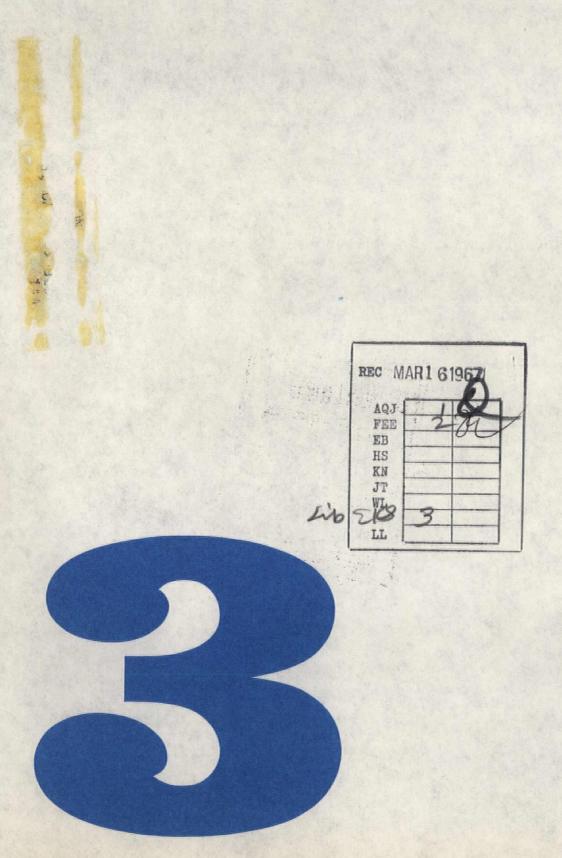
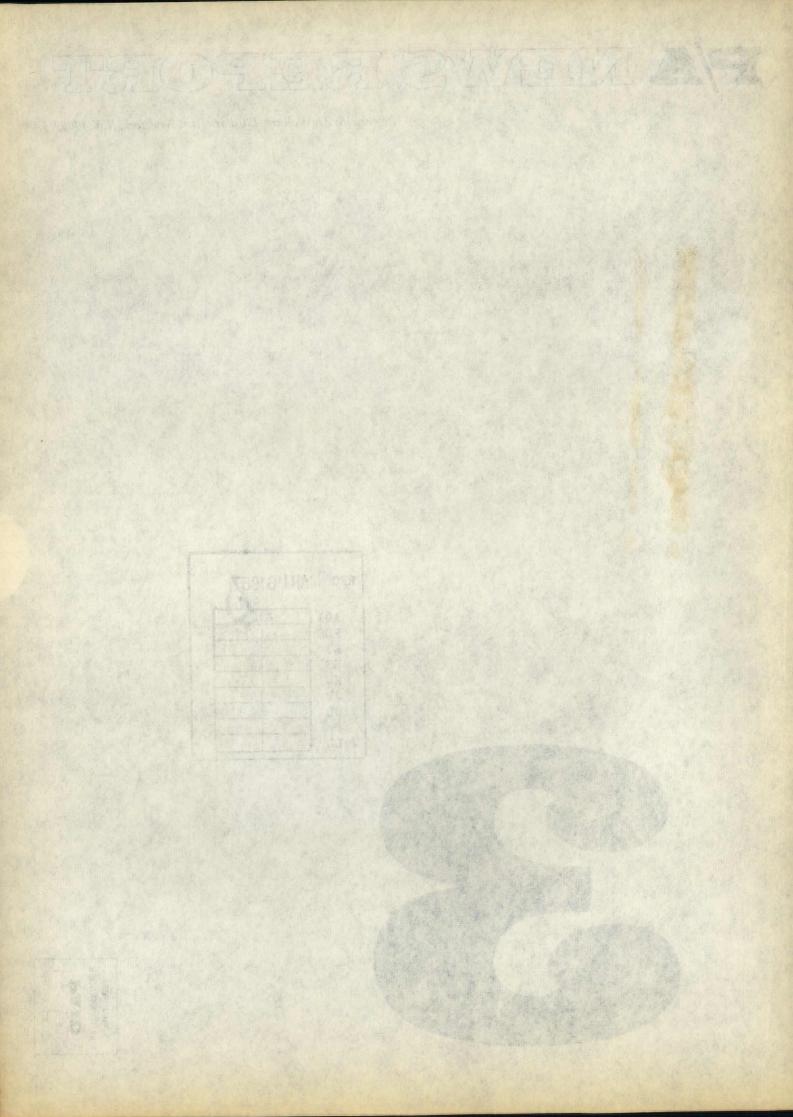
PANEWS REPORT

Progressive Architecture 430 Park Ave., New York, N.Y. 10022



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PANEWS REPORT

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

March 1967

RALPH W. REINHOLD



Ralph W. Reinhold, founder of PROGRESSIVE ARCHITEC-TURE's predecessor, the Pencil Points Press, died on January 24 at the age of 88. Having begun his career in business publications with the Real Estate Record in 1902, he was for 15 years associated with the Architectural Record as business manager, and with Architectural Forum as part owner and advertising manager. In 1915, he and two associates formed the Chemical Catalog Press; the Pencil Points Press followed in 1920. A merger of the two companies in 1933 produced the Reinhold Publishing Corporation, of which he was President until 1945, and Chairman of the Board until 1950, when he retired from his positions in the company, retaining only the honorary post of Chairman of the Board.

Ralph Reinhold was born in New York City on January 13, 1879. He graduated from Horace Mann High School in Westchester County and attended special courses at Teachers College and Cornell University. He died at the home of his son, Paul.

FDR MEMORIAL FAILS SECOND TRY

WASHINGTON, D.C. In turning down Marcel Breuer's and Herbert Beckhard's design for the Franklin Delano Roosevelt Memorial, the Fine Arts Commission was laconic. They issued a formal announcement of the unanimous decision: Such a memorial, they said, "requires the high-

est standard of artistic achievement and significance.
... The proposed design does not fulfill either criterion."
None of the commission members would say anything else, except that they rejected the design "with great reluctance, aware of the many difficulties that have been faced by the designer and the Roosevelt Memorial Commission."

Breuer's design had the approval of at least one member of the Roosevelt family, which had turned down the earlier competition-winning design by Pedersen, Tilney, Hoberman, Wasserman & Beer. The Fine Arts Commission had approved that design.

The seven-member Fine Arts Commission, established by Congress in 1910, is a permanent, continuing body. Currently composed of chairman William Walton, architects Gordon Bunshaft, John Carl Warnecke, Hideo Sasaki, and Burnham Kelley, with Aline Saarinen and sculptor Theodore Boszak, it advises the President and Congress on building in the capital. But when Congress passed legislation (late in 1963) authorizing a memorial to FDR, it took the unusual step of making Fine Arts Commission approval mandatory, before the memorial could be built.

Breuer and Beckhard had been hand-picked by the Roosevelt Memorial Commission to prepare a design, after the competition failed. What will happen now may be long-term cocktail conversation. The Roosevelt Memorial Commission has a \$125,000 Federal authorization to prepare a design, but there is no time limit.

As P/A goes to press, it is expected that Senator Eugene McCarthy of Minnesota will be elected new chairman of the Roosevelt Memorial Commission early in March; McCarthy is on record favoring construction of the Breuer-Beckhard design. Whatever happens, it is impossible to see how the Memorial can become more politically embroiled than it already is.

P/A DESIGN AWARDS PRESENTED IN SEATTLE



Larson, McGough, Rowan, Walker, Gorasht, Foltz.

SEATTLE, WASH. A blustery gray rain was sweeping in off the Pacific and into Shilshole Bay as the winners of the 14th Annual P/A Design Awards Program assembled in the Captain's Room of The Windjammer Restaurant for the reception, luncheon, and presentation ceremonies conducted by the magazine. Despite miserable winter weather throughout most of the country, almost all of the award and citation winners managed to be present at the Seattle meeting to see Walker & Mc-Gough presented with the First Design Award for their design of the Convent of the



Pfeiffer, Wallace, Price, Deitz.

Holy Names in Spokane (see pp. 110-117, January 1967 P/A) and to receive their own P/A honors. Among the winners attending were Robert Venturi of Venturi & Rauch, Princeton, N.J.; Hugh Hardy and Norman Pfeiffer of Hugh Hardy & Associates, New York; Roy Harrover of Roy Harrover & Associates; Robert B. Church, III, Memphis; Douglas Michels of Yale University; Rai Okamoto, William H. Liskamm, and Rod-

erick T. Freebairn-Smith of Okamoto & Liskamm, San Francisco; Daniel L. Dworsky, Los Angeles; Euine Fay Jones, Fayetteville, Ark.; Carl J. Hunter of the office of John Stephens Rice, Des Moines; and Jorge Del Rio of Puerto Rico.

Also present were noted professionals of the area, including Robert H. Deitz, dean of the College of Architecture at the University of Washington; Frederick W. Mann, University of Washington university architect; Walter Foltz, president of the Spokane Chapter AIA; William E. Schneider, director of the Washington Department of General Administration representing Governor Evans; Harold A. Goltz, Director of Campus Planning for Western Washington State College; James D. Cowan, Executive Director of the Washington State Council of Architects of AIA, Inc.; Clayton Dekle, State Architect of Tennessee; Edward Bolling, vice-president of the University of Tennessee; A.O. Bumgardner, architectural editor of Architecture/West; Victor Steinbrueck, architectural professor at the University of Washington and architectural critic of the Seattle Post-Intelligencer; Arthur Riehl of the U.S. General Services Administration; John L. Wright, president, the Washington State Council of Architects; and many prominent local practitioners and



Mo-Sai projects an image of strength and solidarity for savings and loan offices

Deeply textured Mo-Sai facing units 9 feet wide by 25 feet tall were used as forms for the poured-in-place concrete structural columns. The few required joints were well concealed, giving the columns a monolithic appearance both inside and out. Random quartz aggregates from dark brown to almost white impart a warm, friendly color. Mo-Sai in contrast with exotic wood paneling was used to create the dramatic teller windows and was also used throughout the unusually beautiful offices. The rough textures and colors of the Mo-Sai were chosen by the architects as an expression of the rugged beauty of the Northwest.

First Federal Savings & Loan, Bremerton, Washington Architects: Branch, Branch & Garrison General Contractor: Hainsworth Construction Co.



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PRECAST, PRESTRESSED CONCRETE WITH EXPOSED AGGREGATE

businessmen. P/A was represented by Publisher Philip H. Hubbard, Jr., who welcomed the participants; Editor Jan C. Rowan, who made the presentations and moderated a seminar following the ceremonies; and Senior Editor James T. Burns, Jr.

The seminar consisted of a detailed presentation by Partner John W. McGough and Design Job Captain Gary H. Larson of the First Design Award winner. McGough said that, during the preliminary design stage, they determined that the Convent scheme should be monastic but still reflect a bright and happy outlook, since this "town in a building" would be the nuns' whole life. The firm is now finding that the new ecumenicism is occasioning a few changes in program, but that the idea of main circulation spines and large communal area is still valid. Larson described the project as an aggregate kind of building, with the aggregates - or sleeping and ancillary quarters - located around the big volumes of the communal spaces.

The critique of the convent design was offered by Paul Hayden Kirk, who noted that architecture is beginning to take its part in today's culture, a move he has noticed in other media and disciplines, and one he sees and approves of in the Walker & McGough design. He thinks it appropriate and exciting that the convent was handled as a building and not as a campus. All elements of the concourse, he said, seem to unite strongly and work better than a similar scheme such as Simon Fraser University, uniting as it does everything around the central interior quadrangle or cascading units over it to overlook the landscape. Kirk said that this design expresses a true 20th-Century feeling through controlled environment and control of interior climate. His few cavils about the design concerned the introduction of the box form of the dining area at the juncture of the "cascading" elements, with an abruptness he found somewhat disturbing; the lack of something growing out of the "knuckle" or jointure of the elements to make a sort of vertical accent mark; and an uncertainty he had about the conflict between the dramatic



Hardy, Okamoto.



Rowan, Hunter.





Michels, Liskamm, Mrs. Carroll Burkhard (Michels' grandmother).



Dr. Jordan, Rowan, Harrover, Church.



Rowan, Dworsky.



Bassetti. Arthur Riehl of GSA.



Jones, Bassetti, Kirk, Bumgardner.

Rowan, Venturi.



river site and the generally inturning nature of the convent design. He felt, however, that the interiors will be dramatically practical in a processional sense, with the nuns moving through the corridors and larger spaces.

During the question-andanswer period following the critique, Fred Bassetti took the opportunity to "compliment the jury for choosing a top winner with quality and staying power and not just something devoted to 'jazz' or 'turning people on' or 'making a big new statement.'"

Since the work of Venturi & Rauch bulked large in the considerations of the jury (with one award and two citations presented out of four submissions by the firm), Robert Venturi was asked to say a few words concerning his design approach. He said that architecture today should reflect the complexities and contradictions of modern experience, that we should get away from the "simplicity" that architects have emphasized so much in this century but which so often becomes "simplification" instead. He said that the complexity of a design can come from the program but also from the medium of the art itself (as has been evident in other media for some time). The inevitable problem, he feels, is that of juxtaposition between what is perceptual and what is conceptual and dealing with the frequent disparity between them. To the label of "pop" architect, he stated that young architects dealing with small jobs and small budgets should not try making something heroic out of it, but deal with commonplace problems with conventional elements. If this results in "pop" effects, perhaps so did the Renaissance in a more sophisticated way when it dealt mainly in the "pop" elements of Roman art and architecture. To use commonplace elements and means but use them in vivid contexts is to enhance them and give them other, newly derived meanings and scales, Venturi concluded.

As the seminar began to break up, the rain that had shrouded the harbor all day began to dispell, and the assembly was treated to the spectacle of the sun piercing through above the mountains over the water.

MORE FOR THE GOLDEN GATEWAY

SAN FRANCISCO, CALIF. When four out-of-town investors were low bidders for the job of designing and building in the remaining area of San Francisco's Golden Gateway urban renewal district, both eyebrows and voices were raised in this highly chauvinistic town. Now that the plans are unveiled, both can settle back into place. David Rockefeller, Trammel Crow of Dallas, John Portman of Atlanta (whose architectural firm, Edwards & Portman, prepared the plans), and Cloyce K. Box, chairman of the George A. Fuller Construction Co., are the investors. Their \$125,-000,000 scheme, which they call Embarcadero Center, will cover five entire blocks (8.5 acres) overlooking the Embarcadero. Proposed are three towering office buildings, of rough-textured, precast concrete: One is 60 stories (1) (making it the tallest structure in San Francisco), one 45 stories, and one 25 stories (2). Each of these will have unevenly staggered façades, like a deck of cards whose ends have not been tucked in securely, providing more corner office space, and, not incidentally, breaking up the blockbuster appearance that severe rectangular slabs would produce. At the northeast corner of this site will be an 800room hotel (3) - the city's largest - shaped in a solidtriangle with its balconied







rooms pyramiding from base to top. And stretched out next to the base of the office structures (see site plan) will be an entertainment center, with three theaters, art galleries, a wine museum, restaurants and shops, all surrounded by a pedestrian mall elevated two stories above the ground-level traffic. Underground will be parking space for 2000 cars.

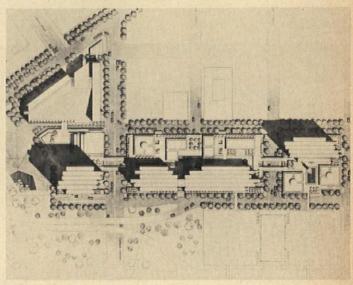
Architect Portman credits his investment partner Trammell Crow and M. Justin Herman, executive director of San Francisco's Redevelopment Agency, with the idea of making the five-block area into a single development. The area will be tied together by pedestrian bridges to the largely residential Golden Gateway Center, now nearing completion across Clay Street. When the entire area is developed, pedestrians will be able to walk through 45 city acres completely free of vehicular traffic. At least part of the Embarcadero Center will face a new park being designed by Lawrence Halprin,



Mario Ciampi, and John Bolles. A feeling of light and space will be achieved, for, despite the size of the office towers, they are being spaced so that their combined mass does not become oppressive and so that residents on the hills behind them will be able to see between them to the Bay. In addition, the developers plan to add more than \$1 million in sculpture to the site. some of it by Bay Area artists, some, hopefully, by internationally known figures such as Chagall, Picasso, Miró, and Marini.

The Embarcadero Center will add a total of 2,851,800 sq ft of office space to the city when completed in an estimated six to eight years.

Judging from the design stage at least, it looks as if San Francisco will profit from outside talent. After all their worrying, San Franciscoans may well be treated to a renewal project much more sympathetic to the city than the adjoining Golden Gateway Center. And the Golden Gateway was done by San Francisco firms.



NEW CANAAN, LAND OF THE HOMELY BILK

NEW CANAAN, CONN. The main street of this New York City commuter town is lined with cutely designed shops and offices, with painted wooden or stucco porticos and cloisters. It's a little bit artsycraftsy in a stiff sort of way, without the carefreeness and charm of a Carmel or even a Scottsdale. It resembles a little what the creators of Disneyland might build in reproduc-

ing a "typical" American suburban town. Yet, because it is the home of many New York City professional people, the city has an image of sophistication its actions belie.

Last November, architect Philip Johnson ran for office there on a platform of urban design and was soundly defeated (see p. 54, DECEMBER 1966 P/A). And Paul Rudolph, commissioned to de-

sign a New Canaan high school with Lyons & Mather of Bridgeport and Desmond & Lord of Boston, has recently resigned from his contract. Rudolph's resignation ends a strident controversy in New Canaan over his choice as architect, and although his departure from the job does not automatically doom New Canaan to a mediocre school building, mediocrity seems to be what the people want. In a letter to the school board, 10 parents wrote in January: "We should move toward an attractive school building, one in keeping with 20th Century building trends, but without revolutionary structural appearance, by eliminating Paul Rudolph." Perhaps what New Canaan wants is a Hilton Hotel. But perhaps not. Charles F. Kelley, the town's first selectman, commented: "We don't want a monument or an architectural landmark that people will drive miles to see. We just want a school." Then he added with a sort of oldtime, New England seclusiveness: "Citizens here want to be left alone, and some of them are afraid that if we let Rudolph do the school, people would read about it in national magazines and say, 'Look

what Rudolph did in New Canaan; lets move there." It is perhaps flattering to Rudolph that someone should think people would leave their homes and move to another community so that their children could study in one of his buildings, but it is hardly flattering or wholesome to have a town full of people who think that way. It might be allright to move next door to someone like that, but would you want your child to marry one?

Ironically, the architects had submitted a preliminary model to the school board and the building committee, both of which had enthusiastically endorsed the architectural direction it expressed. Nothing, however, had been made public, and the furor arose before a single dissenter had seen even a sketch. Commenting on the situation, Rudolph, fingering the lapel of his gray suit, said, "Some people feel more comfortable in a gray suit, like everyone else, with the same muted colors in their neckties. Clothes are something they can hide behind or in. I do not believe architecture should be like this. Evidently, the people in New Canaan do."

I.M. Pei & Associates and approved by the city council in December, the agency hopes to clear about 138 acres (29 city blocks) and rebuild on a scale that will make the central city a merchandising hub for the entire region.

In the first phase of the plan (project 1-A), 340 buildings of the 427 located in the area will be demolished. Replacing them will be, among other things, a convention

When completed by 1989, the city's one hundredth anniversary, the area will include the Oklahoma Tivoli gardens, a retail galleria, and a residential community comprising both high-rise apartments and town houses.

Cost estimates are, at this point, diaphanous, but, depending on how you read them, the reconstruction will cost between \$50 and \$100 million.



center (1) capable of seating 15,000; a new Mummer's Theater (2) (to be built with a Ford Foundaton grant); a 30-to 40-story office tower (3); parking facilities for 8000 cars; and a major department store retail area (4). In addition, street patterns will be changed, and major expressway construction around the site will be completed eventually.





4

STANFORD WHITE'S GIRL IN THE RED VELVET SWING DIES QUIETLY AT 82

Evelyn Nesbit, the golden girl of a gilded age, whose amours both thrilled and scandalized New York society at the turn of the century, died January 17 in a Santa Monica, California, convalescent home. She was 82.

Evelyn arrived in New

York at 15, already a popular artist's model. As a Floradora girl, she attracted the attention of such personalities as actor John Barrymore, artist Charles Dana Gibson, for whom she posed, and the most prominent architect of the time, Stanford White. When,

PEI'S 1-A PLAN



OKLAHOMA CITY, OKLA. This is the way it is in Oklahoma City. Since 1948, sales in the downtown area slumped 29%, while sales throughout the metropolitan area increased 49%. Since 1953, 77 businesses have moved away from

the central business district. And the trend is continuing. It has gone so far, in fact, that the city's Urban Renewal Authority feels the only way to stem the attrition is to take immediate and drastic action. Under a plan prepared by



in 1906, Evelyn's millionaire husband Harry K. Thaw shot White to death before an opening-night audience atop the White-designed Madison Square Garden, Evelyn's affairs became the focus of a public sensation.

At the murder trial, Thaw's defense was based on the right of a husband to defend his wife's integrity. Thaw, heir to a railway fortune, resented Evelyn's relationship with White, prior to her marriage. When the trial ended in a hung jury, a second trial was held, and this time evidence of insanity in Thaw's family was introduced. The result was a verdict of temporary insanity, and Thaw was committed to an institution for the criminally insane. He spent the rest of his life in and out of mental hospitals.

Divorced from Thaw in 1916, Evelyn's mode of living had already altered with her changed fortune. She attempted to carry on a career in show business, but was never able to regain her former popularity. In later years, her "true story" was published in various magazines and papers, and in 1955 she sold her life story to 20th Century-Fox

Photos: Culver Photography

for the movie "The Girl on the Red Velvet Swing," starring Joan Collins, Ray Milland as Stanford White, and Farley Granger as Harry Thaw.

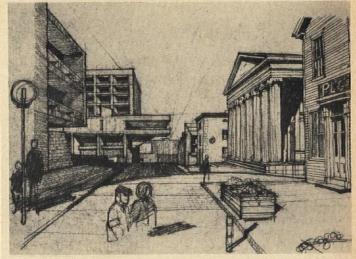
Several years ago, Evelyn was interviewed by Aline Saarinen, who found her living in an old hotel in Los Angeles. Her later years were as quiet as her early one's had been flamboyant. But despite the effects of a stroke suffered in the 1950's, she was still a lively and extremely attractive woman. A son, born in 1912 in Germany, helped support her in her last years.

CALENDAR

The National Association of Home Builders has scheduled a discussion of "Keys to Success in Remodeling and Rehabilitation," to be held April 3-6 at the Chase-Park Plaza Hotel in St. Louis. Enrollment forms are available from the Department of Seminars and Workshops, NAHB, 1625 L St., N.W., Washington, D.C. 20036 . . . The Eastern U.S. Modern Living Show will feature displays of new homes, apartment buildings, vacation homes, and mobile homes. The show will take place inside the Cherry Hill Mall, Cherry Hill, N.J., from April 18–22 . . . The Hardwood Plywood Manufacturers Association plans to hold its Annual Spring Meeting at the San Francisco Hilton April 19–21 . . . The latest developments in steel construction will be discussed at the 19th Annual National Engineering Conference of the American Institute of Steel Construction in San Francisco, April 20 and 21. Headquarters will be at the Sheraton-Palace Hotel. For details and program, write

to AISC, 101 Park Ave., New York, N.Y. 10017 . . . The Urbana campus of the University of Illinois will be the location of the Third North American Conference on **Campus Planning and College** Building Design, April 23-27. Topics include design of the college library, communications, and learning centers. Inquiries about the conference may be addressed to Architectural Conference, Department of Architecture, University of Illinois, Urbana, Ill. . . . All aspects of the design of furnishings for commercial and institutional buildings will be presented at Contract '67, trade show to be held at New York City's Coliseum, April 25-27. More information from Contract '67, 14 W. 40 St., New York, N.Y. . . . The International Association for Shell Structures will sponsor a Colloquium on Pneumatic Structures, May 11 and 12, at Stuttgart, Germany. The University of Stuttgart is acting as organizer of the conference, assisted by German architect Frei Otto. To register, write to D. Feder, Institut für Modellstatik, Technische Hochschule, Stuttgart 1, Postfach 560, Germany . . . May 14-16 are the dates for the Third Annual Theatre, Television, and Film Lighting Symposium sponsored by the Illuminating Engineering Society. The conference will take place at the Hollywood Roosevelt Hotel, Hollywood, Calif. Contact T.M. Lemons, Sylvania Lighting Center, 100 Endicott St., Danvers, Mass., for further information . . .

NEW BEDFORD: SOMETHING OLD, SOMETHING NEW



NEW BEDFORD, MASS. A study underway in this historic New England whaling town may set a precedent for the revival of decaying historic urban areas. New Bedford, of course, was once a thriving seacoast port, but its downtown waterfront area has suffered the blight common to so many towns as population spreads into the surrounding countryside and its industry shifts from fishing to inland manufacturing. New Bed-ford's plight is compounded by the planned construction of an expressway spur that will soon go up along the water, providing the blight with a concrete stamp of approval. Planner Robert J. Kerr, II, a member of the Urban Design Group of the Corinthian Company, Inc.,

realized New Bedford's plight back in 1963 when he stopped briefly in town on a speaking engagement, and since then he has talked the city fathers into doing something about it. The Urban Design Group's plans for the 190-acre waterfront area call for a blend of new contemporary structures and renovated older ones, and a complicated financing scheme, now being worked out, which will include grants from several Federal agencies and perhaps from private ones as well. The sources of funds for these urban renewal projects are just now starting to be sorted out, muddled as they were by the formation of the Department of Housing and Redevelopment. If the New Bedford project is completed as planned, some of these

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sources and their potential contribution to similar projects may become clearer.

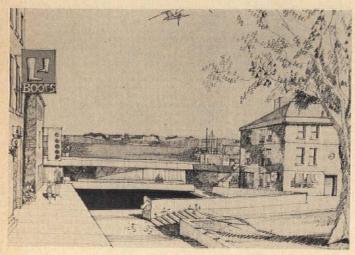
The Urban Design Group's study was financed in part by a HUD grant to the local Redevelopment Authority, in part by a foundation grant, and was helped by services provided by the Waterfront Historic Area League (WHALE). Cooperating with the Urban Design Group on is preparing a report for distribution to agencies and foundations that may help fund the renewal.

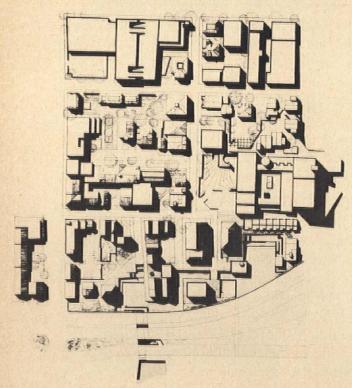
Kerr emphasizes that his group's plan is a guideline rather than a fixed proposal, and he also stresses the importance of recommendations they make for new structures within the historic area. Just because a building is old does not mean that it has historic

be bought by the city, renovated, then resold to private owners. Two considerations help tie the area together. One is the proposed conversion of vacant lots and present parking areas into green spaces and connecting landscaped walkways. The other is a proposed water basin that would bring the water to the people, now that the expressway will keep the people from going to the water. Two connected basins created by conduits running beneath the highway will fill these basins with 3' of water, recreating some of the waterfront atmosphere

that will now be lost. In addition, a walkway tunneled beneath the highway will lead pedestrians to the old wharf area for a view of the real waterfront, with its wharves and fishing fleet. To create space for the water basins, the planners, after a long hassle, convinced the Bureau of Public Roads to move the high-

Also proposed by the planners is a rezoning that would restrict height-floor area ratios and percentage of land coverage of new buildings to keep them in scale with existing structures.





the study were the New Bedford City Planning Department and an economic advisor, Peter J. Laudati. Design work, during the early stages, was reviewed by a jury composed of Jacob L. Crane, planner, Frederick Gutheim, urban affairs consultant, and Stephen W. Jacobs, associate professor at the Cornell College of Architecture.

At present, the design team

value and can be incorporated soundly into a revitalized downtown area. And revitalization is perhaps the key word, for no one sees the New Bedford waterfront as a museum of repainted buildings. Plans even include moving historic buildings into the area from other sections of the city, to replace dilapidated structures of little historic value, And some existing structures may

FANCY FOOTWORK FOR THE WORLD TRADE CENTER



NEW YORK, N.Y. As winter winds and snows howled across lower Manhattan Island early last month, work got under way on the foundation of the World Trade Center. Most of the Center's site is now cleared, and two large vaults have been sunk on the eastern perimeter to hold the mass of telephone cables that now run through the site to the telephone company building at its northern boundary. Just offshore in the Hudson River to the south, workmen are demolishing five unused piers, and barges are sinking pilings to bound an area where landfill will be dumped (see site photo), dug from the Center's site and trucked under the West Side Highway. In all, the landfill will create a 23-acre site on the edge of the island, to be used by the city for some as yet undetermined project. Most of the landfill will come from the excavation for the foundations of the Center's twin 1350' towers, which will cover about 8 acres on an area of Manhattan that was extended into the river about 100 years ago.

Because the area is porous landfill - sand, some gravel, and silt—the water table runs only 5' to 10' beneath the surface. Normal excavation would lead to cave-ins and flooding, so the Port of New York Authority, whose project this is, decided to try a method of excavation never before used in the U.S. First used on hydroelectric projects in Italy, the technique consists of casting a concrete wall in the earth around the site; at the World Trade Center site, the wall will be anchored in bedrock 65' beneath the surface. Extending 3100' around the area to be excavated, the wall forms what has been referred to as a giant concrete bathtub — with a bedrock bottom - one that keeps water out instead of in. Excavation proceeds normally within the tub. The earth fill is scooped out mechanically, eliminating the need for complicated floor matting or hand work.

Low bidder on the wall was Icanda, the Canadian branch of ICOS, an Italian firm that perfected a technique of sink-

introducing CHAPMAN-REINHOLD

There is a significant change on the front cover of this month's issue of PROGRESSIVE ARCHITECTURE. We have added the words, "A Chapman-Reinhold Publication."

This is our way of announcing to you, our readers, that Reinhold Publishing Corporation has consolidated its properties and personnel with those of Medical Economics, Inc. Our parent company's name, as the cover indicates, is Chapman-Reinhold, Inc.

The name derives from the founders of the two companies. Medical Economics, Inc., was founded in 1923 by Lansing Chapman. Reinhold Publishing Corporation was founded in 1933 by Ralph Reinhold, who formed the corporation by merging The Chemical Catalog Company and Pencil Points Press, which were established in 1915 and 1920 respectively. The home office of Medical Economics, Inc. continues to be Oradell, New Jersey, while Reinhold headquarters remain in New York City.

With the consolidation, Chapman-Reinhold, Inc. becomes one of the nation's largest publishers of specialized magazines, books, catalogs and compendia. It has a staff of 600 and an annual sales volume of more than \$20 million. The eight Chapman-Reinhold periodicals, among the leaders in their fields, have a circulation of more than 500,000. The six catalogs and compendia have a circulation of more than 750,000. The four book divisions have an output of 650 current titles and a total of 3 million copies in use. In addition to its own periodicals, catalogs and books, Chapman-Reinhold provides advertising management for the fifteen journals of the American Chemical Society.

We at PROGRESSIVE ARCHITECTURE see the Chapman-Reinhold consolidation as a new, creative force in specialized communications for the professions, the arts, the sciences and industry. We see a new company concerned with all forms of information gathering, storage and transmission by whatever media are appropriate to the mission. We feel that our concept of professional journalism is in close harmony with those of our new Medical Economics associates. Further, we are confident that our association, with the larger complex of Chapman-Reinhold, will make it possible for us to provide an increasingly more meaningful service to the architectural profession that we serve.

P. H. Hubbard, Jr. Publisher

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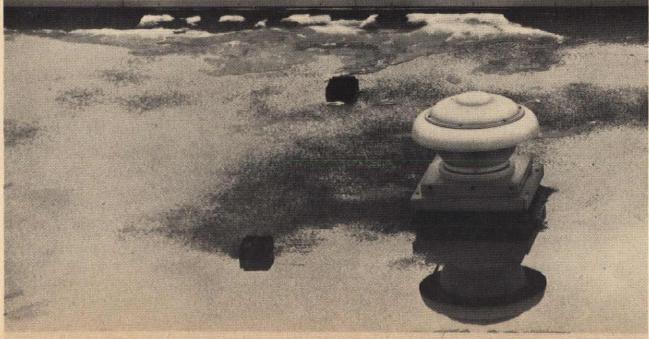
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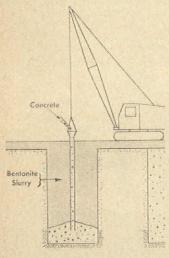
For further information, call or write: Pittsburgh Corning Corporation, Dept. PP-37, One Gateway Center, Pittsburgh, Pennsylvania 15222.





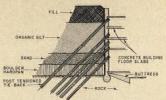
ing these walls. They used it successfully on the Milan sub-way construction, where it first caught the attention of Port of New York Authority engineer John M. Kyle. Icanda, whose bid was \$8,426,424, plans to complete the wall in 18 months.

First step is to dig a trench about 10' deep and 20' long, and about 3' wide. The walls of this trench are lined with concrete to guide the clamshell digging rig, and digging then proceeds with a trench about 3' wide being excavated down to bedrock, some 65' beneath the surface. As the clamshell-bucket excavating rig removes the earth - the rig moves on rails laid on the surface on either side of the trench - a bentonite slurry is poured into the trench. With a specific gravity higher than water, the bentonite keeps water from filling the trench and also prevents earth cave-



ins. Once bedrock is reached, a special slicing tool cuts a groove in it. Next, a mesh of steel reinforcing rods is lowered into the trench; then tremies are inserted and concrete poured through them beneath the bentonite slurry. As the concrete rises, the bentonite floats on top of it and can be drawn off and used again. When one 20' trench is filled, the contractor skips 20', then digs another 20' section, not immediately adjacent to the first. Eventually, an intermediate connecting trench is dug and filled. Each section of the concrete wall is keyed into the adjoining one to further reduce the possibility of water seepage. Despite the wall, some seepage is expected, but the engineers feel it will not be significant - certainly no more than can be handled by ordinary sump pumps. As excavation proceeds, tie-back rods are inserted through the wall, and post-tensioned into bedrock (see diagram); these are kept tensioned until excavation is complete and concrete floor slabs can provide interior bracing.

The section of the foundation within the bathtub walls will house six below-grade levels of the Trade Center. Extending beyond the confines of the twin towers, the base-



ments will provide room for parking, for tenant storage, and for mechanical equipment. The actual excavation will involve difficulties, for the site is now laced by three subway lines, telephone cables, sewers, and electric conduits. All these will have to be moved to the periphery of the site.

Architects on the project are Minoru Yamasaki & Associates, with Emery Roth & Sons, associated architects.

THE NOBLE EXPERIMENT



PHILADELPHIA, PA. Vacant, decaying, the house above stood neglected, like the kid with dandruff in the TV commercials. Several years ago, the Philadelphia Housing Authority set up what it called a Used House Rehabilitation Program, which almost immediately ran into legal problems that were resolved only a year or so ago. The courts ruled that those trying to keep the Authority from aiding "used houses" were not actually in-





terested parties, and the program started moving again. The Authority gained authorization to rehabilitate 1000 houses. Its machinery, however, was rusty. To speed up the program, it decided to find developers who would relieve the staff of the burden of seeking out houses and renovating them. These developers would find a house either vacant and dilapidated, or just dilapidated, and bring the Authority a proposal for its rejuvenation. Once given approval, the developer would buy the house, refurbish it, and sell it to the Authority. Since the time the new program was started in December 1965, some 350 dwelling units have been completed and occupied.

But the Authority found that the economics of the program made it feasible to rehabilitate only single-family houses. Although able to rehabilitate about 50 single-family houses a month under the new arrangement, the Authority gained virtually no multiple-family units — that is, not until last summer.

In late June 1966, the pharmaceutical firm of Smith Kline & French, whose laboratories

are in Philadelphia's Spring Garden area, agreed to cooperate with the Authority. Long worried about housing and social conditions in its section of town, Smith Kline & French had seen no way of improving the neighborhood other than to employ a social worker, which they did. Now, however, the laboratories are helping developers Hertzfeld & Horowitz Associates finance purchase of multiple-dwelling units by paying as much as 40% of the interest charges. The first renovated house, with three, three-bedroom apartments, opened in early January; since then, about one per week has become available. Hertzfeld & Horowitz plan to tackle 70. The renovation work is total: First, a house is gutted, then rebuilt from inside. New plaster goes on walls and ceilings; floors are surfaced with tile; new windows, doors, and storm sashes are put in place; a gas heating system is installed; new electric wiring, copper tubing, kitchen and bath fixtures, new roof, new step rails, and a house with three clean apartments instead of seven crowded, decaying ones is ready for occupancy. The Authority is renting the units for \$65 per month. Priority is given to families living in crowded houses in the neighborhood and the Authority claims that many families move less than a block.

One thousand homes may not be a lot, but more important is that Philadelphia has a rehabilitation program going that makes low-cost housing available without uprooting persons and neighborhoods.

OBITUARY

Missing on a flight from Puerto Rico to St. Thomas in the Virgin Islands in January were Mr. and Mrs. Stephen Currier, philanthropists, whose combined private fortunes were a major source of support for programs involving civil rights and urban problems. Last year, they donated more than \$750,000 to organizations that often were not aware of the source of the gifts, since the Curriers almost always gave money anonymously. Under a provision of their wills, funds will continue

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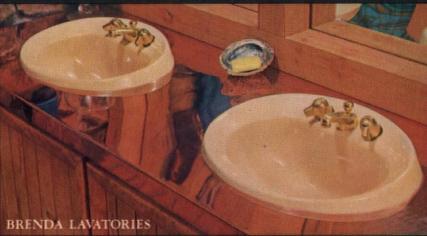
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to support the Taconic Foundation, founded by the Curriers in 1958, and its subsidiary groups, including Urban America, Inc. As publisher

of the Architectural Forum since 1965, and in its other ventures, Urban America has helped stimulate professional thought on urban problems.

UNDERGROUND POLICE FACILITIES WIN NEW YORK CITY COMPETITION



NEW YORK, N.Y. Architects Kelly & Gruzen have started an underground movement. Moving will be 110 police horses from their erstwhile home, the now-demolished 95th Street Armory, into below-ground stables in Central Park. The Kelly & Gruzen design for the stables, a police station, and two equestrian exercise and display rings, won first prize in a closed contest sponsored by the Parks Department with the financial aid of Stephen Currier (see Obituary, p. 62).

Now housed in dilapidated, crowded, low-ceilinged buildings that were designed by Calvert Vaux and are located in Central Park adjacent to the new site, New York's 22nd Police Precinct has long wanted new quarters, but decisions on where to put them and who would design the facilities held up the project.

New York has as much architectural talent as it has deplorable architecture - partly because so little of the talent is used by the city. Last year, however, the Parks Department invited five New York City firms to submit designs to the competition. Entries from the offices of Kelly & Gruzen, Whittlesey, Conklin & Rossant, Edward Larabee Barnes, Philip Johnson, and Marcel Breuer were judged by a jury composed of Deputy Police Commissioner Katz, Parks Commissioner Hoving,

landscape architect Paul Friedberg, and architects Paul Rudolph, William Breger, Lewis Davis, I.M. Pei, Peter Blake, and Arthur Rosenblatt.

Kelly & Gruzen's winning design shows a 3-acre orchard of flowering crab-apple trees, planted in the 3' of earth covering the roof of the underground stables (with 110 stalls for police horses and 220 private stalls). Directly to the west of this orchard will be an outdoor riding ring, circled by a 30' high mound of earth. Beneath the outdoor ring and its spectator seats will be a similar indoor ring and seating. To the north of the orchard will be the 22nd Precinct Station, constructed of the same granite stonework as the walls of the 86th Street transverse on which it fronts. Its sloping roof will be covered with earth and planted with grass. A bridge across the transverse roadway will connect the site with the reservoir to the north. According to the architects, the belowgrade building and roof plantings will preserve existing parkland, with the only loss of existing park being the 5% of the site needed for access roads. Also belowground will be parking for 80 cars and room for other supporting facilities. Anticipated cost of the project: \$7,500,000.

Runners-up in the competition were Whittlesey, Conklin & Rossant.

CUTTING FILE DRAWERS DOWN TO SIZE

HARTFORD, CONN. A miniature approach to the architect's big problem of information storage and retrieval has produced a compact solution — microfilm cards that will compress thousands of pages of manufacturers' literature into inches of space in a small card file.

If it is successfully implemented, the system promises to be one of the most significant advances in the push to make an ever-increasing flood of product information readily available to architects. It was developed by a new company, Commander Publishing Co., Inc., which has just completed a year's pilot study during which sample card files and reader-printers were tested in several architectural offices with generally favorable response.

The small sheets of microfilm, called microfiche cards (recently standardized by the Federal Government for reproduction of their information documents), will accommodate up to 60 pages of a manufacturer's literature on one card (approximately 4" x 6"). Black-and-white will be standard, but color is also available.

If plans proceed on schedule, the first working card files, called decks, will go into the 300 largest architectural offices next October. There will be no charge to the architect, and a simple viewer (magnification about 21x) will also be supplied at no cost, at least initially. In the future, more offices may be added to the priority list, and the service will eventually be available to smaller firms for a yearly fee ranging somewhere between \$75 and \$200.

Two indexes list file contents: one enters products by manufacturer, and the other uses the newly adopted Uniform System for specifications and data filing. A great advantage will be currency: cards and indexes are to be updated every 60 days, and a complete new index, together with revised cards (where necessary), will be sent to users. Monthly revisions may be instituted at a later date, but however frequent interim updating may be, the entire deck will be updated and replaced annually.

It is estimated that the first deck will cover 300 manufacturers and contain some 15,000 pages of data; future plans project 2000 to 3000 manufacturers with a total page count of 200,000. This compares with an estimated 1400 manufacturers and 18,000 pages in Sweet's Catalog, or 1000 manufacturers and 500 pages in the AIA's now defunct Building Products Register.

Drawbacks of the system seem to be that side-by-side comparisons of different manufacturers' products cannot be made on the viewer; and available hardware does not offer the kind of automated retrieval that could add greatly to the convenience of using the file. Also, the viewers to be supplied by Commander will not have a printer. Since hard copy print-outs are usually necessary, the burden of making this investment will fall on the architect.

The usefulness of the catalog will, of course, depend greatly on the number and diversity of manufacturers included. Prospects for thorough coverage seem good. since the price per cardand, therefore (at 60 pages per card), the price per page - is very attractive to manufacturers. Should the manufacturer require more than one card, the cost of each additional card drops considerably. So more manufacturers should be able to afford to put more data at the disposal of designers, specifications writers, and draftsmen.

WASHINGTON/FINANCIAL NEWS

By E. E. HALMOS, JR.

What the Budget Means for Architects — Most seasoned Washington observers are well aware that the annual budget and economic messages delivered by the President are nearly meaningless excerises in bookkeeping statistics except for one thing: the indication they give as to the direc-

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tion of Administration intent in future legislation.

The fact is that budget totals—this year you can take your choice of a figure anywhere between \$135 billion to \$170 billion, depending on which of three budgeting methods you like to follow—are such a vast jumble of carry-overs from previous years, new authorizations and appropriations, shiftings and borrowings from one roll to another, that they are impossible to total or convert in any meaningful way.

Actually, if Congress were to appropriate not a single penny this session, Government agencies would still have something like \$122 billion to spend in the coming year by virtue of previous appropriations, "obligational authority" (a sort of blank check to permit Federal agencies to carry on continuing programs even though money has not been actually appropriated, granted in previous years.

Thus, the biggest nugget of news in the budget and other messages wasn't the total of Government spending for construction purposes (which, at about \$8 billion, was about normal) but that no deep cuts were called for or indicated, except in highway building.

Despite the indefinite nature of the war in the Far East, the prospect of one of the biggest deficits in history, and other matters, the President's message indicated there would be no major attempt to knock any of the Government props from under the construction economy. Programs involving \$1,300,000,000 worth of work for the Corps of Engineers; \$319,600,000 for the Bureau of Reclamation (though down about \$7 million); \$1,600,000,000 in military construction; \$5,300,-000,000 for the National Aeronautics and Space Administration; \$206 million for the General Services Administration (up \$20 million); and others will go right along. The Bureau of Commercial Fisheries will get its \$1,400,-000 for construction of a pilot plant to make fish flour; Housing and Urban Development is to get \$250 million for the Model Cities Program and \$750 million in obligation authority for contracts; huge sums are ticketed for the Health-Education-Welfare Department for hospital and

educational institution construction.

All of this, of course, is provisional on approval by Congress. But there is little doubt that, after some token attempts at pruning the budget, the lawmakers will undoubtedly go along.

Architects and others concerned with the construction industry can therefore assume, that, after all the hints of cutbacks, there will, in fact, be very few: The Administration is either afraid that drastic cutting could upset the economic balance, or feels that talk has succeeded in slowing things down enough already to obviate any further paring of construction spending.

That still leaves one big area of concern: the strong likelihood that the Federal Government will continue to pressure private industry to hold down its construction commitments, and put a lot of hold-down pressure on price and wage escalation.

States May Become Larger Clients — The enormous size of the annual Federal budget, and the current indications that it has become almost unmanageable by either the President or Congress, is the real spark behind recent Congressional moves to return a share of Federal tax collections to the states, with very few strings attached.

The proposal, which stands a good chance of enactment during the current session, is based on the belief that states and local governments can handle money with better effect, and less bureaucratic problems, than can the Federal Government; and that much of the personnel, paperwork, and other problems that eat up funds can at least be shifted out of the Federal area.

If such a bill were passed, it would of course force an entirely new set of conditions on architects, engineers, and others seeking work: They would be dealing with state (not Federal) personnel and regulations.

Contractors Name Architect Liability—Having run into a hornet's nest of objections from contractors (and from some engineers), the AIA, in mid-January, made a reasonably graceful retreat from "hold harmless" provisions in proposed revisions of its "General Conditions of the Contract for Construction" (specifically, Sec. 4.18.3 of Document A-201); see IT'S THE LAW, JANUARY 1967 P/A.

Contractors complained loudly that, as originally worded, the subsection would have had the effect of forcing to "hold harmless" the architect for practically anything except a major defect in drawings.

Not so, said the AIA. In the face of adamant opposition from such groups as the sizeable (7900 member) Associated General Contractors, however, the wording was changed. As now approved by all sides, the revised Section 4.18.3 reads:

"The obligations of the contractor under this paragraph... shall not extend to the liability of the Architect, his agents or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving or failure to give directions or instructions... provided such giving or failure to give is the primary cause of the injury or damage."

With that concession, AGC withdrew its instructions to its own members, who had been asked to urge local architects' groups to revise or ignore the original provision.

Fine Arts Commission at Work — Not at all concerned with national politics and economics, the City of Washington went its own merry way in matters of architecture:

The Fine Arts Commission unexpectedly approved, without any dissent, a huge parking garage (partly underground); and the design by Minoru Yamasaki of three curvilinear office buildings for the Defense Department, to be built on Bowling Field, across the Potomac from National Airport (the buildings are reminiscent of the now partially built Watergate apartment complex). It also approved a new fountain sculpture alongside the Smithsonian Museum of History and Technology.

Equally unexpectedly, the commission rejected Marcel Breuer's modified design for a memorial to the late Franklin D. Roosevelt, near the Tidal Basin, with little explanation except that Breuer's "lying down" granite walls were not on a "human scale" (see

page 53).

In a related move, President Johnson appointed just-defeated Illinois Senator Paul H. Douglas to chair a 15-member "National Commission on Codes, Zoning, Taxation and Development," which is to make a "penetrating review" of zoning, housing, and building codes and recommend solutions for problems it finds. Financial — As noted above, biggest news for architects in the budget message wasn't the totals called for, but the indication that the Administration wants no substantial cuts in Government construction work.

Certainly of equal importance were the first tangible efforts to ease the money markets — headed by bank announcements of reductions in interest rates on major loans. Homebuilders professed to be noting some relaxation, too, and looked hopefully for a revival (though a long way from boom years) in housing construction.

☐ Encouraging, too, was some evidence that pressure on construction costs was slackening: The Bureau of Public Roads' quarterly index (for the last quarter of 1966) showed a drop of 2.5% (to an index of 112.8), after hitting three successive all-time high points during the first three quarters of the year.

□ The sick housing sector seemed also to be showing some signs of revival: In December, the rate of starts was set at 1,100,000 units, compared to 1,007,000 in November, but still well below the 1,800,000 rate of the previous year.

Although about a dozen bills are now in the Congressional hoppers on the subject of exempting business areas from the loss of 7% investment credit, some businesses may still be able to take some credit against income taxes in returns now due. Investments in 1966, up to \$20,000, are still eligible, if the businessman takes 7% and applies it against taxes due for the year.

□ State and local governments remain among the biggest sources of work for architects. Survey by the Census Bureau indicates these units spent \$19,400,000,000 within the 12 months ending with September. That's an increase of about \$2,200,000,000 over the previous year.

NEXT MONTH IN P/A

A one-subject issue of P/A. The subject? The earth. Forming it, conserving it, terracing it, using it creatively to enhance man's environment.

For the April issue, P/A's editors have put in the same massive research and long months of thought that produced "The Great Space," "Toward the Third Millennium," and other one-subject issues that have been made permanent references in the libraries of many professionals. Added to this will be the opinions and experiences of a number of prominent practitioners, including Lawrence Halprin, Garrett Eckbo, Richard P. Dober, Malcolm B. Wells, Dan Kiley, William Conklin, Paul Rudolph, Philip Johnson, Hugh Hardy, Paolo Soleri, and William Morgan, author of "Earth Forms in Architecture."

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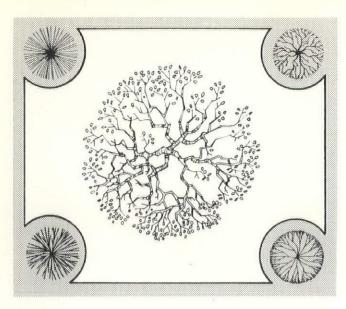
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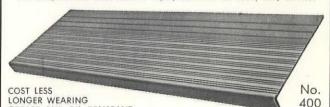


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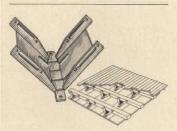
Circle 100, Readers' Service Card



Liquid roofing. Silicone rubber roofing material, now available after four years of developmental studies, is said to outperform similar roofing systems with other types of plastic bases. Its weathering characteristics have been found excellent under extreme temperature conditions and in damp, rainy climates, reports G.E. The material is applied with a roller, like paint, and solidifies to a lightweight elastic rubber membrane that is said to stay permanently flexible with a life expectancy of about 30 years. The two-coat cover (total average thickness of 22 mils) has minimal shrinkage, since curing is by chemical reaction rather than solvent evaporation. "Breathing" and adhesion characteristics, plus low water absorption, protect the silicone coating against cracking, blistering, and peeling. Roofing can be used over concrete decks, regardless of slope, and over exterior plywood decks

with slopes of 1/4" per foot or more. Available in 10 standard colors, including white, gray, and bright yellow. General Electric, Silicone Products Dept., Waterford, N.Y. 12188.

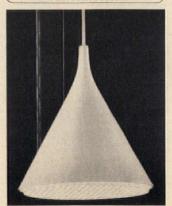
Circle 101, Readers' Service Card



On the level. Anyone, professional or amateur, who has ever struggled with the problems of rehabilitating an old building should be interested in a new floor-leveling device developed by the manufacturer for a New York City urban rehabilitation project. The V-formed device (22gage steel) is nailed to 2x3 sleepers or screeds every 36". The sleepers are then placed 24" apart on top of the existing floor. The angle of the V's are adjusted to accommodate the degree of sag, and nailed to the existing floor. Then the new flooring is laid on top. The Floor/Level/Support carries a live load of 40 psf, and manufacturer reports that the system can be installed more economically than other floor leveling systems under study. It may also be used as a plenum support. Timber Engineering Co., 1619 Massa-chusetts Ave. NW, Washington, D.C. 20036.

Circle 102, Readers' Service Card

FURNISHINGS



Form of Reflector. This versatile hanging lamp (AID award winner) features a spun aluminum reflector (14" high by 11½" dia), finished in baked satin white enamel inside and outside. White circular plastic grid louver made up of ½"-dia cells provide 45° shielding. Louver is held in place by a snap-in plastic flange. Lamp comes either with 15' approved white hanging cord and plug, or with 6' cord, canopy, and fittings for outlet box mounting. Nessen Lamps Inc., 317 E. 34 St., New York, N.Y. 10016.

Circle 103, Readers' Service Card





New and old. Fritz Hansen presents four new groups of furniture designed by Arne Jacobsen and Hans J. Wegner. Jacobsen has unveiled a huge, futuristic - and comfortable - oxhide lounge chair on an aluminum swivel base; it has a matching ottoman; both upholstered in leather, fabric, or vinelle. Another Jacobsen chair is of natural beech with interlocking joints, combining withgrain and cross-grain surfaces. Its tilting chair back adjusts by a leather thong that fastens under the seat. Both chair and matching circular coffee table with artificial slate top can be stained teak or walnut. To his 1943 "Chinese" chair, which has been reintroduced, Hans Wegner adds a table in rosewood, walnut, or cherrywood (like the chair); it can be used in either dining or conference rooms. Staff designers have developed an ashwood chair, sofa, and table group, which also includes a lounge chair with adjustable back and seat, and ottoman. Fritz Hansen, Inc., 305 E. 63 St., New York, N.Y. 10021.

Circle 104, Readers' Service Card

Contract Fabrics. Included in J.H. Thorp's spring line of fabrics are two heavy casements useful in contract installations. "Lakeland," a soft cotton criss-cross waffle weave, comes in beige or natural. The "Gander" casement, of rayon, cotton, and linen, has an uneven horizontal white weft on a cream warp. Both casements are 50" wide. An upholstery, "Antiqua Texture," has the look of hand-woven raw silk with contrasting warp threads; actually, it is rayon, linen, cotton, and acetate. Colors are copper, blue, green, yellow, olive, beige, and natural. Also featured is an imported line of cut, striated velvets and velours, J.H. Thorp & Co., Inc., 171 E. 56 St., New York, N.Y. 10022.

Circle 105, Readers' Service Card

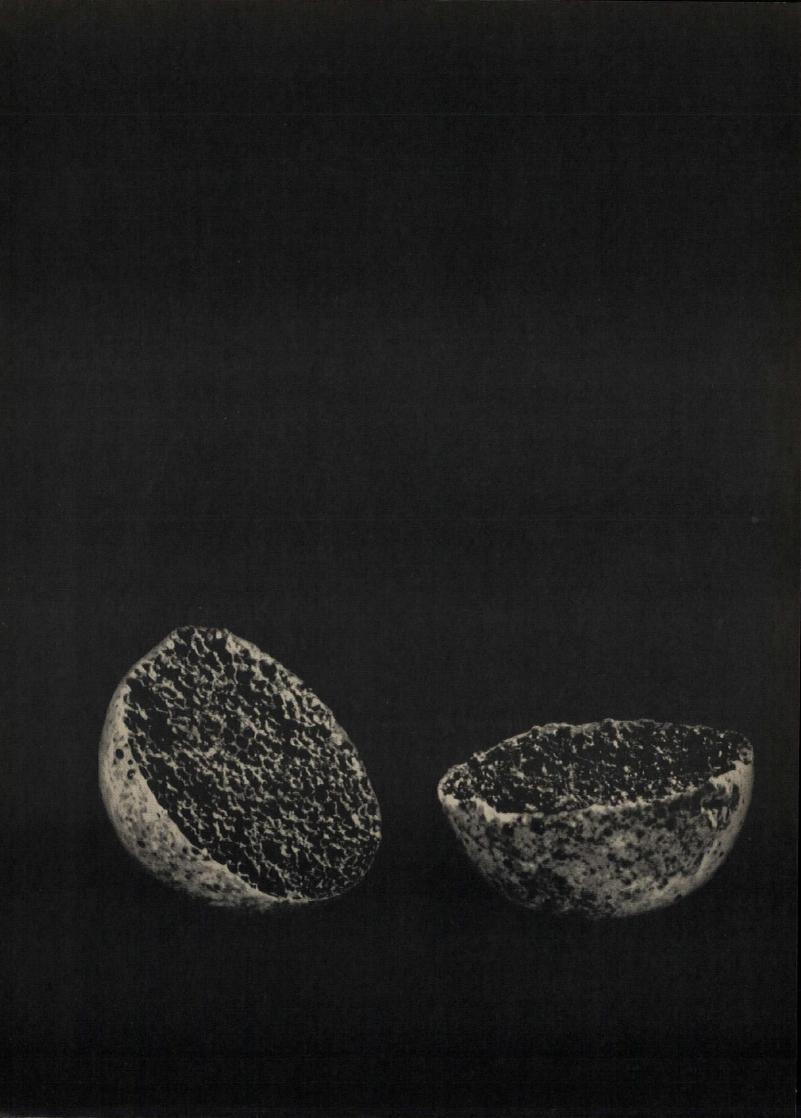
Heavy-duty rubber tile. Halfinch-thick rubber tile lets golfers wearing cleats walk easily through the clubhouse without fear of slipping, sliding, or inflicting damage to floors. "Golftile" will not chip, scratch, or dent; nor does it require special cleaning treatment - damp mopping with mild detergent is sufficient. Either as 24"x24" interlocking blocks, or in interlocking strips 36"x24", Golftile comes in five marbleized colors and in plain black. Mitchell Rubber & Plastics, 2130 San Fernando Rd., Los Angeles, Calif. 90065.

Circle 106, Readers' Service Card

INSULATION



Beaded board. Tiny glasssealed beads mixed in a bituminous binder form the core



Pittsburgh Corning, the insulation people, announce

Celramic-Board

the first roof insulation able to "breathe" without loss of insulating value.

The secret's in the remarkable new glass nodules developed by Pittsburgh Corning (like the one shown at left, cut open and magnified). Each contains countless closed cells which trap still, dry air-the ideal insulating medium-inside a vaporproof, moistureproof shell of glass.

Most roof insulations get their insulating value from air spaces around fibers. These air spaces can absorb moisture. In new CELRAMIC-BOARD, moisture never touches the sealed-in air.

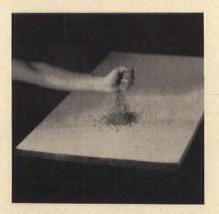
Each 2' x 4' x 1" CELRAMIC-BOARD contains thousands of these multicellular nodules in a bituminous binder. A network of tiny air passages between the nodules permits the

board to "breathe." Trapped vapor is dissipated harmlessly. No vapor pressure can collect beneath the built-up roof and cause felts to separate from the insulation. Wrinkling and buckling is minimized or eliminated.

CELRAMIC-BOARD cannot deteriorate. Laboratory tests have proven its ability to withstand all normal roofing hazards. It can be installed quickly and easily. Its bituminous binder makes it compatible with pitch and asphalt. It conforms to normal irregularities on decks without danger of breaking or cracking.

CELRAMIC-BOARD costs little more than the lowest price insulation. Send for complete information and

sample. Call or write Pittsburgh Corning Corporation, Dept. PP-27, One Gateway Center, Pittsburgh, Pennsylvania 15222.





of inorganic roof insulation boards. The small glass particles, about 1/16" dia, contain numerous glass-enclosed cells of insulating air (see magnification in photo above) that protect against moisture penetration; but air passages between the particles allow ma-terial to "breathe," thus pre-venting the wrinkling and buckling of roof felts caused by vapor pressure build-up, claims manufacturer. "Celramic-board" is fabricated in 48" x 24" x 1"-thick sheets covered with a specially treated paper. The bituminous binder, compatible with either pitch or asphalt, is said to allow all materials in the roofing system to expand and contract at the same rate. Manufacturer reports that insulation boards are easily cut and are suitable for most decks. Typical "U" value is .25 for a 4" concrete deck without ceiling using 1" Celramic-board. Pittsburgh Corning Corp., One Gateway Center, Pittsburgh 22, Pa.

Circle 107, Readers' Service Card

Correction. Because of a printer's error Pittsburgh Corning's Celramic-Board ad-

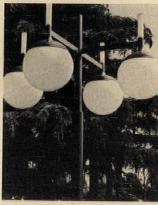
vertisement in the February issue of P/A was printed as a negative. The advertiser had this comment: "We really aren't going psychedelic. The strange look of Pittsburgh Corning's new product ad last month came from a printing mix-up - not LSD." You can see it as it should be on pages 68-69.

LIGHTING



The lighting sphere. Outdoor lighting fixtures, somehow pleasantly reminiscent of earlier days, lend a unifying element to multibuilding projects, streets, and malls. The one-piece, no-seam globes are formed from a spe-

cially developed acrylic with a chemical additive that eliminates discoloration, says manufacturer. Six-globe unit (at top) incorporates an integral glass fiber bench planter; available with opal diffuser for 300w incandescent lamps, or



with clear diffuser for 250w lamps. Four-lamp fixture has 24" dia globes topped by illuminated cylinders; available for either 400w mercury vapor or 500w incandescent lamps. Aluminum poles are offered in a variety of finishes. Architectural Area Lighting Co., 6100 S. Wilmington Ave., Los Angeles, Calif. 90001.

Circle 108, Readers' Service Card

SPECIAL EQUIPMENT



Maps à go go. Illuminated routing maps, a standard feature in the Paris Metro for many years, are now being manufactured and installed in this country. When the button indicating a particular destination is pushed, the map lights up the route by which it can be reached. It stays lighted 30 seconds, using color coding and selective lighting to indicate the observer's location, his destination, and the route. Signs are suitable not only for rapid transit systems, but may also be installed at trade shows and fairgrounds. Devco Engineering Inc., Caldwell Post Office, Fairfield, N.J. 07006. Circle 109, Readers' Service Card

Why Not Design in LEAKAGE Specify SUPERIOR

Cushion-Lock REGLETS

For Counterflashing and Metal Window Frames

You can be assured of permanently leakproof joints when you specify SUPERIOR Cushion-Lock Reglets, so why gamble with inadequate or unspecified substitutes that may cause serious problems at a later date. Installation is fast and because of the labor-saving advantages, total "in-place" cost is lower. There's no on-the-job caulking. Shipped ready for application. Five types available-extruded PVC or aluminum.

WRITE for Bulletin CL-3 and "On-The-Job" 4-page brochure.

Sweet's Catalog

21g/Su or,

SUPERIOR Concrete Accessories, Inc.

9301 King St., Franklin Park, III. Phone (312) 678-3373 2100 Williams St., San Leandro, Cal. Phone (415) 352-2830 New York • Houston • Los Angeles • San Diego • Toronto

On Readers' Service Card, Circle No. 431

TO SHARPEN: PUSH HERE

WORLD'S THINNEST LEAD **AUTOMATIC PENCIL**

Finally! Sharpening is a snap! Demi-.5 always assures you of a sharp constant fine line.

0.5MM LEAD

Designed especially for architects, engineers and draftsmen. A precision instrument for delineating the finest detailed drawings. DEMI-.5 leads (0.5 mm within a tolerance of 1/1000) are always sharp and black (reproducible) - saving you time - in a hand-balanced holder. \$1.98 each. Set (with a dozen H and 2H leads) \$2.99. DEMI-.5 leads are available in the finest HB, F, 2H, 3H and 4H sizes. 50¢ per dozen lead box.

Available at your favorite art materials and stationery dealers – or have your dealer write us. Dealer inquiries invited.





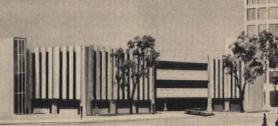
RESCON

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

PARKING GARAGE

58' SPAN WITH POST-TENSIONED TUBE SLAB

Cost of this five level parking facility 304' x 174', including two large rental areas, added restroom facilities, mechanical, electrical, traffic control, and landscaping was \$6.20 per sq. ft. The structure uses Prescon positive end anchorage tendons for posttensioning prestressed



New Britain, Conn., Parking Garage.

concrete and the Tube Slab System, a monolithic one or two-way concrete slab using uniformly spaced large diameter hollow paper or metallic tubes to create voids in the concrete.

Designed by A. J. Macchi, Engineers, Hartford, Connecticut, it provides for one-way directional traffic with one spiral movement upward, one downward, and a level portion at the center common to both movements. The 58' spans use 20-wire Prescon tendons stressed to 165 kips. Where the slab is 174' (3 spans), 16-wire tendons were stressed to 133 kips. Tie tendons in bridging members transverse to tubes and tendons were placed at 1/3 span points.

The floor slabs are 23" deep with 18" round metal tube voids at 22¾" on center positioned approximately at mid-depth of the slab. This forms a 4¾" rib between voids and reduces dead load to 142 psf. With a 10' floor to floor height this gives 8' 1" clear headroom. Temperature steel is used at the top and bottom of the slab. Tubes were omitted at the periphery to form solid edge beams.

Three hundred piles were used in the foundation. The exterior columns are 1' x 4', and interior columns are 4' x 3'. Double columns were used at expansion joints. In level areas the slab forms were sloped a maximum of 3" for drainage. Basement walls and pile caps used 3000 psi



Tendons have been uncoiled on slab forms in foreground; in upper right, part of the concrete placement has been completed with additional concrete being pumped into place.

concrete; columns, slabs, and beams used 4000 psi concrete.

Two parking rows plus a 22' wide traffic aisle is provided at every level. Parking is at 60° to the traffic direction. Column-free areas facilitate self parking. Monthly patrons have separate access to parking space in the basement level.

Architectural treatment consisted of exposed aggregate precast concrete panels 35%" thick for the facade. The exterior columns and stair towers concrete has a board marked finish.

This parking garage, scheduled to open in March 1967, was built for the City of New Britain, Connecticut. A. J. Macchi invented the Tube Slab System used in this project. Angelo Tomasso Inc., New Britain, Connecticut, is the general contractor.



Pumping of concrete to form the slab. Temperature steel and tubes can be seen in place. Tendons are positioned in ribs between the tubes

PARKING GARAGE BROCHURE AVAILABLE. Colorful 12-page brochure pictures and describes several different parking structures, plus listing 87 other parking garages using the Prescon System. Write for your free copy today.

THE PRESCON CORPORATION

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

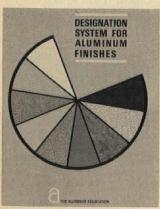
© 1967 THE PRESCON CORPORATION

B 67

MFRS' DATA



Designing with cables. Steel cables are no longer the exclusive design domain of bridge engineers; they receive increasingly enthusiastic attention from designers of buildings. "Suspended Structures Concepts," written for U.S. Steel by H. Seymour Howard, Jr., Professor of Architecture at Pratt Institute, discusses in its first section the theory and common design problems to be expected in building suspended structures. The second section gives case histories of stadiums, airport terminals, pavilions, etc. The final section shows proposed projects. The book is well written and illustrated - a compact guide to the world of suspended cable buildings. 37 pages. United States Steel Corp., Room 9974, 525 William Penn Place, Pittsburgh, Pa. 15230.



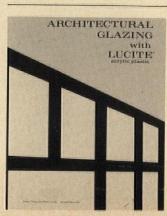
Aluminum finishing. New editions of two booklets discuss paints and finishes for aluminum. "Color and Quality Standards for Painted Aluminum Sheet" contains samples of 75 colors adopted by the Aluminum Assn. for factory painted sheet. Number coding provides a standard

system for specifications. 8 pages. "Designation Systems for Aluminum Finishes" details the system for specifying finishes and coatings. Mechanical and chemical finishes plus anodic and other coatings are covered. 8 pages. The Aluminum Assn., 420 Lexington Ave., New York, N.Y. 10017. Circle 200, Readers' Service Card



Patterned glass. Figured and wired glass for residential and commercial-institutional structures is discussed in a catalog featuring a channelshaped glass. "Profilite" is 12" wide with 15%" legs. The glass is available wired or unwired in 8', 10', 12', or 14' lengths. It is said to have high loadbearing properties especially suited for glazing walls and roofs in exposed positions. Joints are sealed with mastic. thus eliminating the need for supporting cross members. Photos of glass patterns, physical-properties tables, and light transmission data illustrate Catalog No. 67. 20 pages. Mississippi Glass Co., 88 Angelica St., St. Louis, Mo. 63147.

Circle 201, Readers' Service Card



Plastic windows. "Architectural Glazing With 'Lucite'

Acrylic Plastic" presents the advantages of "Lucite" sheet for light control, insulation, weight, color, and workability. The brochure also describes installation procedures, care and cleaning, design tables based on wind loads, and standard design details. 8 pages. Du Pont Co., Room 2420, Nemours Bldg., Wilmington, Del. 19898.

Circle 202, Readers' Service Card

The "fire" down below. Snow melting and heating cable products include fiber or wire mesh heating mats for installation within asphalt or concrete slabs; fiber mesh heat mats for concrete floors in buildings; and soil heating cable for athletic fields. Also included are automatic switches and thermostats. Data tables, photos. 8 pages. The Singer Co., Climate Control Div., 62 Columbus St., Auburn, N.Y. 13021.

Circle 203, Readers' Service Card



Concrete decks. Catalog of prestressed precast concrete slabs (4" to 12" thick) includes load tables, typical spans, and instructions for use on steel frame, concrete frame, and wall-bearing construction. The slabs have hollow-core cells for underfloor electrical distribution and for heating, air-conditioning, and ventilating ducts. Text, drawings, specifications. 8 pages. The Flexicore Co., Inc., P.O. Box 825, Dayton, Ohio 45401.

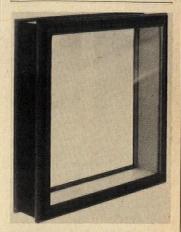
Circle 204, Readers' Service Card

DOORS/WINDOWS

Period pieces. Door and drawer hardware is available in several styles of bygone days—"Country French" and "Early American," for example. Pulls, hinges, and roses are made from wrought iron; knobs are available in wrought

iron, porcelain, or crystal. Catalog gives prices, photos, and dimensions. 12 pages. Peabody Distributing Co., Belwith International Ltd., 1119 E. 63 St., Los Angeles, Calif. 90001.

Circle 205, Readers' Service Card



Factory-sealed windows. Double-glazed, hermetically-sealed windows dampen sound in critical areas such as airports, motels, and band rooms. "Acousta/Glaze" windows or window wall systems provide sound control ranging from STC 40 to STC 60 by varying glass thickness and air space. Maximum vibration-, noise-, and thermal-insulation are achieved by the use of zippergasketing, according to manufacturer. Folder describes properties, gives sound-transmission graph, and shows typical installation details. 4 pages. Sitelines, Inc., 1957 Long Beach Ave., Los Angeles, Calif. 90011.

Circle 206, Readers' Service Card



Open and shut. Door lock charts give function, descriptions of operation, and drawings. Brochure illustrates knob and rose styles with dimensions and materials, and manufacturer's recently introduced maximum security locks and keys. 16 pages.

Sargent & Co., 100 Sargent Dr., New Haven, Conn. 06509.

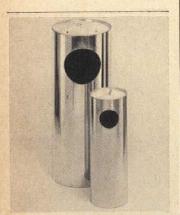
Circle 207, Readers' Service Card

FURNISHINGS



Institutional Furniture. A 65page catalogue from Fixtures Mfg. Corp. illustrates large collection of institutional furniture: chairs, table bases, table tops, bar stools, coat racks, lounges, accessories. Of special off-beat interest are legless tables supported by chair attachment. Photos illustrate every piece, and specifications include dimensions, weight, colors, and materials available, and optional features. Fixtures Mfg. Corp., 1641 Crystal, Kansas City, Mo. 64126.

Circle 208, Readers' Service Card



Office Receptacles. Habitat's extensive collection includes elegant cylindrical sand urns, water urns, ashtrays, waste receptacles, and umbrella stands and racks. All units are made of Trexiloy, an aluminum alloy with fine surface finishing characteristics and high resistance to corrosion. Finishes are polished or satin chrome - matte black and matte white are available for some umbrella stands and sand and water urns—and brass, bronze, and gunmetal satins on contract orders. Well-designed series of black and

L-O-F announces new larger sizes new design flexibility new low prices on Mirropane* ...the "see-thru" mirror

Larger sizes . . . substantial price reductions . . . faster delivery. All are possible due to new production facilities.

The largest standard size of Mirropane has been increased from 60 x 80 inches to 72 x 120 inches. Maximum size on special order for ¼" thickness, 120 x 144 inches. These larger Mirropane sizes, in all the different types of L•O•F glass (see table below), provide more flexibility in design.

Mirropane is used in schools, hospitals, clinics, stores, banks—wherever it's important to observe what's happening without being seen.

For more facts, phone your L•O•F Distributor or Dealer listed under "Glass" in the Yellow Pages or write to address below.



A DIVISION OF LIBBEY-OWENS-FORD GLASS COMPANY 8237 L-O-F Building, Toledo, Ohio 43624

Mirropane Selection Table

Туре	Thickness	Primary Advantage	Maximum Standard Size
Regular Polished Plate	%"	Lightest weight	72"×120"
Plate or Float	1/4"	Economical standard type	72"×120"†
Heavy Duty Plate	36", 1/2", 5%", 3/4"	Strength, sound reduction	72" x 120"
Parallel-O-Grey®	13/64", ¼", ¾", ½"	Best performance lower light ratio	72" x 120"
Laminated Safety Glass	14", 36", 1/2", 56", 34", 76", 1"	Safety and sound reduction	72" x 120"
Tuf-flex® Tempered	¼", ¾", ½", 5%", ¾"	Thermal shock, impact protection	72" x 120"

†Available up to 120" x 144" on special order.

Steelcraft 9017 Blue Ash Road Cincinnati, Ohio 45242 Please have your distributor deliver my free copy of the Steelcraft Tech-nical Data Manual on Metal Doors and Name_ Address

State

Free technical data manual



Steelcraft's Technical Data Manual has everything you need to know about metal doors and frames, all wrapped up in a handy package that is easily the most complete source of technical data in the industry. Included are architectural details, specifications and applications for all types of metal Doors, Frames, Labeled fire doors and accessories. Your manual will be hand delivered and kept up to date by your local Steelcraft distributor. Fill out the coupon above and obtain your reference guide now.



On Readers' Service Card, Circle No. 390

white catalogues give sizes, finishes, and photo of each unit. Habitat Inc., 341 E. 62 St., New York, N.Y. 10021. Circle 209, Readers' Service Card

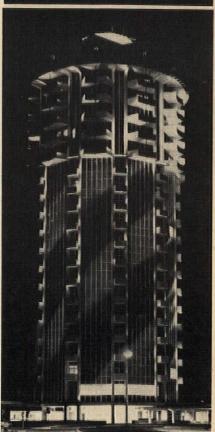


Library Furniture, Robert Donovan designed these squared-off, hefty walnut pieces (burn-, scuff-, and stainresistant) of Metwood library furniture, which include round and rectangular tables, bookshelves, card catalogues, desks, and a magazine rack, atlas case, dictionary stand, and occasional bench. Looseleaf catalogue has 20 full-page photos; backs of photos give dimensional data and optionals. Standard Furniture Co., Herkimer, N.Y.

Circle 210, Readers' Service Card

Clouds on the ceiling. Though surface-mounted, wraparound Plexiglas acrylic diffusers ("Clouds") in a translucent matte-white finish show no metal fixtures. Held in place by a concealed spring catch, the diffuser swings open, attached to the fixture by a channel hinge, to facilitate cleaning and relamping. Available in sizes up to 51" square, in 9 styles, these fixtures are said to give an even wash of shadow-free light. Brochure includes product photos, specifications, illumination diagrams, and co-





VIVID COLOR LIGHTING

in up to 1500W sizes.

New Stonco Color-Floods deliver brilliant white light for year-'round use. Convert in a jiffy for rainbowrich holiday lighting, or lavish archi-



tectural accents. (Even special indoor units for ice shows, circuses. etc.) When color has you cornered, call on Stonco.

We'll be tickled pink to share our experience.

1967 STONCO ELECTRIC PRODUCTS CO., KENILWORTH, N. J.

It might do the job at first. But gradually there's a loss of insulation efficiency in low-cost, water-susceptible insulation. Heating bills and cooling costs go up, and up, and up.

Here's what happens. The bargain insulation gets water-logged and loses its insulation value. Vapor barriers aren't enough. Movement of a building will split them, allowing moisture-laden air to penetrate the insulation. Moisture forms through

condensation, reducing insulation efficiency. What to do?

Specify STYROFOAM® brand extruded foam. It's the finest, most modern insulation you can buy. Never loses its effectiveness. Always stays dry. Requires no vapor barrier. Doesn't rot, mold or deteriorate. Flame retardant. Lightweight and easy to install.

As for application, you can use the

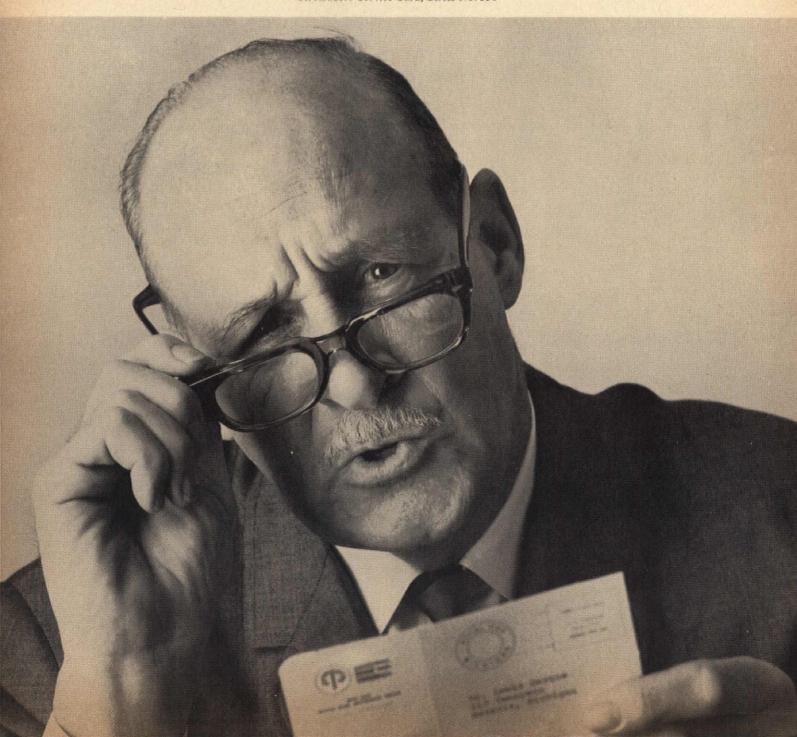


Miller System; apply paneling or decorative wallboard directly on it; use as a base for wet plaster; or as a perimeter insulation for foundations and slabs.

The next time why not specify STYROFOAM brand insulation... one of a family of rigid foam insulations offered by Dow. For more information, write to The Dow Chemical Company, Construction Materials Sales, Dept. 71300, Midland, Michigan 48640.

No one will know you installed bargain insulation.

(until the owner heats up)
On Readers' Service Card, Circle No. 338







Are you beset by Gargantuan quantities of configurations to be laboriously transcribed onto foolscap, parchment or vellum, in the pursuit of your daily employment? Then you will be pleasantly gratified, we venture to assert, with the performance of that ingenious contrivance, the VEMCO V-Track Draughting Machine. Not since R. Jeremiah Q. Spurgeon's patented mechanical quill pointer has a device so advantaged the draughting milieu, nor, in truth, met with such enthusiastic acceptance—almost verging on the hysterical, according to one unconfirmed report, we might add.

If your management is still equipping you with T-Squares, Parallel Straightedges and Triangles instead of VEMCO V-Track Draughting Machines (which is similar to using mustache wax to polish your button hooks) you might wish to ascertain how you can elevate your company to an even more lofty position of progressive enterprise by arranging for a demonstration (without obligation, need it be mentioned), or sending for a free Brochure No. 681/6796, on this amazing, and ingenious contrivance.



On Readers' Service Card, Circle No. 447

efficient charts. Peerless Electric Co., 576 Folsom St., San Francisco, Calif.

Circle 211, Readers' Service Card

INSULATION

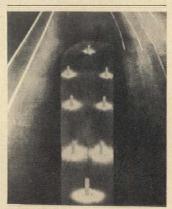


Thermal protection. Brochure describes granular fill and sheet polystyrene for insulating concrete decks and masonry walls. Sketches illustrate typical applications, and tables recommend thicknesses to meet various insulating conditions. Booklet G-279; 8 pages. Zonolite Div., W. R. Grace & Co., 135 LaSalle St., Chicago, Ill. 60603.

Circle 212, Readers' Service Card

SPECIAL EQUIPMENT

On the bunsen burner scene. Sinks, cabinets, countertops, plumbing and electrical fixtures, and other laboratory components are cataloged with photos, drawings, dimensions, and other pertinent data. 90 pages. Hamilton Mfg. Co., Two Rivers, Wis. 54241. Circle 213, Readers' Service Card



Lighted markers. For highways, drive-in theaters, or other traffic areas, two lighting units serve to mark, direct, or warn automobiles. One is a flexible plastic tube for safety islands or roadside markings. The other is a small (8" dia) disc set in the pave-

anything NEW IN KITCHEN VENTILATION YES The

GAYLORD



- No Filters or removable parts •
- Automatic Water Cleaning Daily .
 - Centrifugal Grease Extraction
 - Requires less air •
 - Removes grease, heat, odors •
- 24 hour Automatic Fire Quenching •
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 - Guaranteed Performance

WITH A FLAIR

DESIGN SERVICE — The Gaylord Ventilator is adaptable to all equipment — upon request we will provide design services and layout drawings for each of your installations showing not only our recommendations for the utilization of the Gaylord Ventilators but complete air engineering for the job — at no cost or obligation.

For Complete Literature: GAYLORD INDUSTRIES P.O. BOX 19044 Portland, Ore. 97219 - 503-246-8835

ment, and designed to withstand the wear and tear of traffic. Brochure describes properties of lights, and suggests applications. The Strong Electric Corp., 624 City Park Ave., Toledo, Ohio 43601. Circle 214, Readers' Service Card

Mechanical helper. Dumbwaiters and accessories are specified and described in brochure covering six models. Capacity and size charts, photos, simple installation plan drawings. 8 pages. Energy Elevator Co., 47th and Chestnut Sts., Philadelphia, Pa. 19139.

Circle 215. Readers' Service Card

Ladies/Gentlemen. Washroom accessories of trim, simple design are illustrated in full-color photos and drawings. Units may have woodgrain face panels or be fabricated entirely of stainless steel. Items cataloged include soap dispensers, paper-towel dispensers, recessed cabinets, mirrors, grab bars, and special purpose washroom and janitorial accessories. 34 pages. Accessory Specialties, Inc., 42-14 Astoria Blvd., Long Island City, N.Y.

Circle 216, Readers' Service Card

Moving water. Packaged fountain assemblies need only be plugged into the "nearest electrical outlet." Lightweight glass-fiber pool (18" to 12' dia.) is fitted with spray head (several water patterns available), recirculating pump, lights, and other necessary accessories. Custom work available for larger installations. Packages without pool (only spray head, pump, etc.) also available for designer-planned fountains. Drawings, prices, and equipment information. 120 pages. Roman Fountains Inc., 7251 N. Varna Ave., North Hollywood, Calif. Circle 217, Readers' Service Card

PROGRESSIVE ARCHITECTURE

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combines all conventional features with private telephone intercom

Webster Electric, a pioneer manufacturer of sound and intercom equipment, has developed an entirely new sound system combining all outstanding features of a conventional system with private automatic telephone intercom. This innovation, the Webster PC System, is modular and fully transistorized - so entirely unique - a patent has been allowed.

It works like this. The sound system is multi-channel, permitting normal distribution of recorded, broadcast, or live programs, time and emergency signals to selected rooms, groups and areas. The telephone intercom section features a solid state line circuit switchboard, providing trouble-free communication over any number of dial telephones. In addition, you gain access to the sound system from any phone for paging, announcements or emergency all-calls on a private and/or priority line basis.

The advantages to this system are many. The electronic components of the sound private and the system are many.

nents and switchboard can be located in a remote spot - closet or equipment room. Wiring is telephone type — economical to install, maintain and expand. No special training is required to use — dial telephones are familiar to everyone. There are no restrictions on

access to system — any authorized telephone may call.

The Webster PC System is ideal for schools, dormitories, hospitals, factories, wherever you recommend a sound or music distribution system. It's a natural to replace existing systems in remodeling or expansion programs.

Your Webster Electric distributor* can tell you more — how your clients can benefit from the new PC System concept. Call him today or write direct for technical literature.

*See Yellow Pages — "Intercommunications Systems"

5260

COMMUNICATIONS DIVISION

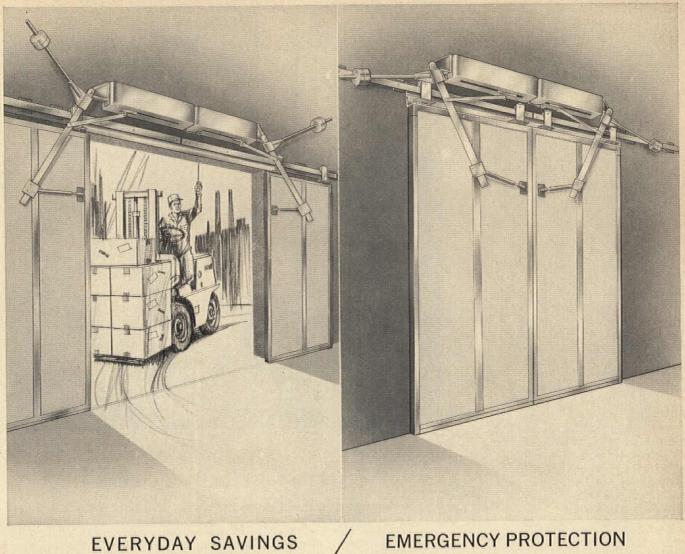




ELECTRIC COMPANY, INC. RACINE, WISCONSIN 53403

subsidiary of Sta-Rite Industries, Inc.

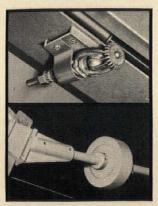
PRIVATE DIAL TELEPHONE . LOUD-SPEAKING INTERCOM . SOUND & PAGING SYSTEMS . TEACHING LABORATORIES



NEW STANLEY Automatic Fire Door does Double Duty

Everyday automatic operation reduces materials handling costs, conserves conditioned air, isolates restricted areas. Built for heavy duty, high frequency use and low operating cost.

24-hour emergency closing is assured by a fail-safe mechanism that meets both U.L. and Factory Mutual inspection test requirements. Write for Specification Sheet M79-IND. Or look for us in the Yellow Pages under "Door Operating Devices". Stanley Door Operating Equipment, Division of The Stanley Works, New Britain, Connecticut.



Emergency closing is initiated by simple fusible nozzle or other fire or smoke detection device. Opening is completely sealed, but manual operation remains possible.

Operator does not have to be disconnected in case of fire. Built-in counterweight closes automatically at any phase of cycle. Eliminates fusible links or spring-loaded devices.

AUTOMATIC ENTRANCES by



Where opportunity walks right in.