PANEWS REPORT

Progressive Architecture's Monthly Digest of Buildings, Projects, People and Products

December 1966

CONTRIBUTIONS SOUGHT FOR **NEW AIA HEADQUARTERS**

WASHINGTON, D.C. Under a newly devised arrangement, corporate AIA members are being asked to help raise, through donations, \$900,000 for a new national headquarters. Donations will go to the American Institute of Architects Foundation, Inc., a tax-exempt foundation set up in 1942 to do educational and research work. With these funds, the Foundation will purchase the Octagon House, present AIA headquarters. from the AIA, and will oversee its renovation. Purchase price is expected to be \$600,000; renovation, \$300,-000. This purchase transaction is subject to reconfirmation by the 1967 convention. With funds gained from the sale, the AIA will then construct a new building, being designed by Mitchell & Giurgola of Philadelphia. The new building will fit an enlarged site behind the Octagon, including land purchased next door (the Lemon building tract, approved by the 1966 convention). Architect G. Harold W. Haag is chairman of the fund-raising drive. Contributions are tax-deductible.

KAHN DESIGNING MUSEUM IN SOUTHWEST



FORT WORTH, TEX. Louis I. Kahn, who is currently working on a master plan for the capital of East Pakistan, is also designing a museum for the Kimball Art Foundation of Fort Worth. To be located

on Amon Carter Square in downtown Fort Worth, the museum will comprise more than 100,000 sq ft of space on a 9-acre site. The museum will house the extensive art collection gathered by Mr. and Mrs. Kay Kimball - primarily 18th-Century English painting. Associated with Kahn on the project is Preston M. Geren, Fort Worth architect and engineer.

COMPUTER PROJECTS **FUTURE BUILDING TRENDS**

NEW ORLEANS, LA. For architects and planners who want to know future housing and commercial trends in a given U.S. city, a computerized service now makes these projections available. Allied Chemical Corporation's Barret Division has available reports on 161 metropolitan areas that can be purchased for a nominal fee of \$100. "Projectiron," as the service is called, uses two computers to process more than 1000 pieces of information about a given city, and produce a comprehensive report giving trends in demand for office and residential space, locations, and price ranges. Barret points out that a report of this type would normally cost anywhere from \$250 to \$20,000. "In most cases," says a company spokesman, "these reports will eliminate the need for field competition studies, consumer research, and the like."

For example, a report prepared recently for the New Orleans area predicts that the city will absorb an average of 5986 for-sale units annually from 1970 to 1975. Though apartment construction there is currently concentrated in the rent range of \$135 to \$190 per month, the largest demand is, and will continue to be during the next 10 years, for units in the \$100 price class.

The reports are prepared for the Barret Division by W.R. Smolkin & Associates, Inc., New Orleans housingmarketing consultants.

SPACE, SCALE, AND SICKNESS: THE EFFECTS OF HUMAN CROWDING



"Man seems likely to relapse into his 19th-Century plight of being the prisoner of the city, and, this time, with no possibility of escape. This is a formidable outlook for us, because the imprisoned town dwellers of the past have been apt to develop an ugly temper. The imprisoned proletariats of Athens, Alexandria, Rome, Constantinople Paris, and Leningrad have, each in turn, been prone to break out into mob violence. An inescapable city cannot be a seed-bed for vegetables or cereals, but it has often been a seed-bed for riots and revolutions."

ARNOLD TOYNBEE Like thousands of young girls before her, Nancy Wells came to New York to work. She found a job teaching in a junior high school in Brook-

lyn, and set up housekeeping in a one-bedroom Manhattan apartment with two other girls. "We have no space," said one of her roommates recently. "We're always bumping into each other." Nancy sleeps on a couch in the living room, waits in line for the bathroom, squeezes into the tiny kitchen, where two are a crowd. Dressing in the morning, with everyone looking for stockings, becomes a flurry of arms and legs. Once out of the apartment, Nancy goes underground, pushes or is pushed across a crowded subway platform into a packed subway car, where she clutches a strap for the 45-minute subterranean ride to Brooklyn. All day she teaches in an overcrowded schoolroom. Her classes average about 40 stu-

Are the bugs out of all plastic flashings? Just one— Saraloy 640R.

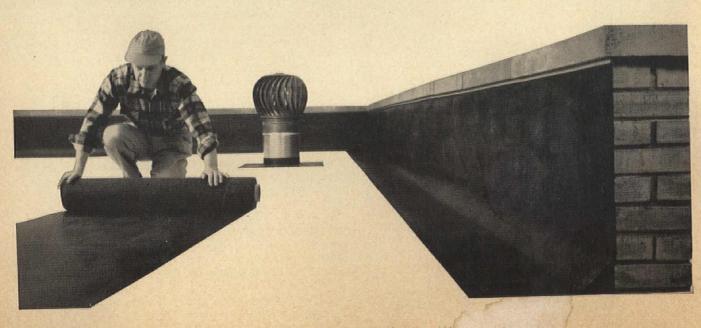
There are only two reasons for not specifying flexible flashing: (1) you've tried it before with mixed results, or (2) you don't like to try new things. Well, now we think we can reassure you on both counts. Early flexible flashings (and a few that are still around) had their faults. These have been corrected in Saraloy® 640R plastic flashing. Second, flexible flashings are

not new. They've been some time reaching the state of perfection embodied in Saraloy 640R flashing. Consider the advantages of Saraloy 640R. Since it's flexible, it can adjust to the building movements that occur. It can withstand extreme roof temperatures-either hot or coldwithout thinning out or getting brittle. And it lasts and lasts.

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For more information, contact The Dow **Chemical Company, Plastics Sales** Department, Midland, Michigan 48640, or consult Sweet's Architectural File 8g/Do.





dents. And she has six classes. At night she squeezes back onto the subway for the 45minute ride to her apartment.

Late one night a month or so ago, Nancy's roommates heard a crash in the living room. They found her sprawled on her back on the floor, eyes wide open staring at the ceiling, unable to move or talk.

The doctor said she had low blood pressure, and, after a more thorough examination the next day, said she had all the symptoms of hyper-anxiety. "Where do you come from?" he asked her. When she mentioned a small town upstate, he named a cure. "Have you ever thought of going back there? Some people just can't adjust to New York."

In the midst of a rash of talk by architects, planners, and population experts about high-density living, Nancy's plight has far-reaching implications. Already New York City has one of the highest population densities in the world (75,000 per square mile on Manhattan) and a psychiatric study done three years ago showed that 23 per cent of the people in a six-block East Side area had severe neuroses. Obviously, highdensity living has an effect on people. It has to.

But planners and population experts, blithely predicting a world population 10 to 20 times greater than it is now within 100 years, lack knowledge of the effect a population of 20 billion will have on individuals. Their ignorance is understandable, if hardly commendable, for a surprising dearth of scientific knowledge about human crowding exists. Psychiatrists, psychologists, and sociologists are just now starting to study the problem.

What will the United States be like 100 years from now. with a population of 1 billion? Some planners say that even now we have the physical means for handling that large a population. Last month, however, ABC television's "Stage '67" took a frightening look at the world of 2067. (We should point out that although the program distorted probability by projecting simply one factor - population growth - at the expense of many other variables, the mere possibility of such overcrowding is unnerving.)

An hour-long drama, "The People Trap," told of a land race for the last 20 acres of undeveloped land in the United States. By this time, according to the drama, the Government was assigning space to people in already crowded urban apartments. People could have babies only by Governmental decree; unlicensed mothers were arrested for pregnancy and put in detention camps. If an unlicensed baby was born, it was frozen; its "development was arrested." Winners of the land race were to be given an acre apiece in Yosemite Park, and each was to be licensed to have one child. Everywhere the camera looked in this world of 2067 there were mobs of people, as if the earth were a giant Macy's post-Christmas sale. The hero had to race (through these mobs) from some point in what was once New Jersey into Times Square. Everywhere he had to push through motionless crowds. To travel a block took hours. At one point, he had to scale a 200-story windowless apartment house. But he won. And he and his wife were shown - and, by then, it was a relief to see - skipping hand in hand across an open meadow with trees; one acre seemed like the Eden of a menthol cigarette ad. Sunlight shone through the leaves. Then, suddenly, the camera panned behind them to a chain-link fence. Against it was pushing a crowd of those milling, faceless, ubiquitous masses.

The mere possibility of such overcrowding as pictured in these fictional terms is frightening. It has led population experts, such as Kingsley Davis, to issue strong warnings. Writing in Scientific American for September 1965, Davis stated: "It seems plain that the only way to stop urban crowding and to solve most of the urban problems besetting both the developed and the underdeveloped nations is to reduce the over-all rate of population growth. Policies designed to do this have as yet little intelligence and power behind them. Urban Planners continue to treat population growth as something to be planned for, not as something to be itself planned. Any talk about applying the

brakes to city growth is therefore purely speculative, overshadowed as it is by the reality of uncontrolled population increase."

But what effect does the crowding already besetting us have on humans? Psychologists, trying to answer the question, can point only tentatively to work done with lower animals. In lower animals, crowding past certain defineable limits produces physical and psychological changes. Shrimp studied at the California Current Resources Laboratory showed that a growth in male populations led to fewer pregnancies in females. On an island in the St. Lawrence, where a population of Sika deer could expand in number but not in area, a population of more than one per acre was reduced in one sudden wave of death to about one for every three acres. Autopsies showed that their adrenalin glands had increased in size as much as five times. This enlargement is a familiar sign of stress, and biologists theorized that the animals died of insulin shock. Researchers also found two cases of death from hepatitis and believe that the prolonged stress brought on a susceptibility to disease. Rats tested by ethnologist John Calhoun soon broke up into a kind of feudal aristocracy. A king rat with a small harem took over a large bit of controlled space. The rest, forced into a relatively small area, became anxious and irritable, nipped at each other's tails, and showed a strange breakdown in sexual activity.

Psychologists are not yet certain what implications all this has for humans. Being an animal, man will show some similar patterns. But psychologists point out that man's intelligence, his reasoning ability, his communication through language and other media, and his culture will offset some of the immediate effects of overcrowding found in rats and deer. Psychologist Robert Beck points out that a certain kind of person is attracted to high density areas, such as New York, or London, or Paris, or even Pittsburgh. That's where the action is. "The lights are much brighter there," Petula Clark tunefully reminds us. And some people not only adapt

well to these situations but seem to thrive on them. Moreover, there are cultural differences among people. Italians and Japanese, for instance, who have for years lived under more crowded conditions than those found in the U.S., seem to have a higher tolerance for crowding than do Americans. Psychiatrist Humphrey Osmond, in Who Designs America?, puts it this way: "How much space and what sort of space does a man need? The aristocrat feels overcrowded if he can see any sign of human habitation from the topmost battlement of his castle; London slum dwellers, on the other hand, complained of the bareness, emptiness, and eerie quietude of the English countryside when they were evacuated during the bombing in 1940. There are New Yorkers who hate leaving the canyons of that megapolis, just as much as the northern trapper fears the thunder and rush of the city. ... We can be sure that man, like every other creature, has certain spatial requirements, just as he needs certain conditions of heat, light, oxygen, water, and terrain to survive."

Robert Beck was, until recently, an advisor to the Regional Plan Association in New York, a group trying to outline future expansion in the New York metropolitan region. He is quick to point out the vast gaps in his, and other psychologists', knowledge of crowding. But planners he worked with felt his contribution was valuable, merely because he could raise questions about density and related stress that they might not think of. Unfortunately, the budget would not support his position. On November 1, Beck was forced to give it up.

In a still unpublished paper written for the Regional Plan, with architect-planner Rai Okamoto, Beck cautioned that density itself may not be the real enemy. "It may not be the population density, per se, that is the issue here, but rather the way in which the density is organized. That is, areas where there are low standards of mental and physical health do have high densities but also have little order or system to control the density. Order and chaos become two kinds of density to study."

In one of the only general

books published on the subject of human population density, The Hidden Dimension, anthropologist Edward T. Hall makes a strong plea for research into and consequent understanding of man's spatial needs. These needs are determined by how man reacts to space, and this reaction in turn is determined by all the senses: sight, hearing, touch (including a sense of body heat), taste, smell. Different cultures react differently to these senses, and only research will show how much space each person needs. Hall cites the work of a French husband and wife scientific team, the Chombard de Lauwes. They compiled data on crowding and its consequences in urban housing. Using an index that measured the number of square meters per person per unit, they found that, when the available space was below 8 to 10 meters per person (about 25' by 25'), the incidence of social and physical illness doubled. Surprisingly, the Lauwes found that the incidence of illness also increased when the space available rose above 14 square meters. They were hard pressed to explain this latter finding, and could only theorize that the families in the second category were upwardly mobile and devoted more time to work than to their families. But the important fact is that, as Hall points out, "Illness, crime, and crowding were definitely linked." With typical scientific caution, Hall goes on: "There is nothing magic about 10 to 13 square meters of space. This figure is only applicable to a very limited segment of the French population at a particular time at a particular place and has no demonstrable relevance to any other population.... It is absolutely essential that we learn more about how to compute the maximum, minimum, and optimum density of the different cultural enclaves that make up our cities . . . I think it will ultimately be proved that scale is a key factor in planning towns, neighborhoods, and housing developments. Most important, urban scale must be consistent with ethnic scale, since each ethnic group seems to have developed its own scale."

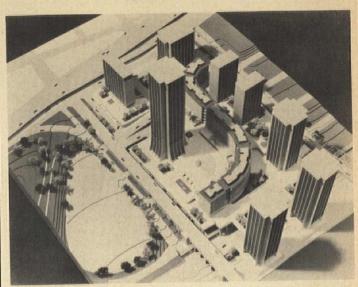
At a time when architects talk increasingly about the need for help from other disciplines, the time has come for less talk and more action. Dr. Hall spoke recently at the Conference of the California Council, AIA. Although this is an encouraging step, it is not enough. Psychologists, anthropologists, and ethnologists should be made consulting members of the design team. The plight of Dr. Robert Beck is unfortunately both common and unique. Few planning agencies have the kind of professional consultants Beck represents. To have had one and to have lost him is defeat on the brink of success.

ing that now adjoins the museum will contain the Justin K. Thannhauser Collection of impressionist and 20th-Century paintings. Exhibit space will be increased by one-third. Designer of the addition is

lindrical administration build-

William Wesley Peters, one of the foremost disciples of Frank Lloyd Wright and Chief Architect of the Frank Lloyd Wright Foundation. Peters says his design conforms to Wright's own ideas for the museum as he originally conceived them. The annex will rest on 13 pylons on the northwest corner of the museum site. Shown is the model of 'the structure originally planned; except for the height, the revised design is essentially the same.

ARCH ENEMY



Photos: Schwarz & Van Hoefen, Architects



crease by 100 times the city's tax base for the area. They selected the plan as the "most desirable of five basic urban renewal concepts." "Most desirable" to whom? If the project goes ahead, there will be 3578 apartments to fill, a performing arts theater, cinema, art gallery, bowling alley, supermarket, interdenominational chapel, skating rink, library, and off-street parking for 5000 cars. All commendable; given some architectural value it might be worthwhile. Acquisition of the land is expected to take two years. And the \$100 million cost of land and construction is expected to be carried by Federal and private funds, with no dependence on the city.

Architects are Schwarz & Van Hoefen.

NEW OFFICE BUILDING FOR GUGGENHEIM

NEW YORK, N.Y. An attempt by local residents to halt plans for the construction of a threeand-a-half-story addition to the Solomon R. Guggenheim Museum, designed by Frank Lloyd Wright, has been only partially successful. The new structure was planned and approved by New York's Board of Standards and Appeals in 1963, despite protests by a group led by Mrs. Martin Opperman, a resident of the neighborhood who holds a degree in architecture. Now, however, most neighbors of Wright's Museum have been placated by the announcement that financial considerations have induced the museum authorities to alter the plans,



Photo: Courtesy, Solomon R. Guggenheim Museum

building only a two-story structure. According to spokesmen for the museum, this should still provide sufficient space to house all administrative facilities, freeing the top two ramps of the main building for exhibits. The cycommunity in a downtown area. Unfortunately, they are not following these precepts well, for the plan they released in late October has little to distinguish it architecturally. Although the plan calls for open spaces between buildings, the spaces lack adequate definition, and are in danger of being uninviting, if the plan is executed. The buildings themselves, varying in height from 12 to 51 stories, are spaced with little imagination, and tied together by an Sshaped 12-story apartment building that snakes through the center of the site, as if some giant hand had accidentally dropped a huge Studebaker emblem in the midst of a housing development. According to the developers, the project would in-

ST. LOUIS, MO. Just upstream

from Eero Saarinen's Gate-

way Arch is a 22.5-acre site

that will be bought up for re-

newal. The developers, the

River Center Redevelopment

Corporation, are following the

best precepts of current urban

renewal theory. They are mak-

ing use of the waterfront, and they are providing a multiuse

INFORMATION SOURCE ON ART-ARCHITECTURE COLLABORATION

DELFT, HOLLAND. Professor A. M. Hammacher of the Department of Architecture at the Technical University in Delft is compiling international documentation on the relation between art and architecture. He hopes to provide a clearing house for information in this field, and urges contributions from both architects and artists.

With the scope of architecture enlarging, Hammacher feels it is increasingly important that architect and artist should better understand each other. "There must be research into the influence of art on space," he states. "Every new chance to realize this relation and to clarify it can be seen as an individual case in the collaboration between artist and architect." Specifically, he is seeking: information on projects in the design stage; photos and exact data (measurements, materials, dates) on completed projects; names and addresses of architects and artists who have worked on related projects. Hammacher's address is: Technische Hogeschool, Afdeling der Bouwkunde, Oude Delft 75, Delft, Holland.

FLOODS SULLY ITALIAN ARCHITECTURAL HERITAGE

FLORENCE, ITALY. As the rainswollen waters of the River Arno receded last month after a week-long rampage through Florence, they left ruin and despair in their wake. Architectural landmarks that had stood unmarked for centuries emerged ravaged and bruised. More than 600 paintings were stained by mud and water. "The destruction is incalculable," noted Piero Bergellini, the mayor of Florence. "Not even the war, not all of the last war, wrought so much destruction on Florence as the water of the Arno River." Superintendent Ugo Procacci of the Uffizi Gallery and his close friend Carlo Ludovico Ragghianti, curator of the Palazzo Strozzi, were in tears.

At the Uffizi Gallery, Giotto's "The Wedding of St. Catherine" and a Botticelli

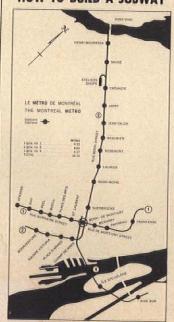
triptych will have to be restored, together with about 50 other paintings. More than 200 paintings will have to be cleaned.

Among the architectural works damaged were the Baptistry of St. John, the Ponte Vecchio, whose picturesque shops will have to be replaced, and the church of Santa Croce. In the Baptistry, the Pisano doors were badly cracked, and five of the ten scenes on Ghiberti's "Door of Paradise" must be either repaired or replaced.

But Florence was not the only Italian town struck by the deluge. Throughout northern Italy, more than 100 persons were killed, and total damage was estimated at \$2,400,000,000. Venice had tides 7' above normal.

Offers of help came from all over the world. The U.S. sent a team of 16 art-restoration experts to give temporary aid to the work, which, according to Ragghianti, "will take many, many years." A Committee to Rescue Italian Art is being formed, and is headed, in this country, by Professor Bates Lowry of Brown University.

HOW TO BUILD A SUBWAY



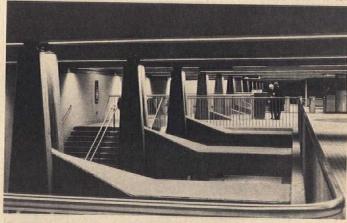
MONTREAL, CANADA. Montreal has been talking about building a subway since 1910. In October 1966, two of three proposed lines of the Montreal subway opened for business, and some North American cities that have talked about installing subways for almost as long are looking carefully

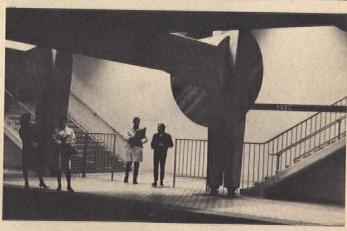
at the new system. Several features make it worth watching: For one thing, its station stops were designed by architects. Sixteen sections are the work of local architects; 10 more were done by the city's architectural department. Stations are spacious (most are two

lines. Workmen broke ground in May 1962, and the lines started carrying passengers in October of this year. By the opening of Expo '67 next April, the subway's third line (line 4), connecting the fair to the city, will be in operation. A fourth spur, running



Photos: Forrest Wilson





stories high) and well lit; each has a different décor. For another thing, the system's newly designed trains run on rubber tires.

When Jean Drapeau became Mayor of Montreal in 1960, he pledged construction of a subway. From that point on, things happened fast. In November 1961, the City Council gave its blessing to the plan and appropriated \$132 million for the first two

under Mount Royal, will open at an as yet unspecified date.

On a typical weekday, the subway is expected to handle 400,000 passengers. (As a result of the new transportation system, the city recently sold 100 used trolley buses to Chicago.) Passengers now using the system report a quick, quiet, clean ride. Escalators take passengers to and from station platforms when the platform-to-street distance exceeds 12'. In general, the use of rubber tires on the cars permitted station construction close to the surface, because the rubber-wheeled trains can negotiate a steeper grade than their steel-wheeled counterparts. From the stations, subway tracks lead downward at angles up to 6% through tunnels that are farther below ground than the stations. Above ground, all entrances are built into existing or planned structures, eliminating a need for unsightly kiosks.

French engineers who were consulted on the project talked the city into using rubber tires. Although still a matter of controversy, Montreal engineers feel these tires provide a quieter, more stable ride, that the stopping efficiency of trains is increased, and that they allow trains better to negotiate sharp turns. Evidently, the tires squeel on turns, but the noise level never approaches that of steel on steel.

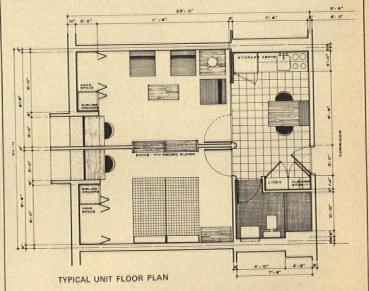
All financing of the system so far has been done by city loans. At three successive meetings, the City Council appropriated \$213,700,000 — \$153,000,000 for tunnel construction and track work, and \$61,700,000 for rolling stock and accessories.

Mayor Drapeau has provided Montreal with the sort of leadership that might well be envied by his counterparts in the U.S., who tend to devote more time and energy to talking than taking effective action.

Montrealers are pleased with their Metro. At the polls in October, they elected Mayor Drapeau to a second term with 95% of the vote.

UTILITIES

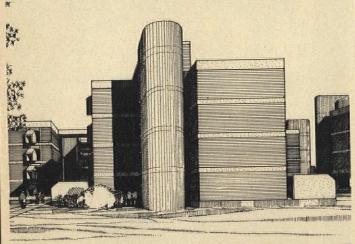
their law campus is composed of three parts: an academic structure with library, classrooms, auditorium, and faculty offices; a commons facility with dining room, bookstore, and snack area; and housing. Parking is provided on the east and west sides of running in bands through the building's red brick walls. Just to the south of the commons are two groupings of housing, each consisting of four buildings arranged in radial arms around a central open area. Each dormitory room, complete with bath and galley,



the site. In the center, between the parking areas, are the buildings that make up the law campus, isolated from the automobile, surrounded by trees, and connected by walkways. At the heart of the site are the commons buildings, a focal point of activity and a beacon of constant central light at night. Between the commons and the academic buildings is a paved, central courtyard, flanked by covered galleries. In these buildings, the stair towers are articulated of a textured concrete. Concrete framing is left exposed, can accommodate two students or a married couple (see plan).

Most noticeable results of the research the architects have done in classroom planning is seen in the auditorium. When sliding panel walls are closed, the auditorium becomes seven classrooms, two seating 75 students, four seating 100, and one seating 200 When the panels are pulled aside, varying combinations of auditorium-classroom space become available. The architects see the use of this space being determined by com-

LAW CENTER FOR FLORIDA UNIVERSITY



GAINESVILLE, FLA. For years, Miami architects Pancoast, Ferendino, Grafton, and Skeele experimented with educational facilities. They conducted seminars, interviews, did research, and wrote reports on the use and arrangement of classrooms and school buildings. Putting their research into practice, they built many schools in southern Florida. But their work was merely a preparation. They never had a project in which they could incorporate everything they had learned. Never, that is, until they gained a commission to design a Law Center for the University of Florida. Earlier this fall, their design won an Honor Award from the Florida Association of the AIA.

The University of Florida



expects its law school enrollment to double by 1968, and, accordingly, the law faculty was given a wooded site on the northwest corner of the campus for a center that would combine facilities for housing, teaching, and re-search. Architects Pancoast, Ferendino, Grafton, and Skeele designed a plan that avoids the clichés of campus arrangements. Essentially, puter. The 200-seat portion of the auditorium will be furnished as an appellate courtroom, and each student in this section will sit in a swivel seat at a fixed work desk.

It is already apparent that

the years of planning have paid off. The budget for the academic building, which will be the first to go up, was \$19 per sq ft. Bids went out in late October, and the low bid came in at \$18.90 per sq ft.

THEATER ON THE SKYLINE

SAN ANTONIO, TEX. The Ruth Taylor theater, opened on the Skyline campus of Trinity University here in late October, is called by its managing director, Paul Baker, "the first truly American theater." Designed by architects O'Neil Ford and Bartlett Cocke, it has six levels, taking advantage of a hillside site, and three distinct stage areas. Largest of these theaters is the 412-seat Theater One (middle photo), with a total frontage of 110'. Its horseshoe-shaped stage surrounds three sides of the auditorium floor, where 140 swivel chairs are located. A spectator in any one of these seats can swivel to follow the action as it moves from one area of the stage to another. Behind these seats are 186 seats fixed on risers and in the balcony are 86 more.

The second theater, Attic Two, seats 108 persons for smaller productions. And the Cafe Theater seats 100 for after-show entertainment. In addition, the building's 55,000-sq-ft house classrooms, diction booths, a costume shop, study halls, set design shops, dressing rooms, offices, rehearsal rooms, a children's theater area, art room and ticket booths.

Under construction for two years, the theater is the third building in a fine arts complex at Trinity. Already in use are the Ruth Taylor Music Center and the Ruth Taylor Art







Building. And it is the thirtyeighth structure built on the Trinity Skyline campus since 1952.

Funds for the \$1,300,000 theater were donated by the Ruth and Vernon Taylor Foundation.

PERSONALITIES

Richard H. Tatlow, III, will hold the position of presidentelect of the American Society of Civil Engineers. Tatlow, who is president of the architectural firm of Abbott, Merkt & Company, New York City, will be the first to occupy this office . . . President of the Philadelphia Chapter of the AIA for 1967 is Louis deMoll, partner in the Ballinger Com-

pany . . . Newly elected president of the New York State Association of Architects is Fay A. Evens, Jr., who is a practicing architect in Troy, N.Y. . . . Howard Morgridge, a principal in the firm of Morgridge, Richards & Coghlan of Los Angeles, is to be the new president of the California Council, AIA . . . The presentation of an Achievement Award to Mrs. Lyndon B. Johnson for her national beautification program was the highlight of the National Convention of the American Society of Registered Architects, held in Cleveland . . . A jury of five has been selected to judge entries in the AIA's 1967 Honor Awards Program. Members are James M. Hunter of Boulder, Colo., chairman; R. Max Brooks of Austin, Tex.; Vladimir Ossipoff of Honolulu; Joseph N. Smith of Atlanta, Ga., and Philip Will, Jr., of Chicago, Ill. David N. Yerkes of Washington, D.C. will advise the jury . . . Morris Ketchum, Jr., past president of the AIA, has received the French gov-

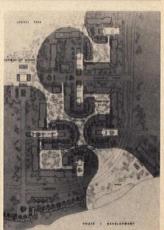
ernment's highest honor in the field of humanities. He is the first American architect to be named a Chevalier de l'Ordre des Arts et Lettres . . . The East Bay and northern California chapters of the Women's Architectural League have honored Norman K. Blanchard of St. Helena, Calif. He founded the league 25 years ago . . . The Library of Architecture and Allied Arts, Los Angeles, Calif., has elected its immediate past president, David J. Witmer, to the office of chairman of the board. Witmer, member of the firm of Witmer & Pidgeon, architects, was honored for his contributions to the library by the board of directors.

A NEW TOWN, WITHIN A CITY



MONTREAL, CANADA. As Montreal's Expo '67 gets underway next spring on an island in the St. Lawrence River, another island just upstream will become the scene of construction activity, which may have just as much effect on the future of Montreal. On Nun's Island, a 1000-acre area just 10 minutes by car from the downtown business district, work will get underway on the first stage of what will become a community of 50,000 persons. A Chicago real-estate firm, Metropolitan Structures, Inc., has a 99-year lease on the island; and a recently completed bridge, linking Verdun, a Montreal suburb, with the south shore of the river, cuts across the island, making it a prime spot for development.

Initial work will concentrate on 800 town house and apartment dwelling units to be designed by Mies van der Rohe and Stanley Tigerman of Chicago, and by Philip David



Bobrow of Montreal. Over-all planning is being done by Johnson, Johnson & Roy of Ann Arbor, Mich.

Until 1957, the island was occupied by the Sisters of the Congregation of Notre-Dame. In 1956, it was purchased by the Quebec Home and Mortgage Corporation, Ltd., who leased it to Metropolitan Structures.

Eventually, Nun's Island



will be a city within a city, complete with schools, shopping facilities, industry, and recreation areas. What makes it different from other new towns throughout the world is its proximity to an established metropolis. Few other cities still have 1000 acres of open land so close to the city limits. Obviously, this juxtaposition was a boon to the developers, for the city of Verdun is running water, sewage, and telephone facilities to the island, and will also provide schools and other public facilities. Furthermore, Metropolitan Structures is getting a complicated tax incentive from the city.

Development of the island was discouraged until recently, both because of the lack of a road link to the island off Montreal and because of flooding. Ice jams forming downstream had backed up river water each winter, but construction of a \$14 million ice-control structure has stopped this. Even so, the upriver end of the island, set aside for golf courses, parks, and other recreational facilities, will be diked.

Concept for the first cluster of housing shows both highand low-rise structures grouped around central greens. Mies has designed the high-rise apartment. Tigerman is responsible for the lowrise, cluster-type town houses. Wisely, the planners have situated houses along the riverfront, and meandering roads are planned that will keep the automobile from intruding upon the community. Roads are being financed by a Verdun municipal bond issue.

When completed in 15 to 20 years, the project will have cost Metropolitan Structures about \$300 million.

CALENDAR

The Winter Meeting of the National Society of Professional Engineers will be held January 4-7, 1967, in the Americana Hotel, San Juan, P.R. . . . The Architectural Aluminum Manufacturers Association has planned its Committee Week for January 23-27, 1967, at the Chisca Plaza Motel, Memphis, Tenn. . . . Management and Technology will be the theme of the Plant **Engineering and Maintenance** Show and Conference to be held in Chicago, January 30-February 2, 1967. This year, a special area will be devoted exclusively to products and services for the building industry, and all evening sessions of the conference will concern the industrial building industry. For registration and other information, write Clapp & Poliak, Inc., 341 Madison Avenue, New York, N.Y. 10017 . . . Also on

January 30-February 2, the 18th International Heating and Air-Conditioning Exposition will be held at Cobo Hall, Detroit, Mich. Write for further details to E.K. Stevens. International Exposition Company, 200 Park Avenue, New York, N.Y. 10017 . . . A series of five one-day seminars will be held by Bolt, Beranek & Newman, Inc., at BBN's offices in Cambridge and New York. Sessions include one on lighting, in Cambridge, Mass., January 7, and in New York on January 21; one with the theme of "structures," to be held in Cambridge on February 4, and in New York on February 18; and one on computers, in Cambridge on March 4, 1967, and in New York March 18. Details are available from Bolt, Beranek & Newman, Inc., 50 Moulton Street, Cambridge, Mass.

JOHNSON IN POLITICAL FORAY

NEW CANAAN, CONN. Architect Philip Johnson waged a losing battle last month for a seat in the Connecticut General Assembly. Running here in his heavily Republican home town, Democrat Johnson polled only slightly more than a third of the votes cast. His reason for running was "to make the Democratic party more palatable" in New Canaan. But his campaign had one note: the need for plan-

ning in Connecticut. He pumped hard for controls on water and air pollution and better use of open space. He hoped to find out whether these things were of interest to general voters. "Obviously they aren't," he told P/A. "Voters are more interested in things like the PTA." One fears that this interest—or rather lack of it—carries far beyond the land of New Canaan.

WESTERN MOUNTAIN AWARDS







SANTA FE, N. M. At the first joint conference of Rocky Mountain architects and interior designers held here October 12-15, architectural awards went to six Western Mountain Region firms. States represented in the Western Mountain Region of the AIA are New Mexico, Arizona, Utah, Colorado,

Wyoming, and Montana. Honor award went to the Denver firm of Moore & Bush for the Resources, Inc., office building (1).

Architectural merit awards went to: Scott & Louis of Salt Lake City for the East Elementary School building in Tooele, Utah (2); the firm of Harvey S. Hoshour, Albu-

querque, N.M., for the First Unitarian Church of Albuquerque (3); the firm of Charles A. Haertling of Boulder, Colo., for the residence of Dr. Robert Willard in Boulder (4); Cain, Nelson & Wares of Tucson, Ariz., for the First National Bank Building in Tucson (5); the firm of Bennie M. Gonzales of Phoenix, Ariz., for the Rush Memorial Medical Building, Phoenix (6).

An award for interior de-







sign from the American Institute of Interior Designers went to the Denver architectural firm of Dick Heraty for The Seven Levels Inn, a ski lodge at Teton Village, Wyo.

CALIFORNIA ARCHITECT TURNS THESPIAN

SAN FRANCISCO, CALIF. Crazy Quilt, a very funny, low-budget movie, filmed in and around San Francisco, is notable for, among other things, the cinematic acting debut of Robert Marquis, current president of the Northern California Chapter of the AIA. Marquis plays a dancing psychiatrist who strokes his beard, looks lecherously at his voluptuous patient, and gambols with her in the park. His performance is delightful, and so is the movie.

Crazy Quilt is the first fulllength film of John Korty, a 29-year-old San Franciscoan who adapted the script from a short story, "The Illusionless Man and the Visionary Maid," by Allen Wheelis. Korty produced, directed, photographed, and edited the film himself. And as if that weren't enough display of talent for one family, he persuaded his brother, Doug, to play the roll of Falbuck Wheeling, an unwashed, unshaved motorcyclist who talks only in monosyllables and only about his motorcycle.

The story, which is presented as a fable and is narrated by Burgess Meredith, tells of the love and the lack of it in the marriage of a man (played by Tom Rosqui) who has no illusions, and a maid (Ina Mela) who quests for love and warmth and affection. The man is a termite ex-



terminator, turned construction worker, who builds several of his own houses, any one of which is enough to make an architect nod in amused understanding. Let it be said that the night we saw the film, the lady next to us couldn't stop laughing.

In a letter to P/A, Bob Marquis wrote: "Be sure to see my debut in this new and promising career; urge your staff and friends to see it also (especially since I own stock)." We doubt that Marquis, principal in the San Francisco firm of Marquis & Stoller, is actually contemplating a new career, but, as a hobby, his acting is a happy pursuit. It reverses a California trend in which one is supposed to be an actor first, then take up another career.

Imagine being able to turn from the T-square to a romp across the grass with someone as winning as Ina Mela.

WASHINGTON/FINANCIAL NEWS

BY E. E. HALMOS, JR.

The final session of the 89th Congress enacted five or more pieces of legislation that promise to have a broad impact on the profession. Several of these deserve study:

The legislation created the new Department of Transportation; set up further aids to construction of educational facilities; aids for construction of libraries; amendments to stream-pollution control measures; the controversial "Demonstration Cities" program; cut-backs in tax-deductions for new construction.

(The Demonstration Cities bill - see last month's column - survived a bitter attack on some of its provisions; the tax cut-back also was modified to allow for smaller buildings and pollution control works construction.)

Effect of creation of a new Transportation Department will be somewhat indirect for architects - more on the level of policy making than actual control of activities and planning on the site. Obviously, consolidation of agencies such as the Bureau of Public Roads, the Coast Guard, Federal Aviation Agency, and others under a single administrative tent will probably result in an attempt to impose a uniform policy on architectural and engineering services involved.

One thing should be clear at the outset: As set up by Congress (PL 89-562), the Department is potentially an administrative impossibility, and moves will certainly be made next session for changes. Problem centers around the fact that, in order to placate dissenters, Congress set up the heads of the formerly independent agencies as Presidential appointees (with Congressional consent); thus they could, in effect, thumb their noses at the new Secretary. (This is the same situation that forced consolidation of the semiautonomous agencies that constituted the former Housing and Home Finance Agency.)

Big field for architects under the new agency will be in planning functions - attempts to merge efforts in urban planning, mass transportation, highway-air-rail safety into some sort of a coherent whole.

On returning from his Far Eastern tour, the President named Alan S. Boyd Secretary of the new department. Boyd moves up to the new post from his position as Under Secretary of Commerce. He is also former chairman of the Civil Aeronautics Board. Boyd's new job is obviously not an easy one. Only a strong-handed administrator can bring cohesion to a many faceted department that, at birth, has some 100,000 employees and more than \$6 billion in appropriations.

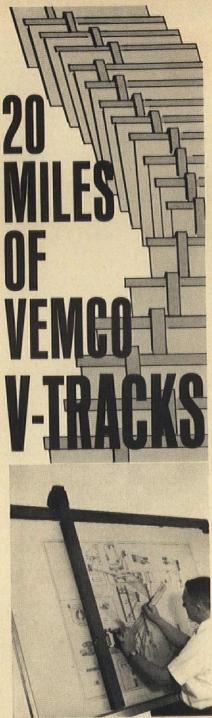
Huge sums of money for construction and planning are included in the group of education-aid measures enacted: \$300 million for construction of graduate facilities under the Higher Education Act; \$310 million for library services and construction (through 1971); \$105 million over five years for grants to improve medical library facilities and services; \$1,400,000,000 for elementary and secondary education aids - including construction, as well as other purposes.

Amendments to existing stream-pollution control laws upped spending for construction loans and grants to \$3,-400,000,000 over four years, provided for broad-gage areawide planning, called for a number of studies of pollution and possible control measures. Most significantly, the Interior Secretary is also instructed to study incentives including tax deductions for industry.

Architects' Fees - The running battle between the Federal Government and architects and engineers over current 6% limitations on fees hasn't quieted down with Congress' departure from the capital.

Reason: Before packing its bags, Congress ordered its fiscal watchdog (the General Accounting Office) to look into the fee situation on a Government-wide basis, and to come in with some recommendations next year.

Architects and other professionals have long argued



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On Readers' Service Card, Circle No. 423

that the now 27-year-old 6% fee limitation is obsolete and is in fact detrimental to the professions as well as to the Government. The current investigation by GAO is an outgrowth of these complaints, strengthened by new battles over fees allowed by the Farmers Home Administration.

Taking the lead in the discussion, the AIA last month submitted a "position paper" to GAO, urging repeal of the limitation on fees, arguing that: (1) cost of architectural services has risen faster than costs of construction, because of complexity of modern buildings and component systems; (2) with the low fees, architects can't allow as much time for research and design as a project should have; (3) increasing probability of financial loss - due to low fees, frequently long timelapses between conception and completion of projects -"works against the best interests" of the Government because of loss of interest among architects in Federal projects.

Engineers have made similar comments.

Prospects are that GAO's report to Congress next year will suggest increases, or some sliding scale for such fees. Whether Congress goes along depends, to some extent, on its new composition (after last month's elections), and how Congressmen read the trends on need for further economy in Government.

Who's to Blame? — The influential Associated General Contractors has taken a carefully noncommittal official view of AIA's revisions to its "General Conditions of Contract for Construction," after AGC's directors failed to endorse the changes (Document A201) at a recent meeting.

Bothering the builders were the provisions of the new document that would require the contractor to "hold harmless" the owner and architect of all legal claims for injury to an employee or member of the public, or for damage to properties near the construction site, if such damage is caused in whole or in part by any negligent act or omission of the contractor or subcontractor [see IT'S THE LAW, OC-TOBER, NOVEMBER, DECEM-BER 1966 P/A].

AGC carefully advised its members of the board's failure to endorse the new document; and suggested that contractors (1) check legal effects of the document with their attorneys; (2) review the provisions with their insurance carriers; (3) push local chapters to "obtain cooperation of local architects in removing or modifying the objectionable 'hold harmless' clause."

Cautioned AGC: "Many local architects are not fully aware of the wording and legal effect of the revised Form A201."

Financial — Biggest factor in the financial picture for construction - and most other business activities - for the coming year was the final total of funds appropriated or authorized for the coming year by Congress. Best estimates put the figure at more than \$120 billion for all purposes — a far cry from the President's \$102 billion budget last January. The enormous spending total (bolstered by mounting costs of war in the Far East and numerous "Great Society" programs) had to presage either a cutback in spending next year, a tax increase, or both. (The Budget Bureau has already said it will try to chop \$3 billion out of public works spending next year, despite Congressional actions.)

□ With the huge spending increases, construction costs kept mounting. Best indicator in Washington is the Bureau of Public Roads' quarterly index on highway construction prices, which jumped another 1.7% in the third quarter, to reach new all-time high (at 115.6% of 1957–58 prices). Since the beginning of 1966, the index has risen a total of 8.3% — far and away the biggest cost rises since the index was started.

☐ Beginning to show the effects of tighter money and higher prices, total value of new construction put in place for September was set at \$6,700,000,000 — 1% below a year ago, the first time the Census Bureau's figures have shown any decline at all for more than two years. Housing continued the weakest spot, running at a rate of 1,073,000 units for September, down 2.6% from August of this year, and 15% under July.



KING COUNTY MEDICAL SERVICE BUILDING; Architect: GRANT COPELAND & CHERVENAK; General Contractor: BAUGH CONSTRUCTION CO.; "Incor" Cement Precast Units: OLYMPIAN STONE CO. (All of Seattle, Washington)

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SEATTLE PACIFIC COLLEGE LIBRARY; Architect: DURHAM, ANDERSON & FREED; Sculptor: HAROLD BALASZ; General Contractor: BRAZIER CONSTRUCTION CO.; "Incor" Cement Precast Units: OLYMPIAN STONE CO. (All of Seattle, Washington)

Two brilliant examples of precast concrete in Seattle are the King County Medical Service Building, above, and the Library Building at Seattle Pacific College, below.

The use of lightweight concrete saved 150 tons of facing weight in the precast window wall units for the new Medical Building. These 844 precast units are each one story high and three feet wide, and have built-in grooves for the window frames.

The College Library shows the visual impact of concrete murals, designed as an integral part of the structure. The specially designed precast concrete units have an exposed surface of Steilacoom pebble aggregate.

Lone Star's performance-proved "Incor," America's first high early strength portland cement, was used exclusively for both of these outstanding precast jobs. Lone Star Cement Corp., 100 Park Ave., New York, N.Y. 10017.







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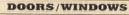


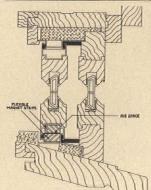
Perlite lightens roof panels. High strength and low density of reinforced concrete roof slabs made with perlite aggregate are said to offer good insulating and acoustical properties. "Tuflon" panels, 2' x 4' or 24" x 32" in varying thicknesses, provide an interior surface that may be painted or left exposed; top side has smooth surface ready for conventional roofing. Illinois Brick Co., 228 N. La Salle St., Chicago, Ill. 60601.

Circle 100, Readers' Service Card

Adhesive family. A group of thermoplastic and thermosetting adhesives, with tensile shear strengths up to 3000 psi, solve the "cost, critical cleaning, and sensitive handling problems which up to now have inhibited metal-to-metal bonding." The thermosetting adhesive will adhere to lightly oiled steel, according to a company spokesman, who adds that one of the outstanding characteristics of the new adhesives is their compatibility with galvanized steel. Photo shows (top to bottom) bottles containing two-part thermosetting adhesive, steel studs bonded to gypsumboard (this application has met with Federal Housing Administration approval), sandwich panel,

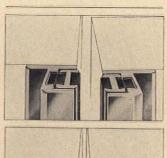
plywood and steel panel, and roll of thermoplastic adhesive. United States Steel Corporation, 525 William Penn Place, Pittsburgh, Pa. 15230.





Magnets repel. Windows slide horizontally on an air cushion formed by the repelling force of two magnetized plastic strips - one installed in the sill, the other on the underside of the sash (see drawing). The strength of the magnetic field floats "Kushion-Aire" doubleglazed, 28-lb wooden window a fraction of an inch above the track; thus, there are no moving mechanical parts and no maintenance, claims manufacturer. The company is also developing a sliding patio door to operate on the same principle. Weather-Seal, Inc., Barberton, Ohio.

Circle 101, Readers' Service Card

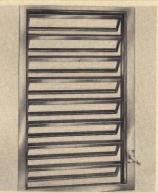




Magnets attract. Floating plungers, faced with magnetized vinyl, form weatherseals for doors. "Magnetic Astragals" align themselves automatically, says the manufacturer, and provide a firm weatherseal that adjusts itself upon installation and during

any subsequent variation of door alignment. Plungers are said to separate quickly when door is opened, thus keeping friction wear to a minimum. Available in satin anodized aluminum and Duranodic finishes, the Magnetic Astragals may be used with magnetic aluminum and stainless-steel thresholds to form a complete weatherseal. The Michaels Art Bronze Co., Inc., Erlanger, Ky.

Circle 102, Readers' Service Card



Escape-proof windows. Awning-type ventilators for penal institutions operate by a single, removable hand crank. Windows open a maximum of 45°, and hinge on tool-resisting pivotal bars spaced 6" or 7" apart. The William Bayley Co., Springfield, Ohio 45501. Circle 103, Readers' Service Card

FINISHES PROTECTORS



Waterproofing solution. "Chemstop" is a clear, transparent solution of chemical solids in a hydrocarbon solvent. Because it contains no silicones, manufacturer says it will not affect glass, nor etch or cloud polished surfaces; and paint can be applied over it without any special preparation. Liquid penetrates concrete and masonry surfaces, becoming a part of the material treated. Spray-on appli-

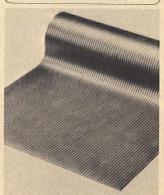
cation. Suitable for above and below grade. Tamms Industries, Paint & Building Products Div., 8000 Joliet Rd., Lyons, Ill. 60534.

Circle 104, Readers' Service Card

Glass coating. Two-part solventless-type epoxy coating contains very fine glass "flakes." Sprayed onto interior masonry or concrete walls, certain hardboards or blasted steel, it is said to form a surface that looks and feels like tile, but is less costly. A coat as thick as 6 mils can be applied in one operation. Suitable for schools, shower rooms, laundries, ships, hospitals, etc. Armstrong Paint & Varnish Works, Inc., 1330 S. Kilbourn Ave., Chicago, Ill. 60623.

Circle 105, Readers' Service Card

FURNISHINGS



Ezykleen spike-resistant matting of Koroseal vinyl protects floors subjected to spike shoes and any other rough treatment (locker rooms, pro shops, bars). It is grease- and oil-resistant, as well as spikeresistant. Matting has a widespaced rib surface. The material is 1/4" thick and made in 25 yd rolls, in 24" and 36" widths. Colors available: black, brown, red, green, beige, gray. The R. C. Musson Rubber Company, 1320 E. Archwood Ave., Akron, Ohio 44306

Circle 106, Readers' Service Card

DuPont's "Tontine" window shades, of vinyl-coated canvas, now come in three new colors to fit institutional needs. The washable, flameresistant, color-fast shades come in widths up to 70". Among possible installations are combination "pull up" and "pull down" shades, to prevent both glare and distraction.

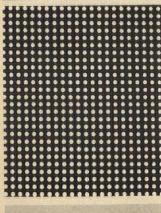
E.I. du Pont de Nemours & Co., Inc., WT 902, Wilmington, Del. 19898.

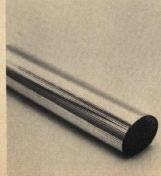
Circle 107, Readers' Service Card



Side-by-side refrigeratorfreezers have "Instant Cold" systems for fast recovery of food-keeping temperatures, and "Power Saver" to make "No-Frost" units as economical to operate as comparable automatic defrost models. The unit has 12 cu ft of refrigerator volume and an adjacent 7-cu-ft freezer that holds 245 lb. Other larger models offer ice-makers. All have fronts available in three simulated wood grains - walnut, birch, maple - or 150 Formica patterns and colors. Philco-Ford Corporation, Tioga and C Streets, Philadelphia, Pa. 19134.

Circle 108, Readers' Service Card





The McCordi Sun-Screen, a metalized mylar film, comes in

patterns that permit varied degrees of light transmission. The sun-screen can be applied directly to windows, using a water-activated adhesive, or can be used to make lightcontrolling screens or shades. Exterior metallic side conceals a room interior, but, from the inside, one can distinguish outside colors. Custom patterns available upon request. The McCordi Corporation, 707 Fenimore Road, Mamaroneck, N.Y. 10544.

Circle 109, Readers' Service Card





British furniture invasion. Engineering craftsmanship enhances design of furniture from England. Sturdy lift-up writing table attached to backs of lecture-room seating operates on a pleasingly simple principle: table slides to horizontal position on heavyduty pins and is held steady by fitting up under the brackets. Comfortable seats (designed by Peter Dickinson) get their tilt-up action from counterbalancing, rather than spring mechanisms. Dining group by architect Max Clendinning (chairs surprisingly comfortable) is part of a painted plywood line. All pieces, including sectional sofas and easy chairs with colorful puffy foam cushions, can be shipped knocked down. Normal delivery on the lecture-room seating; two to three months for other designs until factory gets into full production. All designs are from Race Furniture Company, to be manufactured under license in this country by JG Furniture Co., Inc., 160 E. 56th St., New York, N.Y.

Circle 110, Readers' Service Card



Ornamental translucent panels for outdoor applications come in acrylic - or polystyrene for indoor use. Each is available in a choice of three patterns: leather-grained "Morocco," ice-crackled "Glacial," and textured-roundel "Bottle Bottom." Patterns are executed in shades of amber, ice blue, and olive green. A fine-tooth saw effectively cuts the material to fit cabinets, entrances, bathrooms, suspended ceilings, etc.; standard framing materials, adhesives, or screws will secure the panels. Leigh Products Inc., Coopersville, Mich. Circle 111, Readers' Service Card

LIGHTING



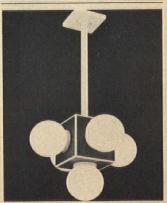
Tweedy ceiling. Over-all louvered pattern of luminous ceiling is uninterrupted by divider strips or hanging grids. Hanging runners (see photo) integrate with 2' x 2' panels, since louver blades and runners are both fabricated from the same white-enameled, .032"-thick aluminum. "Infinitex" is said to install easily around columns and other irregular shapes. Designed for use with standard fluorescent strip fixtures, the panels are noncombustible, smokeless, and nonvellowing; they may be removed for cleaning and relamping. Integrated Ceilings, Inc., 11766 W. Pico Blvd., Los Angeles, Calif. 90064.

Circle 112, Readers' Service Card



Hidden housing. Recessed, low surface brightness fixtures are designed to produce a fairly high level of illumination from inconspicuous light sources. Specular black anodized cones may be relamped from either above or below and are available in four sizes for lamps between 100w and 300w. Fixture is one of a group of new designs by Swivelier. Swivelier Co., Inc., Nanuet, N.Y. 10954.

Circle 113, Readers' Service Card



Lighting geometry. Translucent 5" globes combine with cubes (shown), three-dimensional triangles, and other shapes to make fixtures for surface and pendant mounting. Finishes for both outdoors and indoors combine painted or metal-finish housings with vinyl-film panels of cherry or American walnut grain. Omega Lighting, Inc., 99 Park Ave., New York, N.Y. 10016.

Circle 114, Readers' Service Card



Specifications and Load Tables for High Strength Open Web and Longspan Steel Joists

It's the Steel Joist Institute's practical working handbook of everything you need to specify joists to carry uniform loads on spans up to 96 feet.

The 1967 Edition covers the following joists: J-SERIES, joists made from 36,000 PSI minimum yield strength steel; LJ-SERIES, longspan joists compatible with the J-SERIES; H-SERIES highstrength joists with chord sections made from 50,000 PSI minimum yield strength steel; LH-SERIES high-strength joists with chord and web sections designed on the basis of 36,000



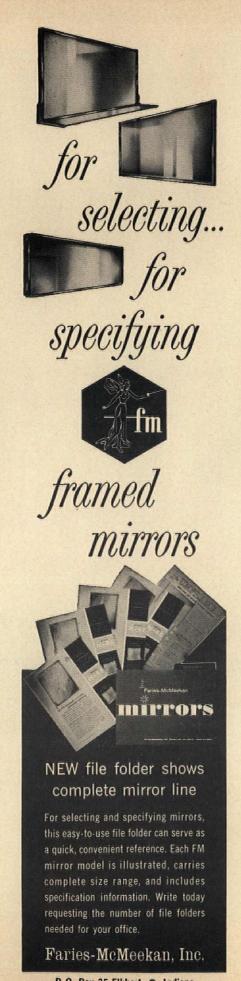
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SANITATION PLUMBING



Electronic faucet. Flow of water starts automatically when hands are held beneath tap. Concealed antenna detects the hands and electronically actuates a valve starting the water; water stops when hands are withdrawn. Manufacturer states that safety is insured by using 12v d-c, maintained by a rectifier. Good for hospitals, doctors' offices, public restrooms, etc. System comprises faucet, antenna plate, electromagnetic valve, and rectifier unit for about \$65. Jud Williams Associates, Inc., Box 262, Califon, N.J. 07830.

Circle 115, Readers' Service Card



A new leaf. Washroom accessory dispenses thin leaves that are all soap - instead of soap-coated paper. Leaves are said to withstand 105° temperatures and 95% humidity. Steel dispensers are available in eight styles for recessed or surface mounting, and will hold 1000 soap leaves. Accessory Specialities, Inc., 42-14 Astoria Blvd., Long Island City, N.Y. 11103.

Circle 116, Readers' Service Card

SERVICES

Up and down staircases in concrete or terrazzo can be built from manufacturer's prefabricated steel forms. Standard components allow

flexibility of design; curved, circular, and standard stairs are manufactured and installed to architects' specifications. Various types of risers, nosings, stringer designs, and rail and newel post mountings. Stairbuilders, Route 66, McCook, Ill. 60525.

Circle 117, Readers' Service Card

SPECIAL EQUIPMENT

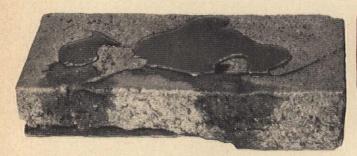
Masonry scrub-down. Liquid cleaner loosens excess mortar and job dirt while controlling vanadium stains on brick, stone, tile, and exposed aggregate. Studies on the cause and control of vanadium stains were the basis for the "Vana-Trol" formula. The Process Solvent Co., Inc., P.O. Box 4437, Kansas City, Kans. 66104.

Circle 118, Readers' Service Card



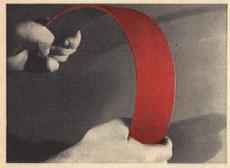
Dual projector compares drawing changes. The "Graphic Comparator," a specially designed, two-part microfilm viewer, superimposes "before" and "after" photo-transparencies or microfilms of plans for checking deletions, additions, or other differences. Lines remaining the same on both drawings show white on the composite image; lines which are on the first card but not on the second (deletions) appear red; and lines which are on the second card but not the first (additions) are green. Controls are provided for size adjustment and vertical, horizontal, and skew alignment of the two images; and the two projectors may be independently focused and dimmed. Unit, 261/4" wide x 30" high x 32" deep, is manufactured under license of General Electric Co., at a list price of approximately \$2500. ISES Corp., 1560 Trapelo Rd., Waltham, Mass. 02154. Circle 119, Readers' Service Card

G-E Silicone Traffic Topping permanently hides unsightly surfaces, permanently protects new ones.





Waterproof. Traffic Topping prevents water penetration and moisture retention damage in concrete and other flooring construction materials. Protects against freezethaw cycles. Repairs previous damage. Ideal for outdoor ramps, platforms, walks, and traffic bearing roofs.



Permanently flexible. Made of silicone rubber, Traffic Topping keeps its resilience indefinitely. Won't harden, soften or become brittle, even at $-65\,^{\circ}\mathrm{F}$ or $300\,^{\circ}\mathrm{F}$. Provides a cushioned walking surface as it protects



Wear resistant. Traffic Topping with-stands wear and abrasion of shoes and vehicles. It's a superior surfacing medium for parking areas, garages, prom-enade decks, and light duty industrial floorings.



Quick, easy application. Traffic Topping adheres securely to most clean flooring construction materials, old or new. Needs no costly equipment. Cures to a tough, weatherproof surface. Looks great too. Six colors available.



Skidproof, too. Even when wet, Traffic Topping's textured surface assures safe, sure traction where it's needed most: pool copings, laundry rooms, public walking areas, tennis courts. And it even makes non-skid stair treads



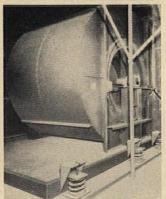
Fights chemicals. Because Traffic Topping resists many chemicals, organic acids, alkalis, salts and oils, it is an ideal surfacing medium for food processing and similar plants, where such materials present a problem.

For complete information and your distributor's name, write Section Q12248, Silicone Products Dept., General Electric Company, Waterford, N. Y. 12188



MFRS' DATA

ACOUSTICS



Vibration study. Protecting lightweight structures from the noise and vibrations of mechanical equipment is a serious problem, especially when equipment is installed on the rooftop close to premium top-floor rental spaces. Laurence Eberhart, author of the study, states that the solution is primarily a matter of designing so that equipment will be out of resonance with the structure, and of selecting effective vibration isolators. Following a discussion of theory and various kinds of noise problems, Eberhart details two practical solutions: floating slabs and concrete inertia bases (shown). Drawings, tables, graphs, and photos illustrate the article. Consolidated Kinetics Corp., 249 Fornof Lane, Columbus, Ohio 43207.

Circle 200, Readers' Service Card

CONSTRUCTION



Wood beams lend personal warmth to any structure, and the impact of their color and texture is probably felt nowhere more quickly than in an institution. How laminated wood beams can be used in schools is described and illustrated in a booklet entitled "Your Dollar's Worth of

School Building." It is interesting to note that, despite its title, the booklet does not discuss costs. It discusses almost everything else about beams and trusses manufactured by Timber Structures, Inc. 16 pages. Color. Timber Structures, Inc., P.O. Box 3782, Portland, Ore. 97208.

Circle 201, Readers' Service Card

Slide-rule type calculator. Design tool aids in figuring amount of expansion, and estimating width of construction joint for polysulfide base sealants. Accompanying 8-page leaflet explains use of calculator, describes polysulfide-base sealant capabilities, and provides guide tables for estimating sealant coverage. Thiokol Chemical Corp., 780 N. Clinton Ave., Trenton, N.J. 08607.

Circle 202, Readers' Service Card



"Copper, Brass and Bronze in Architecture" illustrates the use of these metals in buildings. Color photos and architectural details show how copper, brass, and bronze have been used in window frames, curtain walls, and a Saarinen church spire (shown). Booklet describes finishing processes (mechanical, chemical, and applied coating), joinery and maintenance, and also includes metallic color samples. 24 pages. Copper Development Assn. Inc., 405 Lexington Ave., New York, N. Y. 10017.

Circle 203, Readers' Service Card

Hardwood plywood directory lists mill locations of 61 manufacturers. Tables indicate each mill's panel size limitations; equipment; species of wood; and types of product manufactured. Products listed include doors, block flooring, wall panels and school "components" among others. Hardwood Plywood Manufacturers Assn., P.O. Box 6246, Arlington, Va. 22206.

Circle 204, Readers' Service Card



Hand-made brick. Traditional flaws and color irregularities of colonial days give texture to interior and exterior surfaces; folder illustrates with color photos. 4 pages. Glen-Gery Shale Brick Corp., Dept. H, P.O. Box 206, Shillington, Reading, Pa. 19607.

Circle 205, Readers' Service Card

DOORS/WINDOWS



Doors with solid cores are described in a fold-out chart giving sizes, Federal and commercial standards met, finishing, detailing, guarantees, and cutaway views showing construction of the five flush types. A number of hardwood veneers are available and are also charted by species under sawn, or rotary and plain sliced. Plastic faces may also be specified. Fire and acoustical doors are detailed and also lead- and copper-shielded doors. "Architectural Hardwood Doors and Panels" includes sections on hardware preparation (this may be done at the factory), specifications information, veneer matching, and custom-fabricated doors. 34 pages. Eggers Hardwood Products Corp., Neenah, Wis.

Circle 206, Readers' Service Card

Tri-coated steel. Window-wall units are galvanized, bonderized, and coated with baked enamel in one of eight standard colors. Manufacturer also offers to match any special color specified. Folder contains specifications, color samples, and series of traceable detail sheets for "Spectra-Guard" window wall, Series 365. Carmel Steel Products, 9738 E. Firestone Blvd., Downey, Calif.

Circle 207, Readers' Service Card

FURNISHINGS

Design Ideas with Tiles are explored by Peter Muller-Munk Associates, industrial designers, in a 24-page catalog illustrated with color drawings. Tile, with its old qualities of cleanliness, durability, and low maintenance, is shown in new applications; for instance, to incorporate directional information at eye level, to define wall space in bold contrast to window areas, or to create a visual feeling of wall height with vertical arrangements. Good browsing material for architects. Natco Corporation, Construction Products Div., Box 628, Pittsburgh, Pa. 15230.

Circle 208, Readers' Service Card

Naugahyde's "Posh." Newly introduced fabric has a pigskin-like texture backed with a stretchable, knitted fabric. Manufacturers claim it tailors easily and is cleaned effectively with soap and water. Swatches of 20 colors are included in a brochure, together with addresses of distributors across the country. UniRoyal—U.S. Rubber Co., Koylon Fabrics & Coated Seating Dept., 407 North Main St., Mishawaka, Ind.

Circle 209, Readers' Service Card

George Nelson's "Work Organizer Desk." Unit utilizes a simple tabletop as an L-desk, supported on one end by polished chrome H-legs and on the other end a two-tier storage cabinet. The cabinet accommodates horizontal and



RESCON

THE PRESCON CORP.: 502 CORPUS CHRISTI STATE NATIONAL BUILDING — CORPUS CHRISTI, TEXAS 78401

SCHOOLS

POST-TENSIONING ENCOURAGES DESIGN FLEXIBILITY WITH ECONOMY

School design problems have been solved by many architects and engineers with the Prescon System of post-tensioning for prestressed concrete. Examples near you can be pointed out by a Prescon representative.

The multiple-award winning Estancia High School, Costa Mesa, California, features a "Great Court" surrounded by academic areas all under one roof. The 200,000 square foot roof was a post-tensioned prestressed waffle slab on a 5-foot square module. The waffle slab is 23¾" deep using 8" joist stems and 20" deep pans. Spans varied from 25' to 35.' The roof system was designed for zero deflection under dead load.

Design criteria called for (1) 2,000 student capacity (2) departmentalization (3) flexibility in number, size and organization of departments and teaching stations. All exterior and interior walls non-bearing demountable throughout the academic areas. Building costs were \$1,586.00 per student.

Architects-William E. Blurock & Associates; Structural Engineers-John A. Martin & Associates; General Contractor-Robert E. McKee.

At Bishop College (Dallas, Texas) where all buildings are permanent type, post-tensioning was widely employed. The Prescon System was used in classroom, dormitory and library structures. It contributed to economy in materials, forms and construction speed. (The men's dormitory was occupied in 8 mos.) The flat plates are 8" thick and cantilever 4' in all levels of several structures. Bays are 24' x 26', with columns 12" x 20" and designed for 50 lbs. live load, plus partitions. The Zale Library on the campus has slabs 9½" thick, with 4½" drop panels at columns. The first and second level slabs are designed for 150 lbs. live load, plus partitions. Cost includies 11 lbs. live load, plus partitions. Cost, including library furniture, less than \$13.50 per sq. ft.



Roy E. Larsen Hall, Harvard University. Architects: Caudill, Rowlett & Scott; General Con-tractor: Wexler Construction

E. D. Mayes, structural engineer, pointed out that among advantages of posttensioning were: (1) elimina-tion of deflection in the slab to reduce partition placement problems; (2) use of thinner slabs for reduced floor-to-floor height resulting in lower material costs. Flat plates allow easier mechanical distribution, and ceiling finish can be applied directly to under side of slab.

Architect—Donald B. Kleinschmidt; Consulting Engineers—Mayes & Brockette.

A Ft. Morgan, Colorado, school utilized four structural systems, all post-tensioned: (1) two-way waffle slab; (2) one-way joists and one-way zee type sections; (3) folded plates; (4) haunched slabs.



Watkins Overton High School Gymnasium with classrooms, Memphis, Tenn. Architect: A. L. Aydelott and Associates; Structural Engineer: S. S. Kenworthy and Associates; Contractor: Sam P. Maury Construction Company.



Estancia High School, Costa Mesa, Calif.

Prescon coated, as well as grouted tendons were used. The library is a 65' x 90' clear span area; the auditorium has 90' maximum spans with the balcony framed of post-tensioned cast-in-place concrete to eliminate the need for columns.

Architect—Wheeler & Lewis; Structural Engineer—Russ Kostroski; Contractor—Hensel Phelps Construction Co.

The Student Union Building, Southwest Missouri State College, Springfield, is a four-level structure with 55' clear spans. The second and third floors, and roof have 4" slabs with 6½" ribs on 3'4" centers. Floor construction depth is 2'7½" and 2'11" for the roof.

Field measurement of camber indicated a variance of ½"—from a minimum of 56" to a maximum of ½". In addition to being more economical than the original design, post-tensioning provided the benefit of creep and shrinkage control. Post-tensioning sealed the slabs so well that water standing on the upper portions showed no moisture evidence on the undersides.

Architects—Harold A. Casey & Associates; Engineers—Saul A. Nuccitelli; Contractor— Dondlinger Construction Company.

Today's school design and construction requires ingenuity and creativity to meet the evolving educational concepts, yet remain within budgets. Often post-tensioning will enable you to achieve these demands. Remember the Prescon System - post-tensioning with positive end anchorage.

These are but a few of the hundreds of school structures using the Prescon System. For more complete examples and technical information, write for literature, or contact a Prescon representative.

The PRESCON Corporation

General Offices: 502 Corpus Christi State National Building Telephone: 512-882-6571 Corpus Christi, Texas 78401

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1 66

vertical compartments, file drawers, shelves, pull-out plastic laminate writing surfaces, an off-the-desk built-in panel telephone, space for a dictating machine on a sliding shelf, and a concealed waste basket. Manufacturer claims the cabinet's 43" height is conducive to privacy, when cabinet is used as a partition. The unit comes in walnut wood veneer. Unfolding brochure also describes, with photographs and specifications, other pieces of office furniture. Herman Miller Inc., Zeeland, Mich. 49464.

Geometry forms tables and lamps. Strong, simple forms mark a line of useful furniture designed by Neal Small. One table is composed of a plastic sphere of a lamp trapped within a transparent glass base that is covered with a glass top. A floor lamp consists of a slender polished chrome stem on a baked black steel base topped by a plastic ball; the adjustable stem can be tilted to incline the lamp at angles with the floor. In a folder pamphlet, nine

pieces are illustrated and specifications are given. Neal Small Designs, 556 Broadway, New York, N.Y. 10012.

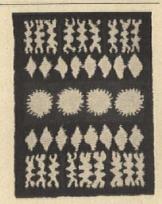
Circle 210, Readers' Service Card

Utilitarian economical swivel chairs and stools, shown in a 12-page brochure, include various bases (tubular, footring, cast, wing-bracket), and seats (plywood, glass-fiber, vinyl upholstered). Illustrations explain the adjusting mechanism for seat height. Prices and specifications are given. Ajusto Equipment Company, 515-525 Conneaut Street, Bowling Green, Ohio. Circle 211, Readers' Service Card

Ceramic files are illustrated in a 31-page brochure. Also included are floor plans for bathrooms and suggestions for complementary towels and fixtures. Tiles come in 20 solid colors, 4 stipples (peppering of one color on a plain background), mosaics (plain and in buckshot patterns), and patterns. United States Ceramic

Tile Company, Canton, Ohio 44710.

Circle 212, Readers' Service Card



The Tapa Group, a new addition to Bigelow Custom Carpets, are reviewed in a 28page, color illustrated catalog. The group comprises six rugs designed by Dorothy Liebes, whose interest in Polynesian motifs of ceremonial mats and Tapa bark cloth inspired the geometric designs. Executed in subtropic colors of palm green, burnt orange, beige, ginger brown, black, and white, the rugs are of 100% wool, and are handhooked with a shaggy, cut-pile effect. Bigelow Custom Carpets, 140 Madison Ave., New York, N.Y. 10016.

Circle 213. Readers' Service Card

LIGHTING

Fluorescent lamp ballasts for indoor and outdoor commercial, industrial, and residential applications are listed in chart form giving electrical and physical characteristics, lead lengths, and wiring diagrams for each ballast. 32 pages. Universal Mfg. Corp., Dept. RO, 29-51 E. 6 St., Paterson, N.J. 07509.

Circle 214, Readers' Service Card

INSULATION

"Comparison of Foamed Insulation Materials" is an article on the insulating properties of expanded polystyrene and polyurethane by E. Y. Wolford, a Pittsburgh plastics consultant. The discussion is pertinent for refrigerated warehouses, cooler rooms, and other environmental facilities, and includes sections on cost, corrosion, and permanence. The final section is

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A product of: LUNDSTROM LABORATORIES, INC. 900 Smith Street, Herkimer, New York

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On Readers' Service Card, Circle No. 360





On Readers' Service Card, Circle No. 340

GET YOUR PERSONAL REPRINT OF P/A's OCTOBER "CONCRETE" STORY

A limited number of reprints of the editorial section of the October issue of PROGRESSIVE ARCHITECTURE have been set aside for our readers.

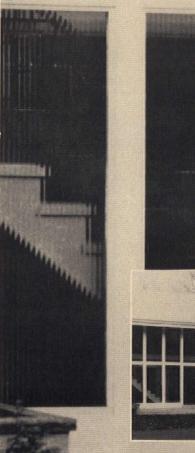
This was the issue that explored the subject of Concrete from top to bottom. It looked in depth at the uses and mis-uses of concrete in office buildings, houses, hospitals, saloons and state capitols. It gave cogent answers to the question: "What is the future for this most promising yet controversial of building materials?"

Comments and critiques on concrete were supplied by experts from all sides of the building industry — architects, designers, engineers and builders.

Get your own personal copy (or copies) at \$1.00 each of the October Concrete reprint by checking #420 on the Readers' Service Card at the back of this issue. We'll bill you later.

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These unique THERM-O-PROOF "Flutex" insulating glass units provide the entrance of this residence with diffused light and a sense of privacy. Another way design ideas can be implemented by specifying THERM-O-PROOF insulating glass. Each unit backed by 10 year warranty.





Wallace Zernich, M. D., Residence Aliquippa, Pennsylvania

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*Flutexe is a registered trademark of ASG.

devoted to miscellaneous characteristics of the two plastics, and the study concludes with a strong recommendation for foamed polystyrene. Sinclair-Koppers Co., Koppers Bldg., Room 947, Pittsburgh, Pa. 15219.

Circle 215, Readers' Service Card

SPECIAL EQUIPMENT

Walk in and cool it. Freezers, walk-in coolers, and refrigerated warehouses maintain "K" factor of 0.118 by using foamed-in-place urethane insulation between metal skins in fabricating components. Detailed loose-leaf "Working Data Catalog" gives architectural specifications, and includes sections on doors, floors, accessories, and sizes/ capacities. Bally Case and Cooler, Inc., Bally, Pa. 19503. Circle 216, Readers' Service Card

Du Pont does not make building products. It does, however, make elastomers used for window gaskets, flooring, roofing, fasteners, and sealants. The company has published 18 data sheets covering uses, advantages, limitations, and installation details of applications of architectural elastomers such as neoprene and "Hypalon." Each subject is covered on one sheet, and includes recommended ASTM tests to establish performance requirements for each compound. Elastomer Chemicals Dept., Du Pont Co., Wilmington, Del. 19898.



Cast bronze and aluminum letters range from 1" to 24" in a variety of type faces. "Art in Bronze" catalog also covers architectural plaques and custom designs, stainlesssteel letters, and letters with plastic faces. Photos, installation details, and size charts. 12 pages. A.I.B. Industries, Inc., Dept. C-18, Waterloo, N.Y. 13165.

Circle 217, Readers' Service Card

SURFACING

Original forest product covers interior paneling. Shunning the printed grain veneers of real birch, walnut, pine, cedar, oak, cherry, elm, or pecan are bonded to flakeboard backing in a union that is said to last forever. Panels, 4' x 8' x 1/4" thick have a burnished finish. Folder suggests uses. Color photos. 4 pages. International Paper, Long-Bell Div., Longview, Wash. 98632.

Circle 218, Readers' Service Card

Ceramic tiles are presented with illustrations of suggested uses in a 15-page catalog. Glazed, crystalline, scored, and decorated tiles as well as quarry tiles come in a selection of sizes and shapes (1" squares to 4" octagons). Choice of 50 solid colors, 70 designs. Colors are keyed to bathroom fixtures by "popular manufacturers." American Olean Tile Company, Lansdale, Pa.

Circle 219, Readers' Service Card

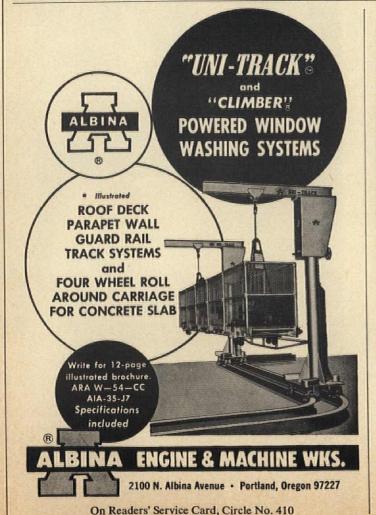
Spray-on acoustical ceiling finish and a fireproofing finish are covered in two leaflets. "Blaze-Shield" includes table of fire-retardant ratings and specifications. 4 pages. "Sound-Shield '85'" gives specifications, description of properties, and table of sound absorption coefficients. 4 pages. United States Mineral Products Co., Stanhope, N.J. 07874

Circle 220, Readers' Service Card

PROGRESSIVE ARCHITECTURE MEWS REPORT

REINHOLD PUBLISHING CORPORATION A subsidiary of Chapman-Reinhold, Inc. 430 Park Avenue, New York, N.Y. 10022

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NEXT MONTH IN P/A



Winners of the 14th Annual P/A Design Awards Program as selected by David Crane, Edward Dart, Sepp Firnkäs, Charles Moore, and Joseph Passonneau.

If you are interested in pace-setting design and planning developments, this issue is imperative reading. If you're not, forget it.

To receive the January Design Awards P/A and 11 more issues packed with ideas, excitement, controversy, and ways to better architecture, tear out, fill in, and mail the Subscription Card (see Contents Page for location).



Because . . . lavatories are fine at home, but in employee and public washrooms, people want wash fixtures that are truly sanitary, quick and easy to use, and require no fussing. Only one wash fixture fits that bill — a foot-operated Bradley Washfountain.

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