Tile and carpeted, on wood.

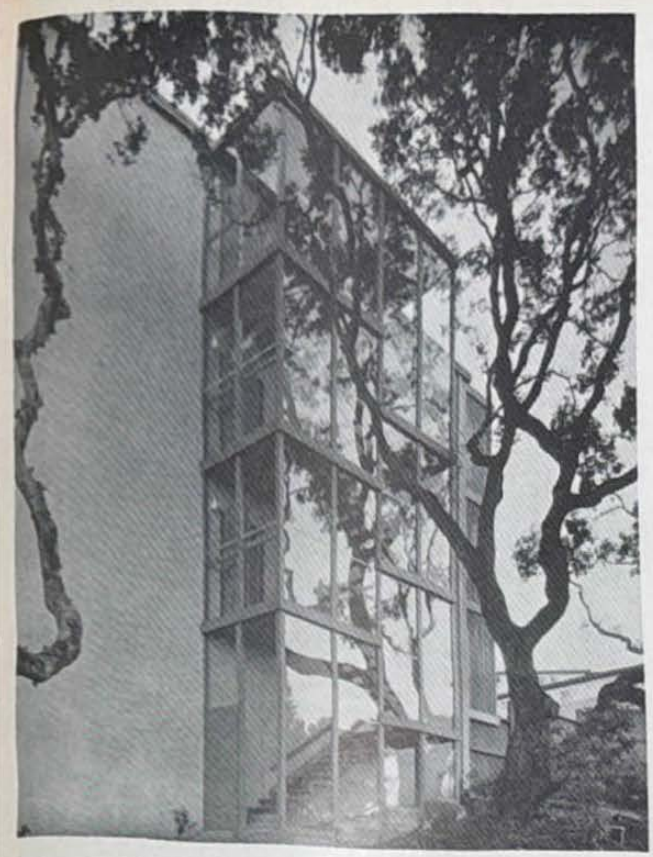
Total Living Area: 15,600 sq. ft.

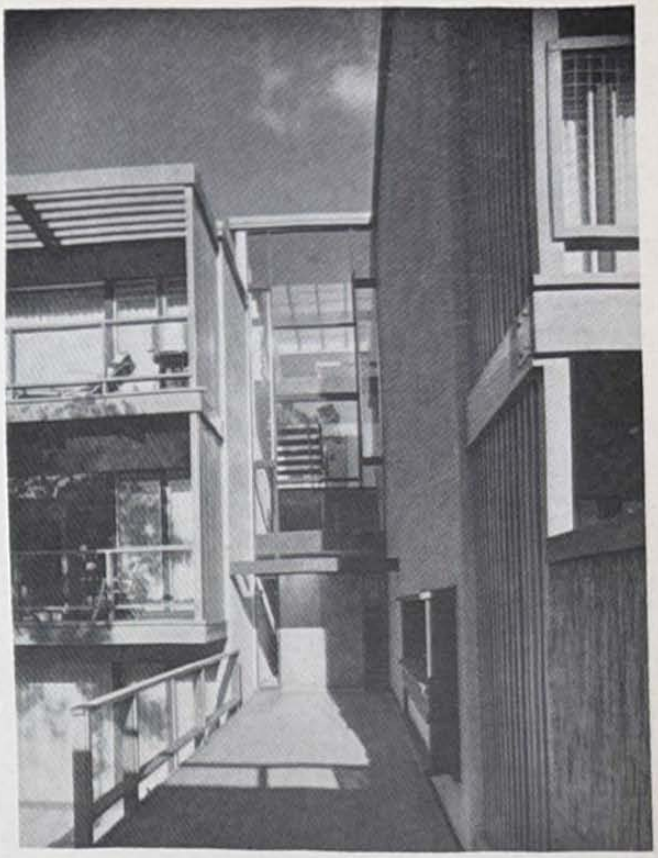
Cost per Square Foot: $7.40

Date of Completion: January 1960.

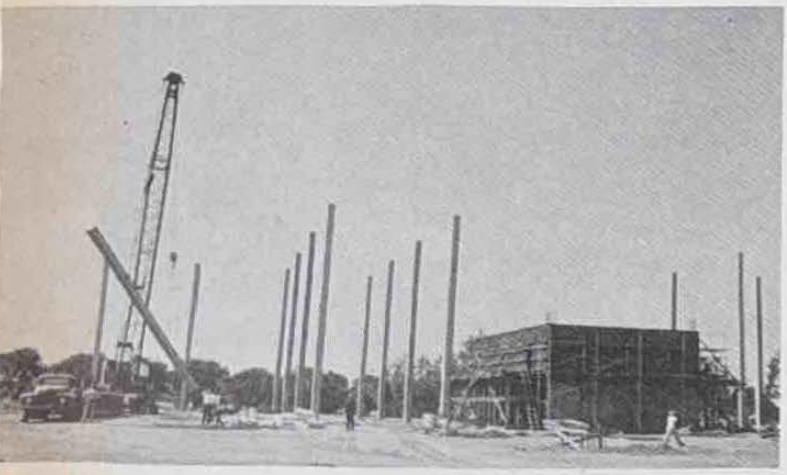
CARLMONT OAKS APARTMENTS, Belmont, Calif./*Robert Bachelor*, architect/*Harris Construction Co.*, general contractor

Phil Fein Photos

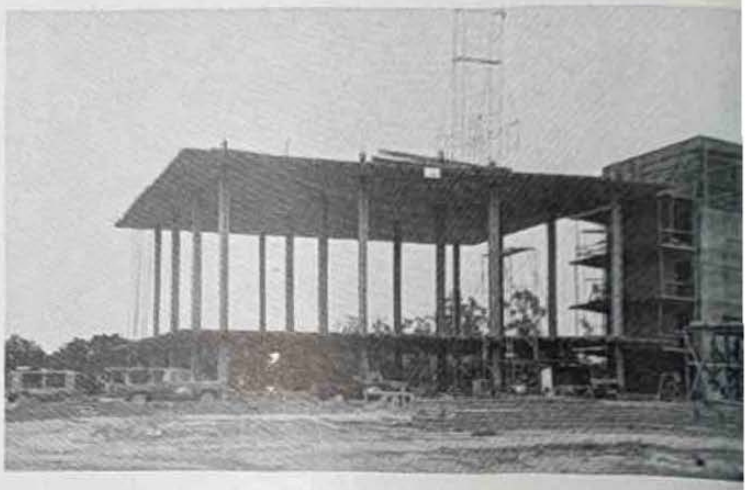








Foundations are provided by base plate with attachment made through four bolts to each precast column. Plate is so arranged that columns can be stacked economically in casting yard for curing and storing. Columns show cut-out section in form which permits insertion of key-bar during erection for support of floor slabs. Erection time for all 16 columns: four hours.



Precast floor slabs are lifted up full height one at a ti and fastened in place around columns, reversing us process of lifting all slabs to first floor, stopping for fast ing, then proceeding up to next stops in sequence. At l can be seen central core of building with its cantilever slabs which perform structural duties as well as support mechanical equipment.



Glass tunnel connects lobby with four-story center which houses 900 engineers.

NORTRONICS CENTER, Anaheim, Calif.

Latest concrete techniques that provide high performanc space on a low budget are described on page 27 . .



MODERNIZE CLASSROOM LIGHTING

AND REDUCE COSTS!

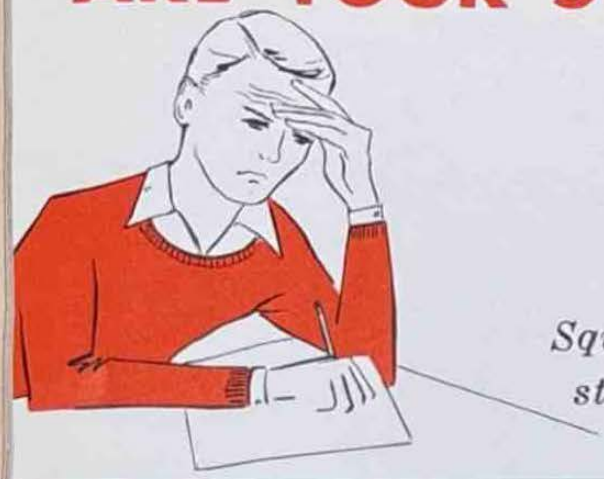
ARCADE SCHOOL, SACRAMENTO, CALIFORNIA: This teacher and class are reapi
the benefits of modern, high-quality lighting while the administration saves mon
each month in reduced power bills. Average intensity after one month's operati
is over 85 footcandles in the seating area. Chalkboards have over 50 footcandl

Smoot-Holman Perfect Vision® Square System
for lighting classrooms

SMOOT-HOLMAN COMPANY · INGLEWOOD, CALIFORNIA

*U.S. Patents Nos. 2,932,728 and 2,933,279

ARE YOUR STUDENTS HANDICAPPED BY DIM LIGHT AND CHALKBOARD GLARE?



Smoot-Holman Perfect Vision® Square systems bring classroom lighting up to modern standards...and save enough to pay for themselves!

WHAT ARE MODERN STANDARDS?

Current intensity recommendations for some common school tasks are:

Reading printed material	30 footcandles
Reading pencil writing	70 footcandles
Reading spirit duplicated mtl. (av.)	70 footcandles
Drafting	100 footcandles
Average of 24 school tasks	63 footcandles

HOW DOES THIS LIGHTING BENEFIT THE STUDENT?

Every study made has shown that when lighting is brought up to these standards of quantity and quality, students learn more quickly, more easily, and with less fatigue and strain. The teacher also benefits from a more alert, more attentive class.

AN APPEARANCE BONUS...

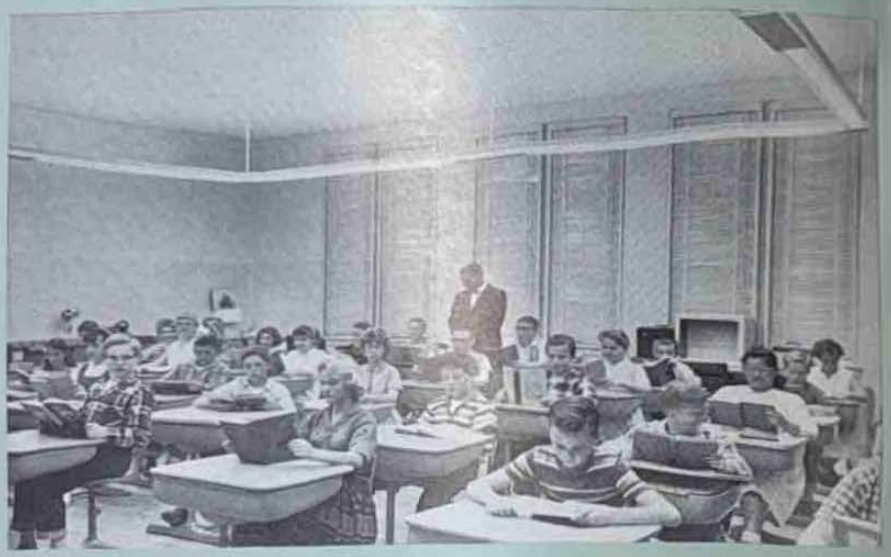
To obtain today's recommended intensities for schools, so many fixtures are needed that the ceiling tends to become cluttered. In contrast, this system is trim and clean in appearance. It does not obstruct the ceiling and conforms to the architecture of the room. Its open construction and unobtrusive lines eliminate the feeling of large masses overhead that is typical of many conventional fluorescent systems.

HOW DOES IT PERFORM?

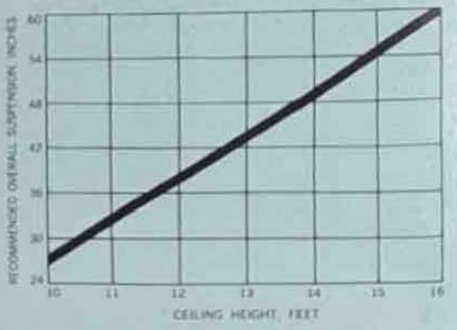
- From 55 to 80 footcandles maintained in the room, very uniformly distributed. No dark corners or "bright spots."
- Excellent brightness patterns, meeting all present or proposed standards.
- Outstanding chalkboard illumination. Over 50 footcandles on chalkboards, bulletin boards and other vertical surfaces. No special chalkboard lighting units required. *No glare* on the boards.
- Cheerful, "live" atmosphere, free from direct glare

ARE THERE ANY RESTRICTIONS...

...on the use of this system? Just one. For proper performance with the standard systems, the ceiling height must be ten feet or more. Under special conditions or for higher intensities lower ceiling heights can be used. Each special application must be examined individually.



Oak St. School, Inglewood, Calif., increased light level 72%, reduced operating costs 58%, and eliminated blackboard glare by replacing incandescent fixtures with this new system.



WHAT SUSPENSION SHOULD BE USED?

When ordering system, ceiling height should be specified. Chart shows recommended fixture suspension for classroom ceiling heights from 10 feet to 16 feet (e.g. 13 foot ceiling should use approximately 44-inch suspension).

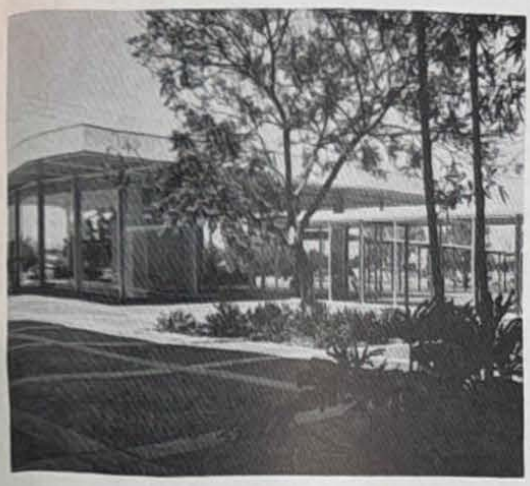
TO GET THE MOST FROM THE SYSTEM:

For effective, comfortable and cheerful lighting, the walls, ceiling, floor and furniture finishes should be light in color. The cover photo is a good example. The ceiling and walls above the fixture level should be white, with a reflectance of 80% to 90%. The walls below the fixture level should be light, from 50% to 70%. The floor and desks should have reflectances of 30% to 50%. Outside light should be controlled so that it does not produce glare.

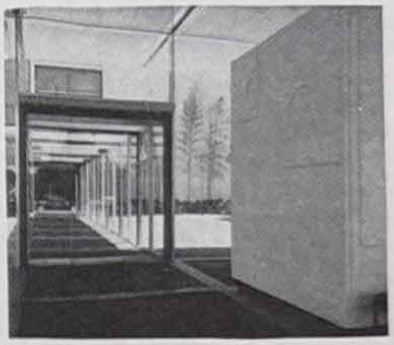
CONCERNING NEW CONSTRUCTION...

Although Smoot-Holman's Perfect Vision® Square System is intended primarily for relighting existing classrooms, its high performance is applicable to new classrooms as well.

• Have you read, "The *A-B-See* of Modern School Lighting"? If not, you may obtain a copy of this non-technical booklet on the principles of school lighting by writing Smoot-Holman Co., Inglewood, California.



Luminous ceiling is employed throughout reception plaza building with panels extending outside glass curtain wall. Roof is supported on four concrete columns within interior floor space. Both luminous light panels, exterior exposed aggregate paving squares and interior floor pattern repeat same size and proportion for harmonic design.



Sanitary and telephone facilities for reception office are enclosed in sculptured walls of small area within office.

SOME NEW STANDARDS for concrete construction innovations and economies have been set by the Nortronics Engineering and Administration Center on a 50-acre site in Anaheim, Calif., resulting in a particularly low budget for this type of building.

By channeling all essential service and mechanical equipment within the central core and its 10-ft. cantilevers, architects - engineers Daniel, Mann, Johnson & Mendenhall were able to design the main portion of the structure essentially as loft space. Conduit installations throughout the two adjacent wings were concentrated in the floor slabs, with construction methods in these areas employing a very economical system of precast concrete columns and prestressed lift-slabs for the four-story wings.

The unique prefabrication and erection methods were responsible for speedy erection by Oltmans Construction Co., and low pre-square-foot cost. A separate design prepared in advance of construction on the basis of standard poured-in-place concrete construction demonstrated a cost saving of more than $35,000, or nearly $0.40 per square foot, using the prefab, prestress and lift-slab techniques.

The two main wings contain 10,000 sq. ft. of engineering and office space on each floor of each wing for a total of 80,000 sq. ft. An additional 20,000 sq. ft. is contained in the central core, the lobby building and the exterior stairs, making a total of 100,000 sq. ft. of structure with 90,000 sq. ft. of net usable area.

The complex part of the installation is confined in the very small area of the building core, a five-story rectangle with cantilevered slabs on each side. These nearly solid walls serve as the principal shear walls for the entire building and to avoid unnecessary penetration, mechanical equipment is placed on each floor of the cantilevered portions of the core where it may feed directly into each floor and have unimpeded access to outside air as well. This design approach concentrates the expensive portion of the structure in a small space and produces a very simple structural system for the main part of the building.

The foundation system of the building consists of drilled concrete piles, caps and grade beams for all structures. Precast columns were fabricated offsite, brought in and erected simultaneously with the formation of the poured-in-place central core which utilizes reinforced concrete beams, bearing walls and one-way concrete slabs.

Lift slabs were poured and stressed on the ground, lifted to the full 50-ft. height of the columns where supporting shear bars were inserted under each slab at the columns and then weld connected to the projected central core slabs. This method eliminated the need for any temporary bracing of the lift-slabs and permitted the direct full-height lift without intermediate parking stops. Simplified connection details cut welding time and complexities to a minimum. The entire lifting operation for the eight 10,000-sq. ft. slabs was accomplished in only 11 working days, including moving jacks.

DMJM engineers reported that unusual construction accuracies for concrete construction methods were achieved throughout the work to its completion. The precast columns were constructed within 1/8-in. of true dimension in the vertical direction. Final checks of the columns after erection showed that most of the critical points in the columns were within 1/16-in. of the planned dimension, a very high degree of accuracy for concrete work, and the erection of the 16 columns for each wing was completed in only four hours. In addition, nearly perfect level floors were obtained by use of prestressing and special level strips poured around the perimeter of each slab prior to pouring the slab.



sun shade

The end of summer isn't the end of sun control problems. Bright fall days —unfiltered by summer's leaves—require architectural attention. The Horizontal Sun Curtain can be adapted for efficient sun shading on any elevation, and for any degree of shading regardless of season or building orientation. The Curtain is fabricated from extruded aluminum sections, and can be hung frrom an overhang or mounted directly at the face of the window. Curved or flat blades are offered to provide different modules. The sun curtains are supplied in etch and lacquer, a variety of alumilite finishes, and in a broad spectrum of colors.—Construction Specialties, Inc., 55 Winans Ave., Cranford, N.J.

(No. 1)

breathing light

Fluorescent luminaires can be the "hot spots" of an office. The Prismaround fixture helps solve this problem with a plastic louver-lens consisting of hundreds of open ⅜-in. prisms that "breathe" to allow air to circulate freely. The luminaire is cooler in operation and the lamp and ballast last longer.—Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 3, Mo.

(No. 2)

acid-resistant cement

An improved epoxy-cement called Durolox 10 is said to be especially resistant to acids, alkalies, oils, chemicals, detergents, and other corrosive agents. It can be used for setting and grouting quarry tile and brick in wet or dry areas, inside and outside, above and below grade. The cement can be applied directly without the use of a primer; its long pot life permits water clean-up of tile and brick up to one hour after application. — Electro Chemical Engineering And Manufacturing Co., Emmaus, Pa. (No. 3)

hospital casework

Both custom and standard base cabinets, wall cabinets and storage cabinets for hospitals are again available from Art Metal, Inc. They are offered in both stainless steel and enameled steel.—Art Metal, Inc., Jamestown, N.Y. (No. 4)

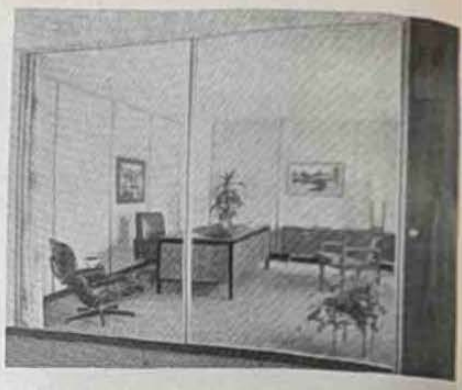
fan-coil thermostat

A new thermostat from Honeywell operates with a pneumatic valve to modulate hot or chilled water flow to the ventilating unit. The fan-coil thermostat can also be used with induction units. Both manual and automatic heating-cooling switchover are offered. Range of the thermostat is from 65 to 85 degrees Fahrenheit.—Minneapolis-Honeywell Regulator Co., 2727 Forth Ave. So., Minneapolis 8, Minn. (No. 5)

custom ceramics

Create your own architectural facing with a new selection of ceramic patterns from Gladding, McBean & Co. A dozen different designs are offered, ranging from medallion effect to ones which vary the play of light. Individual custom ceramics can also be ordered in sizes up to 11¾x11¾ in. Embossed or incised designs can be specified.—Gladding, McBean & Co. 2901 Los Felix Blvd., Los Angeles 39, Calif.

(No. 6)



demountable partitions

All parts of the Gold Bond #100 partition system are completely removable and reusable. Four heights are available: floor to ceiling, cornice, bank screen and low rail. Steel and aluminum framing with asbestos panels form the basic structure. Satin finish anodized aluminum plates with matching trim channel and black plastic base secure and cover the abutting panel edges. The panels may be ordered in any of six colors, or in plain asbestos cement. — National Gypsum Co., Buffalo 2, N.Y. (No. 7)

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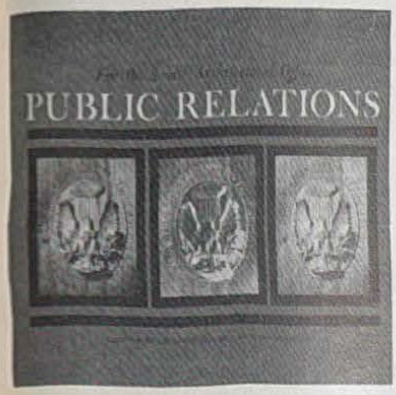
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pick of the month

"Public Relations" is published by the American Institute of Architects especially for the small architectural office. It suggests general policies, but also has specific hints on writing releases, making speeches, building the image of your office. Strictly useful.—6 pp.—AIA, 1735 New York Ave. NW, Washington 6, D.C.



Sound System for Your Church: tells how to improve sound coverage in churches, so that each churchgoer can hear clearly without strain; the brochure is helpful in installing new sound systems, adding to existing systems, or for evaluating present equipment — Executone, Inc., Austell Pl., Long Island City 1, N.Y.

Floodlight Your School: shows how modern lighting can spotlight schools in the public mind and help prevent night vandalism to school buildings; 4 pp.—Floodlighting Institute, 55 Public Square, Cleveland 13, Ohio.

Fluorescent and Incandescent Fixtures: lists, illustrates and describes a wide range of lighting fixtures including electric ceiling systems, recess fluorescent troffers, air-handling fluorescent luminaires and incandescent and recess units; 12 pp.—The Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 77, Mo.

Electric Infrared Heaters: describes and illustrates comfort heaters and accessories; typical solutions to heating problems are given; 12 pp.—Fostoria Corp., 1200 N. Main St., Fostoria, Ohio.

Specialized Protective Coatings: presents a guide to the solving of maintenance problems involving protective coatings; the booklet categorizes and cross-indexes a complete line of coatings for various surfaces and surface conditions; 4 pp.—Wilbur & Williams Co., Inc., 650 Pleasant St., Norwood, Mass.

Eight-inch Square Block: shows ways of using concrete masonry block without creating the look of a "fallout shelter," many handsome photographs of blocks used indoors and out in residential and commercial applications; 16 pp.—National Concrete Masonry Association, 1015 Wisconsin Ave., N. W., Washington 7, D. C.

Bead Glazing: explains what glazing bead is and what the architect's attitude toward it is; lists problems with bead glazing and their solutions; 20 pp.—Pemko Mfg. Co., 5755 Landregan, Emeryville, Calif.

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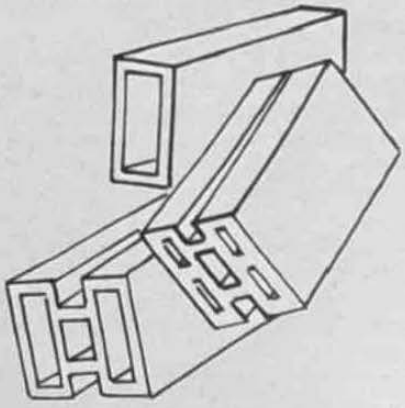
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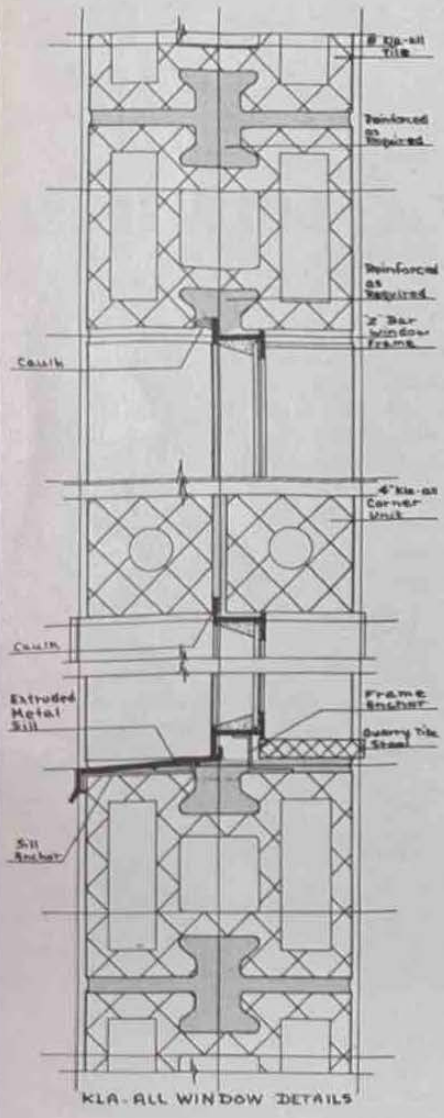
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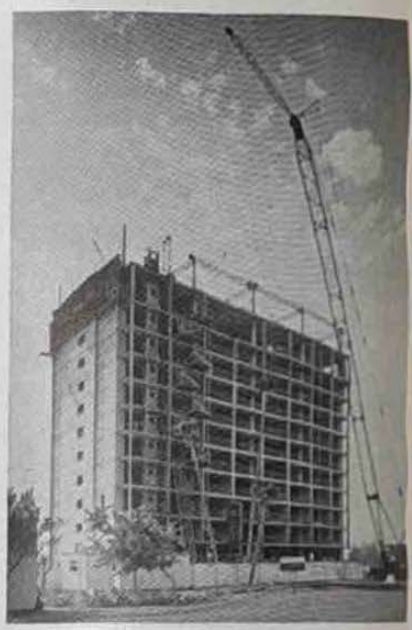
Products in Use

LIFT-SLAB CONCRETE AT DISNEYLAND

TALLEST STRUCTURE in the nation built by the post-tension, lift-slab method, the 11-story Disneyland Hotel Tower is nearing completion at Anaheim, Calif. The $2.5 million addition to the already famous complex was designed for owner-operator Wrather Corp. by architects Weber & Nicholson in conjunction with structural engineers Albert A. Erkel & Associates.

Twelve cement slabs, each 9 in. thick, 68x130 ft. in size and weighing 365 tons, were initially cast and prestressed at ground level, then elevated by 15 hydraulic jacks up an equal number of columns to form the separate floors. The columns were raised in 30-ft. increments to full tower height with the slab floors structurally integrated, one by one, at 9-ft. intervals on the vertical. Vagtborg Lift-Slab Corp. supervised this phase of the construction.

An unusual feature of design at the tower is an exterior elevator running up three tiers in an exposed, mosaic-lined shaft.



Vertical fenestration of precast white concrete and horizontal wrought iron railings will give architectural relief to large areas of charcoal-tinted solar glass of structure towering Disneyland Park.

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NEW STUDIOS, INC. P.O.BOX 472-S BROWNWOOD, TEXAS

Manufacturers and Suppliers

• **Weyerhaeuser Co.:** Robert S. Douglas, vice president of the Tacoma lumber company, has been appointed chairman of the National Wood Promotion Committee.

• **Carnes Corp.:** The Wahl Engineering Sales Co., Phoenix, and the Air Filter Service & Manufacturing Co., Tucson, have been appointed sales representatives for the Wisconsin manufacturer of air distribution and ventilation equipment.

• **Rheem Manufacturing Co.:** Western region headquarters have been moved from South Gate to the Slauson Warehouse Corp., Los Angeles. Offices in the new area are air-conditioned by the firm's Rheemaire equipment.

• **Simpson Timber Co.:** New director of merchandising for the Seattle-based company is Edward J. Riley.

• **Kaiser Steel Corp.:** A newly created position of vice president, executive division, will be filled by Jack J. Carlson, who will headquarter in Oakland. Ernest L. Illsley, former vice president and general manager, will operate the firm's fabricating plants at Montebello, Napa and Fontana.

• **Riverside Cement Co.:** Thomas S. Pucket has assumed responsibility for bulk cement sales to ready-mix concrete dealers in the Greater Los Angeles marketing area.

• **Integrated Design Associates, Inc.:** The Beverly Hills specialists in interior design have elected Kiyoshi Nishimi, executive vice-president, as a participating principal in the firm. Gary Myers is in charge of project coordination and Allen Kaplan has joined the company as project coordinator and operations consultant.

• **Vermiculite Institute:** A new roster of approved concrete deck applicators is available from the Institute, 208 South LaSalle St., Chicago 4, Ill.

• **Lasco Industries:** Thomas A. Carey has been elected to the board of directors of the Montebello firm, producers of chemicals, fiberglass building panels and plastic pipe.

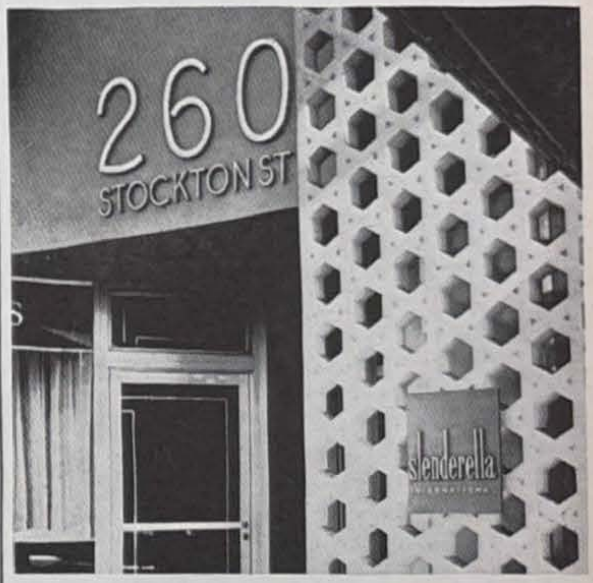
associations

• **Douglas Fir Plywood Association:** After almost 25 years as chief executive of the plywood association, W. E. Difford has retired. His many successful promotional campaigns earned funds for research, eventually resulting in an industry that increased in size 14 times during his tenure.

• **Women in Construction:** new officers and directors installed by the Portland chapter are: president, Mrs. Betty Wick; vice-president, Mrs. Thama Hill; secretary, Miss Ann Schofding; treasurer, Miss Ruth Anderson; directors, Mrs. Alyce Kludt, Mrs. Dorothy Puhaty, Mrs. Bernice Oakley and Miss Gladys Walrod.

• **National Council of Acoustical Consultants, Inc.:** the association has been formed to suppy information and do research on noise and acoustical design problems. Membership is open to firms having primary interests in acoustical consulting engineering. For further information, write to Howard C. Hardy, president, 53 W. Jackson Blvd., Chicago.

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Building Permit Totals for

First Column Figures in Parentheses are Number of Residential Units • Second Column is Dollar

CALIFORNIA

	# Res.	$ Value	Total $
Alameda	(149)	$ 1,386,627	$ 1,584,970
Alameda Co.	(331)	3,792,100	4,826,485
Albany	(1)	13,500	52,059
Alhambra	(33)	391,600	535,840
Anaheim	(203)	2,116,980	6,286,430
Antioch	(26)	335,934	400,496
Arcadia	(43)	664,932	877,933
Arroyo Grande	(5)	57,450	93,060
Artesia	(4)	74,900	99,100
Atherton	(2)	96,800	227,930
Atwater	(1)	10,900	16,550
Auburn	(6)	35,000	96,831
Avalon	( )	Nil	21,300
Azusa	(49)	363,700	434,900
Bakersfield	(32)	377,600	770,450
Baldwin Park	(58)	660,600	820,075
Banning	(8)	109,329	500,498
Barstow	( )	Nil	123,801
Bell	(67)	307,300	385,768
Bellflower	(122)	942,899	1,106,479
Bell Gardens	(85)	669,400	815,500
Belmont	(48)	478,550	545,263
Benicia	(2)	20,783	55,425
Berkeley	(89)	878,038	1,800,723
Beverly Hills	(55)	1,657,000	5,105,270
Bradbury	( )	Nil	Nil
Brawley	(1)	13,000	30,700
Brea	(12)	234,501	268,183
Buena Park	(49)	447,525	1,289,249
Burbank	(115)	770,000	1,553,823
Burlingame	(24)	245,750	409,722
Butte Co.	(126)	2,409,837	2,597,672
Calexico	(2)	20,000	46,950
Campbell	(137)	1,413,110	1,589,316
Carlsbad	(11)	215,478	622,724
Carmel	(1)	21,000	75,600
Chico	(11)	161,942	447,232
Chino	(17)	227,790	306,329
Chula Vista	(78)	791,435	1,998,088
Claremont	(141)	2,462,000	2,630,885
Coalinga	(22)	300,000	302,667
Colton	(4)	66,240	234,984
Commerce	(3)	25,650	272,225
Compton	(7)	93,500	654,625
Concord	( )	No Reply	No Reply
Cntra Csta Co.	(185)	3,916,574	5,090,784
Corona	(30)	331,009	425,433
Coronado	( )	No Reply	No Reply
Corte Madera	( )	No Reply	No Reply
Costa Mesa	(60)	543,613	897,823
Covina	(49)	716,800	789,170
Cudahy	(24)	199,700	212,660
Culver City	(3)	49,000	646,254
Dairy Valley	( )	Nil	13,000
Daly City	(28)	360,200	592,268
Davis	(49)	497,000	519,151
Delano	(5)	68,500	80,428
Downey	(63)	655,674	1,867,630
Duarte	(18)	184,500	240,630
El Cajon	(39)	384,900	897,226
El Centro	(4)	28,250	119,646
El Cerrito	(5)	103,265	910,661
El Dorado Co.	(81)	980,337	3,468,697
El Monte	( )	No Reply	No Reply
El Segundo	(8)	90,000	508,345
Emeryville	( )	Nil	28,095
Escondido	(18)	171,532	443,128
Eureka	(2)	29,400	264,091
Fairfield	(60)	462,139	589,006
Fillmore	(6)	64,832	73,932
Fontana	(12)	194,990	238,562
Fremont	(249)	3,623,300	3,794,281
Fresno	(44)	331,432	1,975,530
Fresno Co.	(50)	502,391	965,241
Fullerton	( )	No Reply	No Reply
Glendale	(313)	3,105,023	5,177,414
Glendora	(23)	401,100	448,885
Half Moon Bay	(8)	80,250	92,050
Hanford	(5)	68,720	157,203
Hawthorne	(43)	401,600	2,118,241
Hayward	(179)	1,298,680	1,839,021
Hemet	(48)	529,300	681,224
Hermosa Bch	(5)	55,832	197,509
Hidden Hills	(2)	71,500	82,350
Hillsborough	(3)	191,000	254,655
Holtville	(2)	26,000	43,880
Humboldt Co.	( )	No Reply	No Reply
Huntngtn Bch.	(354)	5,047,429	5,808,991
Huntington Pk	( )	No Reply	No Reply
Imperial Co.	( )	Nil	92,382
Indio	(2)	25,850	360,767
Industry	(2)	15,200	215,745
Inglewood	(91)	1,021,370	1,259,389
Irwindale	( )	Nil	17,500
Kern Co.	(168)	2,169,352	2,922,888
Laguna Beach	(11)	212,000	258,245
La Habra	(22)	231,690	422,487
Lakewood	(4)	104,600	244,315
La Mesa	(31)	611,462	761,448
La Mirada	( )	Nil	73,075
La Puente	(51)	721,000	762,432
La Verne	(4)	56,000	86,005
Lawndale	(21)	202,150	249,000
Lindsay	( )	Nil	8,517
Livermore	(16)	169,200	624,932
Lodi	(23)	238,024	495,449
Lompoc	(77)	472,214	586,358
Long Beach	(320)	2,150,920	4,951,593
Los Altos	(15)	332,500	698,900
Los Angeles	(2,969)	40,778,144	68,273,351
Ls Angls Co.	(1,108)	13,522,889	19,171,206
Los Gatos	(7)	141,000	369,700
Lynwood	(65)	425,770	932,610
Madera	(2)	28,000	71,947
Madera Co.	(20)	149,556	406,754
Manhattn Bch.	(16)	291,684	449,667
Manteca	(13)	136,000	176,221
Marin Co.	(315)	4,464,340	4,934,906
Martinez	(14)	267,274	431,254
Marysville	(2)	29,500	66,788
Maywood	(6)	202,900	236,980
Menlo Park	(16)	294,000	1,055,355
Merced	(9)	99,083	156,727
Merced Co.	(16)	187,470	237,107
Millbrae	(5)	108,700	213,020
Mill Valley	(6)	123,000	152,950
Modesto	(41)	580,248	754,482
Monrovia	(23)	300,346	378,748
Montclair	(239)	2,373,550	2,446,400
Montebello	(86)	748,722	1,353,650
Monterey	(13)	193,350	287,960
Monterey Co.	(62)	855,916	1,013,435
Monterey Park	(91)	897,700	1,015,447
Mountan View	(282)	2,231,641	2,645,606
Napa	(28)	520,520	561,014
Napa Co.	(26)	385,900	460,912
National City	(3)	23,550	114,805
Newport Bch	(45)	891,843	1,339,528
N. Sacramento	(3)	38,130	173,912
Norwalk	(18)	123,500	354,590
Novato	(33)	550,500	492,022
Oakdale	(2)	23,728	42,320
Oakland	(280)	2,332,785	5,037,844
Oceanside	(19)	226,000	506,128
Ojai	(1)	27,300	72,700
Ontario	(94)	823,705	923,540
Orange	(385)	7,196,810	7,477,800
Orange Co.	(433)	7,094,688	8,504,765
Oroville	(23)	153,500	221,099
Oxnard	(51)	379,696	870,729
Pacifica	(24)	264,000	339,400
Pacific Grove	(3)	37,500	123,376
Palm Springs	(36)	586,500	1,449,058
Palo Alto	(76)	667,300	2,944,088
Pals Verd Est.	(22)	1,061,130	1,081,560
Paramount	(68)	489,000	696,320
Pasadena	(109)	1,063,416	3,638,807
Paso Robles	(1)	10,000	23,869
Pico Rivera	(4)	51,800	676,880
Piedmont	( )	Nil	50,042
Pinole	(2)	42,709	51,283
Pittsburg	(4)	48,872	90,662
Placentia	( )	Nil	1,419,913
Placer Co.	( )	Nil	1,742,841
Pleasanton	(3)	50,610	128,395
Pomona	(161)	1,611,570	4,375,728
Porterville	(1)	9,000	51,296
Port Hueneme	( )	Nil	146,400
Red Bluff	(16)	103,000	251,598
Redding	(7)	110,540	254,349
Redlands	(10)	204,900	1,061,573
Redondo Bch.	(36)	402,109	869,347
Redwood City	(171)	1,746,000	4,105,459
Richmond	(63)	598,320	1,534,902
Riverside	(50)	864,300	1,364,459
Riverside Co.	(470)	5,462,138	6,576,464
Rolling Hills	(2)	110,000	121,800
Rolling Hls Es	(3)	74,000	137,910
Rosemead	(4)	58,400	111,625
Roseville	(70)	506,819	1,081,641
Sacramento	(156)	1,346,300	2,910,400
Sacramto Co.	(513)	5,410,286	7,184,746
St. Helena	(3)	41,328	77,748
Salinas	(169)	1,594,000	3,922,429
San Bernadino	(87)	1,062,116	[illegible]
San Brdno Co.	( )	No Reply	No Reply
San Bruno	(52)	799,600	[illegible]
San Carlos	(11)	219,675	[illegible]
San Clemente	(34)	651,685	[illegible]
San Diego	(443)	4,990,500	[illegible]
San Diego Co.	(233)	3,536,000	[illegible]
San Dimas	(18)	238,150	[illegible]
San Fernando	(7)	109,300	[illegible]
San Francisco	(623)	10,762,487	[illegible]
San Gabriel	( )	No Reply	No Reply
Sanger	(10)	128,789	[illegible]
San Jacinto	(3)	23,830	[illegible]
San Joquin Co.	(27)	239,579	[illegible]
San Jose	( )	No Reply	No Reply
San Leandro	(54)	373,000	[illegible]
San Luis Obsp	(44)	555,275	[illegible]
Sn Ls Obis Co	(108)	1,182,159	[illegible]
San Marino	( )	No Reply	No Reply
San Mateo	(16)	243,500	[illegible]
San Mateo Co.	(131)	1,929,663	[illegible]
San Pablo	(22)	157,017	[illegible]
San Rafael	(102)	1,351,579	[illegible]
Santa Ana	(261)	2,205,100	[illegible]
Santa Barbara	(84)	867,300	[illegible]
Snt Barbra Co	(409)	6,324,500	[illegible]
Santa Clara	(201)	1,998,500	[illegible]
Santa Clra Co.	(52)	905,500	[illegible]
Santa Cruz	(79)	1,177,493	[illegible]
Santa Cruz Co.	(121)	1,602,329	[illegible]
Santa Fe Sprgs	(2)	23,000	[illegible]
Santa Maria	(294)	3,499,804	[illegible]
Santa Monica	(99)	988,136	[illegible]
Santa Paula	(1)	13,760	[illegible]
Santa Rosa	(92)	1,064,300	[illegible]
Sausalito	(6)	133,000	[illegible]
Seal Beach	( )	Nil	[illegible]
Seaside	(22)	163,500	[illegible]
Selma	(29)	169,800	[illegible]
Shasta Co.	(45)	569,038	[illegible]
Sierra Madre	(27)	268,800	[illegible]
Solano Co.	(14)	201,838	[illegible]
Sonoma Co.	( )	No Reply	No Reply
South Gate	(4)	33,050	[illegible]
South El Mnte	( )	Nil	[illegible]
So. Pasadena	(1)	19,800	[illegible]
S. Sn Francsco	(83)	697,650	[illegible]
Stanislaus Co.	(25)	301,592	[illegible]
Stockton	(39)	525,640	[illegible]
Sunnyvale	(297)	2,959,164	[illegible]
Temple City	(17)	175,800	[illegible]
Torrance	(337)	3,878,975	[illegible]
Tracy	(22)	26,190	[illegible]
Tulare	(12)	84,000	[illegible]
Tulare Co.	(156)	898,169	[illegible]
Turlock	(2)	50,052	[illegible]
Ukiah	(1)	15,200	[illegible]
Upland	(42)	546,300	[illegible]
Vacaville	(8)	78,100	[illegible]
Vallejo	(19)	296,000	[illegible]
Ventura	(86)	1,280,885	[illegible]
Ventura Co.	(321)	3,756,592	[illegible]
Visalia	(8)	135,674	[illegible]
Walnut	( )	Nil	[illegible]
Walnut Creek	(26)	357,440	[illegible]
Wasco	(9)	91,550	[illegible]
Watsonville	(1)	13,000	[illegible]
West Covina	(14)	255,450	[illegible]
Whittier	(39)	492,100	[illegible]
Woodland	(19)	240,960	[illegible]
Woodside	(3)	189,666	[illegible]
Yolo Co.	(10)	122,665	[illegible]
Yreka	(5)	67,900	[illegible]
Yuba City	(20)	147,050	[illegible]
Yuba Co.	(56)	454,282	[illegible]
Total	**(19,787)**	**$243,870,267**	**$394,954,639**

OREGON

Albany	(5)	$ 88,160	$ [illegible]
Ashland	(3)	42,500	[illegible]
Astoria	(2)	19,000	[illegible]
Baker	(1)	14,000	[illegible]
Beaverton	(11)	146,272	[illegible]
Bend	(7)	74,000	[illegible]
Central Point	(2)	18,000	[illegible]
Clackamas Co.	(58)	662,945	[illegible]
Coos Bay	(2)	30,500	[illegible]
Corvallis	(41)	344,000	[illegible]
Dallas	( )	Nil	[illegible]
Douglas Co.	(12)	118,850	[illegible]
Eugene	(57)	618,230	[illegible]
Forest Grove	(6)	68,500	[illegible]
Grants Pass	(5)	55,000	[illegible]
Gresham	( )	Nil	[illegible]

*Complete figures not available

Western States for August

Residential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hermiston	( )	Nil	65,717
Hillsboro	(23)	166,400	468,307
Hood River	(1)	7,000	18,815
Klamath Falls	(1)	16,000	378,895
La Grande	(2)	23,748	181,298
Lake Oswego	( )	No Reply	No Reply
Lane Co.	(132)	1,344,766	1,551,139
Lebanon	(1)	18,000	22,252
Marion Co.	(42)	530,980	633,240
McMinnville	(2)	27,500	46,380
Medford	(18)	205,500	288,305
Milltn-Freewtr	(1)	7,500	24,088
Milwaukie	(21)	298,700	335,365
Multnomh Co.	(203)	3,175,802	5,676,057
Newberg	(1)	1,000	7,888
Newport	(4)	39,640	74,140
North Bend	(5)	61,000	110,146
Ontario	(2)	29,000	58,425
Oregon City	(2)	26,500	48,029
Oswego	(13)	236,500	543,151
Pendleton	(3)	33,000	108,360
Portland	(197)	3,262,475	10,148,258
Roseburg	(1)	10,950	39,329
St. Helens	(4)	41,900	107,165
Salem	(14)	105,307	1,726,058
Seaside	(7)	49,500	62,085
Springfield	(24)	215,199	362,512
The Dalles	( )	Nil	50,501
Washingtn Co.	(83)	1,666,490	1,827,420
Total	**(1,019)**	**$ 13,900,314**	**$ 63,758,392**
WASHINGTON			
Aberdeen	(2)	$ 9,600	$ 240,490
Anacortes	( )	Nil	9,540
Auburn	(6)	58,000	327,785
Bellevue	( )	No Reply	No Reply
Bellingham	(7)	93,000	213,343
Bremerton	(2)	30,000	675,600
Camas	(1)	20,000	26,420
Centralia	( )	Nil	28,975
Chehalis	( )	No Reply	No Reply
Clark Co.	(32)	446,000	1,765,220
Clarkston	( )	Nil	42,991
Edmonds	(27)	446,200	595,775
Ellensburg	(1)	10,000	47,644
Enumclaw	( )	Nil	2,200
Ephrata	( )	Nil	15,475
Everett	(12)	178,860	498,875
Grys Hrbr Co.	(31)	291,400	649,325
Hoquiam	( )	Nil	117,097
Island Co.	(11)	78,000	98,050
Kelso	(3)	36,500	157,692
Kennewick	(6)	72,900	105,651
Kent	(18)	319,285	580,660
King Co.	(697)	10,030,755	11,704,112
Kirkland	( )	No Reply	No Reply
Longview	(22)	228,000	367,324
Lynnwood	(3)	54,040	456,030
Mercer Island	(19)	481,420	553,174
Moses Lake	(2)	31,000	240,925
Milke Terrace	(21)	210,000	233,807
Olympia	(10)	161,500	942,159
Pasco	(2)	41,000	563,675
Pierce Co.	(157)	1,671,055	2,622,689
Port Angeles	(6)	63,500	249,570
Pullman	(2)	30,300	259,195
Puyallup	(10)	113,000	181,700
Renton	( )	No Reply	No Reply
Richland	(6)	103,000	270,015
Seattle	(257)	3,183,800	8,333,140
Shelton	( )	Nil	11,600
Spokane	(21)	437,400	1,146,663
Spokane Co.	(38)	652,750	1,200,694
Sunnyside	(4)	57,000	104,585
Tacoma	(137)	1,245,655	2,770,556
Thurston Co.	( )	No Reply	No Reply
Vancouver	(16)	170,250	370,283
Walla Walla	(2)	27,000	154,280
Walla Wila Co.	(8)	97,000	1,385,230
Wenatchee	(2)	23,000	256,166
Yakima	(13)	193,500	861,442
Total	**(1,614)**	**$ 21,395,670**	**$ 41,437,822**
ALASKA			
Anchorage	(42)	$ 937,143	$ 1,936,382
Fairbanks	(39)	571,500	763,200
Juneau	( )	Nil	101,543
Ketchikan	( )	Nil	11,400
Total	**(81)**	**$ 1,508,643**	**$ 2,812,525**
IDAHO			
Blackfoot	(6)	$ 74,925	$ 175,050
Boise	(29)	252,550	2,355,066
Burley	(5)	48,500	239,400
Caldwell	(4)	53,500	516,405
Coeur d'Alene	(7)	82,713	418,757
Idaho Falls	(24)	367,521	534,159
Jerome	( )	Nil	8,500
Lewiston	(2)	29,000	216,865
Moscow	(3)	43,000	199,307
Nampa	(5)	72,000	112,415
Payette	(1)	14,000	19,100
Pocatello	(10)	130,500	257,410
Sandpoint	(1)	22,000	25,700
St. Maries	( )	No Reply	No Reply
Twin Falls	(38)	354,000	533,000
Total	**(135)**	**$ 1,544,209**	**$ 5,611,134**
MONTANA			
Anaconda	( )	$ Nil	$ 6,000
Billings	(22)	383,000	1,652,097
Bozeman	(3)	58,500	79,660
Butte	(1)	4,000	89,600
Cut Bank	( )	No Reply	No Reply
Glasgow	( )	Nil	8,000
Glendive	(1)	14,000	15,582
Great Falls	(38)	403,831	494,353
Havre	(2)	25,000	36,570
Helena	(17)	261,592	674,207
Kalispell	(2)	27,500	48,790
Lewistown	(4)	41,500	412,900
Livingston	( )	Nil	5,900
Malta	( )	Nil	3,000
Miles City	( )	Nil	35,624
Missoula	(5)	77,200	199,073
Total	**(95)**	**$ 1,296,123**	**$ 3,741,356**
WYOMING			
Casper	(22)	$ 301,000	$ 719,733
Cheyenne	(38)	450,900	723,699
Cody	(8)	95,000	103,150
Laramie	(14)	128,400	168,173
Rawlins	( )	Nil	136,780
Riverton	(1)	10,000	28,300
Rock Springs	(18)	162,000	238,000
Sheridan	(4)	107,000	151,347
Total	**(105)**	**$ 1,254,300**	**$ 2,269,182**
COLORADO			
Adams Co.	(146)	$ 1,852,000	$ 2,538,481
Alamosa	(5)	46,500	52,177
Arapahoe Co.	(355)	6,228,150	8,324,328
Arvada	(102)	1,264,000	1,608,609
Aspen	( )	Nil	94,300
Aurora	(89)	959,810	1,138,781
Boulder	(99)	1,832,600	2,053,015
Boulder Co.	(37)	445,257	1,428,019
Colrdo Sprngs	(103)	1,322,773	2,776,023
Cortez	( )	Nil	17,850
Denver	(119)	1,297,229	3,581,857
Durango	(2)	28,327	37,712
El Paso Co.	(41)	639,860	1,054,886
Englewood	(18)	171,500	358,781
Estes Park	(3)	19,050	22,050
Fort Collins	(14)	208,150	368,732
Fort Morgan	(1)	14,620	26,747
Golden	(5)	72,250	108,900
Grnd Junction	(4)	34,000	81,130
Greeley	(18)	229,329	372,960
Jefferson Co.	(303)	3,594,874	4,721,151
La Junta	(1)	12,500	71,882
Lamar	(7)	100,000	105,750
Littleton	(19)	312,245	379,663
Longmont	(24)	251,138	664,668
Loveland	(21)	257,500	368,400
Monte Vista	( )	Nil	21,875
Montrose	(4)	52,200	67,194
Pitkin Co.	(3)	83,000	96,900
Pueblo	(50)	534,190	816,196
Pueblo Co.	(9)	65,000	88,900
Sterling	(1)	6,000	16,900
Trinidad	(22)	199,380	271,295
Walsenburg	( )	Nil	7,583
Westminster	(13)	149,372	349,032
Total	**(1,638)**	**$ 22,282,804**	**$ 34,092,727**
UTAH			
American Frk	(1)	$ 10,000	$ 12,300
Bountiful	(16)	233,700	523,100
Brigham City	(13)	110,000	125,150
Cedar City	(2)	39,000	54,200
Clearfield	(4)	81,000	148,100
Davis Co.	(9)	135,072	209,907
Kaysville	(2)	14,540	18,340
Layton	(22)	286,000	839,900
Logan	(13)	130,999	492,262
Murray	(13)	150,000	494,775
Ogden	(23)	393,760	689,560
Orem	(7)	85,070	105,371
Price	( )	Nil	43,000
Provo	(7)	71,000	216,668
Salt Lake City	(147)	2,191,300	4,675,349
Salt Lake Co.	(328)	3,923,000	5,411,000
S. Slt Lke Cty	( )	Nil	272,360
Spanish Fork	( )	Nil	3,925
Tooele	(60)	607,720	932,286
Utah Co.	(7)	88,310	111,465
Weber Co.	(9)	222,000	259,950
Total	**(681)**	**$ 8,772,471**	**$ 15,638,968**
NEVADA			
Boulder City	(31)	$ 411,549	$ 420,999
Clark Co.	(62)	1,732,969	7,702,217
Elko	( )	No Reply	No Reply
Las Vegas	(496)	6,234,754	7,483,618
N. Las Vegas	(111)	1,011,937	1,119,011
Reno	(93)	1,183,360	6,303,021
Sparks	(46)	581,750	654,710
Washoe Co.	(20)	384,836	666,952
Total	**(859)**	**$ 11,541,155**	**$ 24,350,528**
ARIZONA			
Buckeye	( )	$ No Reply	$ No Reply
Casa Grande	( )	No Reply	No Reply
Chandler	(15)	108,838	231,413
Douglas	(2)	14,975	23,859
Flagstaff	(65)	208,206	836,558
Florence	( )	Nil	Nil
Glendale	(52)	591,600	1,191,465
Maricopa Co.	(124)	1,263,785	1,654,353
Mesa	(73)	783,442	1,693,107
Phoenix	(375)	3,255,087	8,830,089
Pima Co.	(122)	1,403,745	1,758,959
Prescott	(5)	71,500	969,933
Scottsdale	(5)	53,000	631,176
Tempe	(39)	478,568	1,636,450
Tucson	(146)	1,137,469	1,975,984
Wickenburg	(1)	6,500	9,850
Winslow	( )	No Reply	No Reply
Yuma	(8)	48,000	149,340
Total	**(1,032)**	**$ 9,424,715**	**$ 21,592,536**
NEW MEXICO			
Alamogordo	( )	$ Nil	$ 5,139
Albuquerque	(160)	2,603,194	3,431,100
Artesia	(7)	77,000	97,403
Carlsbad	(7)	80,000	210,500
Clovis	(19)	205,511	323,032
Deming	(4)	35,000	38,100
Farmington	(4)	26,094	148,993
Gallup	(7)	125,385	140,075
Hobbs	(24)	335,399	415,757
Las Cruces	(15)	203,200	534,750
Las Vegas	( )	No Reply	No Reply
Lovington	(2)	33,000	66,300
Raton	( )	No Reply	No Reply
Roswell	(43)	487,500	1,265,145
Santa Fe	(25)	251,900	384,945
Silver City	( )	Nil	8,950
Truth or Consequences	( )	No Reply	No Reply
Tucumcari	(10)	107,500	110,120
Tularosa	(1)	7,984	10,544
Total	**(338)**	**$ 4,578,667**	**$ 7,190,853**
HAWAII			
Hawaii Co.	(26)	$ 336,733	$ 700,544
Honolulu	(449)	4,915,030	12,436,868
Maui Co.	(27)	247,523	487,647
Total	**(502)**	**$ 5,499,286**	**$ 13,625,059**
GRAND TOTAL	**(27,886)**	**$346,868,624**	**$538,847,316**

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not specified

We are intrigued by the concept of a five-mile-long building suggested by Prof. Henry Charles Burge of the University of California's School of Architecture and Fine Arts. He thinks there will be such structures within the next decade in California, where there still is ground room.

The concept is based on the force ratio: The energy required to move one pound vertically for one foot will push the same pound five feet horizontally.

"This ratio is constantly at work," Burge argues, "from the minute construction of a building begins until its completion, and afterwards in the service and maintenance of the structure and all operations within it — whether they be industrial, office, retail sales or human living."

The salient points:

- Land cost no greater than for erecting a mile-high structure in a high density area.
- Construction cost about $20 per square foot compared with $100 for a mile-high building.
- Parking provision for all within a minute or two of each doorway. Deliveries available at each doorway.
- A moving sidewalk, having the same 5 to 1 advantage in force ratio, for shuttling between stores and offices.
- Utilities, fire protection and such greatly simplified compared with high rise structures.

Fortunately for the elevator industry, Professor Burge believes that only in California will such buildings become a reality. California has the land, the imagination and the vigorous economy to carry out such a project. The horizontal, low density concept is already a precedent in the state.

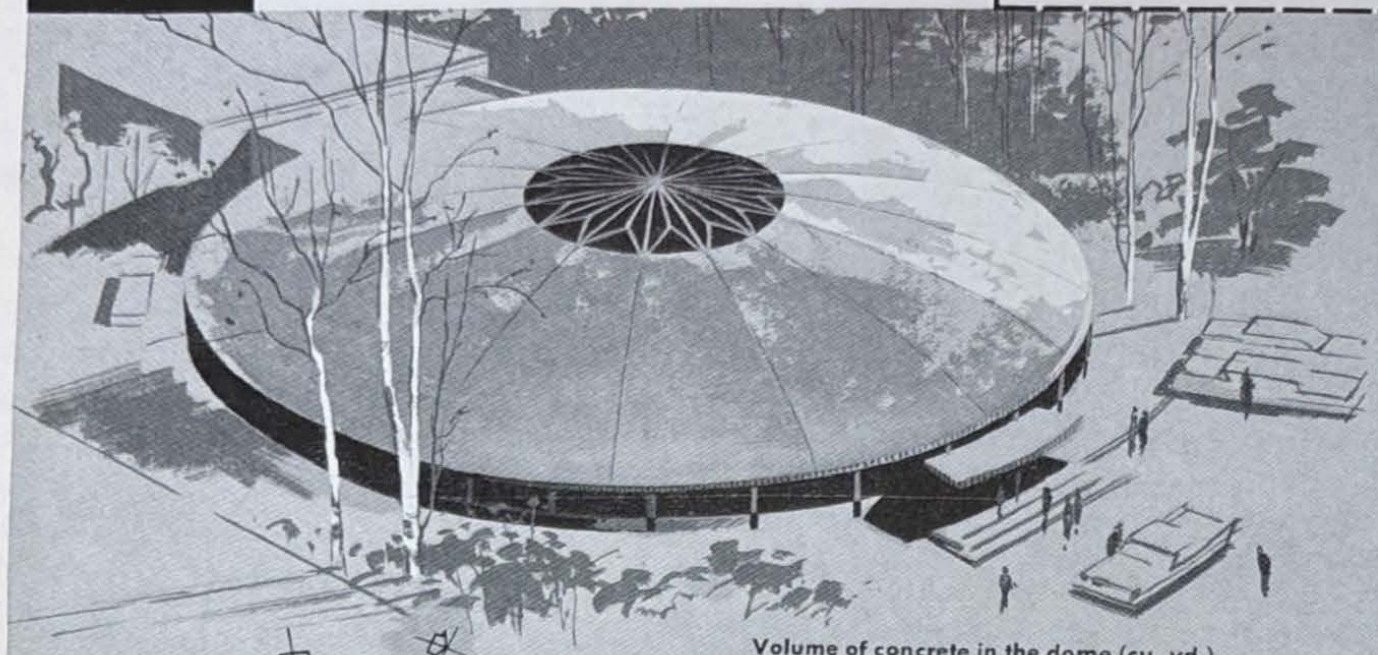
Considering this five-mile-long building, and the concept of componentized systems for paneling and roofing large areas of repetitive shapes, as described in the Panelbild Story starting on page 13 of this issue, we can't help but wonder how long it will take for Professor Burge and Pete Bilder to get their heads together!

NO. 3 dome shell roofs

a.i.a. file: 4-a

Prepared as a service to architects by Portland Cement Association

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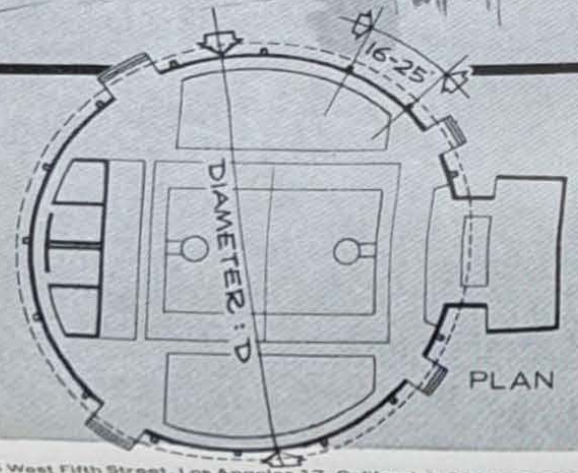


Designing for long spans and column-free space. The basic dome shell of concrete is architecturally important today for both practical and esthetic reasons. Because strength is inherent in the shape, shell roofs in the United States are being designed with thicknesses of as little as 2½ inches.

Dome shells are especially suitable for structures such as gymnasiums where spans are long and column-free space is required. As seen from the table below, shell thickness varies with length of span and curvature of dome.

Domes may be pierced as desired for natural light, or appropriate domed or flat-fixed lights may be used.

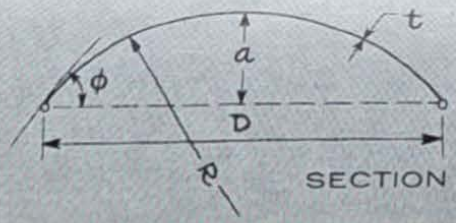
Get complete technical literature on additional aspects of concrete dome shell design, as well as other applications of concrete. (U.S. and Canada only.) Send a request on your letterhead.



Volume of concrete in the dome (cu. yd.)

$$\frac{D^2 (t+1)}{360}$$

D in feet, t in inches



DOME/SPAN DATA

D	t*	ϕ	a	R
100′	3″	30 45	13.4′ 20.7′	100′ 70.7′
125′	3″	30 45	16.8′ 25.9′	125′ 88.4′
150′	3½″ (3″)	30 45	20.1′ 31.0′	150′ 106.0′
175′	4″ (3½″)	30 45	23.5′ 36.2′	175′ 123.7′
200′	4½″ (4″)	30 45	26.8′ 41.4′	200′ 141.4′

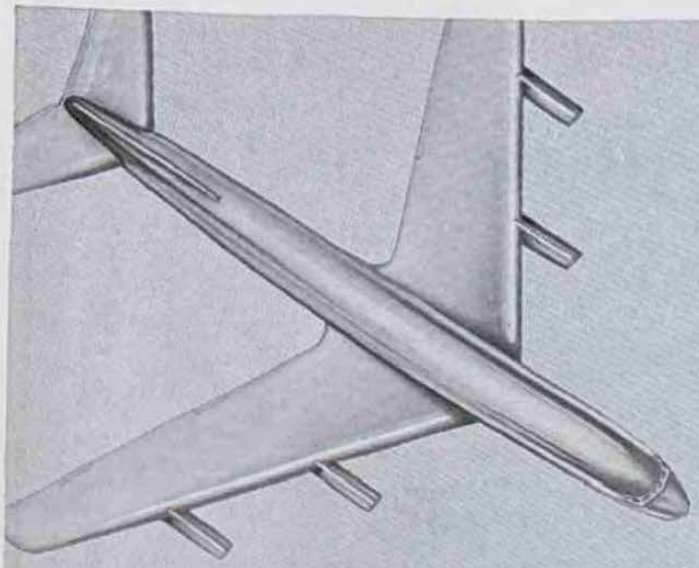
*Note: Shell thickness "t" is usually increased by 50 to 75 per cent near the periphery.

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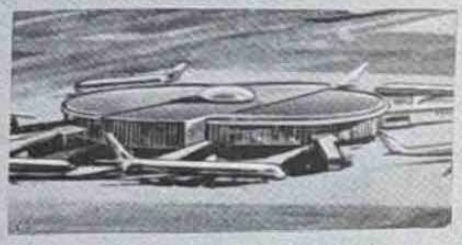
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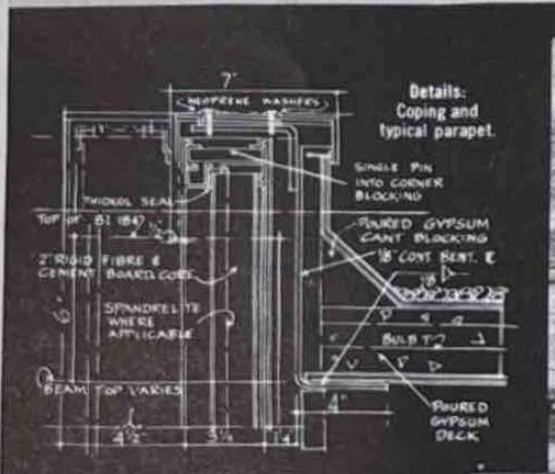
*T.M. Reg. U.S. Pat. Off.

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Consulting Structural Engineers:
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UNITED STATES GYPSUM

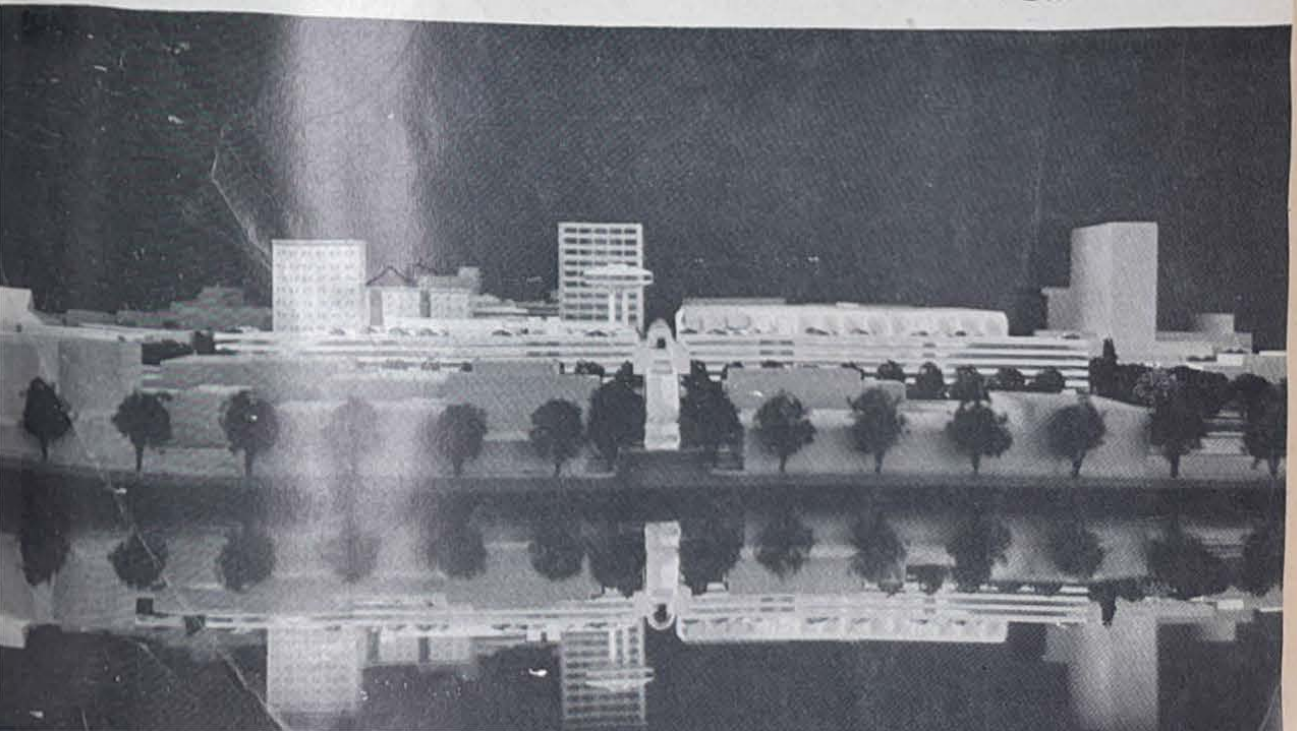
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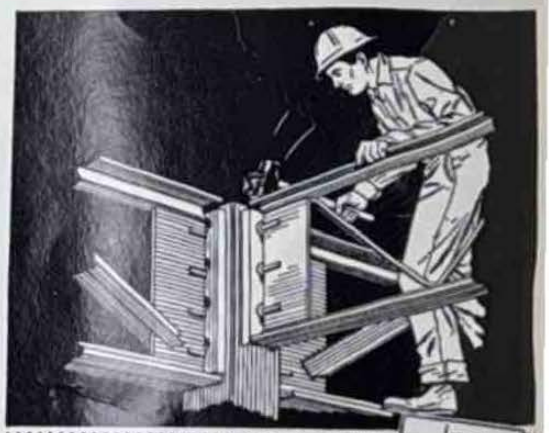
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Business data on page 26

COVER: Across the River; proposed West End Commercial Complex, Sacramento, Skidmore, Owings & Merrill, architects (p. 20)

ABOUT THIS ISSUE: A word of caution. Our features this month deal with restoration and remodeling and renovation. It is possible to get carried away on this subject, to become so preoccupied with the past that we try to salvage every old trap of a shack and thus become just as guilty as those who would bulldoze their way through Independence Square. What we have tried to depict is restoration with restraint, and that restraint should be exercised just as thoroughly in selecting buildings to be restored as it is in the restoration itself.

Architects have a civic and community responsibility every time they touch an existing building. They must consider not only what their client requires but what their efforts will do to the neighborhood, and what the neighborhood may in turn do to their efforts. Al Bumgardner and Herbert Bayer have explored these matters to a degree in an introduction on page 12, and as they salute several dedicated architects who have fought for Western community improvements.

From there we show half a dozen unusual and unusually good restoration jobs, all the way from plastering an adobe hovel at a cost of $500 to the West End Project in Sacramento that will cost so much we hate to think about it.

Where the Architects Hang Their Hats on page 10 is a restoration job, too.

NEXT MONTH: This will be our Christmas issue, and what better time to present a pictorial gallery of churches in the holiday spirit? Awards from four major AIA conferences also will be presented.

THE BUILDING MONTH

Highlights & Sidelights

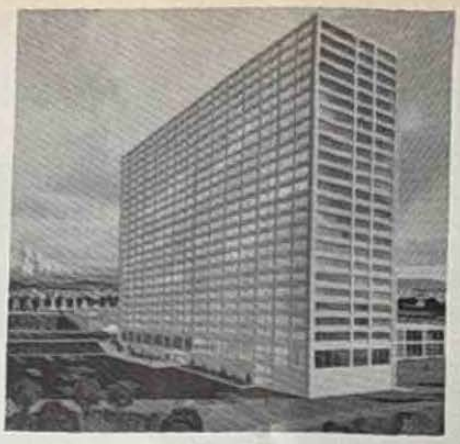
THE BUILDING WEST—Construction permits in the West's 500 leading communities leveled off in September, but at a pretty high level of $477 million, still 1½% greater than last year's unusually high September. And for the first three quarters of the year, the volume was $5.136 billion, 15½% greater than the first nine months of last year. The outlook continues good for 1962 to set an all-time record in dollar volume. Both residential and commercial-industrial work are running ahead of last year. Complete statistics are on pages 24-25.

THE BUILDING HOT SPOTS—California continues to have the lion's share of the market, but some spots in Nevada, Hawaii, Utah and Washington are right up with the leaders. The top 25 (in millions): 1. Los Angeles, $51.0; 2. Los Angeles Co., $18.5; 3. Clark Co., Nev., $12.4; 4. Honolulu, $11.1; 5. Salt Lake City, $9.9; 6. King Co., $9.9; 7. San Francisco, $9.2; 8. Phoenix, $8.9; 9. San Diego, $8.4; 10. Sacramento Co., $7.9; 11. San Jose, $7.9; 12. Orange Co., $6.9; 13. Santa Barbara Co., $6.8; 14. Seattle, $6.5; 15. Riverside Co., $6.1; 16. Long Beach, $5.9; 17. Huntington Beach, $5.8; 18. San Bernardino Co., $5.5; 19. Las Vegas, $4.9; 20. Oakland, $4.6; 21. Fremont, $4.2; 22. Fullerton, $4.0; 23. Seal Beach, $3.8; 24. Contra Costa Co., $3.8; 25. La Habra, $3.8.

CONSULTING THE CALENDAR—The Acoustical Society of America will devote one session to architectural acoustics during its national convention at the Olympic Hotel in Seattle, Nov. 7-10.

DEADLINES—Entries in the 15th Annual Honor Awards Program of the American Institute of Architects must be submitted prior to November 28. Deadline for the First Library Buildings Awards Program sponsored jointly by the AIA, the American Library Association and the National Book Committee (for libraries completed in the United States since January 1, 1958), is December 7. Details for both are available through the AIA office.

BIG POTATOES—Groundbreaking for the first increment of the new Missile and Space Systems Center for Douglas Aircraft Co. at Huntington Beach, has highlighted some awesome statistics. The 10-year project will develop 245 acres, covering 1,636,000 sq. ft. of plant; 2,664,000 sq. ft. of work yard; parking for 15,000 cars, and 30 acres of landscaping and roads. Plans by Daniel, Mann, Johnson and Mendenhall call for a cluster of manufacturing buildings, another cluster for a research center, and additional buildings to house engineering and administrative staffs. A basic modular planning unit is being developed which will be used in multiples throughout the area, and which it is hoped will be adaptable to space construction requirements as yet unconceived. Some structures will be 250 ft. high. All utility lines will lie in spaces between column lines, and all columns will lie on a site module grid—a multiple of the small module.



RETIRE IN PORTLAND

University Tower, retire home sited on bluff o looking Willamette R and adjacent to Univer of Portland campus, have 400 apartment u 32 bed infirmary, dining cilities, chapel, auditori and activity areas. The million structure will be stories, of reinforced c crete. Architects: Wolff Zimmer.

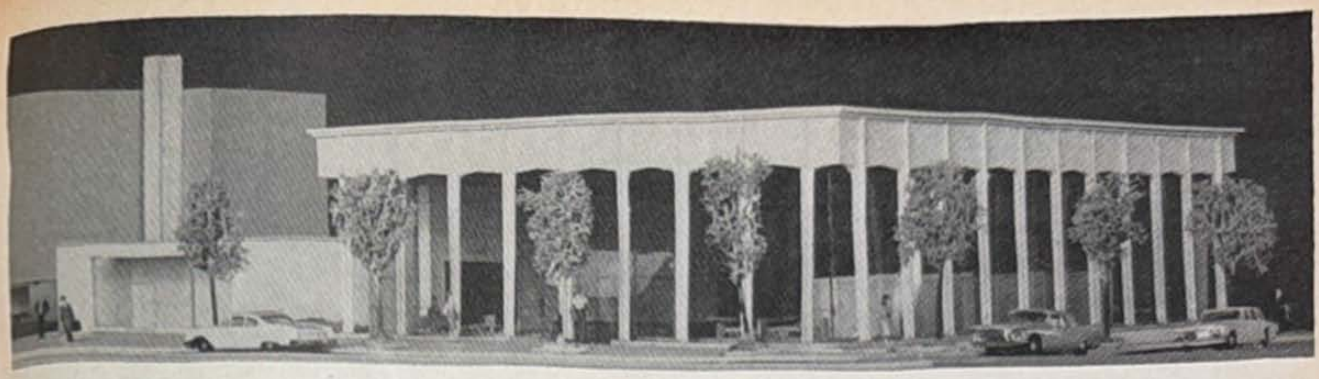
PROJECT PREVIEW



WARMTH AND COLOR IN JUNEAU

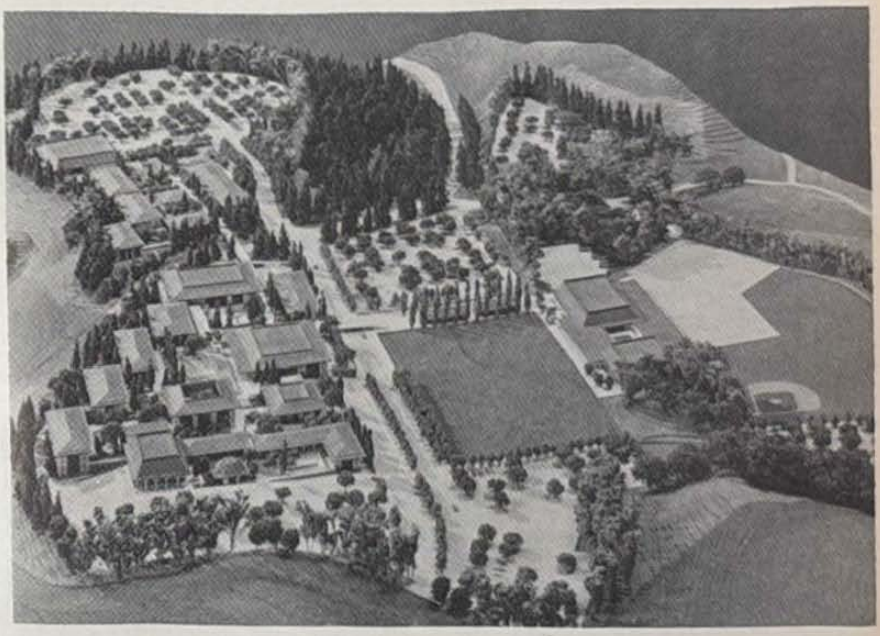
Designed to counteract the somewhat dreary Juneau atmosphere, t United States Post Office and Courthouse will have a warm hon colored or rose tone shimmering quartz aggregate exterior facing precast stone units. Bronze colored aluminum window assemblies, which there are nearly a thousand, will be inserted into the preca units. First floor will be sheathed externally with granite veneer. Po Office to occupy first floor and Court House, the eighth flo Architects-Engineers: John Graham & Company. Associate Arch tects: Olsen and Sands and Linn A. Forrest, Sr., Juneau.





OLD SITE, NEW BANK, IN MISSOULA

Bank and Office building for First National Bank of Missoula will be constructed on same site bank has occupied since 1885. Razing of old structure makes way for two-story building, with plans for future office tower and motor banking area. Colonnade, of prestressed, mosaic faced panels, wraps around three sides of banking area to provide planted plaza. Colonnade supports prestressed, precast concrete roof girders and poured-in-place concrete roof. Architects: Naramore, Bain, Brady & Johanson.

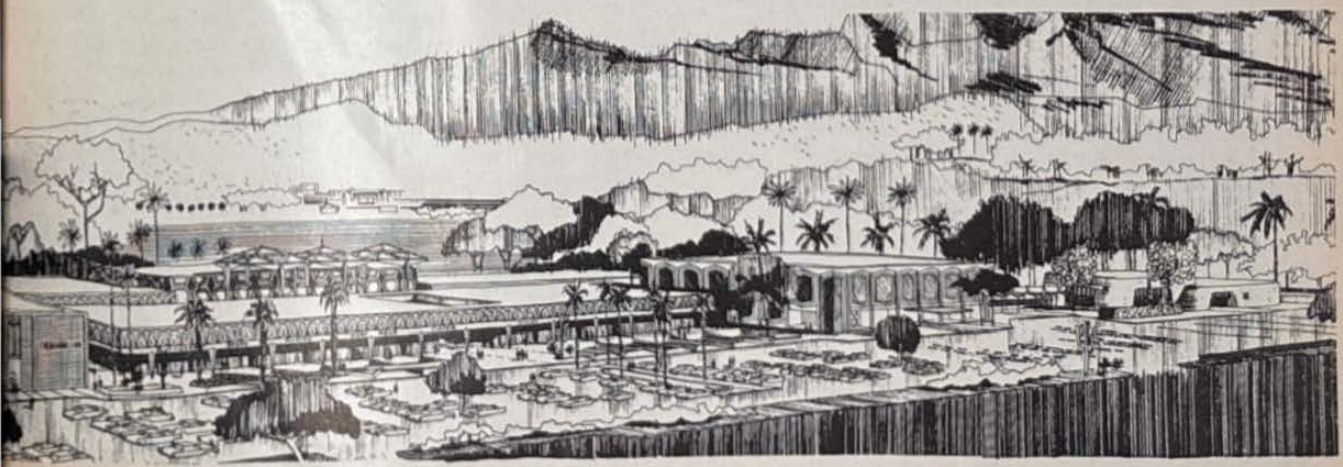


130 ACRE CAMPUS FOR OAKLAND COLLEGE

Located in the East Oakland Hills, the proposed $22 million campus commands a magnificent view of the bay and hills. Four basic building groups—Academic; Science, Exhibit and Assembly; Horticulture and Maintenance, and the Physical Education Group, will accommodate some 6000 students. Plans call for 704,300 sq. ft. building area; pedestrian bridges joining buildings; concrete paved courts and walks providing access to every building; adequate roads and parking areas to handle 4000 cars. An amphitheater will be adjacent to the P.E. group and parking. College will serve in addition to present overcrowded Merritt and Laney campuses. Associated architects: Reynolds and Chamberlain; Wurster, Bernardi and Emmons.

$4 MILLION FASHION CENTER IN PHOENIX

An eight-building complex, architecturally designed to match the sophisticated goods to be carried in some 30 world-renowned shops (including Saks Fifth Avenue and I. Magnin), the Biltmore Fashion Center will cover an area some two miles long, one mile wide. A partially covered, mall will extend throughout length of buildings. Masonry construction with some concrete tilt-up panels will be employed. Completion date has been set for October 1, 1964. Architects: Mayer and Kanner, AIA, Los Angeles.



Three Conferences . . .

"I believe that architects secretly or unconsciously do not really like people. We are by nature and training Boy Scouts with a power complex, bent on doing good, even if our victims are bent double in the process . . . and resentful when people begin asking for what they want instead of what we believe they should have. Indeed, some of us now feel obliged with the best intentions to be social philosphers and to assume obligations and powers not dissimilar from that of the medieval church."—Sir Hugh Casson

California Architects Go on World Search At Monterey Session October 3-7

The theme selected for the 1962 California Council, American Institute of Architects' convention held in Monterey October 3-7, was "World Search." Program Chairman George Hasslein, who is also dean of the architectural engineering department at California State Polytechnic, said that the convention was dedicated to those from over the world who labor in the environmental vineyard whether they search the nature of architecture or its spirit, cities, people; or the architect's services, materials, structures, or forms. The men gathered at the convention were there to represent the architects—the thought and work of their patient search.

The first session pointed out that before looking to other horizons for answers the architect must come up with a few solutions right here at home.

This was brought home to those present at the keynote address by A. G. Odell, Jr., FAIA, and second vice president of the Institute from Charlotte, N.C.

Odell told the group that the national AIA Board of Directors recognized the need for the profession to define its role more strongly and to continue expanding its leadership. Odell said the Board also recognized the desirability of analyzing in detail the competence of the profession; the competitive position of the profession and its communications both within the profession and with the public. That is why, he explained, a committee on the profession was created to define these goals and recommend action.

A panel discussion on comprehensive services proved both popular and informative. On the panel were James M. Hunter, FAIA, architect from Boulder, Colo., and chairman of the Committee on the Profession; Perry B. Johanson, FAIA, Seattle; Donald H. Lutes, Springfield, Oregon architect, wtih Regional Director Malcolm Reynolds as moderator.

Johanson said that in discussing the concept of comprehensive services the architect is not faced with the choice of whether he will or will not accept it, but is faced instead with a trend that already has required individual architects and firms to develop their own methods of approach and solutions.

Donald Lutes explained how his firm, Lutes & Amundson, give their clients comprehensive services. Lutes said his firm often includes feasibility studies, site planning, landscape services, even utility and traffic analysis.

Hunter discussed the AIA's code of ethics and mandatory standards. Under consideration, he said, are changes which would (1) clearly establish the legal status of the architect as owner's agent, (2) require that the architect shall render professional service only after reaching a positive agreement with his client as to scope and proper compensation, (3) stipulate that the architect shall perform with such competence that he renders truly valuable service to the client and to the general public, and (4) require the architect to base his compensation on the value of service rendered and prevent cutting of costs in such a way as to lower design quality.

Perhaps the most popular and dynamic speaker in Monterey was Dr. Mario Salvadori of Rome and New York. He spoke for himself and for his friend, Felix Candela of Mexico, who was scheduled to appear, but was not able to attend. Though he teaches civil engineering and architecture at Columbia as well as practicing in Rome, he speaks more like an architect than an engineer. He felt strongly that "the architect should continuously strive for the essence of beauty —for in beauty lies the spirit of man —even though there might not be a tomorrow."

When Dr. Salvadori said that the architect should be humble for 'none of our structures are built for eternity and in fact most of our buildings are disposable within a period of less than 50 years,' he shocked some attending architects, though none could disagree.

There was no question that Dr. Frei Otto of Berlin was an expert in lightweight structures. His voluminous slides of some things built for clie and some experimental works w proof of his engineering abilit

American born architect Jose Allen Stein has a successful practi in New Delhi, India. Stein at o time worked for Los Angeles arc tect Richard Neutra and one co not help noticing the strong Neut influence in his designs.

Sir Hugh Casson, FRIBA, of Lo don, was brought to Monterey by of the Producer's Council Chapters California. His dynamic personal and wry humor emphasized his int lectual capabilities.

"The world is full of dying citie strangled, cancerous and they will unless we want to rescue them surgery or more gentle treatmen Sir Hugh told the architects.

The British architect said that could accept the paper logic of mechanized age of designed dispo by building horizontally and endles such as in Los Angeles or, he sugge ed, accept continued vitality of European city concept — a place wi a center and edge. Sir Hugh su ports the European City concept. O aims, he said, should be a good e vironment above all, with effect space without waste, effect of co pactness without congestion, reaso ably easy circulation and to sear out the personality of each city a prevent its degredation and dilutio

Sir Hugh pointed out that spac between buildings are very often mor important than buildings, though h did not say how to convince the in vestor of this when he feels he ha a monetary right to use every inch o space for structure. He urged the ar chitects to remember that people ar what matters and the urban live they must live.

A banquet ended the convention CCAIA President Stephen Allen pre sented awards for contributions to th profession to Frank Hope, architect Charles Luckman, architect; and John E. Hirten, executive director of San Francisco Planning and Urban Re newal Association.

Some 1,000 architects and guests at tended the Monterey conference.

—William G. Quinn
Southern California Editor

Oregon Storm: Unplanned Background For N.W. Conference at Oceanlake

Conferences have rotated about the Northwest District of the American Institute of Architects from Hawaii to Montana for some eleven years. It is a tribute to the vigor of this region that no matter where in this most far-flung district of the Institute the conferences be held, they are always lively, imaginatively presented, and even inspiring to the architects assembled. Vacation though they be, there is always sufficient to scratch one's conscience and to glimpse that distant future where one can do good architecture! Would that the national conventions of the AIA did so well!

Southwest Oregon (R. E. Ellis, president; Bob Wilmsen, general chairman) hosted this year's extravaganza at Oceanlake, Oregon, from October 10 through October 13.

The Institute's program of seminars for comprehensive services was strongly presented by John Bolles, San Francisco, and Robert Alexander, Los Angeles. Their audience sensed with reluctance that the reorganization of practice to compete in today's business world is probably an inexorable trend.

Philip Johnson, New York, crystallized these gnawing doubts. He reminded the architect that he must be a creator of art—great art—first; an administrator, second — or third, or fourth. And that great art may not possess the traditional utility or commodity at all. Johnson was granted an overwhelming ovation.

Other architect speakers included Harold Spitznagel, Sioux Falls, and Alfred Bendiner, Philadelphia.

A new idea was introduced at this conference: More free time was reserved and scheduled for creative activities—"doing sessions" appropriate for the conference theme of "The Art of Doing." These activities, ranging from kite flying, stitchery, water color and sand casting, were available with outstanding artist instructors. Architects and wives alike participated enthusiastically, demonstrating that one can as easily recharge his energies by "doing" in a creative way as in listening to philosophical discourses.

The real highlight of the conference was an unplanned phenomenon—an unforgettable storm, reputedly the worst in Oregon's history. Winds over 100 mph put out the power system for a 24-hour period. The spectacle of the raging surf of the Oregon coast with candlelight evening sessions compensated for the rigors of a world without electric razors, percolators and hot water.

Regional opinion bore against paid institutional advertising by the AIA; but if it should come, the money should be spent locally. J. Roy Carroll, first vice-president of the Institute, made a short visit. A strong presidency is predicted upon his likely succession. Business sessions under Robert Durham, regional director, included two new chapters (for a total of ten) in the region: Alaska and Capitol (Salem, Oregon).

Another innovation: A few major product suppliers underwrote some costs for speakers and hosted a luncheon, followed by a wood products design seminar. This seems a highly laudable move, resulting in a smaller, more cohesive conference group.

Approximately 250 registered for the conference, of whom 126 were architects of this region.—A.O.B.

Utah Chapter Hosts 11th Western Regional Meeting at Sun Valley

The Eleventh Annual Western Regional Conference, AIA, was hosted by the Utah Chapter at Sun Valley, Idaho, on Sept. 27-29. Some 210 architects, Producer Council members and their wives were in attendance.

An outstanding discussion on "The Influence of Design on Architecture" by C. O'Neil Ford, FAIA, San Antonio, and Robert E. Alexander, Los Angeles, was moderated by Douglas Haskell, editor of Architectural Forum. The opening seminar on "Expanded Services" was given by Robert E. Alexander, Robert F. Hastings, George E. Kassabaum, and was moderated by R. Lloyd Snedaker, AIA director Western Mountain Region. The closing session of the three-day conference was devoted to a presentation of the down-town Salt Lake City's second century plan, presented by Dean L. Gustavson, chairman of the Utah AIA development plan committee.

Honor Awards were presented to the firm of Buff, Straub and Hensman, Scottsdale, Ariz., for a Pasadena, California, residence, and to Edwards and Daniels, Salt Lake City, designers of the Piute High School, at Junction, Utah.

Two design awards were given, one to James M. Hunter, Boulder, Colo., for the IBM Office Building in Salt Lake City; the second for the dormitories and dining halls of Western State College, Gunnison, Colo., designed by Baume and Polivnick, Denver.



ALPHA DELTA PI *sorority (before remodeling) was winner for Warren Cummings Heylman & Associates and Fred Rounds, Associated Architect, in the recent Spokane merit awards.*



REMODLED SORORITY *house. Jurors comment: "Commended for its pleasant restrained solution to the difficult problem of extending an existing sorority house . . . in keeping with the general character of the neighborhood."*

Next Month: Award Photos

With one exception, that of the Alpha Delta Pi sorority house above, all honor awards are scheduled for December. It seemed timely to include the Spokane remodeling project winner in this issue.

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new offices

Bengt F. Anderson, formerly associated with Paul K. Evans, has opened his own office for the practice of architecture at 118 Vine St., Murray, Utah.

Hai C. Tan, Architects & Associates, have opened offices at 4100 W. Commonwealth Ave., Fullerton.

M. Keith Richardson and William A. Richardson have formed an architectural partnership which will be called Richardson & Richardson. Their offices will be in the Dooly Building, 2nd South and West Temple, Salt Lake City.

Marvin E. Williams has opened offices for the practice of architecture and landscape architecture in the Central Plaza Building, 41 East Main St., Mesa, Arizona.

Jordan and Endsley, Architects, have established offices at 711 West 19th St., Costa Mesa.

partnerships

Walter Gordon, Daniel McGood and John Hinchliff have formed architectural partnership to be ca Gordon, McGoodwin & Hinchliff, 10 S. W. Ash St., Portland.

Richard Layne Tom, Anaheim, nounces the formation of a partn ship, Tom and Truskier, A.I.A., w his former associate, Jan. W. Trusk New offices are located at 1665 Katella Ave.

firm changes

Stone, Marraccini & Patterson, S Francisco architectural firm, named Sanford L. Berger as des director.

Hagman & Meyer, architects, announced that Michael S. Sanch will be director of interior design a planning at the firm's offices in L Angeles and Menlo Park.

John E. Stafford, Eugene archite has resigned from the partnership Stafford, Morin & Longwood, a from the staff of the University Oregon School of Architecture wh he has taught the past two years. Stafford plans to travel extensiv in Mexico and Europe.

The architectural firm will contin at the same address in Eugene, 70 14th Ave., under the name of Mor & Longwood.

appointments

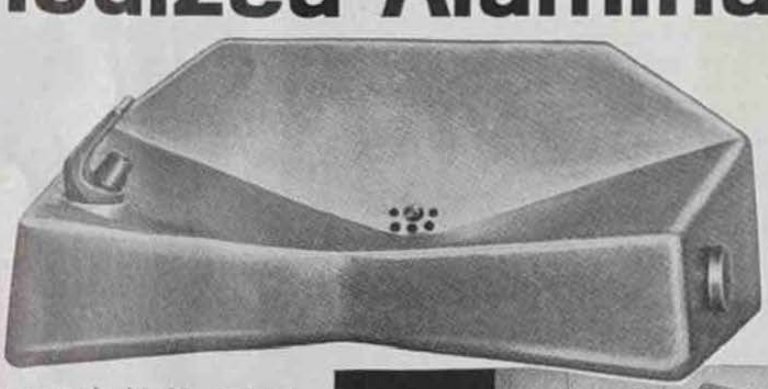
Eugene D. Sternberg, Denver arch tect, has been appointed by the Pu lic Housing Administration to ser on a national panel of consultants a program to improve the design low-rent housing. Fifteen architect three landscape architects and on city planner, Catherine Bauer Wurst of Berkeley, comprise the panel wh will act as advisors on specific build ing plans, designs and site plans.

associations

Wilbur J. Bennington of Cushing Terrell & Associated Architects, wa recently elected president of the Bil lings Architectural Association. Ver non Drake, of Drake & Gustafson wa elected vice president, and Russell Cromwell was named secretary-trea surer.

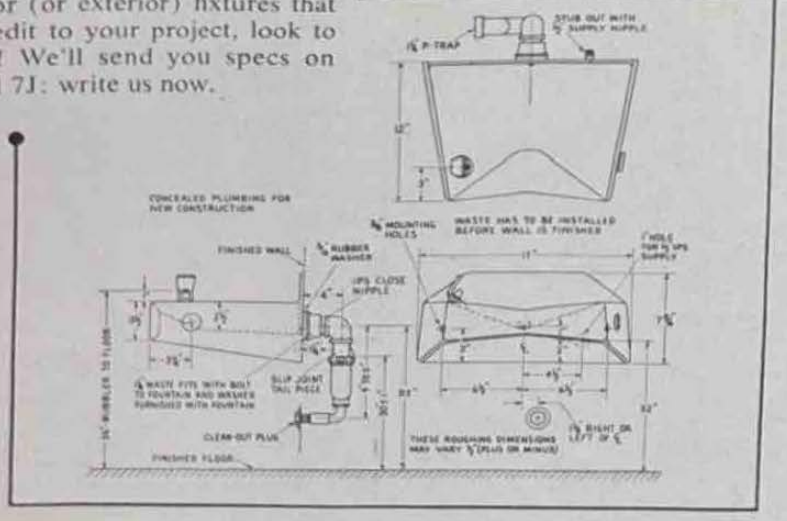
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new addresses

Sam Reisbord, architect, to 800 South Robertson Blvd., Los Angeles.

Reese & Blachly, architects, to 421 S. E. 10th Ave., Portland.

W. D. Merrill, architect, to 711 Columbia St., Portland.

Alex Pierce, architect, to 405 N. W. 18th Ave., Portland.

Stanley F. Adam, architect, to 1859 S. W. 58th Ave., Portland.

Arthur K. Olsen, architect, to 357 East 5th S., Salt Lake City.

Ralph F. Sheppard, architect, to 5208 N. Hayter Ave., Lakewood, Calif.

John A. Rinaldi, architect, to 806½ So. Atlantic Blvd., Monterey Park, Calif.

Robert L. Lustig, AIA, to 1906 Hoover Ave., Oakland.

Lane & Schlick, architects, A.I.A., have opened new enlarged offices at 15840 Ventura Blvd., Encino.

deaths

Louis Skidmore, FAIA, a founding partner of the San Francisco architectural firm of Skidmore, Owings & Merrill, died at the age of 65 at his home in Winter Haven, Fla. During his years as a practicing architect, Mr. Skidmore served as chairman of the advisory council of Princeton University's School of Architecture and as a member of MIT's School of Architecture Visiting Committee. He was also consulting architect to the United Nations, to Princeton and the University of Michigan. Mr. Skidmore, along with other honors and offices accorded him, was author of the Encyclopediae Britannica's section of exposition architecture and of a book on Tudor architecture.

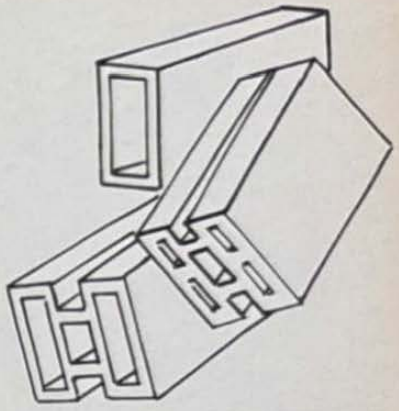
George Frederic Ashley, internationally prominent architect, and designer of many well-known California buildings including the Wells Fargo Bank and the Veterans Memorial Building, died in Oakland after an illness of several months.

DeWitt C. Robinson, AIA, in Portland, last month.

Harrison A. Whitney, AIA member since 1928, in Portland in September.

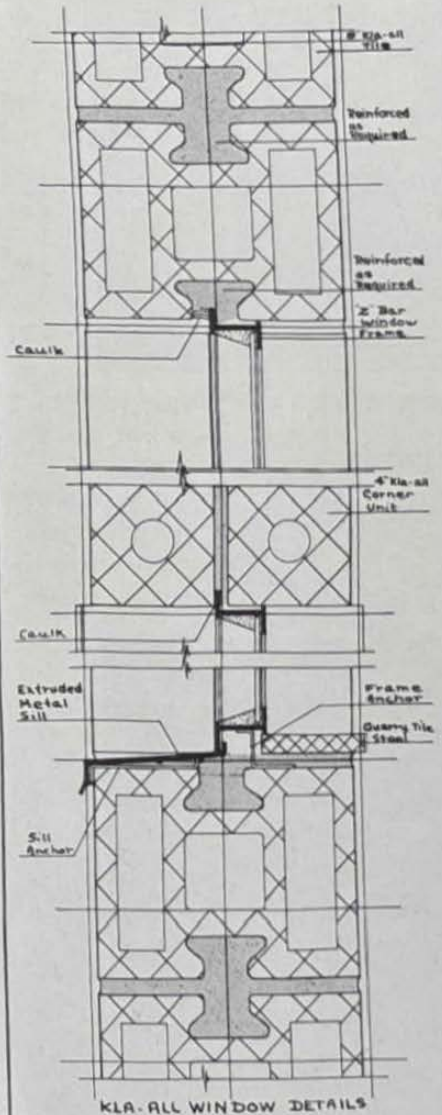
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Portland, Oregon





ng their hats . . . *restoration with restraint*

Marwell F. Allara Photos

To CREATE their new home in an older business district, these resourceful architects found an old building that suited their location needs, retained its exterior character by minor refurbishing, but razed the interior with complete abandon and started from scratch.

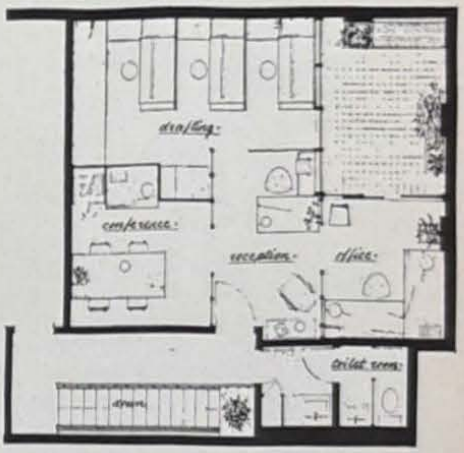
By restoring the facade, they left the building in character with its elderly neighborhood; by razing the interior they were able to treat it in a contemporary manner to suit their needs and design philosophy.

This was a two story structure, 30 ft. by 50 ft. Three-fourths of the area was prepared for rental purposes, the remainder is their own, suitable for the two partners and varying staff of two or three additional persons.

Non-bearing partitions were removed. Brick walls were stripped of plaster and left exposed. Existing utilities were replaced.

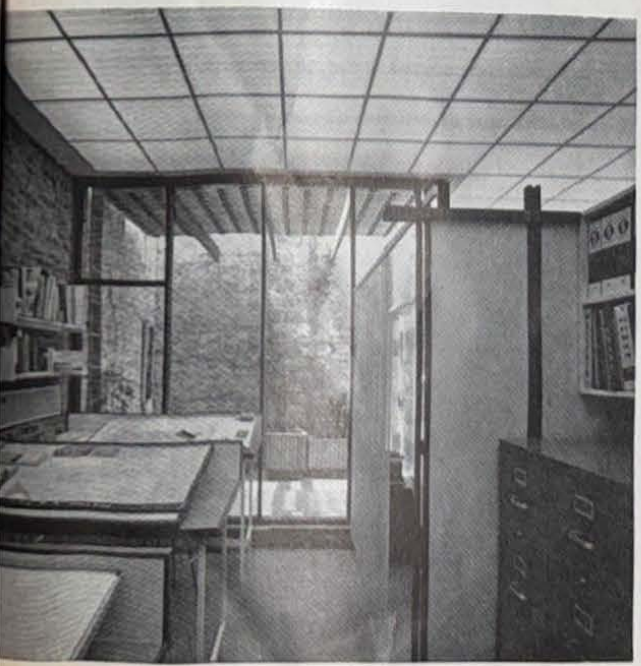
To give visual relief and admit light and air, a glass enclosed inner court was built in the back corner by removing the roof and paving the floor with quarry tile. A luminous ceiling covers the whole office area. Low wood screens, a storage wall and a metal ribbon screen divide the areas, all of which have a view of the court.

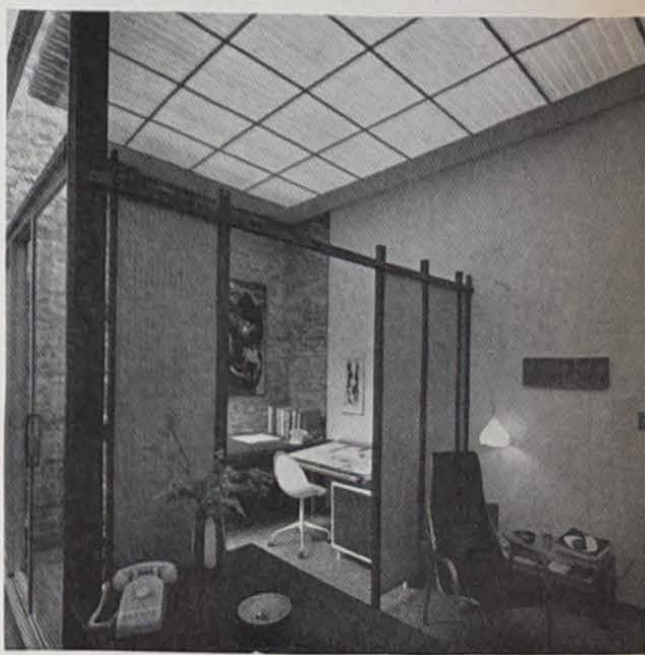
Finishes are the exposed brick, or vinyl and burlap covered gypsum board glued to studs. The ceiling is Cepco-Luminous; floors are Matico Polymerite; stair treads have wraparound Coir matting. Ramco baseboard heat was installed.



Floor plan of architects' portion only.

All spaces have luminous ceilings and a view of the inner court—contemporary styling in an 1889 building.





Restoration with Restraint . . . a synth

ARCHITECTS today rally around the battle cry of "the betterment of our environment" as we stake out the entire community as our field of practice. The breadth of our vision is the challenge!

But let us come down to the scale of the architectural commission for an individual project. The architect is likely to nurture that project through the office with much more care if it be a *new* project—preferably with as few "conditions" as possible.

Admittedly, the problems of how to make an esthetically and functionally suitable building are multiplied when one starts with a building already existing. Yet we cannot shrink from the utilization of our creative energies to design new lives for remodeling projects if we are to remake whole cities.

The remodeling of our cities must not be accomplished by massive bulldozing. It requires a skillful synthesis of old and new—salvaging those parts which have meaning and use in constituting a city's traditions, adding new portions where they must meet modern needs.

Aside from presumed economic advantages for the client, commissions involving alterations and additions to existing work can offer:

- the opportunity for ingenious plan solutions in order to capitalize on virtues inherent in the existing building;
- the opportunity to dramatize the character of the existing building in a fresh and modern manner.

Were it a new building, the architect would feel a compelling urge to "make an architectural statement"; a remodeling project can often serve as a pilot project for new turns in the architect's developing philosophy. —A.O.B.



ARCHITECTS AS CITIZENS

Architecture/West salutes architects whose civic interest is reflected in the faces of their cities.

• Certainly one of the best known is Victor Steinbrueck, Seattle architect-educator, whose sketches in the weekly Argus have alerted his readers to Seattle's architecture (both historic and contemporary), to the freeway, and the city in general.

• Culminating Lewis Crutcher's long campaign in Portland's behalf, his carefully coordinated color scheme of painting Portland's many bridges is now under way. Steel structures in red iron oxide, yellow ochre with charcoal weights, and deep turquoise blue-green, cross the Willamette, which bisects the city.

• At the 1962 AIA convention, Donald Lutes (Lutes & Amundsen, Eugene), documented their pioneering work in converting downtown Springfield, Ore., streets into one of the country's first shopping malls.

• The City of Tacoma has postponed projected blacktopping of space adjace to the new Escalade (moving sidewalk while support is sought for a handsom scheme by Liddle & Jones, architects. Th blank brick wall at the left would b painted in stripes, with canvas awnings the base to shelter outdoor exhibits. Th Escalade wall was to be a tile mosaic—th designer to be selected by a competitio among students. Trees, low planting, an a kiosk complete the scheme.



old with new

HERBERT BAYER, Aspen Design Conference, 1962. "It has been said that the highest aim of the artist is to contribute to the shaping of the community by visually organizing it.

"This . . . calls for an understanding of the economy, psychology, morals and the general character of a community, as one does not exist without the other.

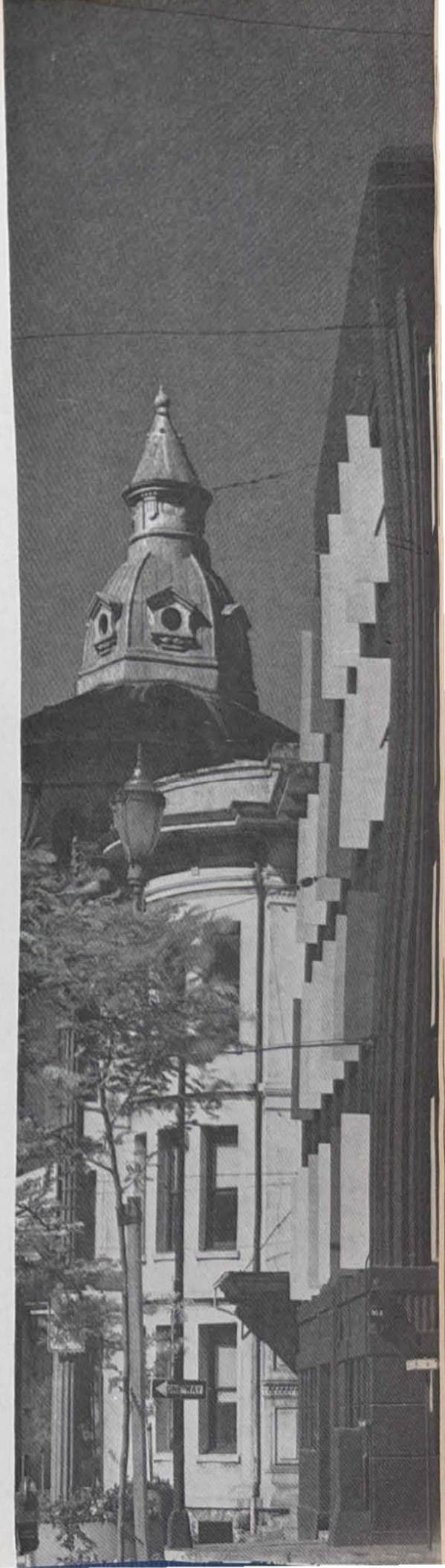
"Besides being a specialist, one has to function as a citizen, educator, even politician. It is my belief that this understanding cannot be acquired unless the designer or architect participates in the civic duties and wrestles with the issues of a community which are the background for his activity.

"It is especially for the architect to realize that his work cannot grow well on a detached attitude, and that he can find a link for communication with his fellow citizens by making the issues of the community his own."

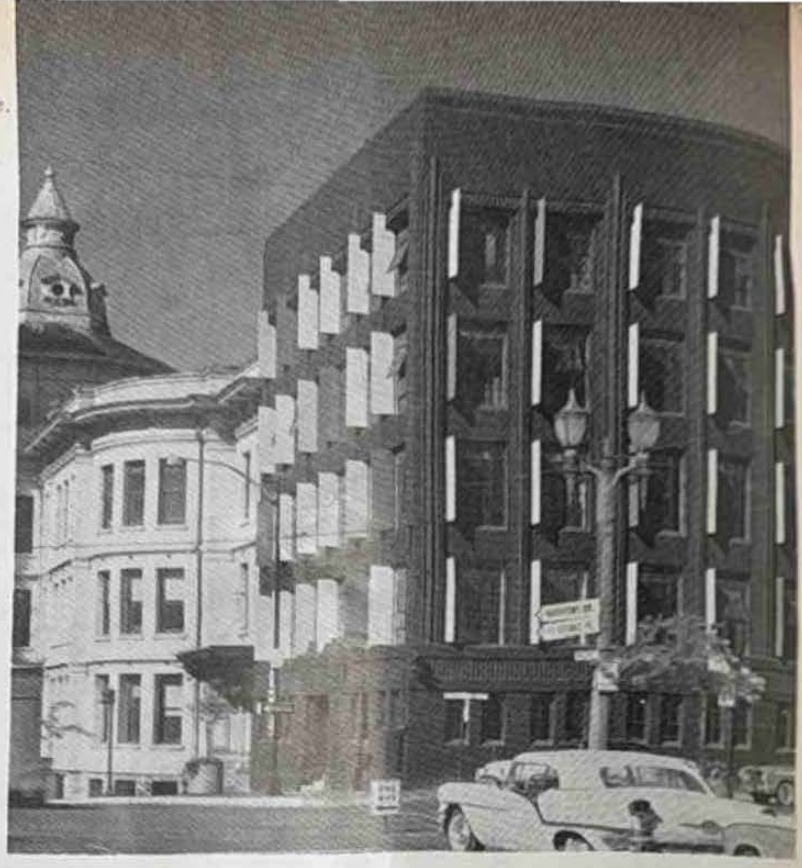


• Monorail passengers enroute to the Seattle World's Fair glide swiftly by Tillicum Place, over which Chief Seattle's statue presides. Hard times had fallen on Tillicum Place until Nelsen & Sabin, architects, launched their crusade in 1960. Partial success has been achieved: the street trees along Fifth Avenue have been continued around the little square and the fountains are again working. However, adjacent merchants resisted the closing of the short side street.





Temporary plywood fins are yellow, orange and ochre.



ALLIED ARTS CENTER
Tacoma, Washington
Liddle & Jones, architects

Hugh N. Stratford Photos



Lower floors already in use and work continues.

The old Public Safety Building—where would you go from here?



Restoration with restraint . . .

When a Low Budget Spurs the Imagination . . .

MANY GRIMY AND DILAPIDATED "old town" downtown buildings of our larger cities might escape the wrecker's headache ball if more sensitive eyes could see through the tarnish to the one-time charm.

In the old city hall area of Tacoma are many such buildings. One, the abandoned Public Safety Building (jail, to you), was no charmer to begin with, but is now being elevated as part of a group through the several-year sensitive efforts of the Allied Arts of Tacoma, Inc., and the architects.

The boxy, multi-story structure has been painted dark brown, and the facade will be screened with gold anodized aluminum grillework. But money is a problem, and for the present exterior decoration has been provided by brightly painted plywood fins at every window, an economical but pleasing means of adding exterior interest. Fins are in varying shades of yellow, orange and ochre in a random color pattern.

The first and second floors have been completely renovated inside and exhibit space already is in use. Plans are under way to continue remodeling of upper floors to provide space for art exhibits, headquarters for member organizations of Allied Arts, and meeting space for events sponsored by the group.

The total effort is an outstanding example of the value of an imaginative approach rather than expensive remodeling and gutting of the face of the building.

Restoration with restraint . . .

Adobe Hacienda---pint size

PAINTER'S STUDIO
Albuquerque, New Mexico
Robert Walters, architect-owner

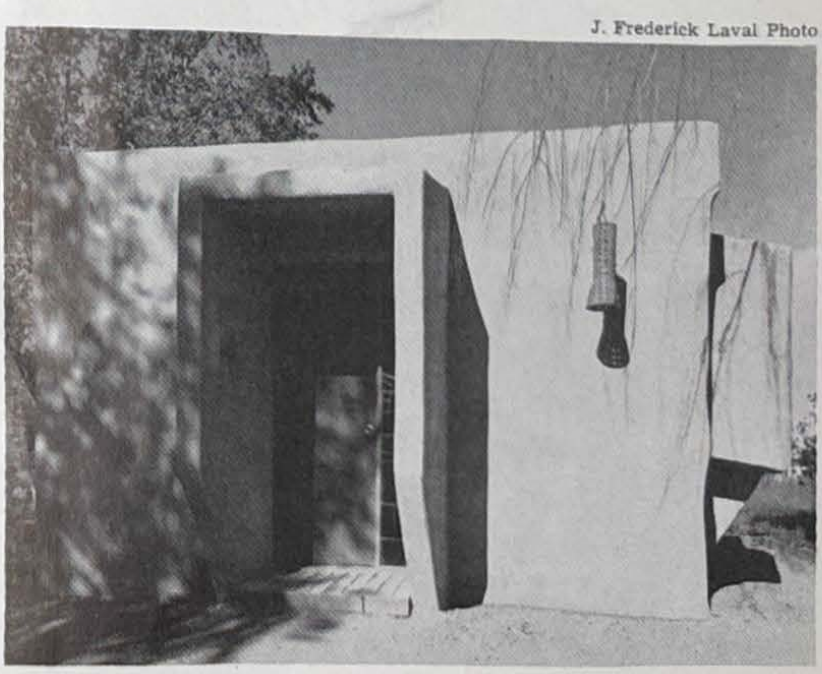


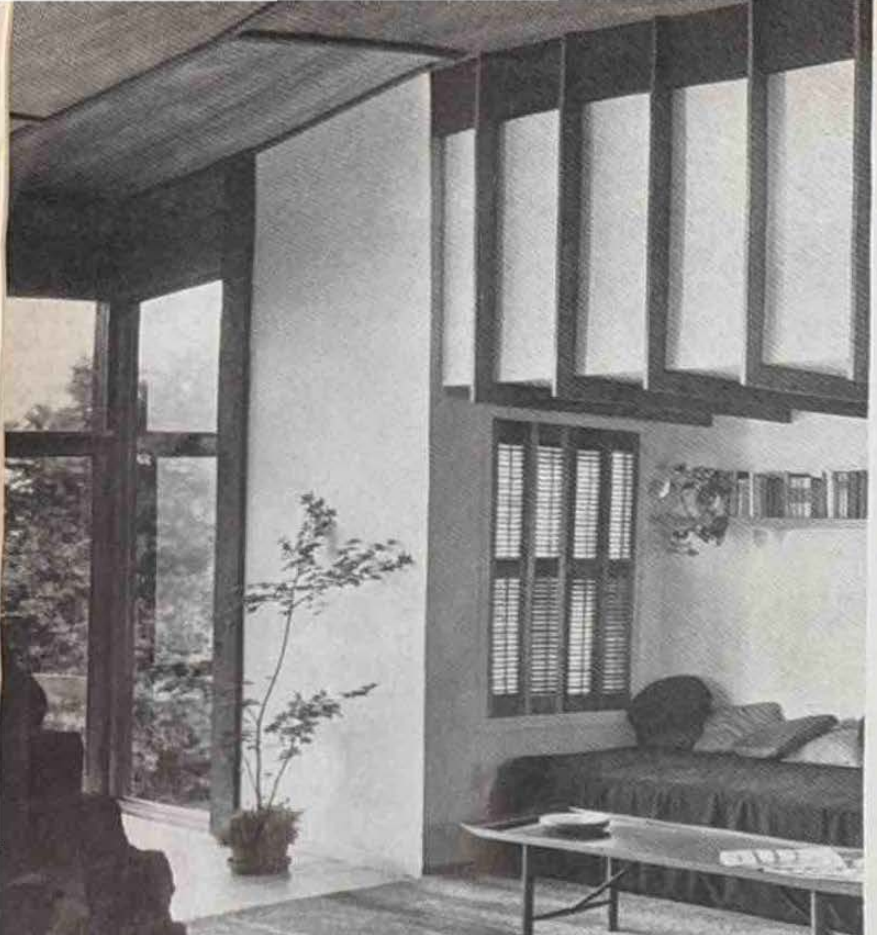
FIRST INSTINCT shouts, "Bury it," but second thought . . . a form, sculptured in plaster, providing strong shapes both in structure and in shadow. Alter the door and window openings, put on a new roof and lay a new floor. . .

What more suitable painter's studio could have been built from the ground for a million dollars, than what resulted from $500 worth of imaginative restoration?

The original adobe box-shaped store room more than 50 years old was 16 feet square, and the structure was not altered, except to cut new windows. Sleepers were put over the old floor. Interior and exterior was plastered into sculptural forms and an entry shelter was added without seeming to interrupt the simple mass. A sod roof was replaced with asphalt.

J. Frederick Laval Photo





An excellent transition from high to low ceilings.

Restoration with restraint . . .

New Persona

FORMULA for turning a 35-year old vinta house into a contemporary, inexpensive find a 35-year old vintage house that h no loadbearing interior partitions.

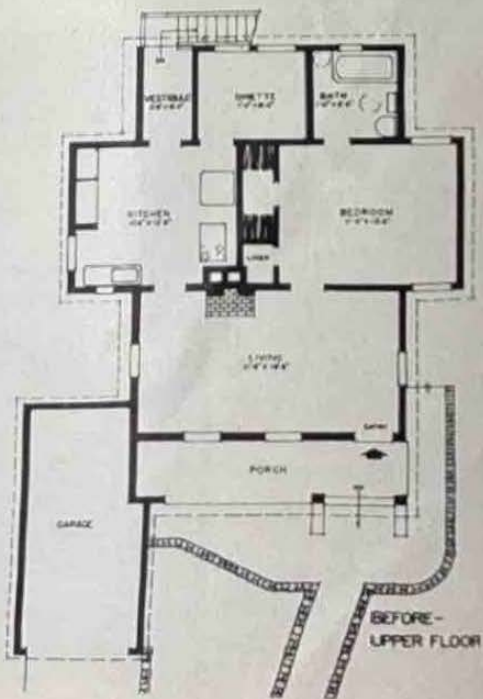
Here the architect-owner purchased unprepossessing house having 1,400 squa feet of interior space and 260 square fe of porch space. Growth of trees and co struction of other buildings with the pas age of time had rendered the porches most useless; the only remaining possib view was from the bathroom. The pla was shabby and rundown, the utilities d teriorated almost to uselessness.

Yet as an owner, he wanted the site, a as an architect he envisioned the tre topped out to open up a wonderful wate front view, the interior partitions swe away and rearranged to open the enti area to a view through one non-bearin sidewall that could be turned to glass.

He brought the 260 square feet of us less porches into the house, and provide one 200 square foot deck outside, increa ing his useful space from 1,400 square fe



AFTER–
UPPER FLOOR PLAN



BEFORE–
UPPER FLOOR

ɔr Vintage Cottage

RESIDENCE
Sausalito, California
Theodore Kessler, owner-architect



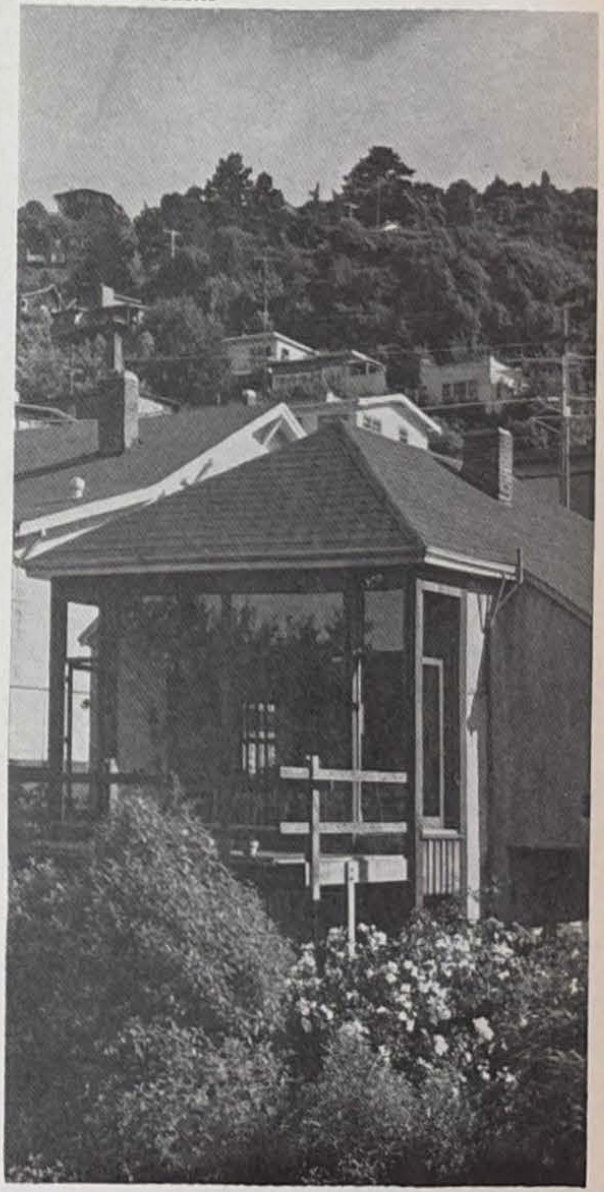
to 1,900 square feet—all without touching the roofline.

Structural and exterior work thus were held to a minimum, leaving most of the $9,000 available remodeling funds to replace the wiring and plumbing and dress up the interior.

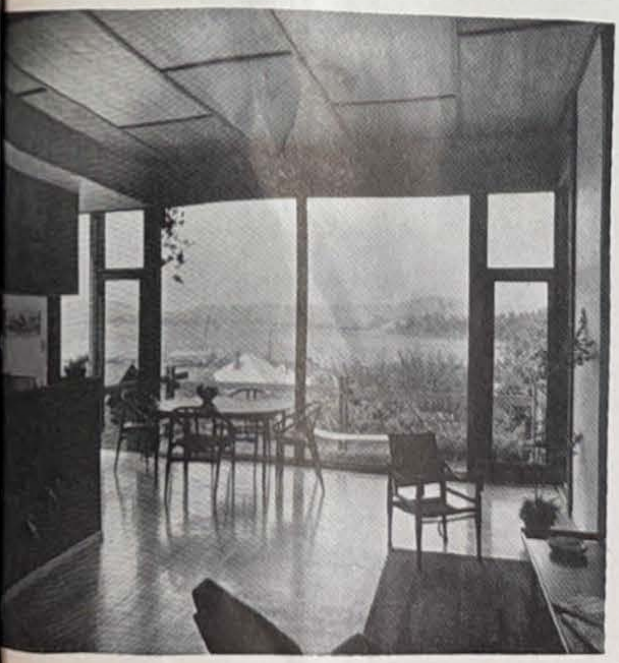
The basic tenet was to provide pleasing space without over-concern for expensive materials and details, yet all the trappings of the contemporary are there: some quarry tile flooring, mahogany kitchen island, floor to ceiling glass. A study wall is of industrial cork. But other walls are gypsum board, and most of the floors are hardwood to match the salvageable existing floors.

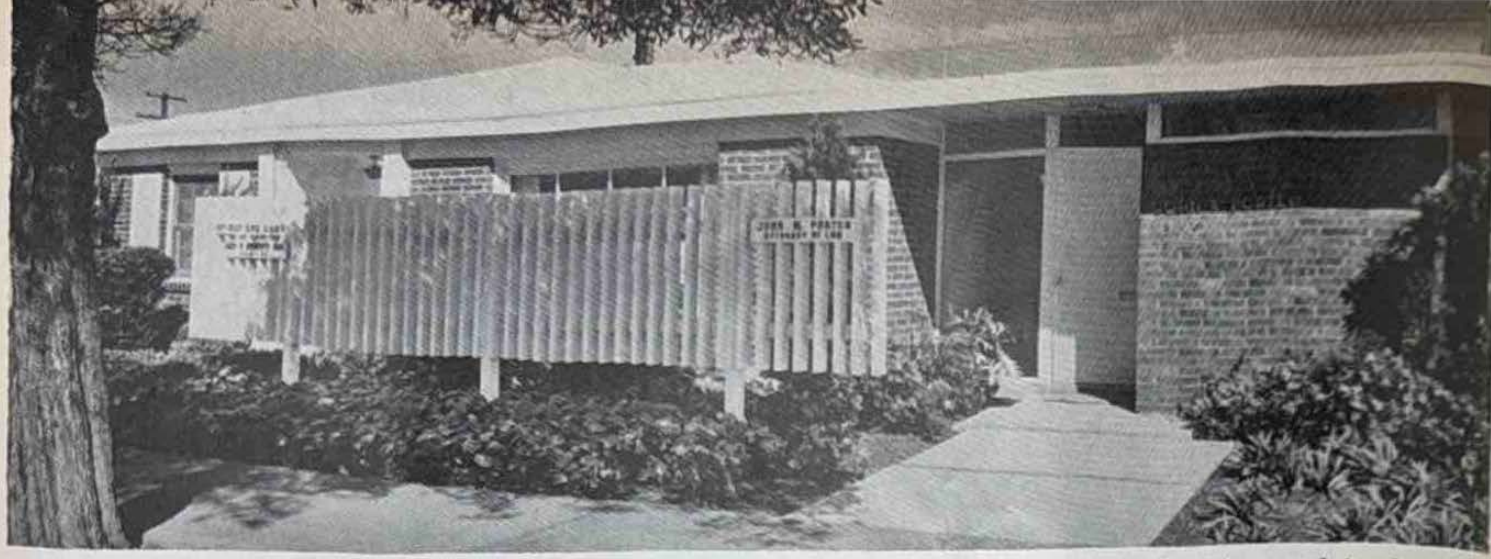
In all, an ideal example of how toil and imagination can substitute for "a lot of money."

Hans J. Schiller Photos



Prior to remodeling, the only view was from a "peephole" bathroom window.





Portion of building at right was built in a 14-ft. driveway, with roofline tied to existing building at left, the whole screened to improve continuity.

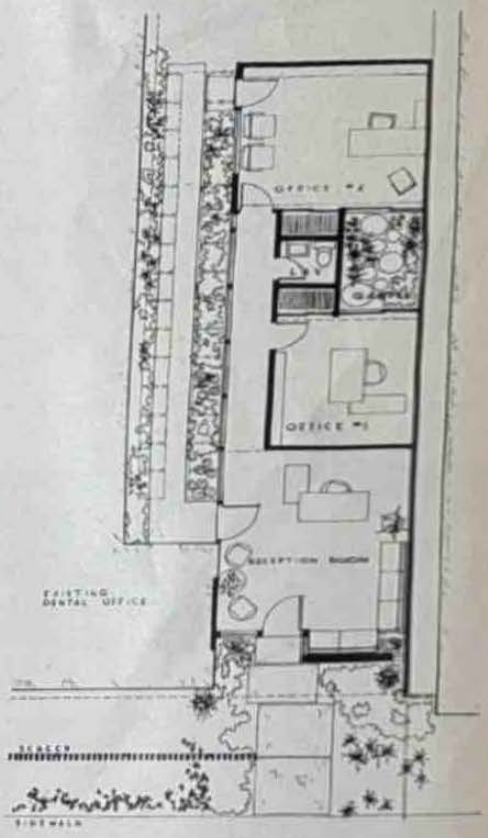
EXPANSION IN A DRIVEWAY



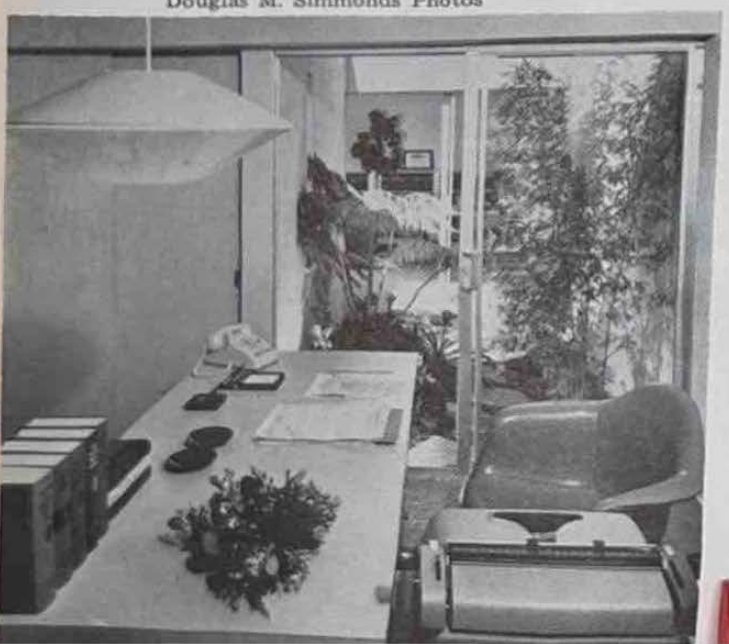
LAW OFFICE
San Diego, California
Homer Delawie, architect

THIS SOLUTION to an expansion problem in a growing community was to build additional space on a 14-ft. driveway adjoining a small Colonial style, residence-like, professional building. The addition was tied into the existing building by re-roofing, using similar materials, and fronting it all with a wood grille-screen.

In the process the dated Colonial style was de-emphasized. The limited space thus provided pleasingly two private offices, a reception room, toilet facilities and an interior garden that really "saved" the entire idea by admitting light and air and an aura of spaciousness into quarters that might otherwise have seemed confining.



Douglas M. Simmonds Photos



Interior garden at rear provides light and ventilation to offices that otherwise would have been without windows.

Restoration with restraint . . .

Sandblasting, Landscaping and Antique Gas Lights



Pirkle Jones Photo

COMMUNITY TRADE CENTER
San Francisco
Lloyd Flood and Bruce Wendell
Beebe, architects



THIS PAPER WAREHOUSE, era 1906, will soon be converted into a Community Trade Center Building, with offices and display rooms on the upper floors, but with the most imaginative transition at the entry.

Antique gas lights and ornamental iron entry gates will lead to a garden court restaurant, lounge and arcade shops. Sandblasting will renovate the brick exterior, large tree plantings and small landscaping effect will redevelop this block which is adjacent to the great new Golden Gateway Project.



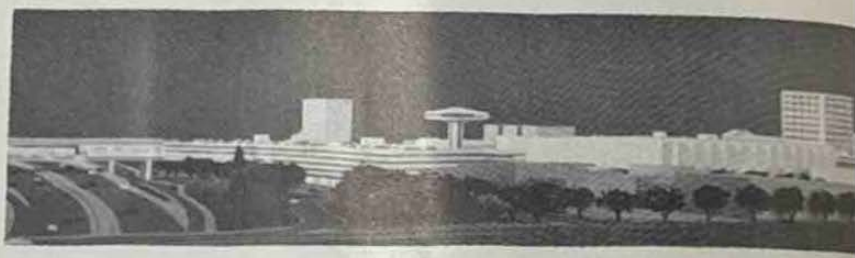
A Complete Redevelopment

SACRAMENTO is a city with a Plan — or a series of plans that may well make it one of the most pleasingly liveable cities in the nation.

The state capitol area, contiguous with the downtown section, yet separated to a degree by parks, has developed through succeeding plans, and its future proper development assured by the California State Capitol Plan of 1959.

All might be for naught, however, if the redevelopment of the downtown shopping and business areas were not as carefully conceived. The projected West End Commercial Complex appears to establish an excellent example.

This is within the commercial core of Sacramento, adjacent



to the river front and extending towards the Capitol Mall to the south — 1,205,000 sq. ft. of land area planned to provide 3,890,000 sq. ft. of useful space, to serve a projected population of 1,380,000 by 1980.

The plan is for two levels, a shopping mall and a basement with a few high rise buildings within the complex. Because shopping is a pedestrian activity, the entire complex will be pedestrian oriented. Shoppers may arrive by auto, park in any of six garages that have space for 4,000 cars, and proceed on foot. The garages are strategically related to the city's traffic circulation and to the retail buildings.

For service, off street truck unloading areas are located underground in two super blocks, and trucked goods will be distributed underground through corridors to storage areas on the basement level.

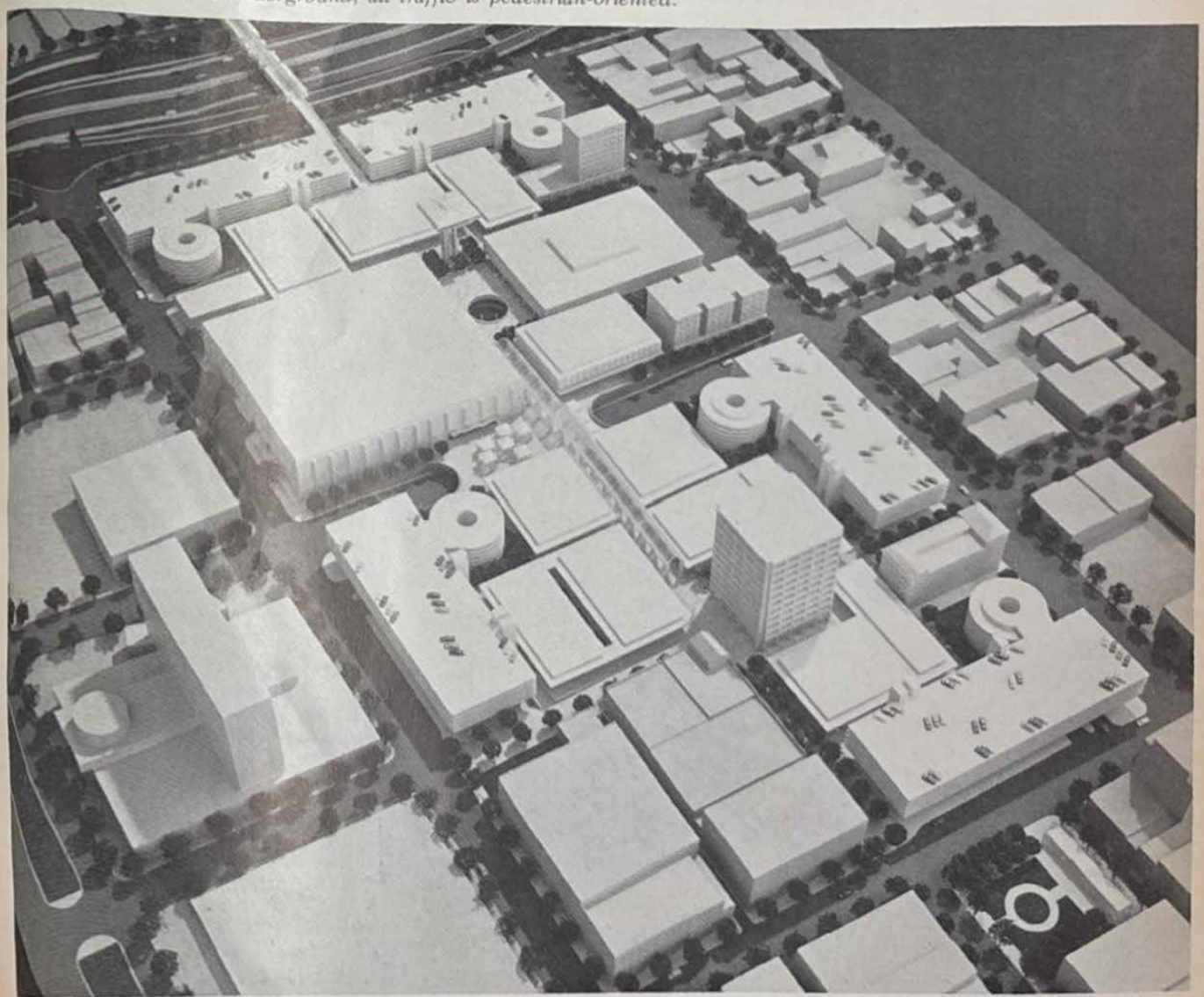
Utilities and services are engineered to serve the complex and the surrounding areas as well. All buildings will be concrete or steel fireproof construction. Retail space will be air conditioned, basements will be ventilated and sprinklered.

First to be constructed: A Macy's Department Store, with underground truck access roads and portions of the mall. The City will build the first 600-unit parking garage, and Macy's will provide parking as well.

In the plans: 14 as yet un-named buildings; restaurants, shops, two existing hotels, for a total of 1,136,480 sq. ft. of retail space; a 118,000 sq. ft. office building; public parks and streets occupying 467,000 sq. ft.

WEST END COMMERCIAL COMPLEX
Sacramento, California
Skidmore, Owings & Merrill, architects

Circular car ramps identify parking garages strategically located in the commercial complex. Services are underground, all traffic is pedestrian-oriented.



stainless steel sliding door



Western architects were shown the first production sliding glass door manufactured of stainless steel at the AIA Conference in Monterey last month. The stainless doors are particularly suitable for coastal areas, where salt air corrosion presents a problem for other metals. The manufacturer is also developing a stainless window wall system which will be introduced soon.—Carmel Steel Products, 9738 E. Firestone Blvd., Downey, Calif. (No. 1)

squirt-proof fountain

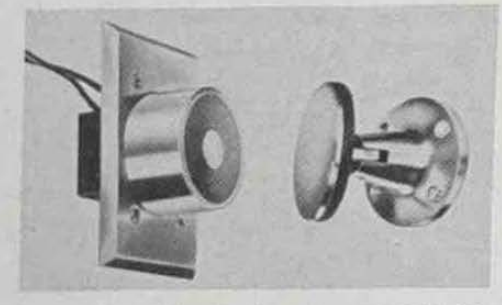
Remember "Old Facefull"? Designed to prevent youthful vandalism and water squirting, a new wall-mounted aluminum drinking fountain has been announced by Haws. The self-closing lever valve is equipped with automatic stream control to maintain steady water volume and pressure. The company is also introducing an air-cooled electric water cooler for semi-recessed wall installation. The cooling unit can be concealed directly beneath the drinking fountain, eliminating the plumbing code difficulties encountered by water-cooled units of similar design.—Haws Drinking Faucet Co., Fourth and Page Sts., Berkeley 10, Calif. (No. 2)

new neutral block

Color-in-the-glass blocks have been introduced in Royal Gray, a shade with maximum glare control. The 12-in. square blocks can be combined with the manufacturer's aqua, green or traditional white, as well as with clear, patterned or ceramic-faced blocks to achieve unusual design effects. The gray glass is made in transparent and translucent patterns. — Owens-Illinois Glass Co., Ohio Bldg., Toledo 1, Ohio. (No. 3)

fire door holder

An electromagnetic door holder which instantly releases self-closing fire and smoke barrier doors has been developed for use in institutional buildings. The device consists of a magnet unit mounted on the wall or floor and a metal plate on the door. When current



is passing through the magnet, it holds the door open with a force of 23 lb. The holder releases all doors in the circuit on signal from a fire detection system, regardless of where the fire is detected; on opening a manual switch; or if there is a power failure. —Sargent & Co., New Haven, Conn. (No. 4)

safety floors

Operating rooms have special flooring requirements which Novatraz was designed to meet. The vinyl resin terrazzo has a non-porous stain-resistant surface which is non-slip, wet or dry. The flooring, composed of marble chips in a choice of colors, embedded in a black matrix, contains conductive materials to dissipate static electricity. Conductive Novatraz can be used over any sound sub-surface for remodeling installations, or can be specified for new construction. — Selby, Battersby & Co., 5220 Whitby Ave., Philadelphia, Pa. (No.

tall grille

One-piece hardboard grille panels to feet high and four feet wide, the largest which can be produced from hardboards, are now offered in sixteen designer-series patterns. One-man labor can handle and install the wood grillework, because it contains less than half the weight of a solid 4x10-ft hardboard panel. Particle board, lami-



board, lebonite and plywood grilles range from ⅜ to ¾-in. thick, or laminations can be made for thicker panels.—Sculpt-A-Grille, Inc., 7105 S. McKinley Ave., Los Angeles 1, Calif. (No. 6)

breathing coating

A weather-resistant coating called Textane permits the normal transmission of water vapor, avoiding costly film failures that can occur when non-breathing materials are used for exterior applications. The polyurethane resins in the coating are especially resistant to deterioration resulting from exposure to chemicals and chemical fumes. Mixed with aggregate, the coating can be used for covering concrete blocks, bricks, cement plaster and other forms of masonry backings. It is available in colors ranging from pastels to bold tones.—Desco International Associates, Box 74, Buffalo, N.Y. (No. 7)

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giant planters

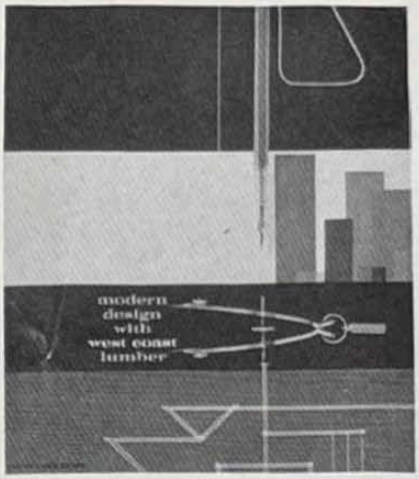
Fiberglass planters up to eight ft. in diameter can be ordered in six standard matte-finish shades, as well as custom colors. The planters were used by World's Fair architects to accent facades, and were even placed in the streets to help control pedestrian traffic. Since the planters are lightweight fiberglass, even the largest ones can be moved with comparative ease. They are made in seven geometric forms, including hexagons and semi-circles. —Architectural Fiberglass Division of Architectural Pottery, 2020 S. Robertson Blvd., Los Angeles 34, Calif. **(No. 8)**

scuff-tough wallboard

Vinyl-covered wallboard designed for use wherever scuffing is a problem will soon be available in three textured pastel shades and in two wood finishes, natural cherry and golden afara. The new wall is suited for use in offices, schools, commercial buildings and private residences. The wallboard may be installed like gypsum wallboard in traditional load-bearing walls or in non-load-bearing partition systems. Cuts or punctures can be "healed" with the toe of an electric iron.—Kaiser Gypsum Co., Room 2480, Kaiser Center, 300 Lakeside Drive, Oakland 12, Calif. **(No. 9)**

LITERATURE

pick of the month



"Modern Design With West Coast Lumber" is far more than just a promotion for building with wood. It is 40 pages of 4-color architectural photographs of 18 different commercial buildings, complete with architectural and engineering credits, job descriptions and statistics. Buildings include banks, shopping centers, motels, office buildings. Not only a good idea book, it is a pleasant experience in the use of pictorial layout and color. — West Coast Lumbermen's Association, 1410 SW Morrison St., Portland 5, Ore.

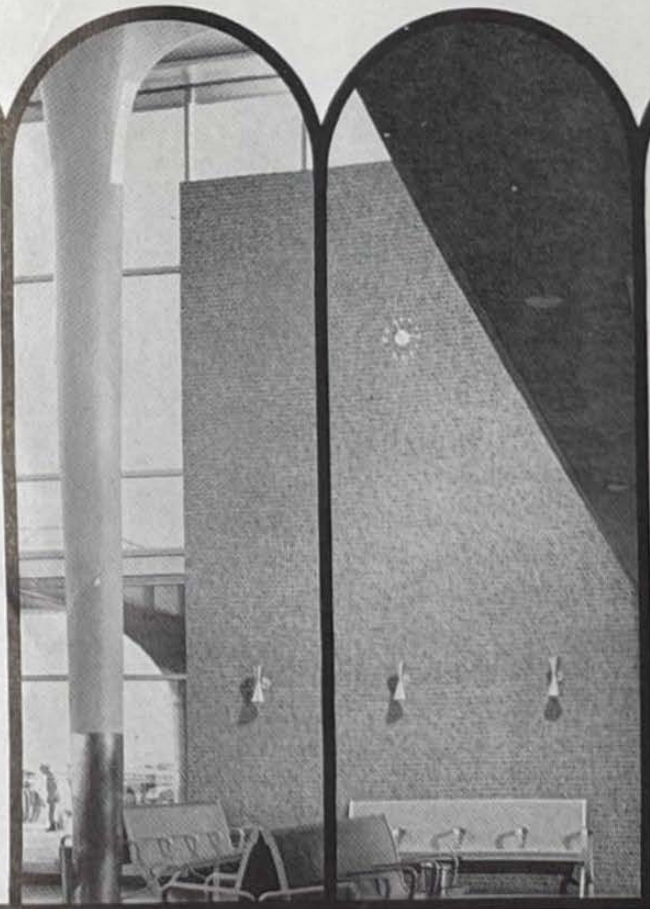
Precast Concrete Decks (AIA 4-K): describes how the use of hollow-core decks in an office building provided greater availability of telephone and electrical outlets and flexibility for future changes. Photographs and detailed drawings show how wiring was routed through the slabs; 6 pp.—The Flexicore Co., Inc., 1932 Monument Ave., Dayton 1, Ohio.

Projected Window: illustrates and describes an aluminum window designed for commercial and institutional buildings; complete specifications and installation details are included; 8 pp.—Michael Flynn Mfg. Co., 700 E. Godfrey Ave., Philadelphia 24, Pa.

Transitop (AIA 19-D): describes four types of core and facing of an asbestos-cement building panel, and illustrates where the panel can be used; 8 pp.—Johns-Manville, Dept. T862, 22 E. 40th St., New York 16, N. Y.

Automatic Door Fact File: (AIA 16-D): contains detail drawings and specification sheets for hydraulic, electric and pneumatic automatic door operating equipment for sliding, swinging and folding doors; 34 pp.—The Stanley Works, 195 Lake, New Britain, Conn.

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Building Permit Totals f

First Column Figures in Parentheses are Number of Residential Units • Second Column is Doll

CALIFORNIA	# Res.	$ Value	Total $
Alameda	(119)	$ 859,172	$ 978,432
Alameda Co.	(132)	1,038,900	1,627,180
Albany	(1)	15,130	67,266
Alhambra	(19)	160,200	303,035
Anaheim	(178)	1,404,200	2,750,431
Antioch	(80)	488,717	523,826
Arcadia	(62)	858,564	1,008,371
Arroyo Grande	(4)	59,275	196,877
Artesia	(4)	44,900	59,000
Atherton	(4)	125,000	172,450
Atwater	( )	Nil	400
Auburn	(4)	48,220	76,918
Avalon	( )	Nil	24,500
Azusa	(84)	688,900	1,312,585
Bakersfield	(24)	329,300	1,270,450
Baldwin Park	(28)	257,150	356,330
Banning	(8)	99,656	211,168
Barstow	(1)	6,911	25,260
Bell	(21)	164,710	183,080
Bellflower	(111)	898,900	1,049,670
Bell Gardens	(31)	286,100	348,470
Belmont	(26)	372,700	435,480
Benicia	(3)	24,994	31,498
Berkeley	(25)	311,288	695,977
Beverly Hills	(1)	80,000	388,097
Bradbury	(1)	36,800	40,887
Brawley	(2)	9,000	27,100
Brea	(3)	54,073	1,124,666
Buena Park	(20)	200,522	679,902
Burbank*	(90)	530,500	530,500
Burlingame	( )	Nil	392,013
Butte Co.	(98)	1,110,558	1,289,793
Calexico	(2)	8,000	346,380
Campbell	(143)	1,269,700	1,308,845
Carlsbad	(1)	22,810	51,639
Carmel	( )	No Reply	No Reply
Chico	(5)	87,147	224,363
Chino	(49)	690,116	802,987
Chula Vista	(19)	256,830	383,891
Claremont	(10)	220,800	949,530
Coalinga	(4)	54,300	59,400
Colton	( )	Nil	16,822
Commerce	(2)	16,200	185,270
Compton	(36)	180,900	366,960
Concord	(96)	1,414,630	1,909,965
Cntra Csta Co.	(217)	3,260,617	3,793,987
Corona	(35)	242,303	261,533
Coronado	( )	No Reply	No Reply
Corte Madera	(41)	734,280	736,160
Costa Mesa	(48)	1,176,130	1,531,390
Covina	(5)	64,600	182,694
Cudahy	(148)	1,209,600	1,249,250
Culver City	(3)	78,000	236,723
Dairy Valley	( )	Nil	2,950
Daly City	(20)	386,253	706,130
Davis	(8)	125,000	134,200
Delano	(5)	53,000	64,132
Downey	(144)	1,384,274	1,742,949
Duarte	(9)	180,000	218,257
El Cajon	(11)	140,500	475,200
El Centro	(4)	41,000	72,255
El Cerrito	(5)	97,955	144,312
El Dorado Co.	(68)	879,020	1,507,535
El Monte	(36)	311,476	536,346
El Segundo	(5)	50,100	586,065
Emeryville	( )	Nil	668
Escondido	(3)	33,527	202,553
Eureka	(3)	41,500	98,500
Fairfield	(15)	173,068	263,922
Fillmore	(16)	146,368	178,544
Fontana	(21)	174,935	211,242
Fremont	(236)	3,221,700	4,216,544
Fresno	(48)	544,962	2,046,666
Fresno Co.	(43)	483,963	1,397,946
Fullerton	(209)	2,956,502	3,859,423
Glendale	(139)	1,496,091	2,667,977
Glendora	(2)	44,500	106,845
Half Moon Bay	(3)	40,000	45,850
Hanford	(2)	41,600	103,748
Hawthorne	( )	No Reply	No Reply
Hayward	(98)	911,034	1,436,757
Hemet	(8)	96,000	190,247
Hermosa Bech	(4)	77,772	140,189
Hidden Hills	(2)	59,700	69,900
Hillsborough	(8)	350,000	374,600
Holtville	(1)	9,000	14,795
Humboldt Co.	(31)	481,313	925,794
Hntingtn Bech	(425)	5,554,808	5,810,405
Hntingtn Park	(18)	239,260	257,860
Imperial Co.	( )	Nil	162,000
Indio	( )	Nil	192,923
Industry	( )	Nil	28,650
Inglewood	(27)	416,020	881,040
Irwindale	( )	Nil	13,844
Kern Co.	(68)	891,725	1,718,002
Laguna Beach	(12)	219,500	280,501
La Habra	(185)	3,117,240	3,758,169
Lakewood	(69)	957,100	1,213,585
La Mesa	(11)	260,806	466,653
La Mirada	( )	Nil	68,770
La Puente	(30)	325,350	367,877
La Verne	(50)	673,500	697,070
Lawndale	(32)	329,450	367,470
Lindsay	(1)	15,000	47,225
Livermore	(32)	331,000	358,243
Lodi	(12)	117,050	187,205
Lompoc	(79)	1,212,955	1,879,393
Long Beach	(324)	3,319,245	5,921,920
Los Altos	(16)	391,000	889,005
Los Angeles	(2,259)	26,900,550	50,976,368
Ls Angeles Co.	(854)	12,032,660	18,542,248
Los Gatos	(14)	313,000	609,050
Lynwood	(37)	248,750	310,889
Madera	(14)	113,740	137,064
Madera Co.	(12)	109,600	148,900
Manhattn Bech	(14)	179,065	332,307
Manteca	(8)	120,500	153,405
Marin Co.	(139)	3,087,130	3,380,982
Martinez	( )	Nil	59,930
Marysville	(1)	9,000	104,189
Maywood	(4)	16,400	30,266
Menlo Park	(8)	209,000	363,288
Merced	(22)	167,951	471,481
Merced Co.	(10)	112,780	207,729
Millbrae	(7)	190,808	404,408
Mill Valley	(5)	132,000	155,625
Modesto	(48)	664,000	859,593
Monrovia	(37)	546,135	636,559
Montclair	(39)	436,960	466,790
Montebello	(222)	1,853,583	2,162,748
Monterey	(7)	120,000	368,650
Monterey Co.	(41)	619,560	723,465
Monterey Prk	(45)	427,650	526,977
Mountin View	(23)	292,860	1,645,292
Napa	(12)	169,446	582,050
Napa Co.	(14)	243,261	355,311
National City	(3)	31,990	259,333
Newport Bech	(105)	1,972,598	2,397,732
N. Sacramento	(32)	205,484	238,732
Norwalk	(13)	119,300	271,480
Novato	(26)	518,480	583,940
Oakdale	(2)	24,620	32,753
Oakland	(327)	3,362,775	4,624,506
Oceanside	(10)	129,500	631,275
Ojai	( )	Nil	27,350
Ontario	(93)	1,217,306	1,340,245
Orange	(122)	1,654,450	2,012,476
Orange Co.	(339)	5,951,456	6,858,334
Oroville	(4)	67,536	277,686
Oxnard	(21)	267,360	568,799
Pacifica	(20)	172,000	387,350
Pacific Grove	(2)	17,000	25,800
Palm Springs	(14)	344,000	2,221,281
Palo Alto	(48)	349,000	1,018,624
Pls Vrds Estts	(17)	693,800	732,910
Paramount	(19)	170,700	275,860
Pasadena	(36)	360,269	943,815
Paso Robles	( )	Nil	165,560
Pico Rivera	(57)	350,000	562,364
Piedmont	(1)	35,000	61,443
Pinole	(9)	106,335	151,783
Pittsburg	(14)	175,490	194,852
Placentia	(92)	1,583,930	1,602,646
Placer Co.	(47)	681,592	2,345,847
Pleasanton	(2)	33,599	110,524
Pomona	(126)	1,342,840	1,678,456
Porterville	(1)	9,000	126,808
Port Hueneme	(42)	204,000	209,297
Red Bluff	(1)	10,218	30,323
Redding	(1)	12,000	664,950
Redlands	(23)	183,000	313,333
Redondo Bech	(30)	302,813	302,813
Redwood City	(38)	334,000	460,696
Richmond	(37)	341,500	567,937
Riverside	(13)	269,600	740,797
Riverside Co.	(373)	4,410,419	6,103,488
Rolling Hills	(1)	58,000	65,200
Rlng Hls Estts	(3)	103,100	225,620
Rosemead	(1)	12,000	54,580
Roseville	(36)	312,804	410,745
Sacramento	(70)	846,700	1,785,900
Sacramnto Co.	(534)	5,785,905	7,915,460
St. Helena	(1)	15,000	16,700
Salinas	(23)	314,500	766,940
San Bernrdino	(94)	906,685	2,865,[illegible]
S Brnrdno Co.	(458)	4,187,071	5,507,[illegible]
San Bruno	(42)	580,200	713,[illegible]
San Carlos	(8)	160,844	254,[illegible]
San Clemente	(33)	34,000	708,[illegible]
San Diego	(86)	2,428,148	8,277,[illegible]
San Diego Co.	(138)	1,995,500	3,530,[illegible]
San Dimas	(6)	113,900	133,[illegible]
San Fernando	(35)	266,250	336,[illegible]
San Francisco	(337)	4,504,517	9,226,[illegible]
San Gabriel	(38)	308,881	548,[illegible]
Sanger	(5)	52,200	83,[illegible]
San Jacinto	(4)	34,700	42,[illegible]
Sn Joaquin Co.	(51)	585,177	975,[illegible]
San Jose	(574)	5,956,500	7,877,[illegible]
San Leandro	(2)	19,000	488,[illegible]
Sn Lus Obispo	(41)	588,828	836,[illegible]
S Ls Obspo Co.	(28)	253,220	321,[illegible]
San Marino	( )	Nil	72,[illegible]
San Mateo	(14)	198,000	738,[illegible]
San Mateo Co.	(56)	655,337	951,[illegible]
San Pablo	( )	Nil	235,[illegible]
San Rafael	(32)	358,397	1,439,[illegible]
Santa Ana	(107)	938,810	2,041,[illegible]
Santa Barbara	(99)	834,500	1,016,[illegible]
Snta Brbra Co.	(352)	5,254,200	6,802,[illegible]
Santa Clara	(132)	1,552,500	3,421,[illegible]
Snta Clara Co.	(22)	434,200	1,943,[illegible]
Santa Cruz	(13)	150,250	388,[illegible]
Santa Cruz Co.	(97)	1,029,103	1,448,[illegible]
Snta Fe Sprngs	( )	Nil	126,[illegible]
Santa Maria	(50)	505,127	951,[illegible]
Santa Monica	(111)	1,216,837	1,679,[illegible]
Santa Paula	( )	Nil	31,[illegible]
Santa Rosa	(105)	1,201,450	2,247,[illegible]
Sausalito	( )	Nil	6,[illegible]
Seal Beach	(398)	2,829,790	3,828,[illegible]
Seaside	(46)	258,000	299,[illegible]
Selma	(1)	12,750	22,[illegible]
Shasta Co.	(40)	607,571	1,273,[illegible]
Sierra Madre	(17)	173,500	247,[illegible]
Solano Co.	(5)	85,530	173,[illegible]
Sonoma Co.	(108)	901,765	1,296,[illegible]
South Gate	(4)	26,000	134,[illegible]
South El Mnte	(3)	23,500	196,[illegible]
So. Pasadena	(7)	134,442	413,[illegible]
S. Sn Frncisco	(15)	146,150	943,[illegible]
Stanislaus Co.	(30)	394,836	558,[illegible]
Stockton	(30)	784,240	1,283,[illegible]
Sunnyvale	(253)	1,575,300	3,287,[illegible]
Temple City	(12)	99,500	157,[illegible]
Torrance	(70)	601,120	1,841,[illegible]
Tracy	(7)	79,900	88,[illegible]
Tulare	(1)	8,550	37,[illegible]
Tulare Co.	(72)	973,125	1,188,[illegible]
Turlock	(2)	30,583	46,[illegible]
Ukiah	(34)	198,300	333,[illegible]
Upland	(86)	1,462,500	1,617,[illegible]
Vacaville	(5)	62,908	123,[illegible]
Vallejo	(2)	31,500	203,[illegible]
Ventura	(3)	59,316	542,[illegible]
Ventura Co.	(137)	1,879,300	2,274,[illegible]
Visalia	(13)	195,000	653,[illegible]
Walnut	(2)	26,500	41,[illegible]
Walnut Creek	(12)	178,420	210,[illegible]
Wasco	( )	No Reply	No Reply
Watsonville	( )	Nil	28,[illegible]
West Covina	(24)	517,130	1,795,[illegible]
Whittier	(78)	1,033,400	1,361,[illegible]
Woodland	(3)	46,000	211,[illegible]
Woodside	(2)	89,608	199,[illegible]
Yolo Co.	(5)	90,041	254,[illegible]
Yreka	( )	Nil	312,[illegible]
Yuba City	(5)	63,080	271,[illegible]
Yuba Co.	(10)	109,789	280,[illegible]
Total	**(23,606)**	**$192,828,059**	**$316,[illegible]**

OREGON	# Res.	$ Value	Total $
Albany	(3)	$ 38,900	$ 55,[illegible]
Ashland	(4)	46,500	62,[illegible]
Astoria	(1)	14,000	32,[illegible]
Baker	(1)	12,000	36,[illegible]
Beaverton	(10)	242,335	268,[illegible]
Bend	(7)	78,500	356,[illegible]
Central Point	(1)	10,000	14,[illegible]
Clackamas Co.	(44)	582,251	622,[illegible]
Coos Bay	(2)	29,000	43,[illegible]
Corvallis	(8)	106,000	138,[illegible]
Dallas	( )	Nil	39,[illegible]
Douglas Co.	(8)	83,600	137,[illegible]
Eugene	(30)	167,305	687,[illegible]
Forest Grove	(1)	15,000	56,[illegible]
Grants Pass	(4)	45,700	1,179,[illegible]
Gresham	(7)	94,450	127,[illegible]

*Complete figures not available

Western States for September

Residential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hermiston	( )	No Reply	No Reply
Hillsboro	(6)	90,500	109,119
Hood River	(1)	11,000	17,516
Klamath Falls	(3)	36,000	55,900
La Grande	(2)	32,800	40,180
Lake Oswego	(14)	232,000	243,267
Lane Co.	(109)	1,145,687	1,290,283
Lebanon	( )	Nil	2,665
Marion Co.	(35)	490,230	839,659
McMinnville	(21)	111,500	130,744
Medford	(27)	303,950	653,577
Mltn-Freewtr	(3)	24,000	76,851
Milwaukie	(9)	107,400	396,330
Multnomah Co.	(145)	1,998,353	2,670,264
Newberg	( )	Nil	2,531
Newport	(2)	24,000	97,500
North Bend	(2)	23,500	49,204
Ontario	( )	Nil	137,550
Oregon City	(5)	54,000	223,915
Oswego	(14)	232,000	243,267
Pendleton	(4)	51,000	93,036
Portland	(46)	1,026,160	3,068,435
Roseburg	(4)	40,409	110,126
St. Helens	(4)	38,860	44,960
Salem	(11)	142,552	1,195,409
Seaside	(1)	15,500	27,808
Springfield	( )	Nil	Nil
The Dalles	(2)	15,967	46,092
Washingtn Co.	(78)	1,520,795	2,664,619
Total	**(679)**	**$ 9,333,704**	**$ 18,367,949**
WASHINGTON			
Aberdeen	(1)	$ 21,500	$ 73,244
Anacortes	(1)	10,500	40,150
Auburn	(7)	84,000	97,600
Bellevue	(1)	12,000	595,250
Bellingham	(3)	35,000	166,983
Bremerton	(4)	66,000	115,240
Camas	(1)	14,000	21,000
Centralia	(1)	2,000	29,140
Chehalis	( )	Nil	19,995
Clark Co.	(41)	553,850	1,420,650
Clarkston	(1)	11,500	50,295
Edmonds	(19)	371,000	377,300
Ellensburg	(4)	54,500	87,431
Enumclaw	(6)	78,000	83,615
Ephrata	( )	Nil	155,152
Everett	(12)	166,247	516,146
Grys Hrbr Co.	(10)	123,200	154,925
Hoquiam	(1)	12,000	30,673
Island Co.	( )	No Reply	No Reply
Kelso	(1)	7,000	29,903
Kennewick	(1)	9,300	48,900
Kent	(29)	518,525	832,625
King Co.	(501)	8,424,180	9,924,455
Kirkland	( )	No Reply	No Reply
Longview	(12)	116,900	208,230
Lynnwood	( )	No Reply	No Reply
Mercer Island	(18)	476,357	527,807
Moses Lake	(3)	62,750	91,665
Milk. Terrace	(19)	204,000	267,613
Olympia	(3)	67,000	279,443
Pasco	(1)	9,000	197,867
Pierce Co.	(119)	1,415,381	1,671,410
Port Angeles	(1)	12,000	172,650
Pullman	(2)	29,570	36,370
Puyallup	(31)	162,900	189,600
Renton	(7)	80,000	166,685
Richland	(11)	193,500	1,108,032
Seattle	(188)	2,613,200	6,483,382
Shelton	(1)	15,000	15,300
Spokane	(11)	282,000	985,825
Spokane Co.	(29)	438,535	668,877
Sunnyside	(3)	49,250	56,350
Tacoma	(102)	1,385,500	2,377,209
Thurston Co.	(30)	312,000	325,600
Vancouver	(23)	212,000	359,216
Walla Walla	(1)	16,000	40,274
Walla Wlla Co.	(1)	11,000	68,597
Wenatchee	(2)	19,500	100,419
Yakima	(16)	192,000	443,650
Total	**(1,279)**	**$ 18,949,645**	**$ 31,685,743**
ALASKA			
Anchorage	(53)	$ 835,767	$ 989,800
Fairbanks	( )	Nil	126,400
Juneau	(4)	110,000	148,150
Ketchikan	( )	Nil	22,600
Total	**(57)**	**$ 945,767**	**$ 1,286,950**

	# Res.	$ Value	Total $
IDAHO			
Blackfoot	(4)	60,000	73,980
Boise	(9)	93,824	340,527
Burley	( )	No Reply	No Reply
Caldwell	(8)	129,450	269,392
Coeur d'Alene	(2)	31,364	108,598
Idaho Falls	(35)	401,935	940,112
Jerome	(2)	20,000	29,550
Lewiston	(3)	56,000	149,358
Moscow	(7)	130,500	132,325
Nampa	(4)	55,300	420,250
Payette	(3)	40,500	53,700
Pocatello	(16)	211,700	294,195
Sandpoint	( )	Nil	8,700
St. Maries	( )	No Reply	No Reply
Twin Falls	(5)	46,000	126,100
Total	**(98)**	**$ 1,276,573**	**$ 2,946,787**
MONTANA			
Anaconda	( )	$ Nil	$ Nil
Billings	(22)	289,100	813,597
Bozeman	(4)	68,500	77,450
Butte	( )	Nil	6,350
Cut Bank	(1)	5,000	50,900
Glasgow	( )	Nil	91,538
Glendive	(1)	20,000	28,200
Great Falls	(112)	894,457	1,764,037
Havre	(1)	9,000	22,573
Helena	(13)	189,100	461,595
Kalispell	(2)	17,500	135,600
Lewistown	(4)	40,000	49,300
Livingston	( )	No Reply	No Reply
Malta	( )	Nil	Nil
Miles City	( )	No Reply	No Reply
Missoula	(3)	56,500	108,392
Total	**(163)**	**$ 1,589,157**	**$ 3,609,552**
WYOMING			
Casper	(14)	$ 169,000	$ 483,492
Cheyenne	(38)	450,600	924,340
Cody	( )	Nil	4,250
Laramie	(2)	15,500	36,023
Rawlins	( )	Nil	10,750
Riverton	(2)	22,000	55,900
Rock Springs	(1)	15,000	26,000
Sheridan	(2)	31,000	118,630
Total	**(59)**	**$ 703,100**	**$ 1,659,385**
COLORADO			
Adams Co.	(193)	$ 2,684,000	$ 2,853,430
Alamosa	(2)	23,500	98,620
Arapahoe Co.	( )	No Reply	No Reply
Arvada	(52)	595,000	904,834
Aspen	(1)	30,000	191,000
Aurora	(73)	1,002,514	1,179,450
Boulder	(71)	861,480	1,710,168
Boulder Co.	(29)	348,357	426,357
Colrdo Sprngs	(64)	816,160	1,239,300
Cortez	(1)	4,000	60,400
Denver	(152)	1,598,376	4,210,739
Durango	(2)	29,920	43,767
El Paso Co.	(53)	652,000	1,247,702
Englewood	(6)	71,500	200,741
Estes Park	(3)	38,550	41,450
Fort Collins	(21)	298,500	1,025,094
Fort Morgan	(2)	25,042	41,228
Golden	(10)	146,850	172,650
Grand Jnction	(1)	12,500	65,955
Greeley	(47)	493,472	1,039,370
Jefferson Co.	(186)	2,304,036	3,192,537
La Junta	( )	No Reply	No Reply
Lamar	( )	No Reply	No Reply
Littleton	(13)	210,576	289,887
Longmont	(30)	285,244	345,201
Loveland	(21)	223,500	329,700
Monte Vista	(2)	6,500	63,600
Montrose	(3)	33,810	39,173
Pitkin Co.	(13)	250,000	259,500
Pueblo	(21)	266,300	612,097
Pueblo Co.	( )	No Reply	No Reply
Sterling	(5)	44,000	87,320
Trinidad	(3)	46,400	70,300
Walsenburg	( )	Nil	3,705
Westminster	(39)	376,549	671,950
Total	**(1,119)**	**$ 13,778,636**	**$ 22,717,225**

	# Res.	$ Value	Total $
UTAH			
American Fork	( )	$ Nil	$ 5,695
Bountiful	(19)	292,200	391,981
Brigham City	(13)	139,000	151,500
Cedar City	( )	Nil	1,850
Clearfield	(2)	20,000	365,300
Davis Co.	(8)	144,875	219,137
Kaysville	(1)	7,560	11,260
Layton	(24)	321,000	336,100
Logan	(12)	129,152	2,020,685
Murray	(18)	218,500	301,600
Ogden	(5)	207,912	505,212
Orem	(14)	171,500	232,335
Price	( )	Nil	64,000
Provo	(5)	74,000	121,200
Salt Lake City	(79)	898,100	9,925,095
Salt Lake Co.	( )	No Reply	No Reply
S. Slt Lke City	(5)	120,000	221,790
Spanish Fork	( )	Nil	1,915
Tooele	(36)	355,102	450,749
Utah Co.	(1)	15,245	334,465
Weber Co.	(6)	70,000	73,400
Total	**(248)**	**$ 3,184,146**	**$ 15,735,269**
NEVADA			
Boulder City	( )	$ Nil	$ 2,700
Clark Co.	(254)	3,642,111	12,437,251
Elko	( )	No Reply	No Reply
Las Vegas	(450)	3,701,681	4,858,430
N. Las Vegas	(41)	301,271	608,938
Reno	(99)	1,364,960	1,620,151
Sparks	(32)	374,500	411,228
Washoe Co	(21)	381,660	653,238
Total	**(897)**	**$ 9,766,183**	**$ 20,591,936**
ARIZONA			
Buckeye	( )	$ Nil	$ 455
Casa Grande	(3)	44,000	132,750
Chandler	(13)	89,736	136,984
Douglas	( )	Nil	56,247
Flagstaff	(30)	116,680	2,725,595
Florence	( )	Nil	1,000
Glendale	(30)	339,000	565,348
Maricopa Co.	(98)	1,028,582	1,210,845
Mesa	(134)	575,533	871,186
Phoenix	(420)	3,012,672	8,848,463
Pima Co.	(153)	1,697,000	1,971,051
Prescott	(2)	17,500	17,500
Scottsdale	(30)	363,500	1,888,427
Tempe	(132)	1,114,582	1,414,417
Tucson	(114)	1,281,581	1,860,266
Wickenburg	(1)	14,000	21,800
Winslow	( )	No Reply	No Reply
Yuma	(2)	16,000	39,750
Total	**(1,162)**	**$ 9,710,366**	**$ 21,762,084**
NEW MEXICO			
Alamogordo	( )	$ Nil	$ 12,940
Albuquerque	(164)	307,483	2,805,777
Artesia	(2)	27,000	46,615
Carlsbad	(6)	70,000	523,245
Clovis	(36)	419,818	597,400
Deming	(7)	35,000	39,300
Farmington	(1)	3,000	74,176
Gallup	(21)	176,000	185,140
Hobbs	(16)	239,525	291,925
Las Cruces	(15)	191,200	275,430
Las Vegas	( )	No Reply	No Reply
Lovington	( )	Nil	12,700
Raton	( )	Nil	28,400
Roswell	(31)	296,500	582,137
Santa Fe	(33)	260,250	383,880
Silver City	(2)	26,000	80,965
Truth or Consequences	( )	No Reply	No Reply
Tucumcari	(4)	31,000	46,500
Tularosa	(1)	2,304	2,304
Total	**(339)**	**$ 2,085,080**	**$ 5,988,834**
HAWAII			
Hawaii Co.	(33)	$ 516,924	$ 1,503,633
Honolulu	(611)	7,339,889	11,055,701
Maui Co.	(44)	454,061	1,384,964
Total	**(688)**	**$ 8,310,874**	**$ 13,944,298**
GRAND TOTAL	**(30,394)**	**$272,461,290**	**$477,086,903**

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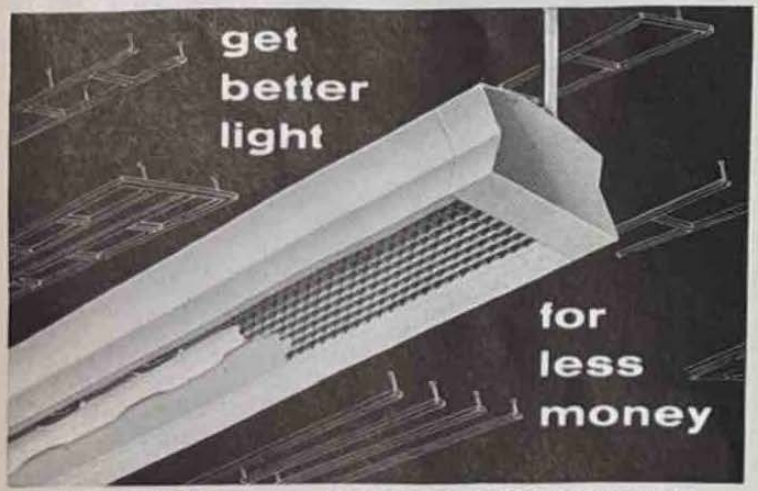
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So much rather charming nonsense has cr
ped up in the news recently that we feel constra
to recite a few of the tidbits here, not entirely b
funny, but because within each item is a germ
news or of basic truth.

There is the Air Door, Inc., decision, in which
firm now has a defined legal right to manufact
and market a door that isn't a door. Backgroun
the patent dispute doesn't concern us—what
caught our fancy is that the manufacturer of
doorless door is a subsidiary of New Castle Produ
Inc., maker of the popular Modernfold door do

• • •

Then there is mathematician Mario Salvatori, a
a designer and engineer, who at the California cha
ter convention in Monterey charged architects wi
worrying excessively about structure . . . "and th
should, because most of them haven't the slight
idea what structure is." He followed this pot sh
with the comment that "We are doing so many ne
things today, so fast, that we cannot do any of the
well. The Greeks took hundreds of years to mo
from one style of column to another. But they we
building for eternity. So we are not necessari
wrong in our approach because we are not buildi
for eternity. We are doing disposable buildings, d
signed to last 20, 30 or 100 years." Well?

• • •

In Seattle, the 15th Pacific Coast Regional Mee
ing of the American Ceramic Society took an awf
whack at the glass and aluminum people, as migh
be anticipated. A panel of architects decribed th
"glass box" look and aluminum window walls a
disappearing from modern architecture. They ex
plained that there is a trend back to brick and othe
structural clay products for lasting beauty, functio
and economy. Most constructively, the ceramics peo
ple did point to the excellent uses of brick and othe
clay products throughout the World's Fair building
and they called on the industry to produce still mor
new products and to develop new uses for existin
products as a stimulus to thinking in the architectu
al field. Meanwhile, we're waiting for the glass in
dustry to ask who lately has viewed the beauties o
a splendid sunset through a brick wall.

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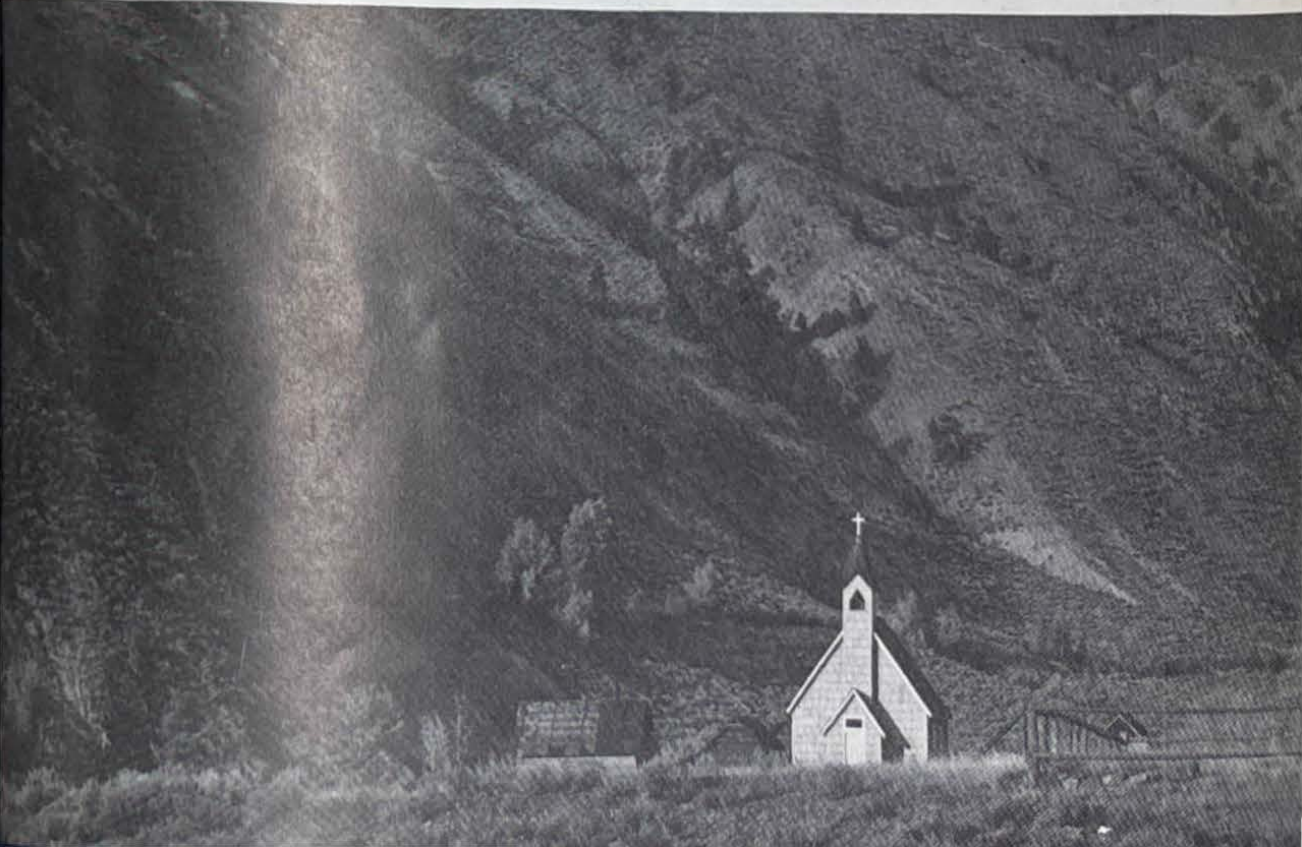
Builders Brick 9
Haws Drinking Faucet Co. 8
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Architecture / West

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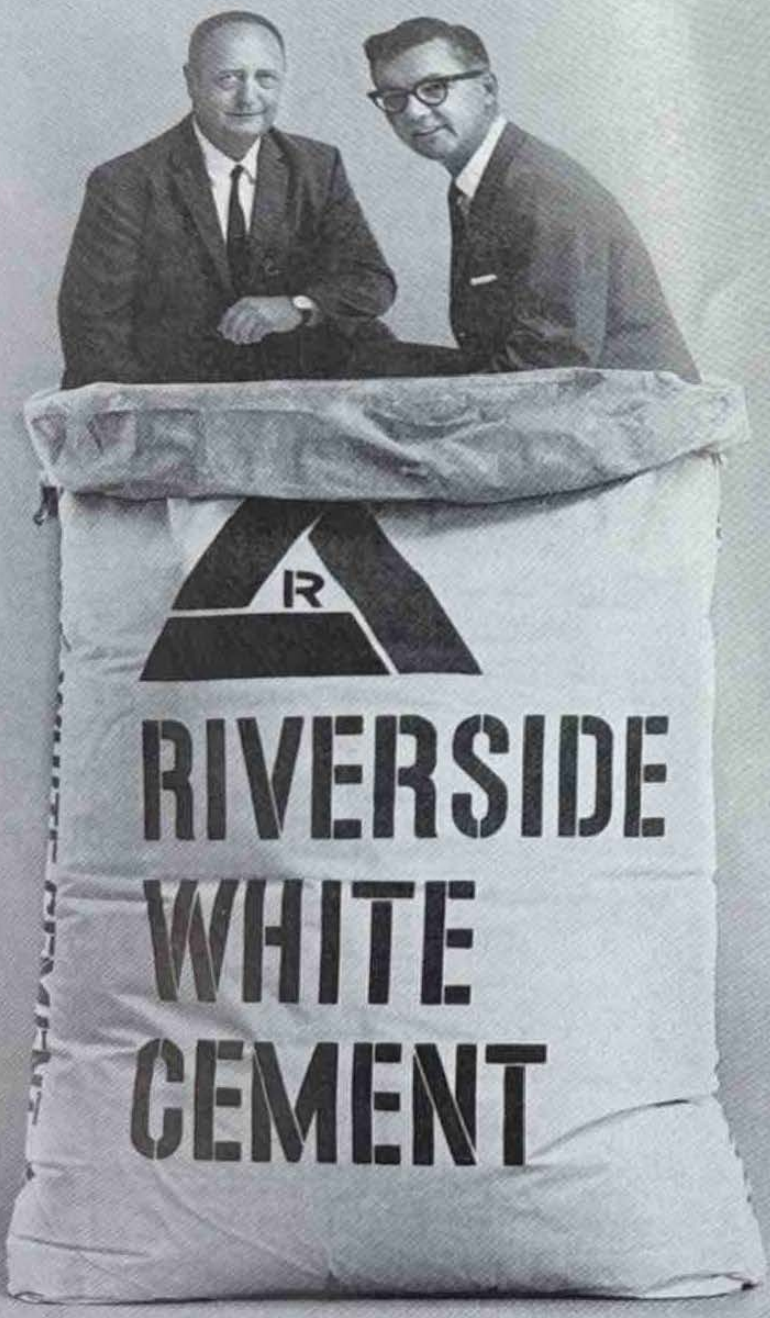
A/W

FORMERLY PACIFIC ARCHITECT & BUILDER ◆ DECEMBER 1962



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Business data on page 28

COVER: A place of worship built of the materials at hand to fill an immediate need: Symbolic of our Gallery of a Scriptured Land, page 11.

ABOUT THIS ISSUE: The gallery of church pictures by Steve Wilson is guaranteed to slow your frantic pace for a brief period of thoughtful reflection. It is symbolic of our Western beginnings and it somehow presents a lesson in serenity, adds an inner strength to our purpose. Review it with reflection, and then go on to the page of dollhouse churches of Hawaii, another example of how simplicity can create serenity. We hope you are as pleased as we with the section of pages 11 through 16.

With death there is life, and we are impressed with the Oakmont Mausoleum whose barrel vault chapel, glassed at the ends, provides mourners a dramatic view of life in the valley below—Hilltop Serenity, page 17.

It was not our intention to make this December issue so serious in content, but somehow the articles fell into line; churches, the mausoleum, a nuclear reactor building at the University of Washington (and at the present time we still face the grim popular connotations of nuclear fission), and finally, by golly, two prisons. They, at least, are presented as interesting examples of attractive structures based on modern penology concepts of atmosphere conducive to rehabilitation. The correctional prison at Shelton is not at this time written as a design article, but as an example of good prefab concrete forming methods.

THE BUILDING MONTH

THE BUILDING WEST—The pace of building permits issued by 500 leading communities in the West slumped a bit during September, but jumped right back in October to $587 million, about 8% greater than last October. For the year to date the total is $5.72 billion, 15% over last year. The tabulation appears on pages 26-27.

THE HOT SPOTS—While California cities continue to dominate the building scene, Phoenix has moved from eighth into fifth place, upping its building volume total by $4 million. The top 25 in the west (in millions): 1. Los Angeles, $58.8; 2. San Francisco, $30.0; 3. Los Angeles County, $21.6; 4. Honolulu, $17.9; 5. Phoenix, $12.3; 6. Seattle, $10.4; 7. Sacramento County, $10.3; 8. King County, Wash., $10.3; 9. Las Vegas, $9.1; 10. Anaheim, $7.7; 11. Huntington Beach, $7.3; 12. Clark County, Nev., $7.3; 13. San Bernardino County, $6.7; 14. San Jose, $6.7; 15. Riverside County, Calif., $6.2; 16. Orange County, $6.2; 17. Santa Barbara County, $6.1; 18. Santa Ana, $6.0; 19. Sacramento, $5.9; 20. Fresno, $5.7; 21. Denver, $5.6; 22. Santa Clara, $5.4; 23. Logan, Utah, $5.2; 24. Sunnyvale, $5.0; 25. Torrance, Calif., $5.0.

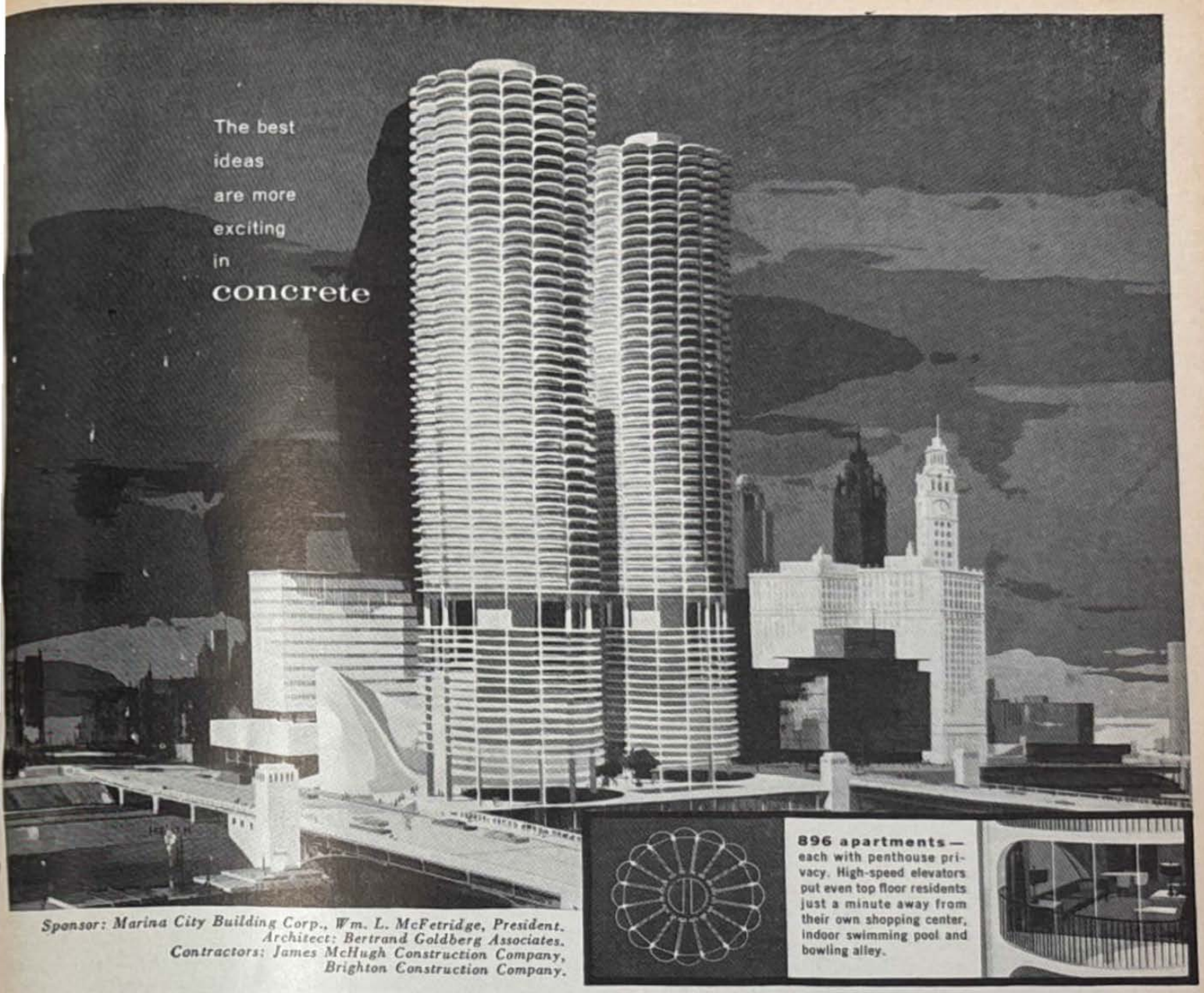
INADEQUATE ARCHITECT'S FEES—The San Francisco Housing Authority, chairmanned by Jacob Shemano, has moved to modify restrictions that adversely affect design of public housing projects. Main issue is the mandatory fee schedule set up by Federal authorities for architects on such projects. The majority of architects, it seems, decline entirely, or are at best reluctant to accept public housing commissions, feeling that they cannot afford to give the necessary time and attention to the job because of the low fee. The American Institute of Architects is at present in Washington, D. C., engaged in discussing similar matters with Commissioner of Public Housing Marie C. McGuire. At the same time, the Northern California Chapter, AIA, has informed the Commissioner that only through adequate fees and removal of certain other existing restrictions can architects satisfy the announced desire for public housing that is humanized and sensitively designed. In San Francisco, meanwhile, Shemano has ordered the San Francisco staff to defer execution of a contract for designing an apartment for the elderly, pending the possibility of a waiver of the mandatory fee schedule by Washington that would allow them to complete a more pleasing and distinguished building.

OLYMPIC INVITATION—The City of Portland almost upset the U. S. Olympic Games Committee with her firm bid for the 1968 site. And although Detroit won out over "the little town 'way out in the West," Portland cannot be discounted as a strong contender for the 1972 U. S. nomination. The Committee, in admitting that the Portland story "was the most dramatic presentation we have ever seen," left the door open for the City of Roses. Full color sketches of the proposed Olympic stadium done by Oregon architects, the $9 million Memorial Coliseum with seating for 14,000, a proposed 3000-seat convention hall adjoining, together with a brilliant, warm presentation of Portland at work, play, culturally, sports-wise, educationally, historically, brought into sharp focus the entire Northwest and perhaps etched more sharply in the minds of her own people the cosmopolitan facets of their city, arousing a civic fervor that will not be stilled. Look out for 1972!

Highlights & Sidelights

INSTANT HOUSES—New compact packages known as "Instant House", "Instant Chair", "Instant Space Station", are now possible according to the Research and Development Division of Dyna-Therm Chemical Corp., Beverly Hills firm. New methods of cementing pellets of urethane compound to an inflatable object of any desired shape enables space-age structures. Once boosted into the vacuum of outer space, a package of structures would inflate and under the influence of solar energy, the pellets melt, form and cure to produce a rigid structure. While the "space housing projects" may lead to an accumulation of trash in outer space, no doubt some plastics engineer of the future will be assigned the task of reversing the actions and converting the obsolete space slums back to the elements from which they came.

INTO THE BILLIONS—A multi-million dollar expansion of the 30-acre site of United Technology Corp., at Sunnyvale, California, is underway. Included are an administration-engineering building costing $1 million with plans being made for research buildings, six-story office tower. . . . Public Service Co. of New Mexico has budgeted $7 million for 1963 construction work in the state with $2.8 for Albuquerque alone. . . . Work has started on a $3.2 million service building for Space Technology Laboratories at Redondo Beach, Calif. More than 10,000 are expected to be employed at the new center. . . . Plans for a $56 million development in the South Auditorium urban renewal area have been announced by the Portland Center Redevelopment Corp. Development work is scheduled to start next July. Skidmore, Owings and Merrill, Portland, have developed overall plan. . . . Congress has approved $4 million for construction, including building, at the National Reactor Testing Station, Idaho Falls, with the city also stepping up its building programs. . . . The half-way point on construction of five buildings for Aerospace Corporation, San Bernardino, has been reached. The 80-acre site will house headquarters and support facilities, complete computer center, research and development facilities, science library, maintenance and warehouse, at a cost of $5.8 million. . . . An additional $1.5 million is being spent in Portland with construction of the Lloyd Plaza at Lloyd Center. Plaza will be four office buildings, with first now underway . . . A $16 million Medical Center at the University of Utah, Salt Lake City, will be completed by summer of 1964. . . . Pacific Tel and Tel's $15 million building in San Francisco will be first office building in that area with built-in radiological fallout protection safety devices. . . . Ground was broken on multi-million dollar "Century Square," regional shopping center for Century City in West Los Angeles, early in November with completion scheduled for fall of 1964. . . . Improvements at a cost in excess of $10 million are under construction on the Nevada University campus, Reno. . . . Downtown redevelopment, conversion of Century 21 Coliseum into sports and convention facility, development of the Seattle Center, all aftermaths of World's Fair, are in planning stages at Seattle. . . . General Services Administration has selected downtown Dodd Block, Spokane, for office building estimated at $8.5 million. . . . Wells Fargo Bank, San Francisco, have plans out for a $25 million building. The 25-story structure is designed by John Graham and Company.



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"Doors That Open To Everything But Fire" is a new film that shows architects, contractors and building owners how Overly U/L labeled doors and frames reduce fire damage and save lives.

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This important film will be useful to you as well as your clients. To arrange for showings, write to: Manager, Underwriters' Product Sales, Overly Manufacturing Company, Greensburg, Pa.

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S. A. Roberts & Company—Salt Lake City
Builders' Specialties, Inc.—Seattle
Fryer-Ford—Spokane

T-SQUARE TALK

new offices

W. L. Nunes, architect, has opened offices at 1001 North Main St., Porterville, Calif.

David L. Williams has opened offices for the practice of architecture and urban planning at 2545 Albion St., Denver.

James R. Borman, structural engineer, will serve as structural consultant to architects from his new office at 838 Grant St., Denver.

Andrew Frank Madson has opened offices for the practice of architecture at 760 N. La Cienega Blvd., Los Angeles.

James Terrill Ream, formerly with W. C. Muchow Associates, has started private practice at 463 Logan St., Denver.

Rinehart & Durr have formed a new architectural office at 330-C Village Lane, Los Gatos, California. Principals in the new firm are Donald W. Rhinehart, AIA, and Loren D. Durr.

honors and appointments

John Lyon Reid, San Francisco, was presented the Medal of Honor for Distinction in Architecture from Rice University, Houston, during its semicentennial celebrations.

The San Francisco firm of Anshen & Allen, architects, have been presented the American Institute of Steel Construction's Architectural Award of Excellence for their design and work on San Francisco's International Building. This is one of only 14 structures throughout the United States so honored this year by AISC.

Charles Luckman, Los Angeles architect, has received the distinguished service citation of the California Council, AIA, for "encouraging greater understanding of the environmental responsibilities of state colleges and the architect's role in meeting them." Citation was made at 17th annual convention of the CCAIA.

Robert Anshen, FAIA, of Anshen and Allen, has been selected as one of three architects to serve on a nine man jury for "Design in Steel" competition sponsored by American Iron and Steel Institute.

firm changes

Irving Rector, AIA, has been appointed director of school planning and design for Kober & Nicolais, Los Angeles architectural and engineering firm.

Dan Morris has joined the Eugene office of Stearns & Mention as an associate architect. The firm also maintains offices in Bend, Oregon.

Following the recent death of William G. Merchant, AIA, Hans U. Gerson announces that he has assumed Mr. Merchant's practice and will continue the firm name of William G. Merchant and Associates with present staff at the same address, 57 Post St., San Francisco.

Verne Chaney, engineer, has left private practice to become engineering supervisor for Jefferson County School District R-1, Colorado.

The partnership of Redd & Tregeagle, engineers has been dissolved and V. Quenton Tregeagle will continue the business at 303 Dooly Bldg., Salt Lake City, under the name of Tregeagle and Associates, consulting engineers.

elections

Great Falls Society of Architects has elected Robert K. Lund as president. Other newly elected officers of the society are R. Terry Johnson, vice president; Dale Beland, secretary-treasurer and Marv Holtz, Earl Ackerman and Douglas Garber, directors.

Spokane Chapter, AIA, has elected this slate of officers: Fulton Gale, president; Frederic Long, vice president; Nicholas Kabush, secretary and William Trogdon, treasurer.

At the recent Western Regional Conference, Sun Valley, William Rowe Smith, Salt Lake City, was elected regional treasurer; Fred Jobusch, Tuscon, and Bradley P. Kidder, Santa Fe, judiciary committee, with Harrison Cook, Sheridan, Wyoming, as alternate.

I. Robert Kriendler has been elected to the board of directors of Charles Luckman Associates of New York and Los Angeles.

new addresses

Partners Joseph Wythe and George Thomson to Casa Guetierrez, Monterey. They will be associated with engineering consultants, Dudley Engineering, Monterey and Carmel Valley, California.

Hagman & Meyer, Architects, AIA, to 1010 Doyle St., Menlo Park, California.

Kite & Overpeck Associates, AIA, to new offices of their own design at 8447 Wilshire Blvd., Beverly Hills.

Marvin E. Knedler to 1395 Allison St., Denver.

Herbert R. Kamen, AIA, to 1054 S. Robertson Blvd., Los Angeles.

Francis Palms, Jr., to 526 Pierce St., Monterey.

J. Roger Musick to 570 Detroit St., Denver.

Victor Hornbein and Edward D. White, Jr., to 5909 E. 38th Ave., Denver.

Robert Billsbrough Price to 10524 Bridgeport Way S.W., Tacoma, a temporary location pending completion of new offices at 4303 Ruston Way early in 1963.

David W. Curtis and Gordon H. Glass to 2515 East Coast Highway, Corona del Mar, Calif.

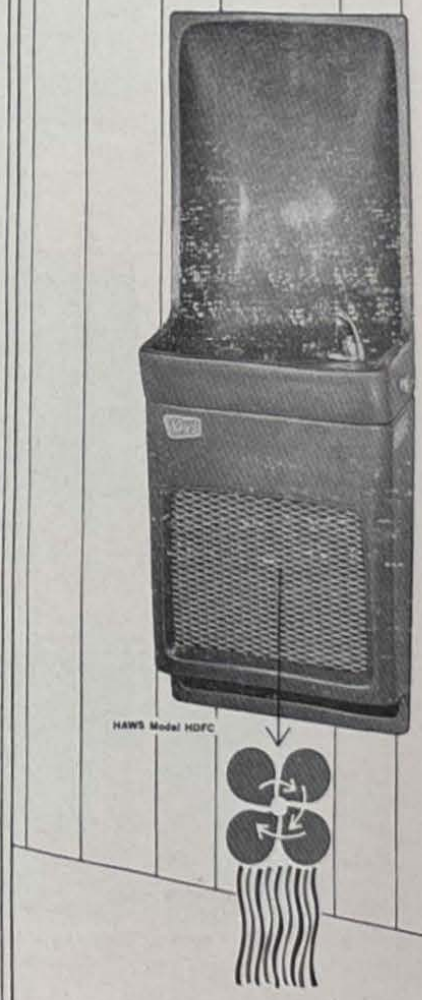
John Brooks Boyd to 176 Ferne Court, Palo Alto.

deaths

William Hamblin Crowell, 85, Portland architect, died at his home on October 20. He was a fellow and former regional director of AIA, as well as past president of the Portland chapter. He was a partner in the former architectural firm of A. E. Doyle & Associates, and with its other members D. M. Jack and Pietro Belluschi, participated in the design of numerous Portland buildings including Pittock Block, Art Museum, Reed College, Public Service Building, and many others.

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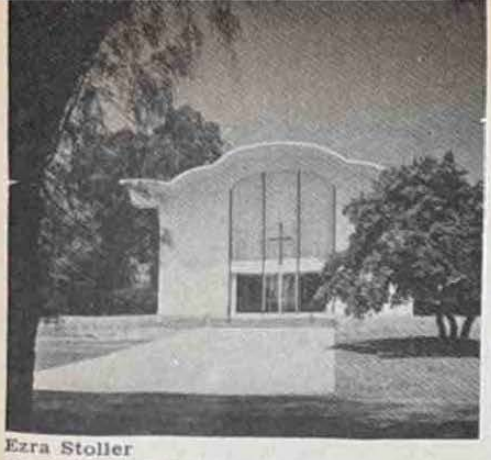
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Ezra Stoller

CHAPEL, FIRST METHODIST CHURCH, La Verne, Calif.: Ladd & Kelsey, architects.



DR. WALTER THOMPSON, JR., RESIDENCE, San Marino: Buff, Straub and Hensman, architects.

AWARDS OF MERIT

Preston E. Mitchell



HOME OFFICE, PUREX CORPORATION, LTD., Lakewood, Calif.: Anthony & Langford, architects.

Dale Healy



STERER ENGINEERING & MANUFACTURING CO., Los Angeles: Walter Chase, architect.

Duane C. Alan



DENTAL ARTS OFFICE BUILDING, Pasadena: William L. Duquette, George Bissell, Jr., architects.

Mervyn Lew



AIRLINE LOUNGE INTERIOR, Los Angeles International Airport: Kenneth M. Nishimoto, architect.

Julius Shulman



DR. SIDNEY FINE RESIDENCE, West Los Angeles: Buff, Straub and Hensman, architects.

Ezra Stoller



STUFT SHIRT RESTAURANT, Newport Beach, Calif.: Ladd & Kelsey, architects.

Reed Camera Store



F. W. REED CAMERA STORE ALTERATION, Pasadena: Kenneth A. Gordon, Robert F. Gordon, architects.

SAVINGS AND LOAN BUILDING, Rosemead, Calif.: Burge-Roach, Henry Charles Burge, architects.

Pasadena Names Two For Honor Awards

Two Awards of Honor and eig Awards of Merit were announced b Pasadena Chapter, AIA, in their 19 Honor Awards program, on Octob 10 at the Huntington-Sheraton hot

The jury commented that they wer impressed with the quality of the en tries in the award program feelin that not many sections of the country could develop such a high degree o architectural merit. "The variety o approaches was especially interestin and demonstrated anew the value o architectural experience in solving a owner's building problem."

Jurors, chosen from neighborin chapters, were Maynard Lyndon, C. J Paderewski, Herbert J. Powell, Joh L. Rex and George Vernon Russell, al FAIA.

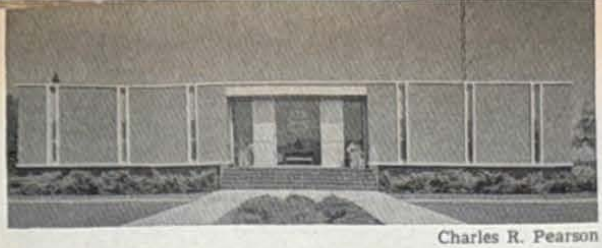
HONOR AWARDS

Chapel, LaVerne, Calif.: "This build ing has a simple well organized plan an excellent use of concrete as plastic material with graceful, delicate line . . . a most outstanding building de signed in the classic manner recentl coming into favor . . . the building i based on a low "podium" and by it line and finish produces an impressio of elegance . . . the workmanship o the actual building is superior in every respect."

Dr. Walter Thompson, Jr., residence "This house is beautifully related t its hillside setting . . . the rustic flav or was carried into the design by means of redwood, brick paving, and wood construction expressed com pletely by outrigger beams outside and wood sheathing and rafters inside . . the kind of informal American Home that would furnish fine living to any family."

John Hartle





Charles R. Pearson

FIELD HEADQUARTERS OFFICE BUILDING, Pacific Gas Transmission Co., Spokane: Kenneth W. Brooks, architect.



ALPHA DELTA PI SORORITY HOUSE, Pullman, Wash.: Warren Cummings Heylman & Associates, architects; Fred Rounds, associated architect.



WORLD OF COMMERCE AND INDUSTRY BUILDINGS #1, #2, #3, Seattle: Walker & McGough, architects.



PROFESSIONAL OFFICE BUILDING (Doctors), Coeur d'Alene, Idaho: McClure & Adkison, architects.

Spokane Honor Awards

Four equal awards of merit for distinguished accomplishment in architecture by Spokane architectural firms were presented at the annual Awards Banquet, September 28, at the Davenport Hotel.

Jurors were Wendell Lovett, architect, Bellevue, Wash., who is also associate professor at the University of Washington, chairman; Walter Gordon, architect, Portland, former Dean of the School of Architecture and Allied Arts, University of Oregon; and William Sloan, architect and planner, associate professor at the University of Idaho.

Western Regional Conference honors four

Piute High School at Junction, Utah, won an honor award for Edwards and Daniels, Salt Lake City architects, at the recent Western Regional Conference in Sun Valley. Buff, Straub and Hensman, Scottsdale, Arizona, were recipients of the second Honor Award given for the Jack Thompson residence in Pasadena, California.

Two design awards were also given: to James Hunter & Associates, Boulder, Colorado, for the IBM building in Salt Lake City, and to Baume and Polivnick, Denver architects, for the dining hall and dormitories at Western State College, Gunnison, Colorado.



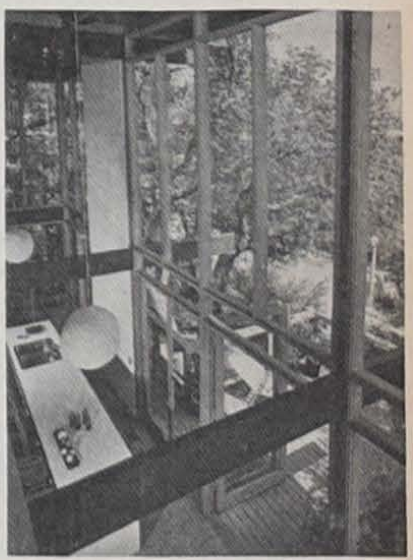
JACK THOMPSON RESIDENCE, Pasadena, California: Buff, Straub and Hensman, Architects & Associates, Scottsdale, Arizona.

PIUTE HIGH SCHOOL, Junction, Utah: Edwards and Daniels, architects, Salt Lake City.



IBM OFFICE BUILDING, Salt Lake City: James M. Hunter and Associates, architects, Boulder Colorado.

DORMITORIES, DINING HALL, Western State College, Gunnison, Colorado: Baume & Polivnick, architects, Denver.

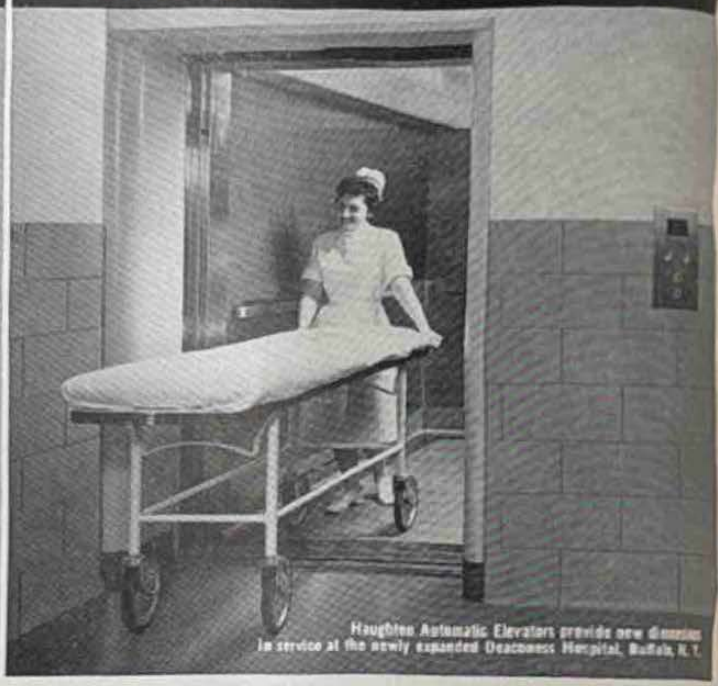




Why don't they make elevators big enough?

Haughton Does





Haughton Automatic Elevators provide new dimensions in service at the newly expanded Deaconess Hospital, Buffalo, N. Y.

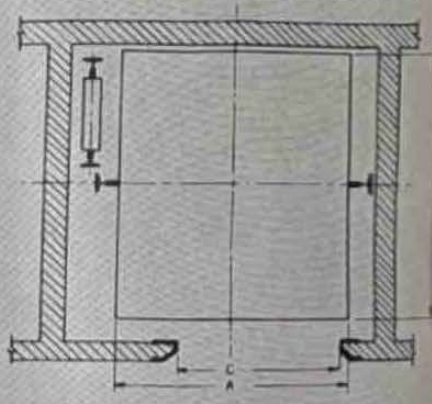
Elevator space problems worry a lot of hospitals these days. It's no wonder. Current standards call for 5′4″ car width and 8′ depth for elevators rated at 3500 lbs. capacity. For a 4000 lb. rating, its width 5′8″ and depth 8′4″. These dimensions and capacities are simply not adequate for your hospital or any other.

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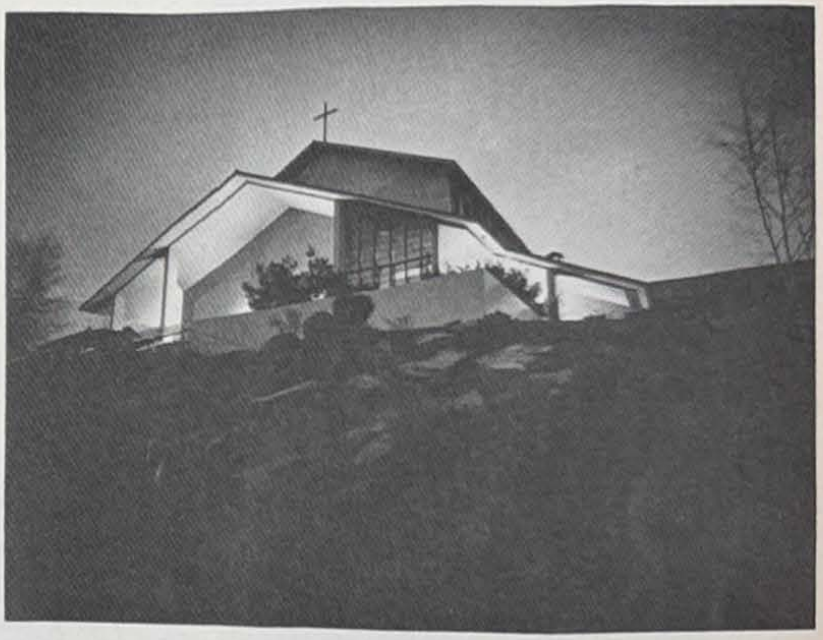
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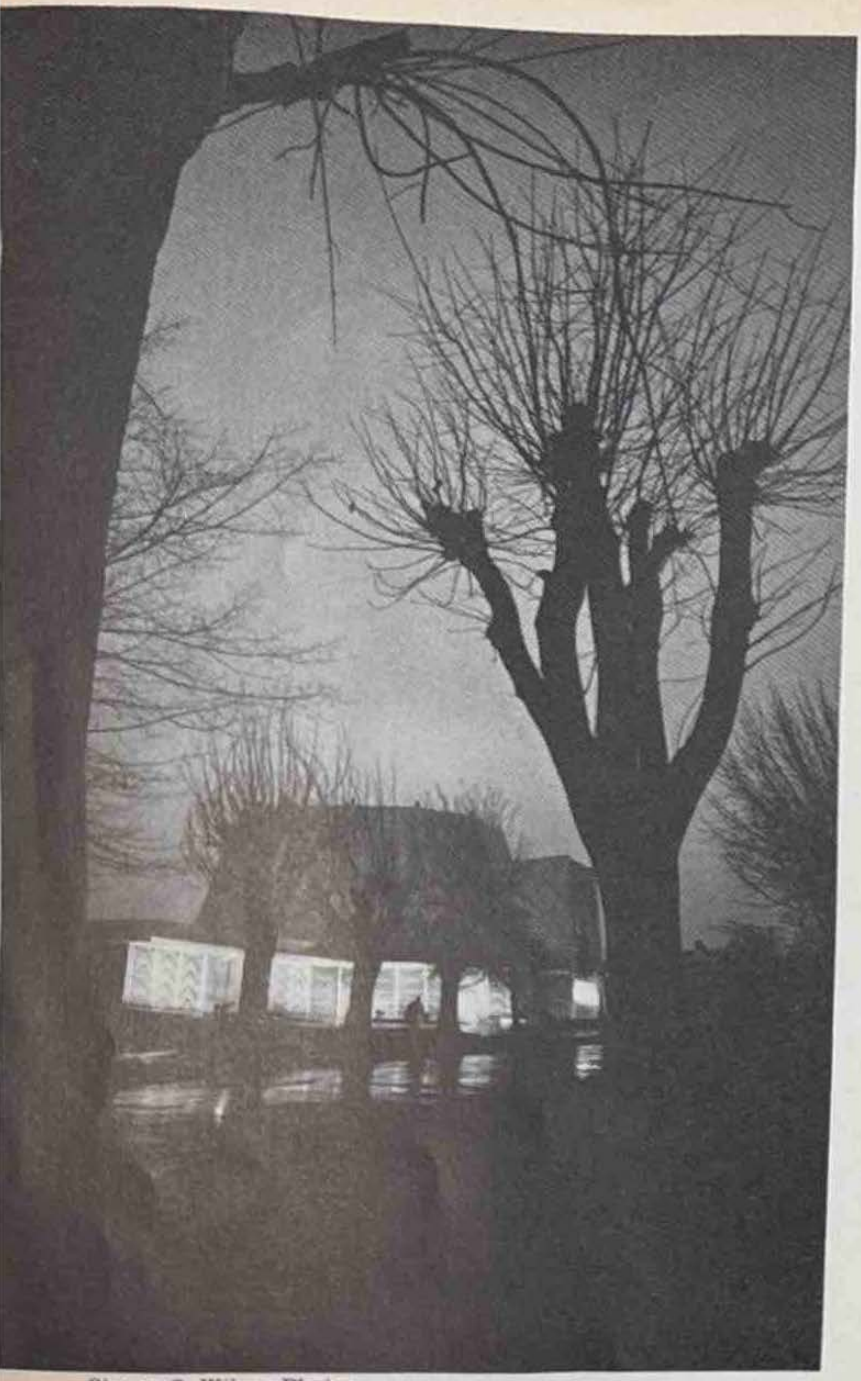
A SCRIPTURED LAND

"The pastures of the wilderness drip,
the hills gird themselves with joy,
The meadows clothe themselves with flocks,
the valleys deck themselves with grain."

—Psalm 65

GREEN PASTURES, sloping hills and shadowed valleys make the northwest terrain a Scriptured land punctuated with churches. Architecturally these churches are sometimes a question mark, othertimes an exclamation point; yet each emphasize man's desire either to communicate with or contain his Creator. They are the quotation marks embracing man's expression of his affinity with the infinite designer of his surroundings.

Contours of the earth or a cluster of trees bring a subtle completeness to man's architecture. Accentu-



Steven C. Wilson Photos

Galle

ated by the ascending slope of an adjacent hillsid the slant of a sanctuary roof rises beyond its height. slender steeple gains greater thrust from higher steeple evergreens nearby. Light from a synagogue casts shad ows on sentinel trees with tender new branches telli of survival and eternal hope against great odds.

The mood of the terrain where he chose to build hi church magnifies the mood expressed by man in th design of his buildings. In lonely pasture land th church is simple, bleak and harsh of line. Long ago tw or three gathered here to build a sanctuary with roug boards of hand hewn timber. One room beneath a sol tary spire filled the needs of those assembled. Atop th spire they set a weather vane; below, by the door, a sign "Built AD 1860."

Passing years weathered the church with rain, wind and summer sun. The color of the wood darkened lik the earth. The trodden path to the door grassed over. Now the weather vane squeaks in the lonely wind where man once worshiped in a moment of time.

A half a century later people in a village beyond the pasture land constructed another church with white

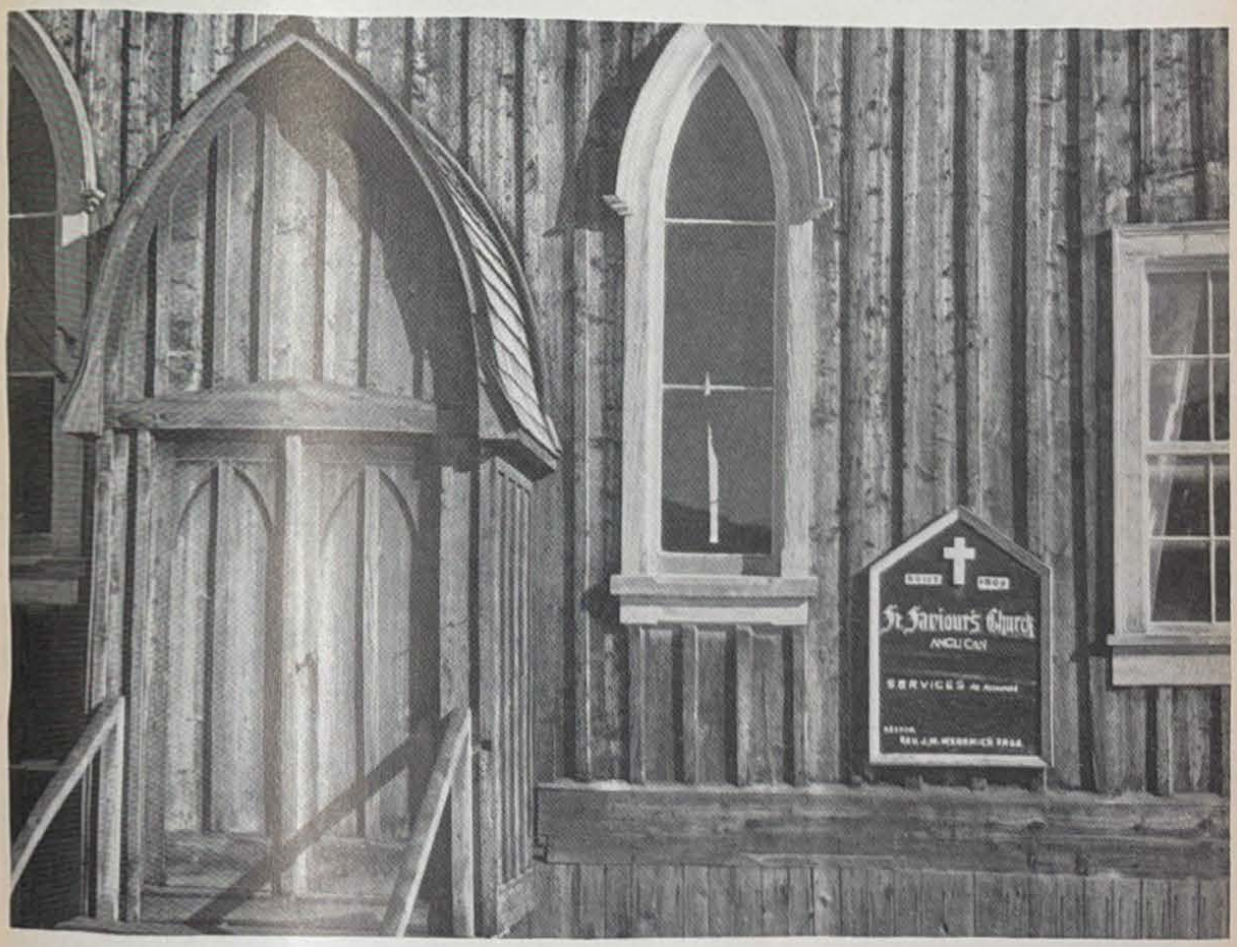


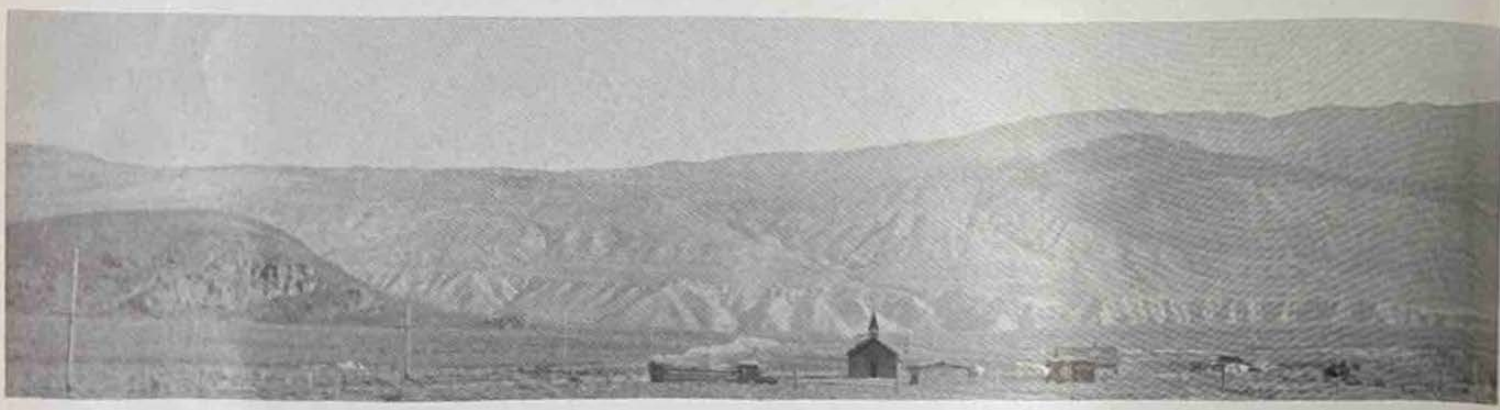
Scriptured Land

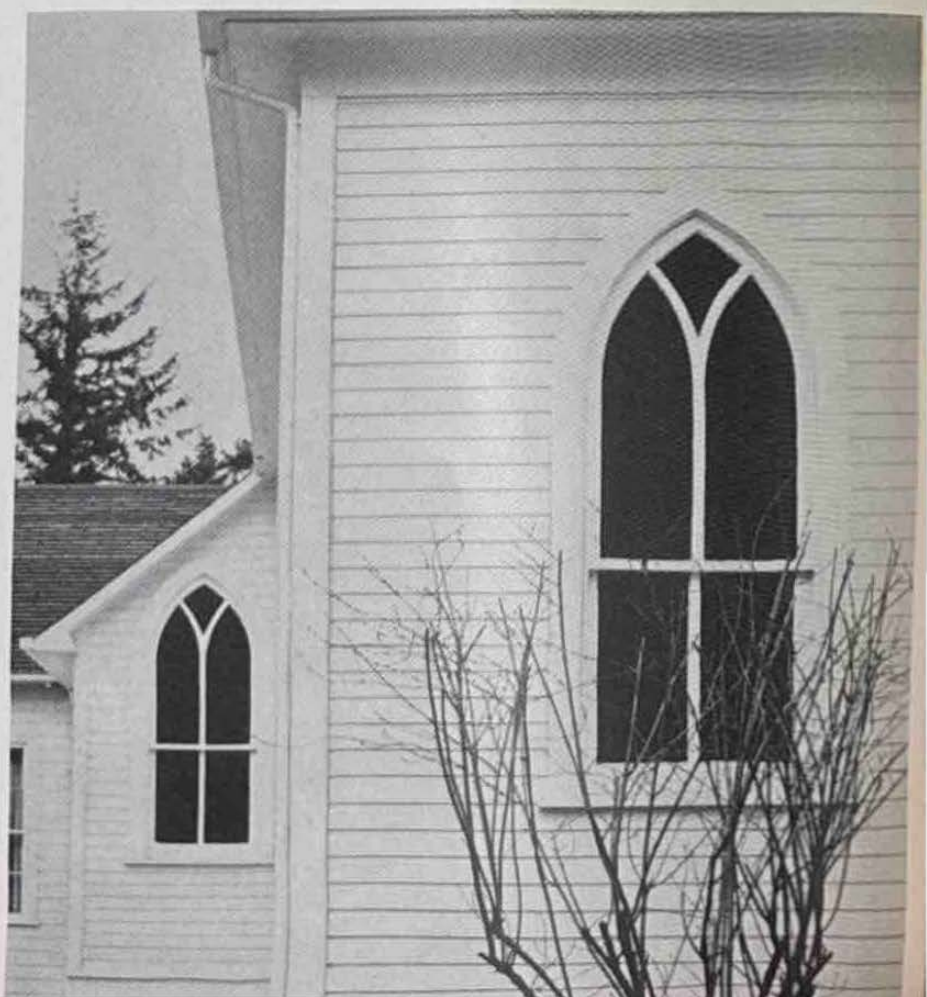
clapboards. After many paintings the boards still glisten in the sun . . . Bushes cut short and symmetrical grow beneath polished gothic windows. The green lawn is mowed and weeded. Cleanliness everywhere tells of good people who respect their church amid a mood of contentment and containment and branches trimmed lest they grow too tall in the sky.

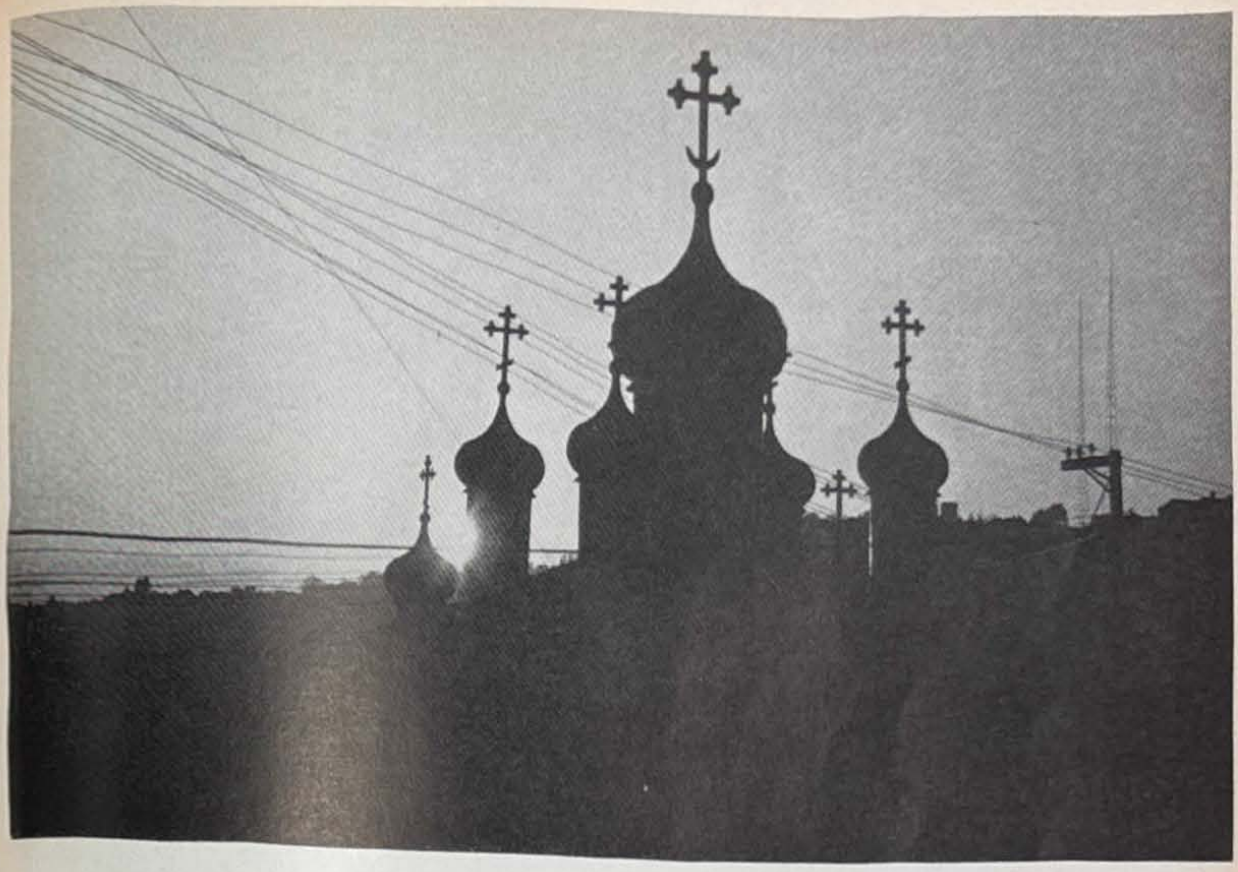
Miles away near a great city another village recently exploded into a suburb. The brown shingled church was razed by an angry bulldozer. In its place are laminated beams, high and gothic, rising over the modern sanctuary. Beneath a towering cross, also laminated, a steeple of abstract design contains the old bell.

The mood is one of excitement and change for a shopping square with shining glass and neon lights has replaced the country store, the strawberry farm and the blacksmith shop. A stoplight regulates the steady flow of traffic on the four lane highway passing by

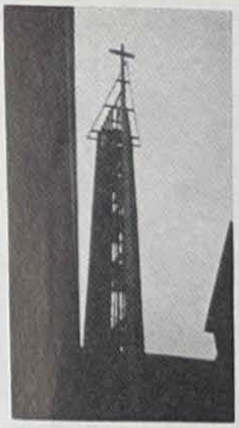


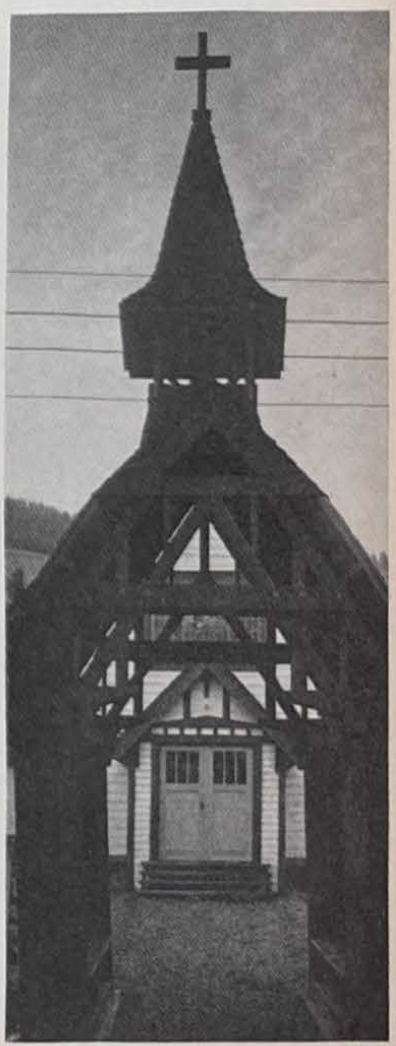






Steven C. Wilson Photos

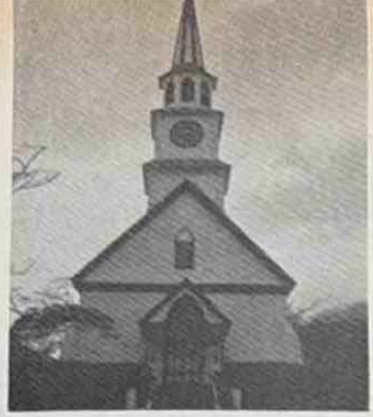




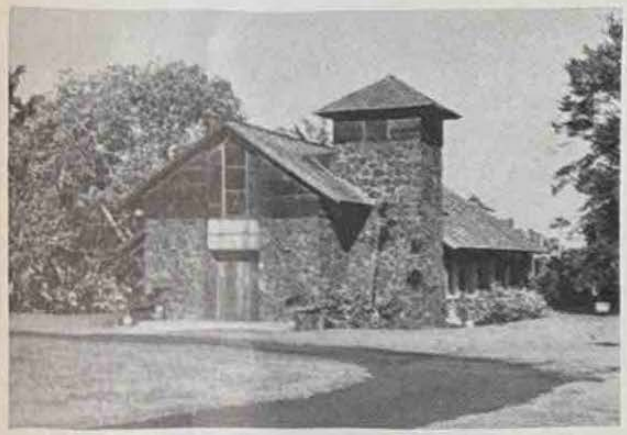
the church. Few see the new cornerstone – AD 1960 – sheltered by a cultivated bush planted in fertilized soil with proper ceremony on the day of dedication.

These differing churches of varying denominations are more than fractions of man's theology. In their natural surroundings they communicate a truth transcending denominational differences: when man worships, the church is the denominator or the number of equal parts into which the whole is divided. Each church is an integral part of the created surroundings. Neither is complete without the other. ■

Ben Bradford
Steve Wilson



Reaching the Heavens.



Native lava rock.

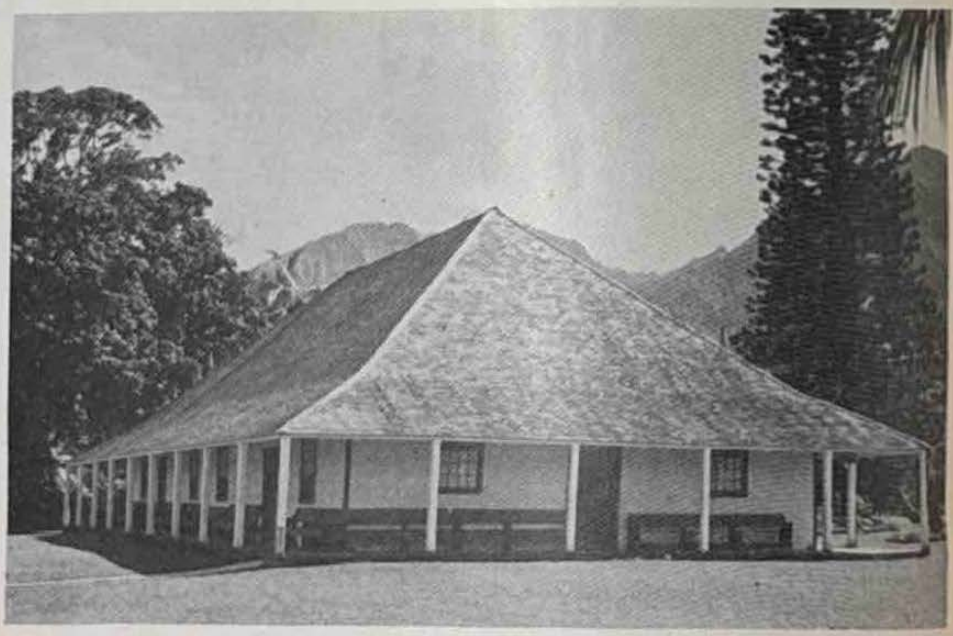
Doll-House Churches of Hawaii

THE CHURCHES OF HAWAII are so like the old churches of the Western states—not monuments or monoliths, even in their own time; but loving, hallowed sanctuaries, simply built with the materials at hand for the purpose that was needed.

Below is the Waoili Mission House at Hanalei, Kauai, built by the first missionaries in total simplicity—a wooden frame to support a grass roof (now shingles) and a lanai for shade, no pews, only a table for the preacher.

By contrast, Kaahumanu, top, reaches for the sky. This is Wailuku's oldest church, started in 1839. And, at left, a lava stone redwood structure, strong and simple, designed by Guy Rothwell for the Hawaiian congregation at Lihue, Kauai.

Particularly charming is the dollhouse character of many of the Hawaiian churches, some having been built for as few as 10 persons. ∎



Ultimate shelter simplicity.

Beatrice Howell Photos



Framed against Mt. Diablo, Oakmont Mausoleum is a moving sight from the valley below. Barrel vault section faced in glass at both ends is the chapel area.

Hilltop Serenity for Eternal Rest



See-through chapel offers inspiring view of valley life below.

A TRULY MAGNIFICENT SITE in the Mt. Diablo area inspired this symmetrical, simple, yet almost ethereal mausoleum design. It is on a promontory overlooking a valley, and in turn may be viewed against the mountain from the valley below.

The program was to provide crypts and urn niches and also include a small chapel for services. Division between the two areas was accomplished basically with structure. Crypt and niches are flat roofed; the chapel between is of high ceiling barrel vault design. Relief from uniformity is provided by soaring prestressed concrete bell tower shafts.

Much of the building is of concrete, faced with travertine marble and white plaster, trimmed with bronze. The barrel vaults are basically plywood on timber walls. ■

OAKMONT CHAPEL AND MAUSOLEUM

Lafayette, California

Goetz & Hansen, architects

Elmer Freethy Co., general contractor

Karl Riek Photos

GENERAL SPECIFICATIONS

Structure: Poured concrete and timber.
Exterior Finish: White plaster and travertine marble.
Floors: Concrete slab, terrazzo.
Roof: Concrete slab, tar and gravel; plywood barrel vaults, neoprene.
Interior Finish: Plaster and acoustical plaster.
Windows: Wood.
Insulation: Fiberglas batts.
Trim: Bronze.
Heat: Gas, forced air.
Total Area: 3,880 sq. ft.
Cost: $109,450.
Date of Completion: October 1961.



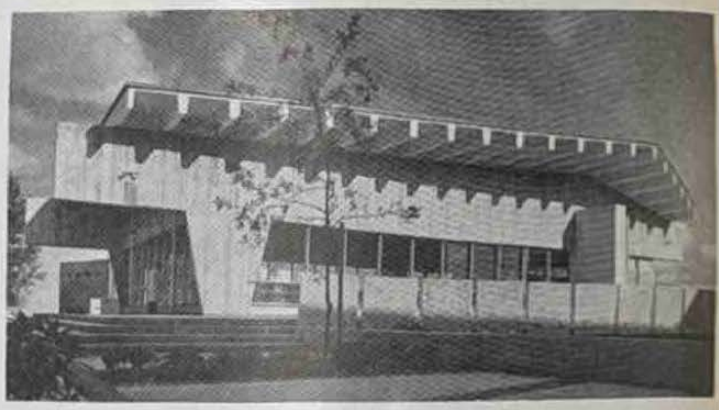
Broad deck surrounding the reactor building provides view to the mysteries of a nuclear reactor.

Strong Lines Lead Students to Nuclear Learning

DESIGNED FOR TEACHING and research in nuclear engineering, the Reactor Building at the University of Washington is a tool of vital importance in the University's comprehensive nuclear engineering program.

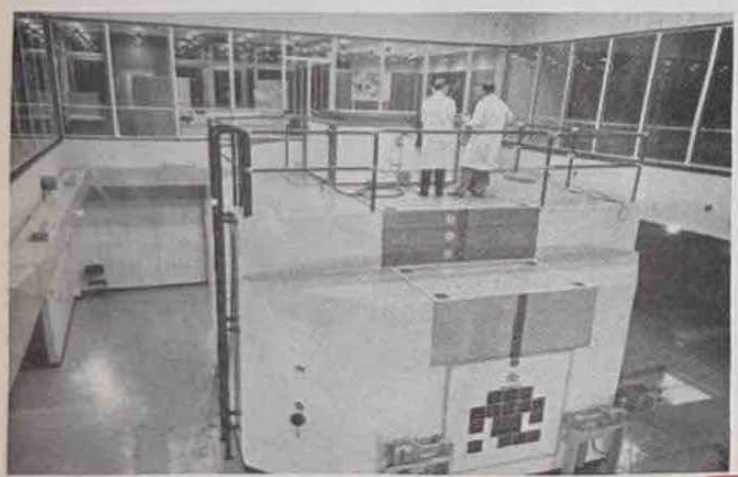
Placed between existing buildings on a sloping triangular site and adjoining a wide exhibition plaza, the new structure provides a natural focus for the engineering building group. The broad deck surrounding the upper portion of the structure will be used to dispel some of the mystery of nuclear engineering as students will be able to view the reactor in operation.

The natural slope of the site permits the logical location of the reactor below grade at the level of trucking and service. The campus pedestrian approach is across the exhibition plaza at the upper level. The two-story glass and concrete reactor room is surrounded by related use spaces at the lower level. Those directly related to its research function open into the reactor room,



Strong building for a powerful subject.

Interior is strictly utilitarian.

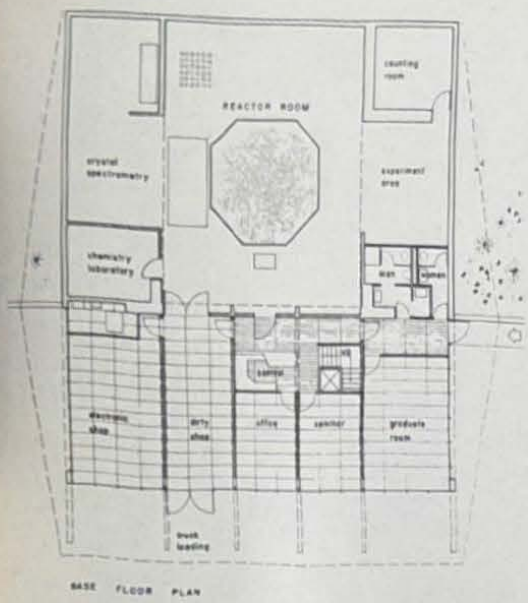


while others, shops, offices, and graduate classrooms, are grouped outside the control area in order to receive natural light and view.

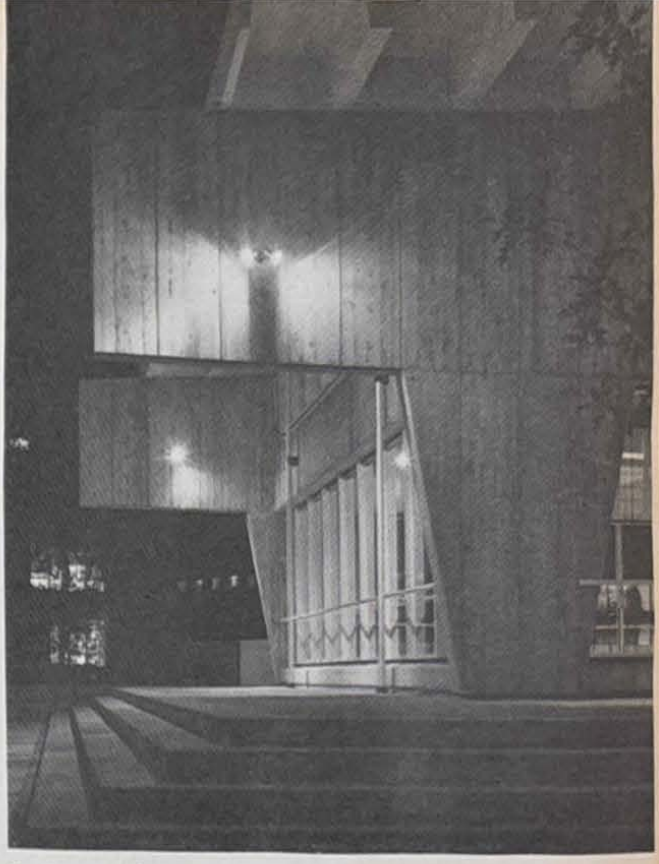
At the upper level are the control room and lecture room with sliding partition providing access between. The reactor room and the control room may be viewed simultaneously from the lecture-briefing space.

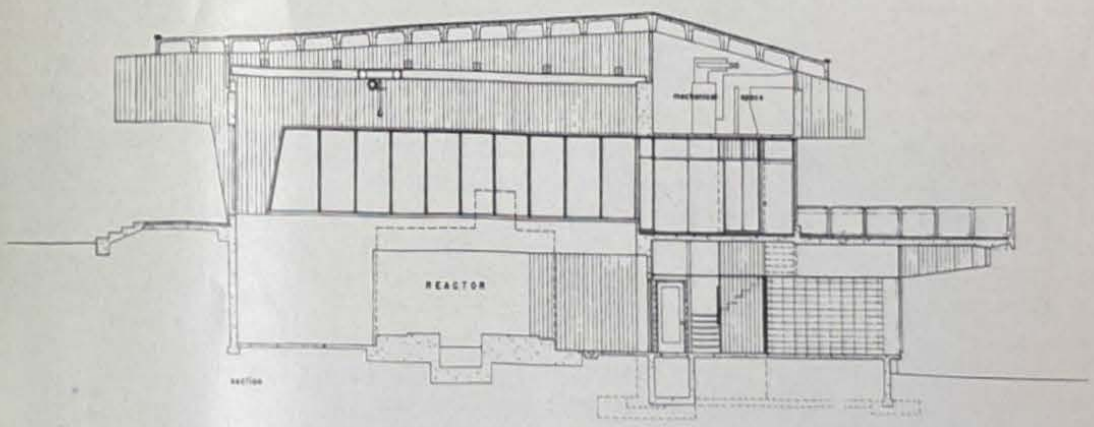
The powerful building structure, in keeping with the nature of the dynamic new energy source, is entirely of

Art Hupy Photos



BASE FLOOR PLAN


By day or night, a campus focal point.



section

reinforced concrete. The principal room is spanned by four-foot wide concrete channel slabs resting on ten-inch thick poured beam-walls which also support the steel rails of a traveling five-ton crane. A heavy transverse haunch beam carries and braces the bulk of the overhead structure. The haunch beam and roof slabs are painted white. The remainder of the structure is natural, unpainted concrete. ■

NUCLEAR REACTOR BUILDING

University of Washington, Seattle

Wendell Lovett, Daniel Streissguth, Gene Zema, associated architects

Gerard Torrence, structural engineer

Robert Chittock, landscape architect

Jentoft & Forbes, general contractor



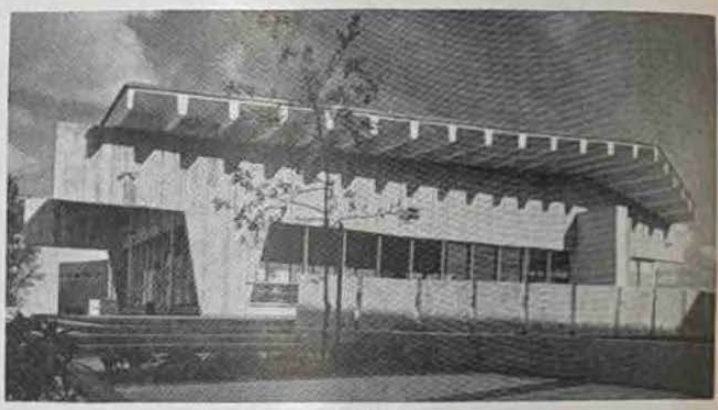
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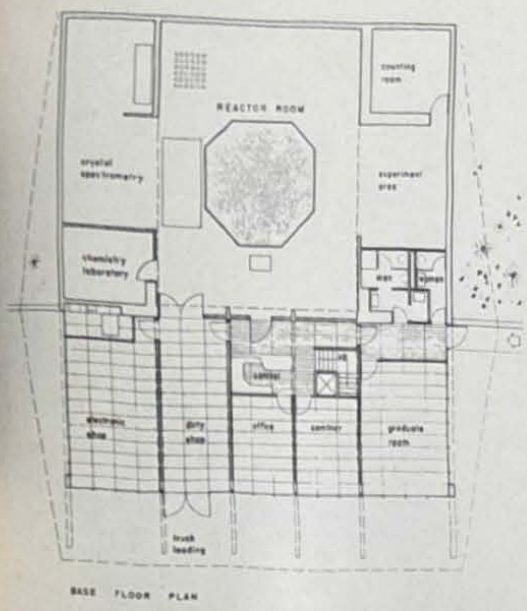


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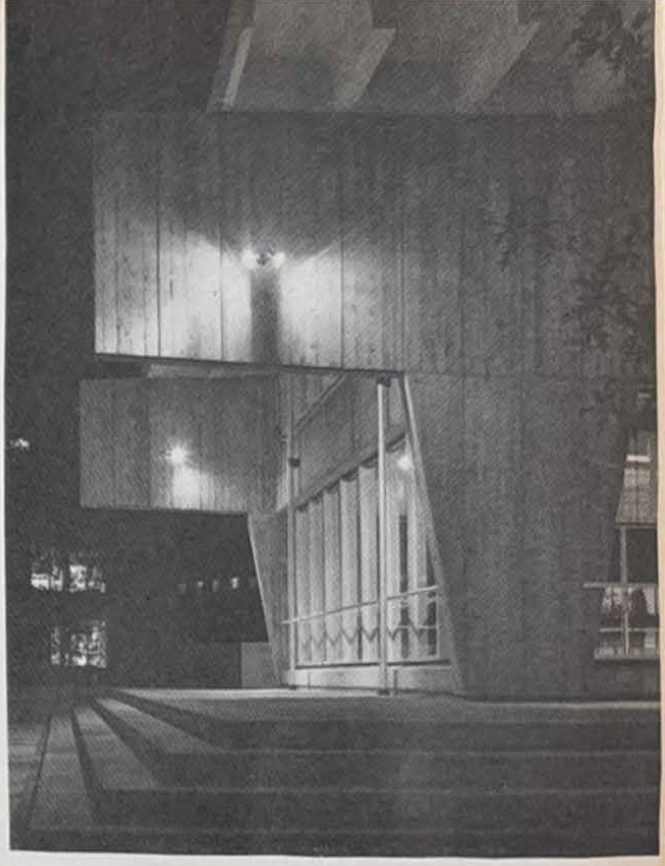
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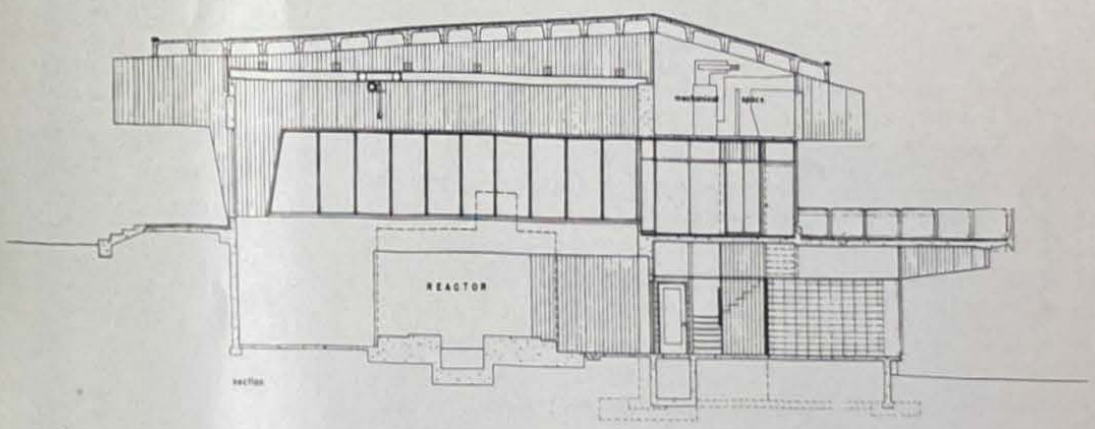
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Lionel T. Berryhill Photos

Brick waffle pattern of 8x8-inch openings relieves severity of penal structure.

Iron Bars Do Not a Prison Make

. . . nor are they necessary



Dining and recreation area.



Probation office.

THIS UNUSUALLY ATTRACTIVE penal building offers a couple of "firsts" in addition to its obvious good physical appearance. The plan features a unit system, in which each unit consists of a day room, dorm, central toilet and shower. During the day, the dorm is shut off from the wash rooms and day room by steel doors. At night the situation is reversed to give better prisoner control. The probation department of 16,000 square feet has movable partitions.

The flat roof, which has a six foot overhang, is divided into an exercise and recreation area, a luncheon area for employees, and a "no man's" area between, separated by walls eight feet high.

The architects were given mainly functional problems to solve—a tie in with an older existing structure, with free traffic between structures, and with the usual requirements of prisoner control. The other requisite: an attractive exterior, compatible with civic and residential development of the downtown area. All were well satisfied, with the exterior turning out particularly well. The poured-in-place concrete structure is faced with beige colored brick laid in modules, three courses each, with 8x8-inch openings forming a waffle pattern, in transition from a classic courthouse to other contemporary adjoining buildings.

The building is four floors, 40,000 sq. ft., at a cost of $735,000. ■

COUNTY PROBATION
AND JAIL FACILITIES

Riverside, California

Ruhnau, Evans, Brown
& Steinmann, architects

J. Putnam Henck, Inc.,
general contractor

Factory Built Prefab Forms Prove Best Where Pours Are Small but Numerous

THE VALUE of prefabbed, reuseable forms is amply demonstrated in a 20,000 cubic yard project, the correctional prison now being constructed near Shelton, Wash., by Mutual Construction, Inc.

The correctional center is a group of eight concrete buildings, mostly one-story high, that seem to take off in all directions over a flatland of gravel-bound earth.

Excavation is simple and access for concrete pouring is not perplexing. The key factor to cost control and profits is the concrete forming. The pours are small and cut up, mostly 20 to 40 yards, seldom over 80 yards.

Mutual studied the project carefully, rejected job-built forms because repetitive usage seemed more feasible; eliminated steel forms in favor of lightweight sections that could be manhandled around the gravel piles.

Instead they rented 35,000 sq. ft. of practically every size Symons Steel-Ply forms available, and put several crews at work simultaneously. Materials lists are made in advance of each pour and the right form sections stacked on the spot for crews to start slapping them into place at 8 a.m. each day. Thus the crews often start with bare ground in the morning, get their forms and steel up and ready to catch on an afternoon pouring schedule.

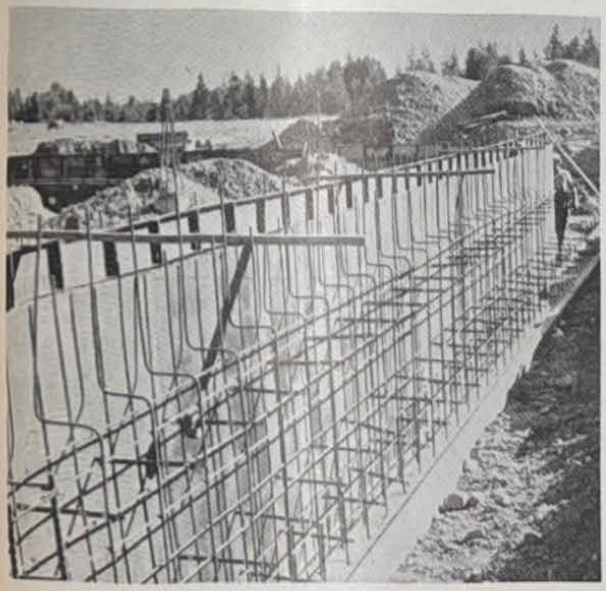


Prisoner's view through precast concrete grillework used instead of prison bars. Shelton stresses modern penology concept of high-percentage rehabilitation.

Careful scheduling of the work, attention to detail in getting the right forms in the right place at the right time, and having men who are thoroughly familiar with operating the ties are cutting forming cost 10% to 50% on various sections of the project.

An unusual forming problem was posed by the large size, high visibility concrete grillework that was specified by the architects to eliminate prison bars. No conventional forming method was possible, so a fiberglass specialty company designed several sets of special plastic molds. Steel was placed in the molds, concrete poured and externally vibrated. Then they were turned over and hit with a water and air blast to leave an exposed aggregate architectural finish. Grilles were then set in position and bound into the wall pours.

Architects are Bassetti & Morse, Seattle; Walker & McGough, Spokane, and Curtis, Davis & Associated Engineers, New Orleans. Worthington, Skilling, Helle & Jackson, Seattle, are structural engineers. ■



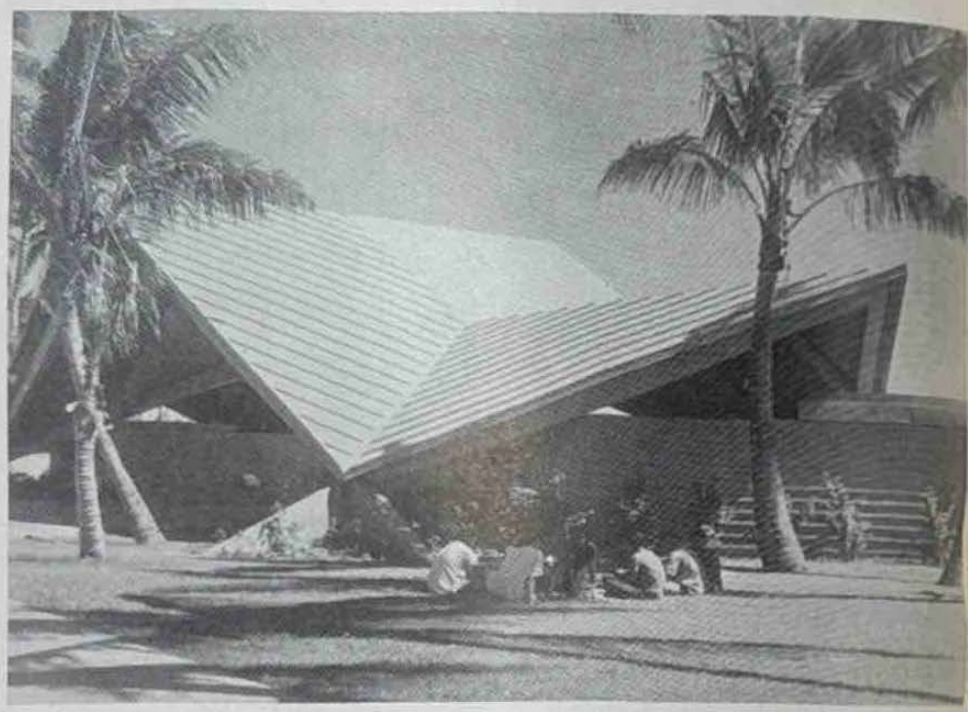
Steel follows backwall form into place. Many pours were made same day that forming started.



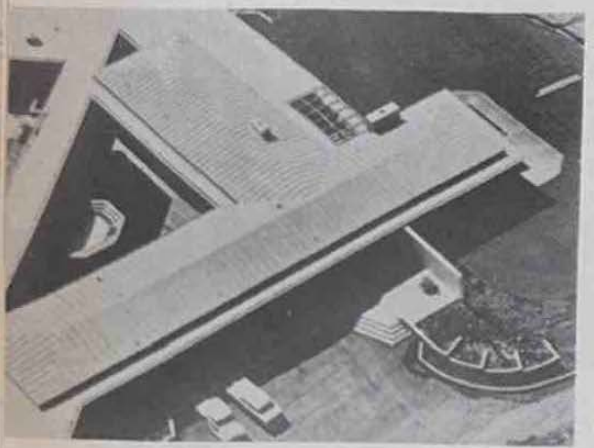
On a job with small, cut-up pours, lightweight forms that make manhandling easy are important.

TO MOST CLIENTS *a roof was a roof until the recent splurge of folded plates and hyperbolic paraboloids and other "funny" systems made all people roof conscious. Lately, architects are finding that more and more of their clients are willing to listen to explanations that a roof should be more than a shelter, that it is an important phase of architectural expression, helping to unify the elements of a plan into a cohesive, artistic entity.*

Architects, in turn, freed from client-imposed shackles, are doing more and better things with their roofs. They are exploring and using new structural systems and new roofing materials. They can look back and find new applications for old materials—in this case one of the first roofing materials used in the United States but virtually unknown to the younger architects, all but forgotten by many of the older architects.



Waikiki Beach Center, Honolulu, sports unusual ridges and elevation that gain definition and depth through the accented lines of seam construction possible with Terne metal. Architects: Dennis & Slavsky, Honolulu.



Philbrick residence in Los Altos, Calif., has standing seam Terne roof which brings definition to the wings and heightens the effect of the peaks. Architect: Paul J. Huston, Palo Alto.

Terne metal was introduced in Wales in 1720 and brought to this country during the 18th Century, known as "valley tin" or "roofer's tin". It is cold rolled copper bearing sheet steel coated with and alloy of 80% lead and 20% tin. Tensile strength is 45,000 psi., and the expansion rate of 0.8 inch in 100 linear feet per 100 deg. F. change in temperature is the lowest of any roofing material.

The material now is produced by Follansbee Steel Corp. in 50-ft. seamless rolls in widths of 20, 24 and 28 inches, and thus can be applied in almost any design to fit ridge patterns, and can be crimped or seamed into a virtually unlimited number of textural patterns for individualized linear effects and shadings.

It is adaptable to the color conscious, linear feelings of contemporary architectural creativity because paints adhere well to the fire resistant surface for periods ranging from five to fifteen years, an important factor in emphasizing the interaction of design and color to the basic form and raw material.

Terne probably can be considered truly a "lifetime" material as it does not seem seriously affected by wind, erosion or corrosion, even in salt water atmospheres. Lightning control is not necessary other than the normal grounding of the roof at four corners to establish fire protection.

Used first in sheets on such historic buildings as the Octagon, the John Pierpont house in New Haven (now the Yale Faculty Club), on John Kennedy's Glen Ora, on The Hermitage and Monticello, the material's new seamless roll version deserves renewed consideration.

The heritage of Terne was once expressed by the late Frank Lloyd Wright: "Imaginative new conceptions in architecture can frequently trace their origin to a basically simple idea. One of the oldest types of roofing, Terne metal, lends itself to many dramatic new applications in the contemporary idiom. By rediscovering and re-interpreting a time tested material, we make out of the very old the very new. ■



Gymnasium of Willcox (Ariz.) high school is externally ribbed Terne metal shell, a simple application painted light to reflect 70% of solar heat. Architects: Scholer & Fuller.

universal roof

Suitable for practically any type of service, on almost any solid surface, on almost any slope and in any climate, a single-specification one-ply roofing is also easy to construct. Johns-Manville reports that the system, used in Germany for over a decade, is quickly applied and wears well. Any errors in application can



be corrected easily and in any weather, since the roofing membrane is simply applied with cold adhesive and brushed, sprayed or rollered with a metallic coating. — Johns-Manville (A/W), 22 E. 40th St., New York 16, N.Y.

sound and fire block

A fire door also designed for sound control has been developed by Overly for use in industrial applications, schools, studios, and private offices. Noise and hazardous conditions can be blocked off behind these doors, which have a sound transmission rating of 41 and have a three-hour fire resistance. Doors in the series have the appearance of conventional metal doors and firedoors except for the sound seals, and are equipped with conventional hardware.—Overly Manufacturing Co. (A/W), Greensburg, Pa.

comfort package

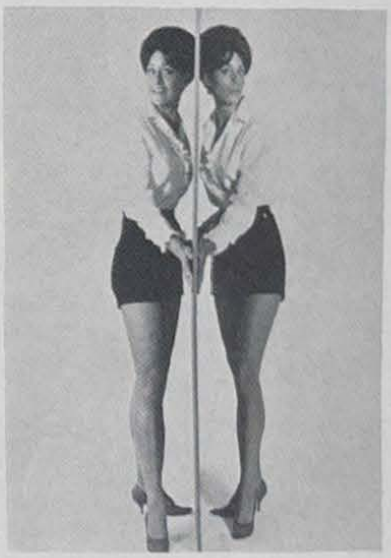
Some like it hot, but those who don't will appreciate an air-conditioning unit with separate "packaged" heating and cooling sections. The heating section can be installed first; later, the cooling section can be slid into position and electrically plugged into a built-in receptacle in the heating section. The room cabinet, which projects 7⅝ in. into the room attaches to a sleeve installed through the outside wall of new or existing buildings. The design provides a choice of steam, hot-water or electric resistance heating coils; the latter is recommended for co-op apartments, since heating or cooling can be metered on an individual basis. A heat-cool interlock insures that only the desired unit is operating. — American-Standard (A/W), Industrial Division, 8111 Fireman Ave., Detroit 32, Mich.

epoxy paint

The remarkable ruggedness of epoxy has been incorporated into a hard-wear paint designed for industrial and public buildings. Said to last fifteen years, compared to an average of three years for conventional paint, the coating has a glazed, tile-like finish. It is available in black and white and color in satin or high-luster finish. Unlike many other hard coatings, it may be recoated or repaired at any time to maintain a continuous film. The product may be applied by any experienced painting contractor. The O'Brien Corp. (A/W), South Bend 21, Indiana.

muffle board

A recently developed sound control board can be used for floors, walls and ceilings that resist airborne sound and impact noises. The Douglas fir fiberboard panels are especially suited for use in apartments, motels, hotels and offices where the control of noise between units is essential.



Sound transmission loss for the wall system (sound deadening board laminated to gypsum wallboard) ranges up to 54 decibels, and weighs less than an eighth of a conventional equivalent system.—Sound Control (A/W), Room 2480, Kaiser Gypsum Co., 300 Lakeside Dr., Oakland 12, Calif.

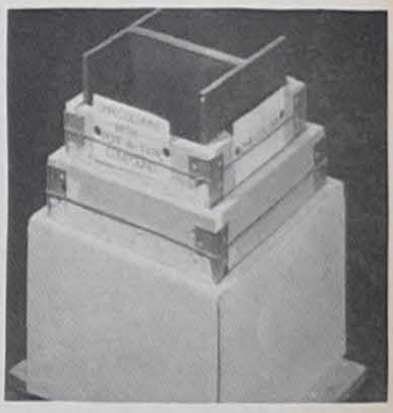
THESE MANUFACTURES INVITE YOUR FURTHER INQUIRY—PLEASE WRITE TO THEM AT ADDRESSES SHOWN ABOVE

concave curves

First in the Contour line is a pattern called Crescent, a glass block with a sloping, concave shape for added design interest. Twelve-inch blocks are available in gray. Not all the manufacturer's blocks are squares, however; a new 12-in. x 6-in. size has been announced, and will soon be available in gray, green and white in a prismatic face pattern. — Owens-Illinois (A/W), Toledo, Ohio.

firefighter column

A new drywall system protects steel support columns for two or three hours, depending on installation techniques. It consists of three layers of ⅝-in. gypsum wallboard, held in place by wire or steel straps, screws and metal angles. In addition to being



incombustible, the system acts as a barrier to heat because when it is attacked by fire, the heat releases chemically combined water from the wallboard.—United States Gypsum Co. (A/W), 300 W. Adams St., Chicago 6, Ill.

architecturally-oriented furniture

Office furniture designed with the architect's needs in mind, and priced so that it can be recommended without embarrassment, is being introduced this fall. Units are modular, bases equidistant from the floor; bases, housing and tops of all arrangements provide continuous horizontal sight lines through an office. Available in many metal colors and in several woods. Pedestals and back panels are sound insulated.—Columbia-Hallowell Div. 8000 Series, Standard Pressed Steel Co., (A/W) Jenkintown, Pa.



LITERATURE

Vinyl Panels: (AIA 26-A-5) explores imaginative applications for vinyl building panels, and offers "how to" information for sloping roofs, sidewalls, and arched roofs; 12 pp.—Product Publicity Dept. (A/W), Barrett Division, Allied Chemical Corporation, 40 Rector St., New York 6, N.Y.

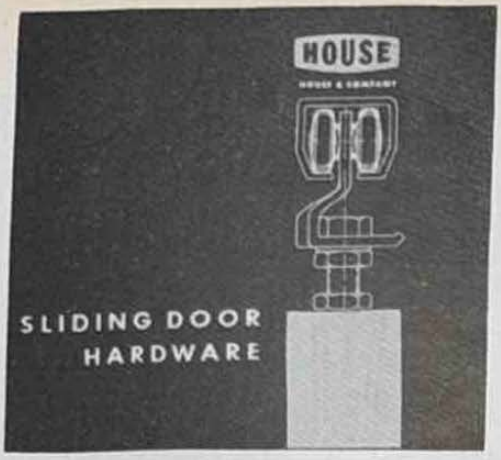
The Lin Y Report: describes a precast, prestressed concrete member which can be supplied in units up to 10 ft. wide, 120 ft. long for support of folded plate and other unusual architectural roof structures. Tables of technical data are included; 8 pp.—Lin Tee Affiliates (A/W), 14656 Oxnard St., Van Nuys, Calif.

Doors and Entrances: catalogs a line of custom hollow metal doors, kalamein doors, pressed steel frames, borrowed lights and entrances; 8 pp.—Baxter Steel Equipment Co. (A/W), 6790 E. 32nd St., Indianapolis 26, Ind.

Rolling Aluminum Windows (AIA 16-E): lists 362 sizes and configurations of the manufacturer's line. Complete specifications are given, as well as instructions for installation in frame and stucco, concrete block or bevel sliding construction; 4 pp.—Kendall Industries (A/W), 5581 Air Terminal Dr., Fresno 27, Calif.

Construction Guide for Plywood: contains revised information on plywood construction, including load span charts, recommendations for use of FHA 303 specialty sidings, charts giving weights of typical ceiling and roofing materials. The new guide includes specifications for Western softwood plywood, which is also compared to Douglas fir with suggestion for the best use of each.—Douglas Fir Plywood Association (A/W), 1119 A St., Tacoma 2, Wash.

Gypsum Partition Systems (AIA 20-B-21, AIA 35-H-6): summarizes uses dimensions and features of Pabcowall partitions in handy chart form; 4 pp. Separate 6-page architect's specifications on individual systems are also available; Metal-Stud and Metal-Furring System, Studless Gypsum Drywall System, (Quiet-Zone), and Studless Gypsum Drywall Systems (all AIA 20-B-21); Movable Partitions (AIA 35-H-6). Each booklet is illustrated with detail drawings and contains installation instructions.—Pabco Gypsum Division, Fibreboard Paper Products Corp. (A.W), 475 Brannan St., San Francisco 7, Calif.



pick of the month

"Sliding Door Hardware" introduces a complete new line of sliding, folding and accordion door hardware for medium and heavy doors. The simplicity of the line (less than 30 interchangeable parts, and only one standard track) is complemented by the uncluttered presentation of parts photographs and tables of dimensions. A time-saving bonus is a special twelve-page section of full-scale drawings of typical installations. The twenty-five page catalog is published by House & Co., 219 E. 44th St., New York 17, N.Y.

Copper Piping Manual (AIA 29-B-4): presents engineering data in chart and picture form on specification and installation of copper piping. Four pages are devoted to tables of flow of water and friction loss; 18 pp.—Nibco Inc., (A/W), 500 Simpson St., Elkhart, Ind.

Melamine Doors: includes construction details on core composition of melamine laminated doors, facing and edging materials, etc., as well as a description of accessories such as louvers and stainless steel edge angles and channels; 4 pp.; Bourne Manufacturing Co., (A/W), 7321 Gratiot, Detroit, Mich.

Shopping Center Lighting: shows how to apply outdoor lighting to shopping center parking lots, malls, facades, service areas and fountains. A complete lighting layout for a typical center is given. The brochure also describes the mercury, fluorescent and filament luminaries recommended for each shopping center area; 14 pp.—General Electric Co., (A/W), Schenectady 5, N. Y.

Red Cedar Manual: deals with grades of shingles, shipping weights and roof coverage, plus illustrated application steps and specifications for shingles and sidewall shakes; 4 pp.—Red Cedar Shingle News Bureau, 5510 White Bldg., Seattle 1, Wash.

OFFICE AIDS

universal drawing ink

An opaque black ink that is fast drying but will not clog Rapidograph pens is now on the market. The ink was developed especially for use with polyester drafting film, and can be used on paper as well. It is packaged in unbreakable plastic bottles designed for convenient filling of fountain pens and ruling pens.—Koh-I-Noor, Inc., (A/W), Bloomsbury, N. J.

electric eraser

Now you can change a line or "wash out a word of it" if your moving finger should make a mistake. The Deletor is a low-cost electric erasing machine that simplifies precision bulk erasing jobs. Two models are available: Model E1 contains a built-in mercury switch that automatically starts the motor when the eraser is tilted slightly forward; Model E2, for use on vertical surfaces and typewriters, has a manually operated push-button switch. Both models accept all standard ¼-in. diameter erasers up to about 1 in. long, won't roll off slightly inclined surfaces, can hang on a hook when not in use.—W. L. Engineering Co., (A/W), 407 S. Springfield Road, Clifton Heights, Pa.

compressor for air brushes

A small compressor at a low price has been especially designed for air brush applications. It delivers a maximum of 38 lb. per sq. in. of air. The compressor operates from any 110-volt wallplug and has a convenient carrying handle.—Binks Manufacturing Co., (A/W), 3140 Carroll Ave., Chicago 12, Ill.

paper protection

A storage cabinet for large, heavy papers such as blueprints and matboards can cut down on damage to finished work and protect paper supplies too. The trays of a new line of cabinets are sized to fit paper up to 44x30 in. (Larger sizes can be made on special order.) The nine-tray cabinet, which also has closed storage at the top, holds 100 lb. of paper in each tray. Counter-top models are also offered. Related papers of different sizes can be kept in one tray by using the peg-board bottom of the drawer to hold slips and dividers. The cabinets are available in various woods ranging from handsome hardwood to utilitarian fir.—Pacific Mill & Fixture Co., (A/W), 901-77th Ave., Oakland 21, Calif.

MANUFACTURERS/SUPPLIERS

• **International Pipe and Ceramics Corp.:** All divisions of Gladding, McBean & Co. will be known as Ceramics Division of International Pipe and Ceramics Corp., result of the recent merger of Gladding, McBean and the Lock Joint Pipe Company of East Orange, New Jersey. Divisional headquarters will remain at the same Los Angeles address.

• **Libbey-Owens-Ford Glass Company:** Retirement of Hazen A. Schofield as Pacific Region sales promotion manager, San Francisco office, has been announced by A. C. Boldemann, regional manager. Glenn T. Dunn, Jr., who held the same post in Dallas, Tex., has been appointed successor.

• **Builders Brick Co.:** R. T. Wasson has been appointed marketing manager for Builders Brick Co. and Mutual Materials, according to an announcement by R. S. Houlahan, president of both companies. Formerly vice president and general manager of H. O. Seiffert Co., Everett, Mr. Wasson replaces Ralph Yoder who is returning to school for an advanced degree.

• **Kalwall-Pacific Corporation:** The San Rafael firm, manufacturers of translucent walls, ceilings and skylights, announces the appointment of Edward M. Preim as sales manager. Preim was previously assistant regional manager of Weyerhaeuser's wood products division in Tacoma.

• **Owens-Corning Fiberglas Corp.:** Appointment of Gerald E. Fuller as plant manager at Santa Clara has been announced by John H. Thomas, vice president and general manager. Fuller has been with the firm nine years.

• **Mosaic Tile Company:** John B. Swartz has been appointed territorial manager, Pacific Coast Territory. In his new assignment, Swartz will be responsible for sales, sales personnel and service center operations in the states of California, Oregon, Washington, Idaho, Montana, Utah, Nevada, Arizona, Alaska and Hawaii. Prior to this appointment, he was assistant to the vice president of sales for Mosaic Tile.

• **Reynolds Metals Co.:** Seattle branch of the Reynolds Aluminum Supply Co. of California, a division of Reynolds Metals Co., has moved to larger quarters at 640 S. Othello St., Seattle.

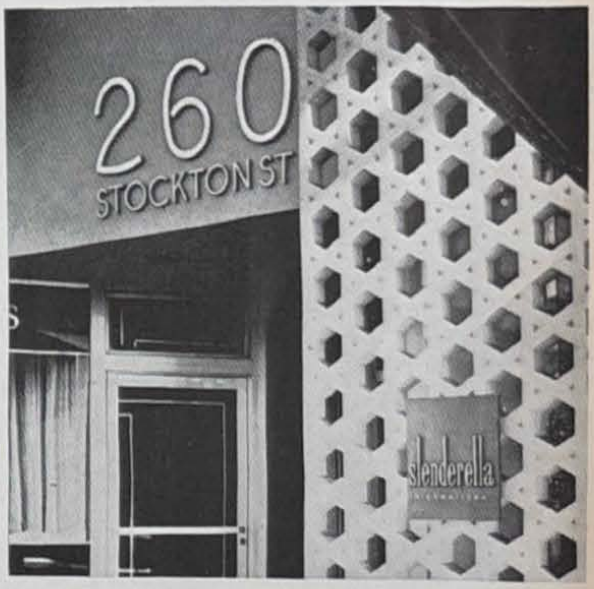
associations

• **California Redwood Association:** re-elected officers for 1963 are Julian N. Cheatham, president; Philip T. Farnsworth, executive vice president; A. O. Lefors, secretary; Martha J. Berg, acting treasurer. Mr. Cheatham is vice-president of the Georgia-Pacific Corp.

• **National Association of Architectural Metal Manufacturers:** Serving as chairman of the 1963 Convention Committee will be Edward P. Benson, Los Angeles. Mr. Benson is manager of the Bronze and Aluminum Division, A. J. Bayer Co.

• **Women in Construction:** Seattle Chapter recently installed Mrs. Norma Hudson of Naramore, Bain, Brady and Johanson architectural offices, as president. Other officers are: Margaret Nyblin, vice president; Evelyn Collyer, secretary; Ruth Schrum, treasurer; and June Gehrke, Norma Sierer, Joan Stier and Joan Moore, directors.

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Building Permit Totals fo

First Column Figures in Parentheses are Number of Residential Units • Second Column is Dolla

CALIFORNIA

	# Res.	$ Value	Total $
Alameda	(23)	$ 236,920	$ 399,259
Alameda Co.	(86)	419,750	1,868,834
Albany	(3)	27,600	62,840
Alhambra	(100)	740,100	1,036,504
Anaheim	(83)	1,369,935	7,782,653
Antioch	(5)	74,457	101,561
Arcadia	(14)	140,125	457,034
Arroyo Grande	(11)	73,770	124,478
Artesia	(28)	187,000	224,800
Atherton	(4)	216,500	336,007
Atwater	( )	Nil	19,200
Auburn	(1)	26,550	65,644
Avalon	(2)	30,000	34,500
Azusa	(4)	37,200	102,065
Bakersfield	(45)	530,700	728,010
Baldwin Park	(31)	339,900	567,448
Banning	(2)	21,902	74,313
Barstow	(34)	238,755	256,470
Bell	(8)	65,200	124,935
Bellflower	(81)	610,600	861,678
Bell Gardens	(58)	468,900	551,750
Belmont	(37)	419,000	644,718
Benicia	( )	Nil	13,985
Berkeley	(209)	1,576,100	2,047,350
Beverly Hills	(3)	310,000	697,034
Bradbury	( )	Nil	8,225
Brawley	(5)	45,000	70,500
Brea	( )	Nil	68,561
Buena Park	(78)	1,121,678	1,251,680
Burbank	(34)	274,000	1,055,651
Burlingame*	(62)	22,500*	590,105
Butte Co.	(134)	1,031,162	1,085,162
Calexico	(3)	29,800	133,008
Campbell	(4)	75,750	513,890
Carlsbad	(2)	43,610	64,705
Carmel	( )	No Reply	No Reply
Chico	(23)	497,430	544,420
Chino	(43)	500,350	823,191
Chula Vista	(1)	14,303	66,968
Claremont	(84)	1,483,550	1,979,350
Coalinga	(2)	18,000	26,470
Colton	(6)	39,192	70,461
Commerce	( )	Nil	595,430
Compton	(41)	288,880	539,714
Concord	(42)	544,350	661,720
Cntra Csta Co.	(172)	2,767,872	4,521,233
Corona	(77)	745,630	791,186
Coronado	( )	No Reply	No Reply
Corte Madera	(34)	474,200	530,694
Costa Mesa	(127)	1,755,470	2,159,651
Covina	(159)	1,573,175	1,719,399
Cudahy	(43)	330,600	359,285
Culver City	(4)	173,000	397,897
Dairy Valley	( )	Nil	187,100
Daly City	(92)	797,131	860,880
Davis	(28)	375,000	457,105
Delano	(9)	96,000	130,300
Downey	(96)	980,500	1,922,693
Duarte	(26)	321,000	366,670
El Cajon	(5)	36,000	414,900
El Centro*	(36)	402,000*	582,117
El Cerrito	(18)	204,360	328,135
El Dorado Co.*	(91)	1,093,325*	1,725,923
El Monte	(202)	1,222,806	1,382,300
El Segundo	(4)	41,250	773,030
Emeryville	(4)	35,000	63,879
Escondido	(8)	95,218	187,833
Eureka	(2)	36,000	117,861
Fairfield*	(63)	640,883*	1,091,342
Fillmore	(1)	14,080	20,727
Fontana	(17)	118,709	151,802
Fremont	(131)	1,616,900	1,969,450
Fresno	(102)	663,516	5,728,732
Fresno Co.	(67)	627,462	1,267,713
Fullerton	(202)	2,632,745	3,611,163
Glendale	(212)	2,237,173	2,865,831
Glendora	(7)	108,370	291,095
Half Moon Bay	(3)	44,000	113,550
Hanford	(4)	42,990	116,640
Hawthorne	( )	No Reply	No Reply
Hayward	(111)	922,231	1,527,892
Hemet	(18)	202,066	529,654
Hermosa Bech	(9)	133,161	183,626
Hidden Hills	( )	Nil	22,900
Hillsborough	(1)	40,000	62,200
Holtville	(1)	11,300	25,800
Humboldt Co.*	(19)	313,480*	369,415
Huntingtn Bch	(522)	7,108,582	7,366,545
Huntington Pk	(24)	163,900	467,770
Imperial Co.	( )	Nil	76,000
Indio	( )	No Reply	No Reply
Industry	( )	Nil	892,182
Inglewood*	(70)	740,567*	935,133
Irwindale	(1)	9,800	215,051
Kern Co.	(154)	2,040,058	3,093,147
Laguna Beach	(9)	161,500	188,375
La Habra	(156)	2,789,900	3,103,221
Lakewood	(54)	706,000	941,050
La Mesa	(11)	116,215	878,292
La Mirada	(2)	55,000	211,012
La Puente	(60)	405,600	509,387
La Verne	(25)	351,500	357,760
Lawndale	(34)	357,740	428,588
Lindsay	(3)	29,100	49,809
Livermore*	(117)	696,700*	1,394,830
Lodi	(32)	254,650	334,920
Lompoc	(113)	1,363,791	1,878,843
Long Beach	(477)	4,406,015	6,551,820
Los Altos	(21)	505,000	571,466
Los Angeles	(2,807)	31,356,580	58,836,739
Los Angls Co.	(1,140)	15,226,215	21,636,673
Los Gatos	(49)	867,500	1,090,980
Lynwood	(28)	202,000	255,141
Madera	(3)	36,750	55,465
Madera Co.	(12)	131,000	215,645
Manhattan Bch	(24)	400,100	556,346
Manteca	(27)	278,500	319,870
Marin Co.	(38)	687,450	843,024
Martinez	(30)	467,466	488,568
Marysville	(1)	16,000	51,150
Maywood	(6)	12,700	37,424
Menlo Park	(3)	75,000	426,575
Merced	(4)	61,993	653,279
Merced Co.	(19)	228,906	306,936
Millbrae	(3)	82,150	337,663
Mill Valley	(11)	234,000	260,440
Modesto	(42)	381,000	755,454
Monrovia	(72)	647,205	826,742
Montclair	( )	Nil	204,120
Montebello	(44)	921,695	1,163,606
Monterey	(22)	214,500	463,000
Monterey Co.	(38)	504,980	873,936
Monterey Park	(20)	195,410	337,625
Mountain View	(115)	1,324,243	2,553,515
Napa*	(32)	447,681*	862,512
Napa Co.	(14)	226,995	327,365
National City	(4)	50,770	260,091
Newport Bech	(16)	405,850	749,839
N. Sacramento	(21)	141,910	156,536
Norwalk	(122)	685,900	1,129,066
Novato*	(61)	324,490*	1,000,590
Oakdale	(2)	13,800	74,895
Oakland	(232)	2,311,900	4,467,592
Oceanside	(42)	569,000	863,120
Ojai	(2)	63,870	69,070
Ontario	(56)	688,548	945,256
Orange*	(104)	1,415,720*	1,826,266
Orange Co.	(456)	4,974,877	6,205,573
Oroville*	(5)	38,500*	75,217
Oxnard	(64)	340,654	1,276,224
Pacifica	(116)	1,232,800	1,509,949
Pacific Grove	(9)	112,750	133,400
Palm Springs	(17)	421,000	1,067,827
Palo Alto	(131)	1,139,800	2,332,088
Plos Vrds Estts	(19)	750,565	812,520
Paramount	(48)	414,001	720,095
Pasadena	(97)	1,038,215	2,436,949
Paso Robles	( )	Nil	29,850
Pico Rivera*	(129)	447,300	*
Piedmont	(1)	25,000	71,331
Pinole	( )	No Reply	No Reply
Pittsburg	(20)	273,686	500,846
Placentia	(85)	624,120	1,100,539
Placer Co.	(49)	666,940	1,142,445
Pleasanton	(2)	42,058	49,802
Pomona	(88)	1,079,110	1,722,307
Porterville	(3)	33,724	54,225
Port Hueneme	(2)	14,000	17,600
Red Bluff	( )	Nil	4,086
Redding	(2)	24,000	273,450
Redlands	(140)	2,237,850	2,698,495
Redondo Bech	(96)	928,000	1,254,854
Redwood City	(47)	506,040	672,730
Richmond	(65)	685,949	1,117,066
Riverside	(51)	779,973	1,720,716
Riverside Co.	(496)	4,738,444	6,281,397
Rolling Hills	(2)	75,900	84,700
Rllng Hlls Estts	(3)	84,000	123,600
Rosemead	(20)	104,400	203,712
Roseville	(23)	211,246	288,408
Sacramento	(91)	918,700	5,906,500
Sacramnto Co.	(724)	6,245,896	10,327,275
St. Helena	(3)	41,288	41,688
Salinas	(21)	285,000	1,207,425
Sn Bernardino	(40)	553,248	1,269,587
S Brnrdno Co.	(575)	5,292,403	6,706,918
San Bruno	(93)	1,151,400	1,182,264
San Carlos	(13)	284,155	312,137
San Clemente	(107)	1,977,400	2,054,470
San Diego	(606)	7,175,400	15,656,999
San Diego Co.	(145)	2,553,000	4,995,506
San Dimas	(11)	187,000	212,814
San Fernando	(6)	35,000	117,940
San Francisco	(470)	7,109,103	30,087,915
San Gabriel	(29)	272,191	409,726
Sanger	(4)	40,232	60,732
San Jacinto	(5)	37,300	48,670
Sn Joaquin Co.	(52)	592,610	832,410
San Jose	(486)	5,081,775	6,706,858
San Leandro*	(274)	1,181,572*	2,907,911
Sn Luis Obispo	(89)	1,228,829	1,596,248
S Ls Obspo Co.	(39)	520,570	908,133
San Marino	(1)	30,700	209,832
San Mateo	(47)	445,000	999,996
San Mateo Co.	(121)	1,317,400	2,036,204
San Pablo	(21)	139,556	246,506
San Rafael	(60)	738,204	964,943
Santa Ana	(238)	2,917,850	6,004,366
Santa Barbara	(90)	859,145	1,070,660
Snta Brbra Co.	(382)	5,490,100	6,147,736
Santa Clara	(69)	635,040	5,442,479
Snta Clara Co.	(37)	604,600	2,006,700
Santa Cruz	(24)	266,450	406,320
Santa Cruz Co.	(118)	1,485,906	1,730,741
Snta Fe Sprngs	( )	Nil	474,800
Santa Maria	(53)	556,146	1,224,320
Santa Monica	(111)	2,567,261	3,432,146
Santa Paula	(1)	15,212	52,161
Santa Rosa	(75)	1,046,464	1,710,942
Sausalito	(5)	89,000	113,450
Seal Beach	(3)	49,700	129,000
Seaside	(1)	11,000	70,813
Selma	(2)	24,250	85,623
Shasta Co.	(73)	940,747	1,128,697
Sierra Madre	(6)	77,250	187,948
Solano Co.	(5)	69,614	196,813
Sonoma Co.	(96)	983,329	1,876,422
South Gate	(27)	207,583	452,467
South El Monte	( )	Nil	103,458
South Pasadna	(18)	288,429	382,913
S. Sn Francsco	(5)	48,300	1,006,573
Stanislaus Co.	(45)	434,260	694,400
Stockton	(29)	392,450	949,271
Sunnyvale	(216)	3,177,100	3,007,364
Temple City	(21)	282,500	321,625
Torrance	(335)	4,615,765	5,000,043
Tracy	(1)	11,000	35,207
Tulare	(11)	71,400	103,396
Tulare Co.	(60)	723,349	929,576
Turlock	(3)	45,974	67,263
Ukiah	(2)	33,341	64,153
Upland	(74)	915,950	956,942
Vacaville	(7)	82,160	194,957
Vallejo	(22)	183,000	1,261,473
Ventura	(29)	235,515	3,353,356
Ventura Co.	(106)	1,515,250	3,845,276
Visalia	(9)	137,136	240,979
Walnut	(2)	34,000	46,000
Walnut Creek	(17)	193,260	263,440
Wasco	( )	No Reply	No Reply
Watsonville	(5)	36,375	74,150
West Covina	(5)	79,770	504,187
Whittier*	(84)	1,949,700*	2,422,694
Woodland	(15)	203,000	250,275
Woodside	( )	No Reply	No Reply
Yolo Co.	(8)	128,811	539,642
Yreka	(5)	79,700	109,271
Yuba City	(13)	220,947	365,572
Yuba Co.	(12)	109,873	251,080
Total	**(19,787)**	**$226,981,313**	**$403,443,909**

OREGON

Albany*	(19)	$ 178,270*	$ 228,570
Ashland	(3)	43,000	62,950
Astoria	(4)	68,000	105,250
Baker	(1)	13,500	35,750
Beaverton*	(21)	81,342*	248,773
Bend*	(15)	36,500*	113,850
Central Point	(4)	36,000	50,500
Clackamas Co.	(34)	516,618	1,197,897
Coos Bay	(2)	15,000	55,953
Corvallis	(4)	42,000	51,500
Dallas*	(11)	13,000*	18,195
Douglas Co.	(6)	58,716	118,616
Eugene*	(67)	360,385*	1,136,229
Forest Grove	(2)	15,000	20,945
Grants Pass	(4)	46,000	185,525
Gresham	(3)	44,600	84,600

*Complete figures not available

Western States for October

sidential Permits Only • Third Column is Total Dollar Value of All Permits, Including Residential

	# Res.	$ Value	Total $
Hermiston	(2)	27,475	41,299
Hillsboro	(6)	71,000	110,880
Hood River	( )	Nil	7,600
Klamath Falls	(4)	69,000	202,730
La Grande	(5)	56,100	131,350
Lake Oswego	(11)	226,000	361,500
Lane Co.	(106)	1,001,575	1,249,955
Lebanon	( )	Nil	2,105
Marion Co.	(52)	535,200	642,120
McMinnville	(1)	12,000	23,854
Medford	(25)	243,000	450,779
Milton-Freewtr	(3)	26,500	33,400
Milwaukie	(17)	166,514	230,289
Multnomah Co.	(92)	1,594,624	2,253,860
Newberg	(1)	10,000	11,960
Newport	(1)	17,000	35,800
North Bend	( )	Nil	9,834
Ontario*	(7)	49,500*	69,000
Oregon City	(1)	10,000	38,911
Oswego*	(11)	226,000*	361,500
Pendleton	( )	Nil	143,330
Portland	(49)	621,450	2,798,065
Roseburg	(6)	59,040	179,537
St. Helen	(1)	12,000	16,007
Salem	(23)	195,911	271,879
Seaside	( )	Nil	7,100
Springfield	(50)	302,678	374,762
The Dalles	(5)	76,000	498,328
Washingtn Co.	(56)	1,111,872	1,336,772
Total	**(735)**	**$ 8,288,370**	**$ 15,530,704**
WASHINGTON			
Aberdeen	(1)	$ 22,000	$ 331,562
Anacortes	(1)	16,000	35,125
Auburn	(9)	107,000	896,950
Bellevue	(5)	142,000	248,350
Bellingham	(11)	118,000	167,441
Bremerton	(3)	40,800	161,335
Camas	(2)	16,800	38,745
Centralia	(1)	10,000	54,129
Chehalis	(3)	30,900	53,555
Clark Co.	(22)	314,700	332,998
Clarkston	(1)	14,000	34,100
Edmonds	(11)	205,000	225,875
Ellensburg	(2)	32,000	52,704
Enumclaw	(1)	8,500	8,500
Ephrata	( )	Nil	50,650
Everett*	(15)	991,214*	991,214
Grays Hrbr Co.	(10)	81,800	116,000
Hoquiam	(1)	2,500	27,311
Island Co.	(11)	50,300	65,500
Kelso	(3)	42,000	69,850
Kennewick	(3)	60,800	95,095
Kent	(4)	72,700	93,890
King Co.	(546)	8,133,915	10,307,225
Kirkland	(1)	9,500	65,200
Longview	(5)	61,500	180,499
Lynnwood	( )	No Reply	No Reply
Mercer Island	(12)	308,100	330,280
Moses Lake	(2)	72,200	247,827
Mntlke Terrace	(18)	290,000	336,487
Olympia	(27)	275,000	333,786
Pasco	(8)	109,500	219,118
Pierce Co.	(219)	2,695,910	4,844,040
Port Angeles	(4)	48,600	64,250
Pullman	(4)	60,884	68,314
Puyallup	(9)	79,000	101,750
Renton*	(16)	248,500*	1,952,903
Richland	(13)	199,500	883,674
Seattle	(152)	2,159,102	10,444,095
Shelton	( )	Nil	248,050
Spokane*	(45)	659,700*	884,424
Spokane Co.	(35)	578,175	906,950
Sunnyside	(1)	16,000	86,400
Tacoma*	(62)	838,075*	2,904,772
Thurston Co.	(34)	321,900	*
Vancouver	(79)	615,720	909,640
Walla Walla	(1)	12,000	65,013
Walla Wlla Co.	(3)	47,000	73,632
Wenatchee	(7)	89,400	106,990
Yakima	(14)	166,000	398,238
Total	**(1,444)**	**$ 20,565,595**	**$ 41,221,542**
ALASKA			
Anchorage	(25)	$ 606,887	$ 1,370,397
Fairbanks*	(14)	99,000*	131,500
Juneau	( )	Nil	17,000
Ketchikan	( )	Nil	39,400
Total	**(39)**	**$ 705,887**	**$ 1,558,297**

	# Res.	$ Value	Total $
IDAHO			
Blackfoot	(1)	$ 14,000	$ 26,140
Boise	(5)	68,825	425,188
Burley	(10)	147,500	170,700
Caldwell	(11)	181,000	305,320
Coeur d'Alene	(6)	82,266	98,848
Idaho Falls	(18)	274,671	526,515
Jerome*	((2)	*	10,223
Lewiston	(3)	45,100	83,625
Moscow*	(7)	80,500*	112,150
Nampa*	(9)	106,000*	589,279
Payette	(1)	14,500	30,690
Pocatello	(16)	199,985	1,142,940
Sandpoint	(1)	15,000	33,200
St. Maries	( )	No Reply	No Reply
Twin Falls	(9)	74,000	102,400
Total	**(99)**	**$ 1,303,347**	**$ 3,657,218**
MONTANA			
Anaconda	( )	$ Nil	$ 13,000
Billings*	(49)	271,200*	593,458
Bozeman	(9)	137,000	182,768
Butte	(1)	15,000	61,700
Cut Bank	( )	Nil	Nil
Glasgow	(2)	28,500	67,600
Glendive	(4)	17,100	27,050
Great Falls	(22)	228,055	888,628
Havre	( )	Nil	122,910
Helena	(5)	56,000	593,980
Kallspell	(1)	13,000	59,100
Lewistown	(1)	10,000	20,500
Livingston	(2)	17,000	26,500
Malta	(1)	12,000	12,000
Miles City	(4)	58,000	78,562
Missoula	(5)	97,038	993,091
Total	**(106)**	**$ 959,893**	**$ 3,740,847**
WYOMING			
Casper	(11)	$ 152,000	$ 563,424
Cheyenne	(33)	344,500	678,227
Cody	(3)	29,000	29,000
Laramie	(7)	66,900	138,030
Rawlins	( )	Nil	27,880
Riverton	(2)	29,000	46,800
Rock Springs	(32)	176,000	189,500
Sheridan	(2)	23,000	61,273
Total	**(90)**	**$ 820,400**	**$ 1,734,134**
COLORADO			
Adams Co.	(163)	$ 2,111,750	$ 2,428,355
Alamosa	(3)	41,500	64,860
Arapahoe Co.	(101)	1,886,600	2,648,799
Arvada	(67)	875,000	1,342,824
Aspen	( )	Nil	6,350
Aurora	(80)	714,333	864,714
Boulder	(39)	460,482	1,189,672
Boulder Co.	(36)	341,045	556,415
Colorado Sprngs	(82)	1,014,245	1,169,962
Cortez	(1)	9,000	9,100
Denver	(205)	2,088,006	5,601,115
Durango	(5)	70,325	88,864
El Paso Co.*	(130)	1,230,900*	1,656,500
Englewood	(3)	37,500	155,922
Estes Park*	(6)	40,760*	55,810
Fort Collins	(20)	282,200	1,189,780
Fort Morgan	(2)	27,398	40,463
Golden	(3)	47,300	113,560
Grnd Junction	(2)	19,000	294,315
Greeley	(24)	248,262	465,921
Jefferson Co.	(237)	3,050,539	3,848,870
La Junta	(4)	55,000	63,225
Lamar	(9)	132,500	146,500
Littleton	(22)	328,805	422,220
Longmont	(36)	454,358	839,614
Loveland	(24)	255,500	341,760
Monte Vista	( )	Nil	10,200
Montrose	(4)	44,280	390,711
Pitkin Co.	(5)	72,500	118,500
Pueblo	(33)	368,698	708,184
Pueblo Co.	(5)	57,000	72,050
Sterling*	(4)	11,500*	603,850
Trinidad	( )	Nil	23,913
Walsenburg	( )	Nil	7,335
Westminster	(6)	37,900	991,724
Total	**(1,361)**	**$ 16,414,186**	**$ 28,531,757**

	# Res.	$ Value	Total $
UTAH			
American Fork	(2)	$ 19,500	$ 20,905
Bountiful	(24)	377,000	622,663
Brigham City	(6)	79,000	94,850
Cedar City	(2)	60,000	65,900
Clearfield	( )	Nil	6,700
Davis Co.	(11)	144,340	163,050
Kaysville	(28)	202,000	216,900
Layton	(21)	262,000	278,600
Logan	(205)	2,131,456	5,208,606
Murray	( )	No Reply	No Reply
Ogden	(14)	268,300	699,200
Orem*	(4)	50,640*	123,346
Price	(1)	9,000	30,000
Provo	(23)	471,000	544,100
Salt Lake City	( )	No Reply	No Reply
Salt Lake Co.	(217)	2,613,400	3,092,535
S. Slt. Lke Cty.	(1)	6,200	393,309
Spanish Fork	(2)	19,000	25,890
Tooele	(7)	106,410	155,670
Utah Co.	(8)	106,075	148,900
Weber Co.	(3)	32,000	40,000
Total	**(579)**	**$ 6,957,321**	**$ 11,931,124**
NEVADA			
Boulder City	(17)	$ 12,861	$ 12,861
Clark Co.*	(717)	1,788,027*	7,334,051
Elko	( )	No Reply	No Reply
Las Vegas	(738)	7,822,550	9,108,720
N. Las Vegas	(117)	1,067,717	1,230,571
Reno	(81)	1,118,996	2,587,839
Sparks	(17)	240,000	288,625
Washoe Co.	(13)	197,600	1,258,035
Total	**(1,700)**	**$ 12,247,751**	**$ 21,821,502**
ARIZONA			
Buckeye	(1)	$ 15,000	$ 20,051
Casa Grande	(5)	65,700	92,310
Chandler*	(22)	151,274*	173,000
Douglas	(2)	5,000	12,694
Flagstaff	(26)	171,100*	478,600
Florence	( )	Nil	13,000
Glendale	(11)	143,000	227,300
Maricopa Co.	(171)	1,474,485	1,804,036
Mesa*	(121)	467,332*	1,312,581
Phoenix	(542)	3,806,353	12,318,181
Pima Co.	(134)	1,711,842	2,017,548
Prescott*	(21)	51,000*	258,250
Scottsdale	(31)	370,700	1,409,518
Tempe	(138)	1,240,545	1,363,445
Tucson	(176)	1,366,148	2,431,412
Wickenburg	( )	Nil	6,500
Winslow	( )	Nil	5,950
Yuma*	(55)	102,000*	1,477,600
Total	**(1,456)**	**$ 11,141,479**	**$ 25,421,996**
NEW MEXICO			
Alamogordo	( )	$ Nil	$ 19,560
Albuquerque	(229)	3,707,756	4,735,698
Artesia	(1)	10,000	13,463
Carlsbad	(9)	84,000	251,800
Clovis	(27)	284,757	389,569
Deming	( )	Nil	36,750
Farmington	(8)	58,438	136,683
Gallup*	(6)	65,900*	364,751
Hobbs	(30)	364,160	411,050
Las Cruces	(6)	73,700	185,688
Las Vegas	( )	Nil	Nil
Lovington	(2)	33,000	66,400
Raton	( )	Nil	53,400
Roswell	(49)	472,000	1,957,030
Santa Fe	(9)	99,900	156,266
Silver City	(3)	53,000	77,000
Truth or Consequences	(1)	2,000	2,000
Tucumcari	(7)	69,000	71,800
Tularosa	( )	Nil	Nil
Total	**(387)**	**$ 5,377,611**	**$ 8,928,908**
HAWAII			
Hawaii Co.	(27)	$ 324,622	$ 840,862
Honolulu	(1,032)	13,465,578	17,912,040
Maui Co.*	(42)	439,709*	815,996
Total	**(1,101)**	**$ 14,229,909**	**$ 19,568,898**
GRAND TOTAL	**(28,884)**	**$325,993,062**	**$587,090,926**

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REVIEWING the little old western churches on our cover and pages 11 through 16 of this issue, and comparing these beginnings with our more contemporary places of worship, reminded us that we have occasionally wondered, "What has happened to the old church steeple?"

Or bell tower, or spire, and to the symbolic crosses that are a little hard to find these days. We asked the Overly Manufacturing Co. about it, they being among the nation's leading specialists in the history and design and manufacture of such things.

We learned that these magnificent and inspiring symbols, reaching to the heavens, were de-emphasized a good many years ago because structurally they were too troublesome to maintain, but that modern materials are bringing them back.

The spiritual appeal of a spire does not sustain in a congregation that finds rainwater dripping down its collective necks, and enthusiasm wanes in the face of constant costly steeplejack repairs.

But the desire for a steeple or a spire as the symbolic expression of a building as a church remains, and late developments in materials, particularly light sheet metals, and in craftsmanship with these metals, make spires less costly and almost maintenance free.

Copper, aluminum, stainless steel, Monel and other alloys are today more workable, more corrosion resistant and may be applied by methods that alleviate the expansion and contraction problem. Possibly most important of all to the architect there are many new finishes, so that a selection is available to meet the requirements of almost any exterior treatment.

• • •

Crosses, as crosses, were never exactly de-emphasized. It's just that without steeples to put them on, many of them were relegated to positions that aren't so obvious. Or if installed merely at the highest point on the roof of the church the tendency has been to keep them in character, small and usually a simple Latin cross. Wall crosses have been popular, and often the symbolic expression has been removed from the church building itself to a free standing spire of laminated timber, or metal or of precast concrete masonry.

In any event, according to Overly, there is a trend back to more emphatic steeples or spires to display the cross, whether free standing structures, or slender spires of lightweight metal prefabricated in the factory and set atop the building by helicopter.

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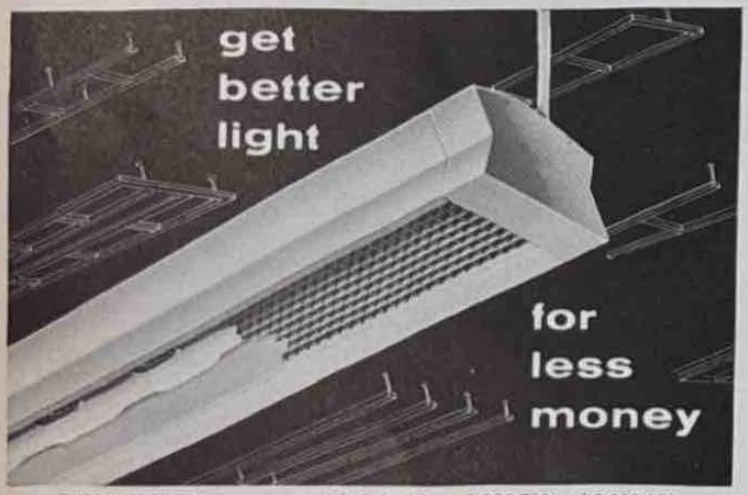
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REVIEWING the little old western churches on our cover and pages 11 through 16 of this issue, and comparing these beginnings with our more contemporary places of worship, reminded us that we have occasionally wondered, "What has happened to the old church steeple?"

Or bell tower, or spire, and to the symbolic crosses that are a little hard to find these days. We asked the Overly Manufacturing Co. about it, they being among the nation's leading specialists in the history and design and manufacture of such things.

We learned that these magnificent and inspiring symbols, reaching to the heavens, were de-emphasized a good many years ago because structurally they were too troublesome to maintain, but that modern materials are bringing them back.

The spiritual appeal of a spire does not sustain in a congregation that finds rainwater dripping down its collective necks, and enthusiasm wanes in the face of constant costly steeplejack repairs.

But the desire for a steeple or a spire as the symbolic expression of a building as a church remains, and late developments in materials, particularly light sheet metals, and in craftsmanship with these metals make spires less costly and almost maintenance free.

Copper, aluminum, stainless steel, Monel and other alloys are today more workable, more corrosion resistant and may be applied by methods that alleviate the expansion and contraction problem. Possibly most important of all to the architect there are many new finishes, so that a selection is available to meet the requirements of almost any exterior treatment.

• • •

Crosses, as crosses, were never exactly de-emphasized. It's just that without steeples to put them on, many of them were relegated to positions that aren't so obvious. Or if installed merely at the highest point on the roof of the church the tendency has been to keep them in character, small and usually a simple Latin cross. Wall crosses have been popular, and often the symbolic expression has been removed from the church building itself to a free standing spire of laminated timber, or metal or of precast concrete masonry.

In any event, according to Overly, there is a trend back to more emphatic steeples or spires to display the cross, whether free standing structures, or slender spires of lightweight metal prefabricated in the factory and set atop the building by helicopter.

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