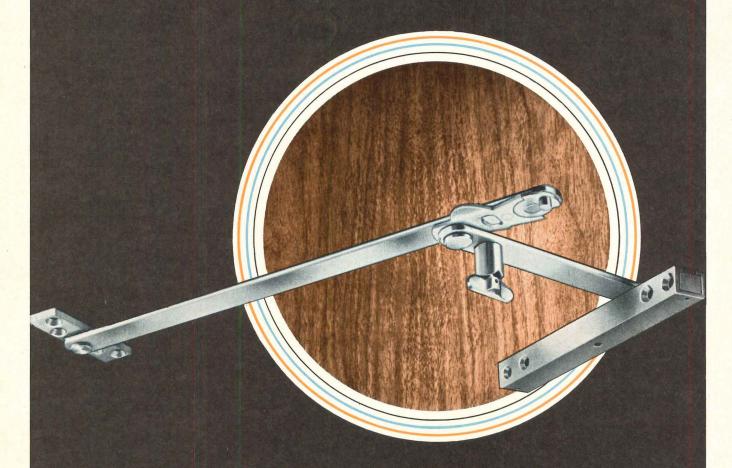


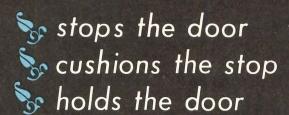
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Progressive Architecture ® May 1968

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the beautiful world of reinforced concrete is reaching out

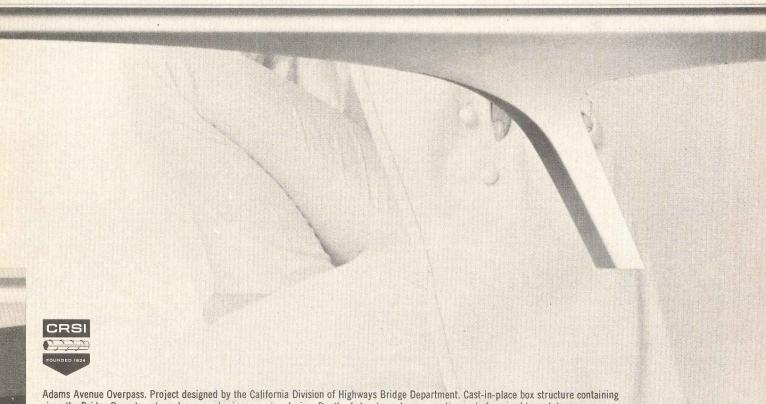
...268 ft.

This exciting new landmark will soon be a part of the San Diego skyline. It's the Adams Avenue Overpass. Part of the Mission Valley freeway project. A monolithic reinforced concrete span that will reach out 268', rise 80' above the freeway floor, nestle beautifully on a ridge that can be seen for miles around. It's a curvilinear 3 span structure with inclined bents. Easy to look at. Economical to build. Virtually maintenance-free.

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VIEWS

Los Angeles Editorial Stirs West Coast Architects

Dear Editor: Re your Editorial in the FEBRUARY 1968 P/A: There are quite a number of us who dig Los Angeles and do not live here, but, then, we do not live in Washington or New York either. We explain the reasons in magazine articles in Europe (for instance, how much more nearly ideal the climate is than Washington's, New York's, or Europe's) which, mysteriously, never get reprinted in U.S. magazines....

Why do we Europeans always have to do you Americans' intellectual dirty work? And this will be dirty work, because one of [my new book on Los Angeles'] aims will be to detonate the last paragraph of your Editorial; Los Angeles is so unique and special a case that one thing "other urban sprawls" can never do is to "resemble Los Angeles." Other cities have never had the same pre-automobile constraints and energies as L.A., and it worries me that a serious editorialist should apparently be unaware L.A.'s distinctive shape (which is a backfilling operation from the perimeter, not a "sprawl" in the Denver sense) was effectively fixed before there were more than 500 automobiles here. Looks like we have quite an educating job to do, us Europeans.

REYNER BANHAM Barlett School of Architecture London, England

[You're right. There undoubtedly are as many as half-a-dozen floating English intellectuals who dig L.A. and who don't live there. That doesn't change what was said about nonresidents' dislike. As long as you've taken it upon yourself to educate us ignorant Americans, we'll look forward to reading an explanation of "back-filling operation from the perimeter" and learning about its relation to Los Angeles's lovability. — ED.]

Dear Editor: Your February Editorial on Los Angeles touched on a subject close to all of us in the profession, not merely in its application to Los Angeles, but in its wider implications to architects practicing in every urban area.

You are quite correct in your assumption that we who live here love doing so. One of the disturbing things about modern architecture and its exalted examples is that people are frequently insensitive to "great design" to the extent

that they often just don't like to inhabit these buildings that architects vote as being aesthetically great.

Architects have to come to the conclusion that their technical capabilities are now well refined in many areas. Therefore, we should possibly study not only the future technological advances of architecture but make a thorough study as well of the likes and desires of people, not only their needs.

One of the additional reasons you did not touch on for liking Los Angeles is that it is really the city of the future in many ways: its planning around the automobile, its determined attempt to create a different urban landscape, and its easily apparent freedom from tradition.

One of the things a Westerner is most conscious of in the East, aside from the tall, dense jungle of buildings, is that "No one does this after September 1," or "This is not the way it's done" attitudes prevail in a great many areas where they really need not impinge on the inhabitants. Some tradition is, of course, desirable, but it does not need to get down to straw hats and gin and tonic, no matter what the weather is.

Surely there are more weighty matters that could be mentioned than these obvious ones, but I can assure you that, were you to live in our "cultural desert" for any length of time, you would never go back to the claustrophobic city you now struggle in. But then, moving your offices here would bring some culture West as well.

RALPH JACKSON Welton Becket & Associates Los Angeles, Calif.

Dear Editor: It is true that Los Angeles is lovable, but it is also true that its environs vary from great beauty to unbelievable ugliness. Many people are ugly but still lovable. Generally speaking, they can't do much about their ugliness. Cities can, and there is no reason for the ugliness in Los Angeles, even though pitifully little is being done about it.

The much publicized mobility, which is a product of our excellent freeway system, is gradually grinding to a halt, and unless some definite efforts are made for public transportation, the mobility will be only a memory. Another contributing factor to this has been the lack of buildings over 13 stories, which was a product of earthquake requirement zoning. Now that this requirement is no longer with us, there is an opportunity to build up big centers - themselves huge traffic generators, but which can be linked by monorail or similar forms of rapid transit. One aspect of the Los Angeles scene that is hardly ever mentioned is its open green areas. There are many beautiful golf courses throughout the city and suburbs, whereas New York has none in the city anymore, although there were once 25. Golf courses in California are taxed as agricultural land, which is a situation other cities not similarly blessed should ponder.

The Watts area will be the first to profit from rapid transit. What they need even more are recreational facilities. Unlike many ghetto areas, Watts is not an unattractive physical situation. There are small, neat houses, green lawns, Canary Island palms and other foliage throughout the Watts area, but there is, unbelievably, no cinema, the reason being that our capitalist system cannot tolerate a nonprofit situation. Government is making token efforts in Watts but what is needed is massive aid from private industry with none of the strings attached that stifle so much of American enterprise. Some of the junior art centers in Los Angeles that have been involved in teaching Negro students have reported fantastic results with "gangs" coming off the streets, lining up to get involved in the "happening," and other exciting activities that these stimulating young art teachers have initiated. Similar enterprises in Watts could be nothing but beneficial. Recreation is almost as essential as jobs, and, if we don't provide it, we will bear the cost of endless rioting.

DESMOND MUIRHEAD Newport Beach, Calif.

Dear Editor: The thoughts expressed in your "amateurish evaluation" of Los Angeles once again indicated to me your editorial excellence.

You are to be complimented on having the perception of a "total life-style" and the meaning of freedom—the very human element—and relating it to the planning and design function.

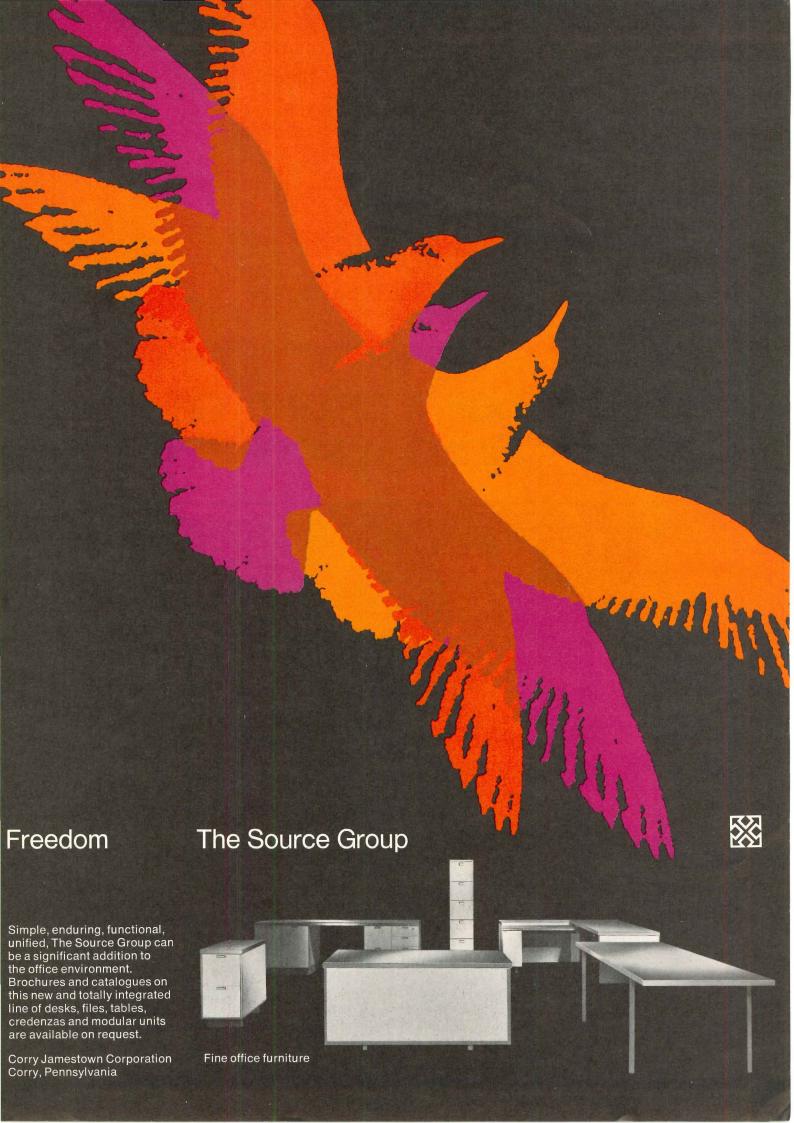
During the past year, your Editorials have made me *think*. And that is beautiful. Because of this, I will continue to be a faithful reader of P/A.

RICHARD H. ALLISON, SUPERVISOR
Armstrong Cork Co.
Lancaster, Pa.

Ford's Peculiar Philanthropy

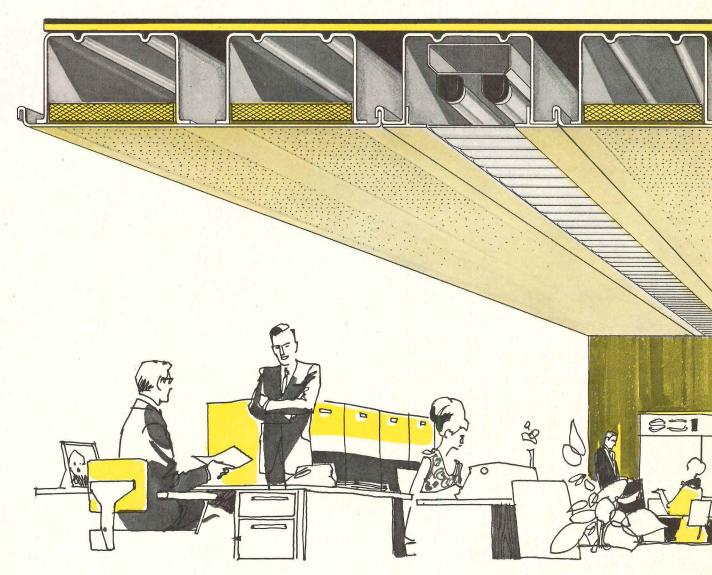
Dear Editor: Re your article "Charity Begins At Home" (February 1968 P/A): I retreat in abject disgust from idealization of the Ford Foundation Headquarters. If this is a symbol of Ford Foundation's "aspirations and aims," then quite possibly those goals should be held up for re-evaluation. Such travesty and waste has been noted before — for example, in the declining years

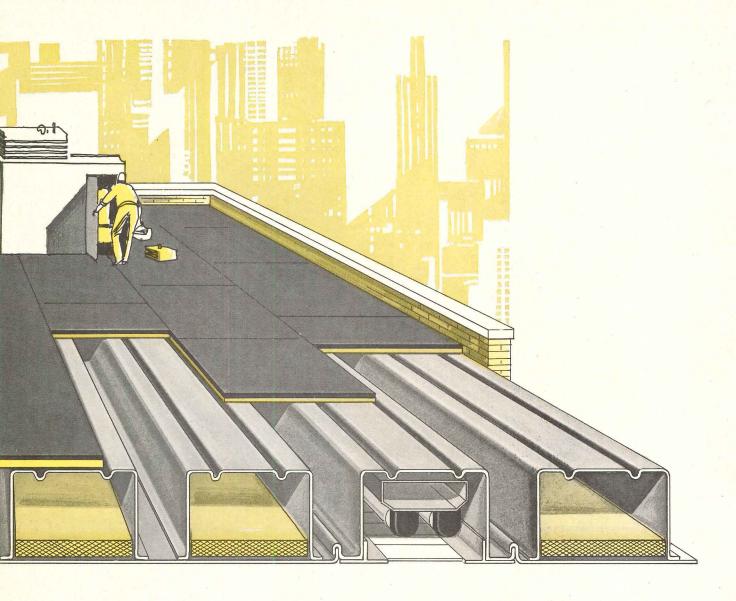
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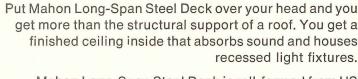
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Continued from page 6

of the Roman and French Empires—but can it be that this is the "goal of excellence" toward which future urban designers should aspire? But then, I guess this is a social question, which puts it out the domain of architects. Another social question we should not concern ourselves with today is why Ford's space cost almost \$1000 per sq ft, while classroom space must be limited to under \$20 per square foot (Mount Anthony Union High School, same issue).

MARTIN KRAVITT Brooklyn, N.Y.

Dear Editor: Your apologia at the conclusion of the article about the new Ford Foundation Building (February 1968 P/A) seems to assume that "good taste" and "superior design" must come automatically if enough money is spent. Would it not have been far better for the Foundation to house itself in a building that really showed how good design can be achieved without undue expense? Or is the real truth of the matter that the "aspirations and aims" of the supposedly philanthropic body are in fact the expending, by any means at hand, of as large an amount as possible in order that it should not go to the public purse in the form of taxes? It is also questionable whether in fact this is a good building; your reviewer, I suspect, might well be suffering from "dollar blindness." The opinion has been expressed that it is a prime example of "a group of brilliant details desperately looking for a building."

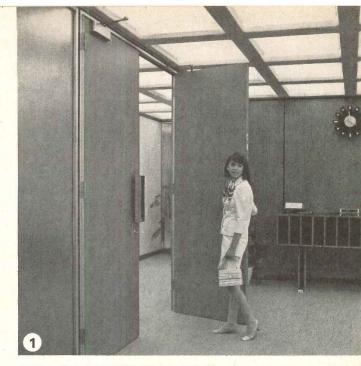
> ROBERT A. WARREN Omega Construction Co. Newfoundland, Canada

Designer Has the Last Word

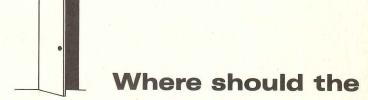
Dear Editor: In reference to James M. Hinzdel's letter in the MARCH 1968 P/A, there are several points he has overlooked.

It is true that the La Puntilla site could have many uses other than housing. The proposal I have worked on tries to include a mixture of all the uses Hinzdel suggests. Transportation facilities for automobiles, buses, and boats are included adjacent to the La Puntilla site and need to be thought of as part of La Puntilla. The most important concern is open space, which is included for both the general public and tourists as well as the housing area. The question is, to what extent? There is indeed a great need for open space in the city. However, to look at the larger scale, La Puntilla is not the best area to locate open space, since it is extremely close to other park areas of the city.

Continued on page 16









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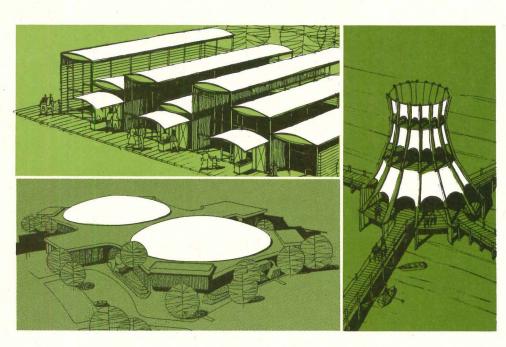
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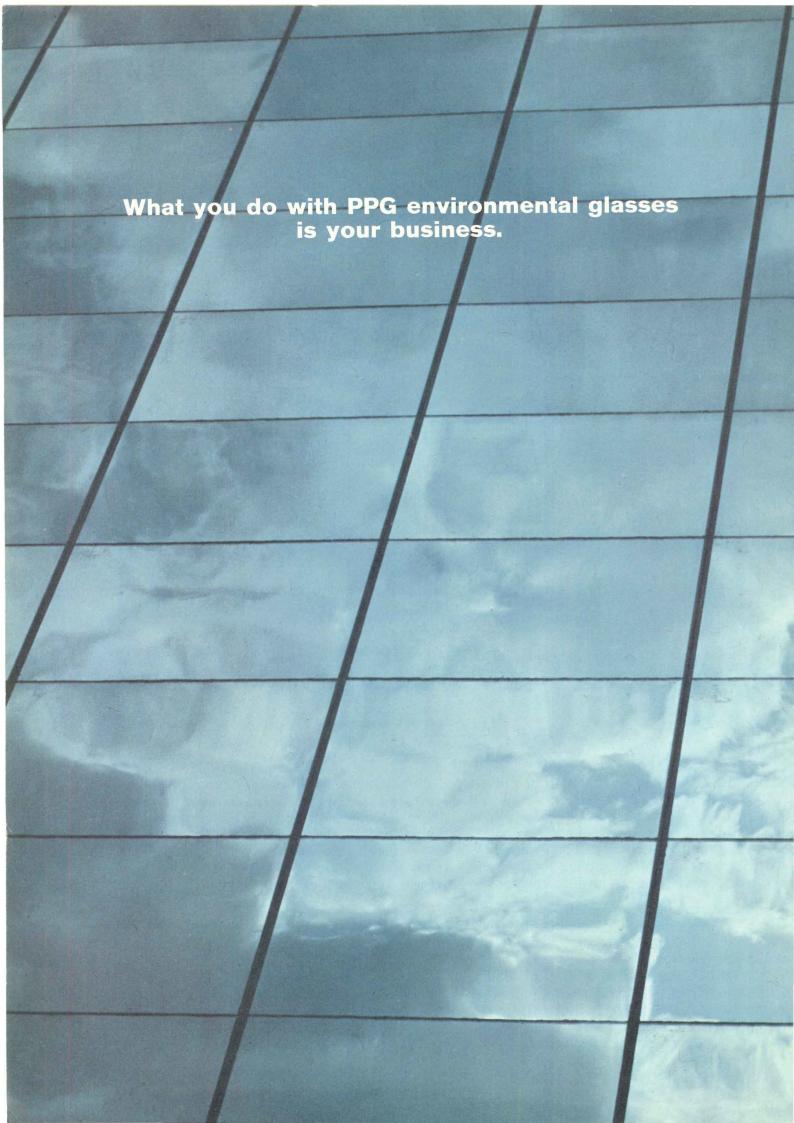


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Continued from page 10

The real issue, however, is on another level. Old San Juan is one of the most interesting cities in North America. Although its plan and architecture are exciting, the real beauty is found in the diversity of uses, functions and population occupying the same area. This, unfortunately, is slowly changing as Old San Juan becomes a high-income American tourist center.

In the La Puntilla scheme, there is the opportunity to provide new housing for a different income level that may bring this diversity back into the Old City. With this intent, I do not think La Puntilla is a mistake but a rational solution to many problems.

> JAN WAMPLER Boston, Mass.

The New Union: A Good Defense Is Not Enough

Dear Editor: In the NEWS REPORT article entitled, "Will the Architect be a Union Man?" (February 1968 P/A) you stated, "A good offense is the best defense. A union has no hand-hold if the salaries, wages, and fringes paid are already competitive with those in other offices in the area."

There is some disparity in renumeration from office to office, and it would be an improvement to bring the most backward offices to the level of the most advanced; however, it would still be far from satisfactory. The fact is that renumeration of employees throughout the profession is distressingly below the levels of other professions. It would have been more constructive had P/A observed that employers should match the salaries, wages, and fringes paid in other professions or even those paid plumbers. A recent "Department of General Services" publication of General Prevailing Hourly Wages Rates in California lists plumbers as receiving \$7.44 per hour and \$14.88 per hour for overtime.

HERBERT M. LIPPMAN, ARCHITECT President, Architectural & Engineering Guild of America Los Angeles, Calif.

The Sole — or Soul — Motive?

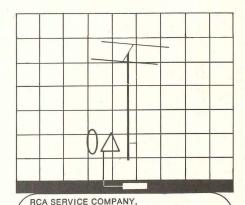
Dear Editor: With regard to your Editorial in the March 1968 P/A, Charles Luckman's belief that "next to the influence of religion in our life and character, the next single, most influencing factor, is the profit motive," would seem to be correct in every respect—except one. The profit motive definitely takes priority over religion. In fact, an over-all look at our society might indicate that the only religion we have is the profit motive.

JAMES E. BRYANT Environmental Design Assoc. Boulder, Colo.

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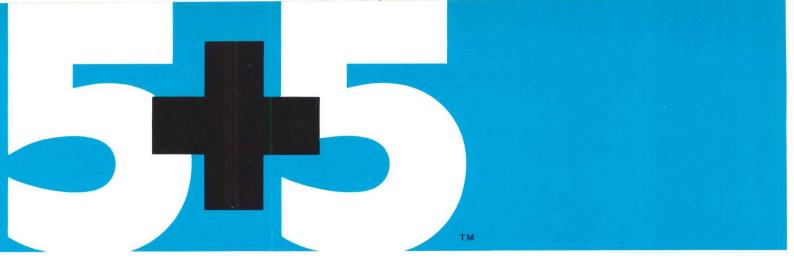
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and ventilating. *Lighting:* 30"x30" Sonolux lighting panels and 20"x60", 30"x60", or 60"x60" regressed troffers. *Acoustical Material:* Ceiling tile, both ventilating and non-ventilating type specially designed for this concept; 30"x30" and 30"x60" ceiling board and semi-concealed ceiling panels designed specifically for this new concept.



More and more architects are choosing *Conwed* "Five plus Five" ceilings based on popular 5' multiples. These ceilings provide a clean, uncluttered appearance and the design freedom needed for today's flexible interiors.

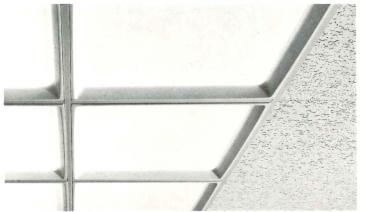
When you choose *Conwed*, you get maximum design freedom and versatility. Why? Because the *Conwed* 5+5 system offers all the components necessary for a beautiful, functional ceiling . . . provides for lighting, acoustics, air delivery and return . . . everything.

Just as important, *Conwed* "Five plus Five" components are interchangeable. So as your design changes (or your client's needs change), ceiling components may be rearranged to fit the new requirements.

Also, "Five plus Five" ceilings let you position partitions along any grid line, without obstructing the servicing of lighting fixtures. And when you choose either our semi-concealed or exposed grid systems, all overhead services are easily accessible.

As always, your *Conwed* representative is ready to assist you at any stage in the design or execution of the project. He can provide technical assistance in lighting, ventilating and acoustical analysis.

Find out how *Conwed* "Five plus Five" ceiling systems help you to achieve design freedom. Contact your *Conwed* Lo-Tone representative, write us, or refer to our AIA File Number 39B in Sweet's for more details.



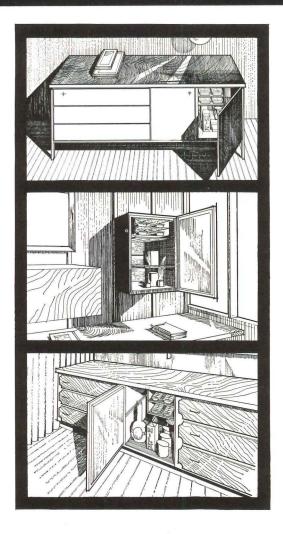
Conwed 30"x30" Sonolux Lighting Panels combined with 30"x60" semi-concealed acoustical panels provide a truly beautiful ceiling. But Sonolux panels are more than aesthetically pleasing. They reduce noise levels, provide a low brightness light source and require less maintenance than other translucent lighting panels.



above you con quirect allow fixture

Regressed troffers are available in three sizes with the *Conwed* "Five plus Five" system: 30"x60" (shown above), 20"x60" and 60"x60". This flexibility means you can now position light exactly where it is required. What's more, these regressed troffers also allow you to achieve a 5' multiple with lighting fixtures of a standard size.

Penguin's Refrigerator "Pak" now makes it possible to specify a refrigerator in a cabinet, credenza, bar or wall unit.

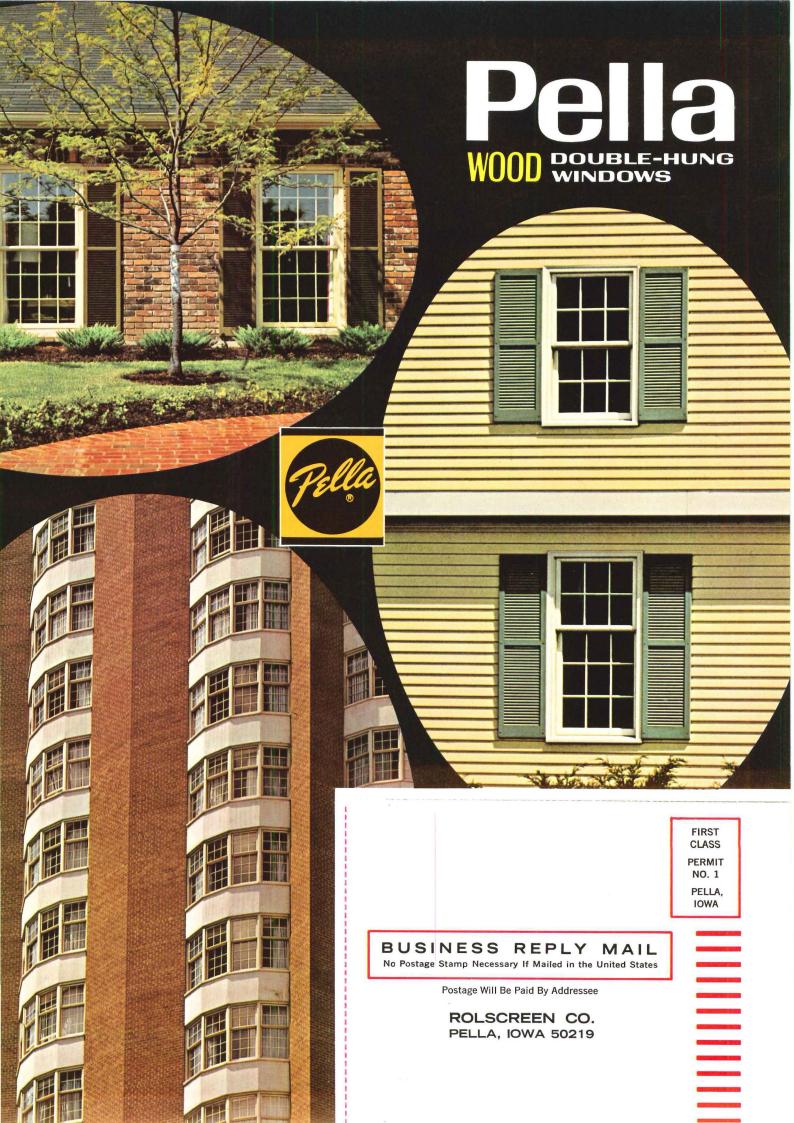


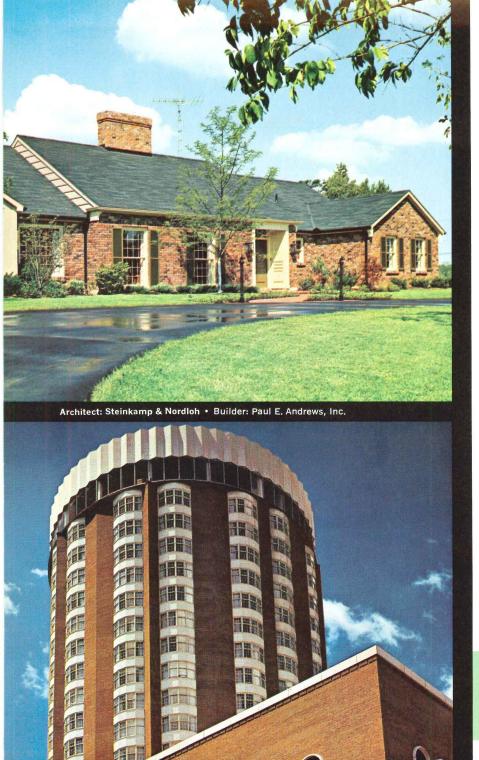


The Refrigerator Pak is Penguin's answer to the designer who has dreamed of having refrigeration wherever he wants it. There's unlimited flexibility in decorating with this handsomely designed refrigerator that has its own flush mounted genuine walnut door. Place it in a cabinet, snack bar, credenza, TV/Stereo combination, etc. This brilliantly engineered refrigeration is easily installed. In five different sizes. Write for illustrated brochure.



SPRINGER-PENGUIN, INC. 3B Brookdale Place, Mt. Vernon, N.Y. (914) Owen 9-3200 New York Showroom: 162 East 62nd Street In Canada: 160 Bates Rd., Montreal





Architect: Rasche-Schroeder-Spransy and Associates • Contractor: Hunzinger Construction

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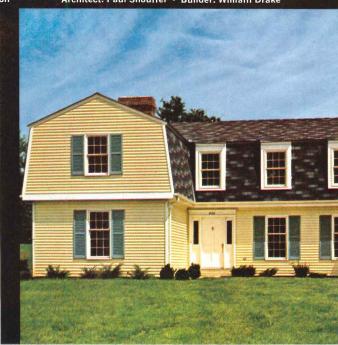
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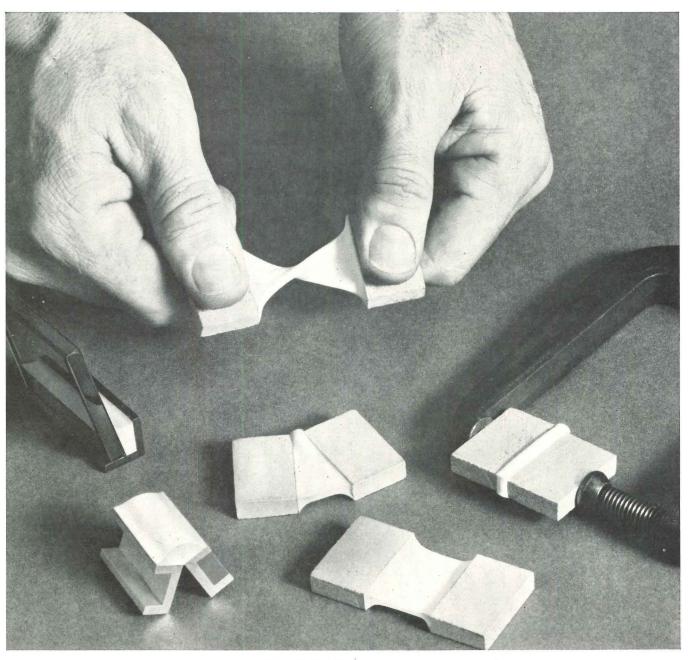
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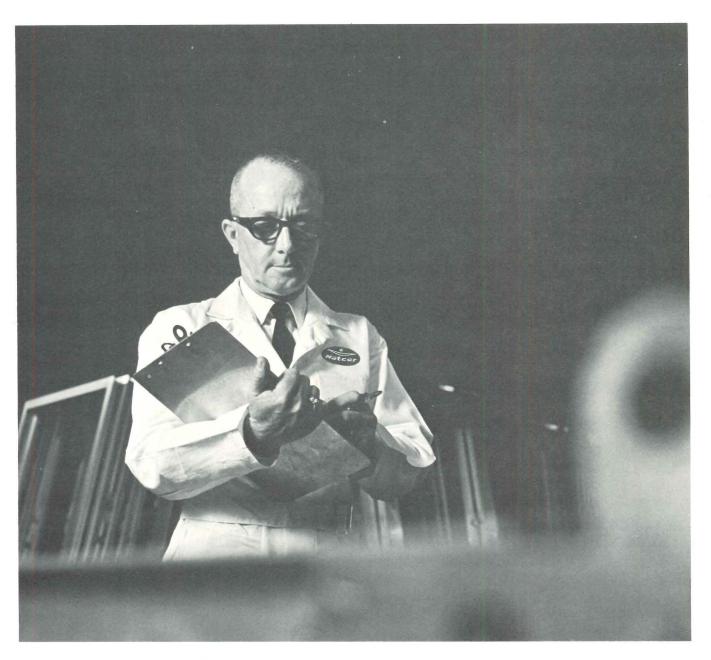
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MAY 1968 P/A



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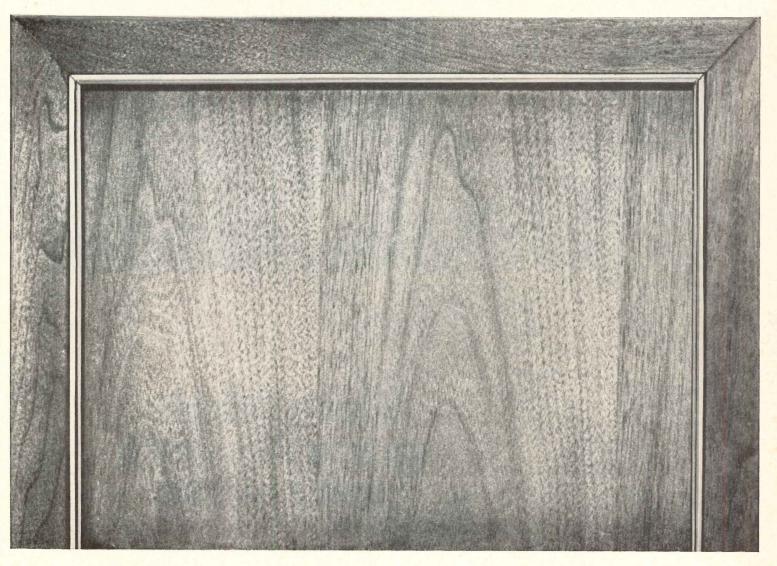
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*BOCA Basic Building Codes: sections 911.2; 911.7; 917.1; 917.2 and 917.21. National Building Code: sections 604.2; 605.6; 609; 702.7 and 805. Southern Standard Building Code: section 701.1. Uniform Building Code: sections 1706 and 4306; table 17-A; chapters 30 and 33.



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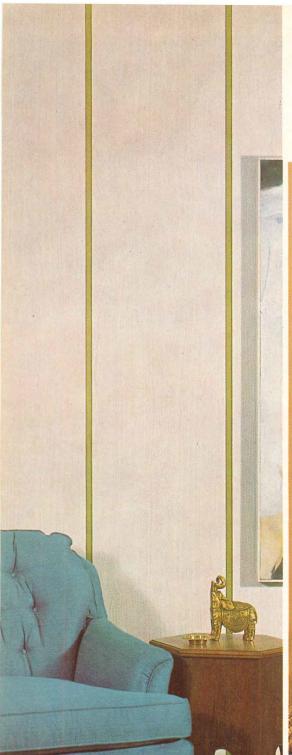
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Wilson-Art Natural Rosewood (R 373A) with Solid Pumpkin (1555) reveal creates a mood for modern tastes. Clip system installation.

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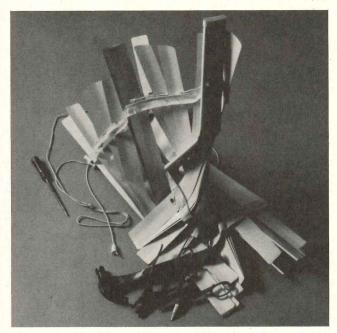
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A Bally Walk-In . . . meets the challenge of mass feeding's growing needs. Today's kitchens demand the most modern equipment and advanced techniques. The emphasis is on fewer kitchen personnel . . . turning out more and better food . . . for a growing number of diners.

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Bally Walk-Ins are the accepted industry standard of high quality. Constructed with unique and advantageous features, they are designed to move forward with today's evolution in mass feeding.

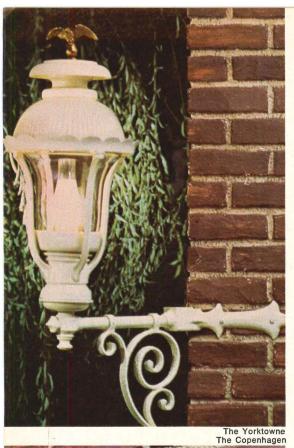
Send to Bally Case and Cooler, Inc., Bally, Pennsylvania 19503 for free 32-page catalog and urethane wall sample.

There's an evolution in the kitchen



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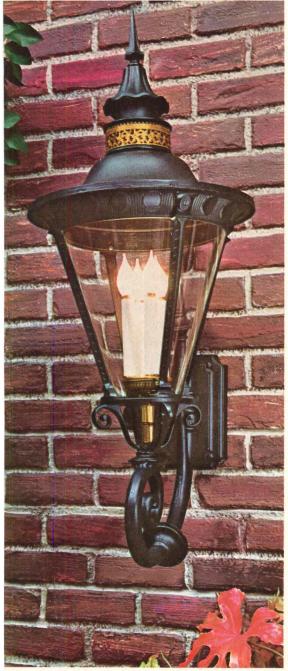
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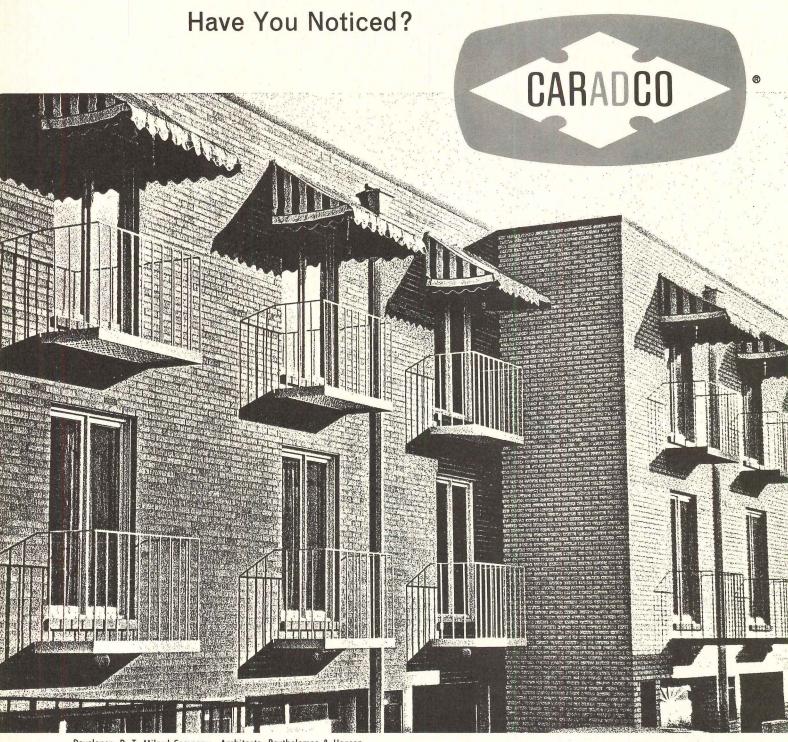






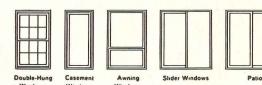
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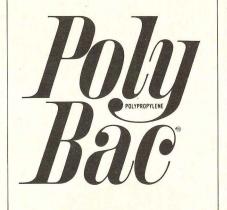
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How well a carpet holds up, often depends on what holds the whole carpet together. In the case of tufted carpeting, the primary back holds the whole carpet together.

Poly Bac is a primary tufting back woven of polypropylene yarn. It keeps tufted carpeting better looking, over a longer period of time than ordinary primary backings.

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In addition, bugs and bacteria will have



nothing to do with Poly Bac. And that old problem of mildew causing the backing to rot, is no problem where Poly Bac is concerned. Even in below grade installations.

Finally, carpets tufted on Poly Bac are more stable. (Poly Bac is completely impervious to humidity, the major cause of carpet shrink or buckle.) Restretching is minimized.

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Greater Baltimore Medical Center



a successful blend of advanced technology and personalized service

framed in structural steel for flexibility, economy, adaptability



Greater Baltimore Medical Center is an imaginative approach to the problems of supply, communication, nursing unit flexibility, and patient privacy. Innovations in design and appointment of this 400-bed facility are apparent at every turn.

Horizontal Plan

The architects took advantage of a 60-acre sloping site to develop a rambling horizontal structure with grade-level access at each of its five floors. Main entrance is at the third level. The self-care ambulatory wing, adjacent to the main entrance, gives patients access to public areas and to the outside. Total square footage: 311,000.

Unique Distribution Systems

Kitchen, cafeteria, loading, storage, and central supply areas are housed on the fifth level. Two specially designed electric trains, that run on a spiral ramp within the building's core, distribute food and supplies to nursing and supply stations on the floors below. Deliveries of records, laboratory specimens, and other smaller items are made to facilities within the core by an overhead basket conveyor system. Both systems substantially reduce the number of service and supply personnel normally needed to perform these functions.



Main lobby and waiting area.



Electric tractor train travels spiral ramp.



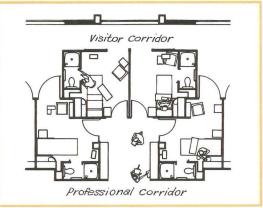
Main entrance to GBMC





Nursing stations with EDP input terminals reduce staff paperwork.





Rooms are laid out in 4-room complexes to provide optimum staff efficiency and patient privacy.

BETHLEHEM

STEEL



Unusual steel framing system simplifies installation of electrical and mechanical services.

Clear spans—maximum flexibility

The strength and versatility of steel were utilized to provide maximum flexibility in functionally related areas. Long, clear spans in emergency and out-patient sections permit use of non-load-bearing, movable partitions. Room size can be varied to meet changing needs.

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Steel floor beams, 16 inches deep, rest atop and at right angles to 21-inch-deep girders. Major feeder lines run beside girders and branch to points of use between the 16-inch beams. Expensive cut-outs in framing members for passage of pipes and ductwork were eliminated.

Alterations and additions can be made quickly and easily. Sixty per cent of the mechanical and electrical work was completed before interior work was started.

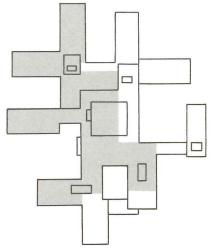


Visitor hallways surround perimeter of EENT nursing wing. All services come through central "professional corridor."



Bedside electrical console provides patients with a nurse call, telephone, TV, lighting, and curtain controls.

designed for easy expansion The master is



Shaded area designates existing structure; white area indicates future expansion.

Credits

Hospital administrator: Paul O. Becker

Associated architects: Rogers, Taliaferro, Kostritsky, Lamb; Wilson; Christie, Niles and Andrews, Baltimore, Md.

Structural engineers: Van Rensselaer P. Saxe, Baltimore, Md.

The master plan calls for the addition of about 200 more beds to meet the needs of northern Baltimore's rapidly growing population. Offices and residential space for staff members, geriatric, and educational research facilities are also included in the master plan. Here too, steel offers the best solution. No other framing material can be tied into existing structures so easily, with so little disturbance to present hospital routine. No other kind of framing can be erected as rapidly, regardless of the weather.

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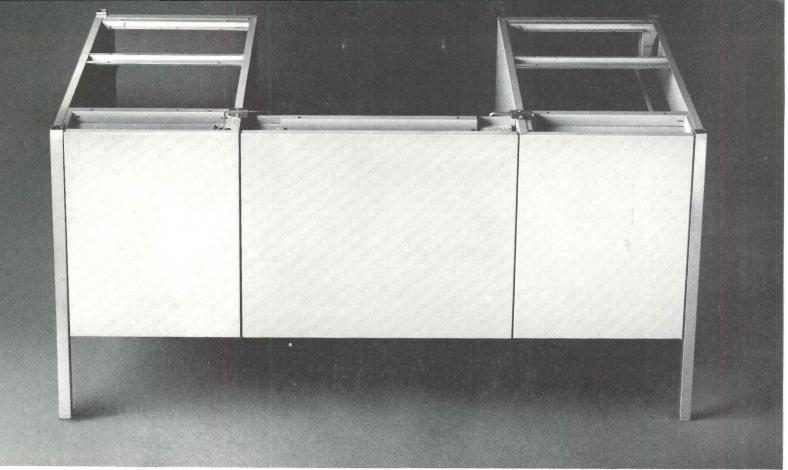
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Mechanical-electrical engineers: Henry Adams, Inc., Baltimore, Md.

Site engineer: Rummel, Klepper & Kahl, Baltimore, Md. Fabricator and erector: The Belmont Iron Works, Eddystone, Pa.

General contractor: Consolidated Engineering Co., Inc., Baltimore, Md.

Structural steel furnished by Bethlehem.



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Don't knock wood.

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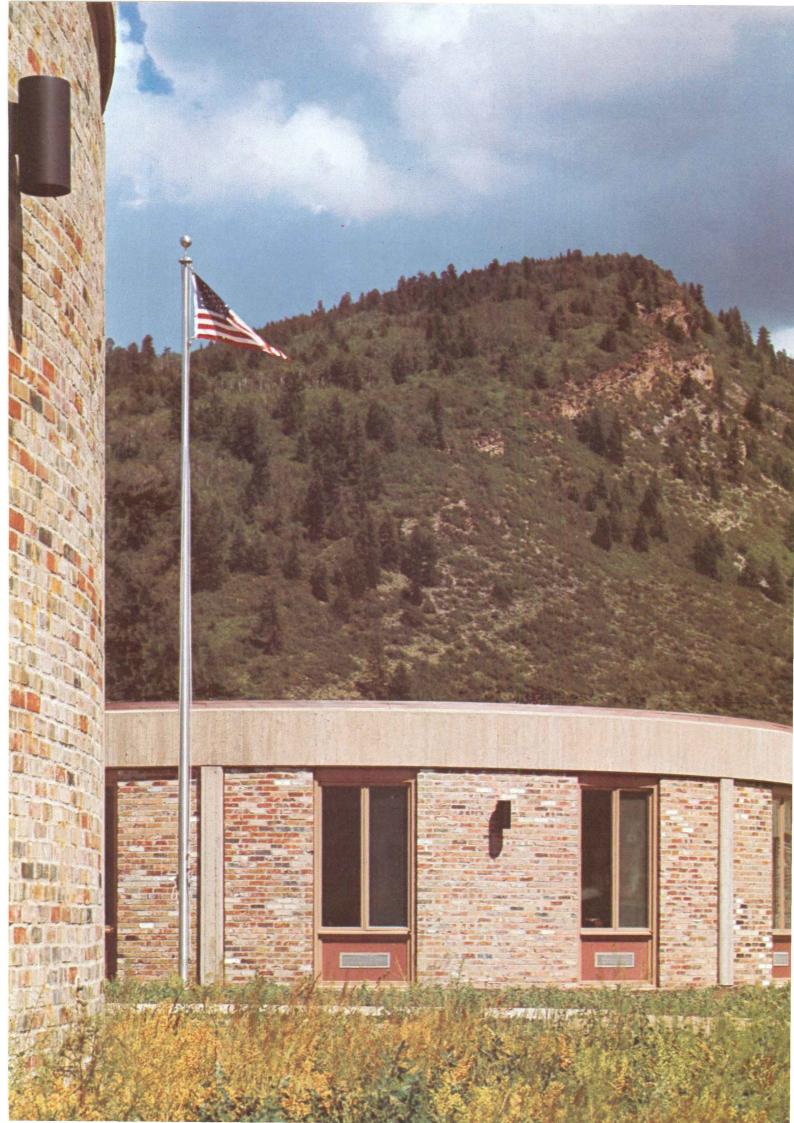
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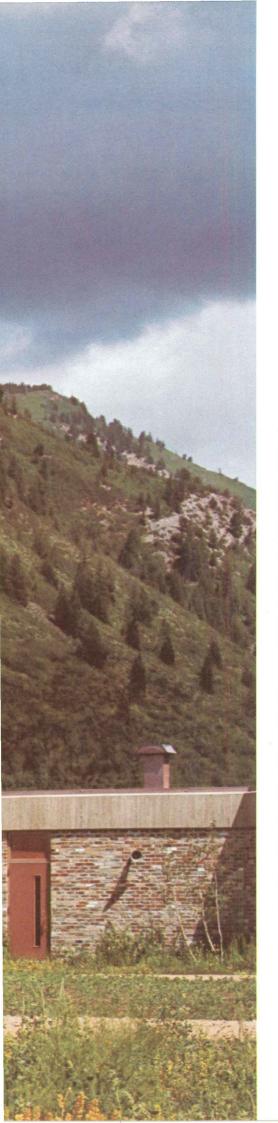
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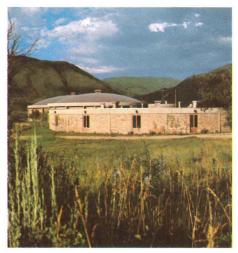




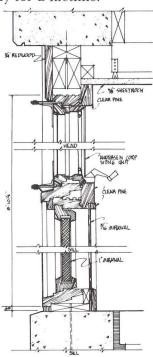
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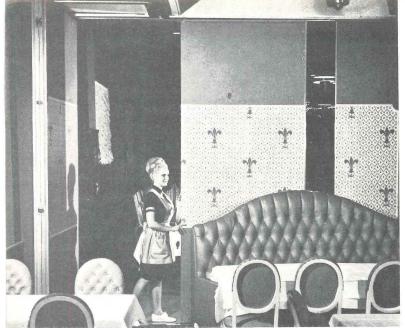
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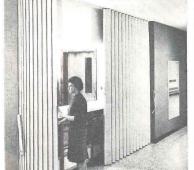
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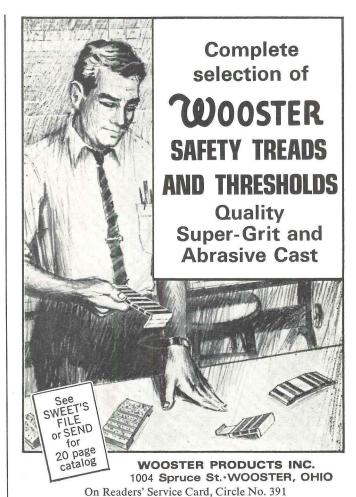
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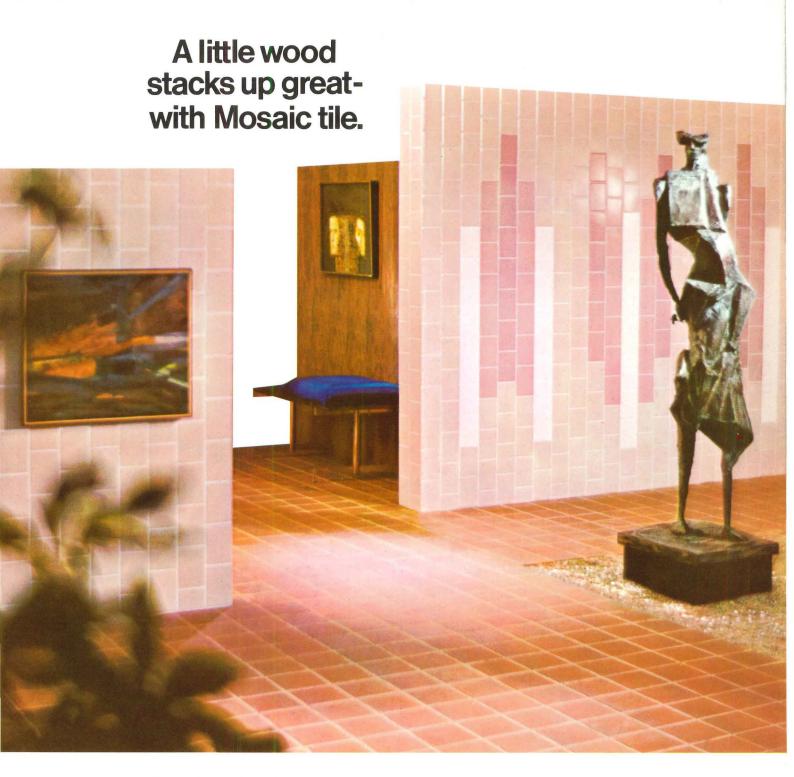
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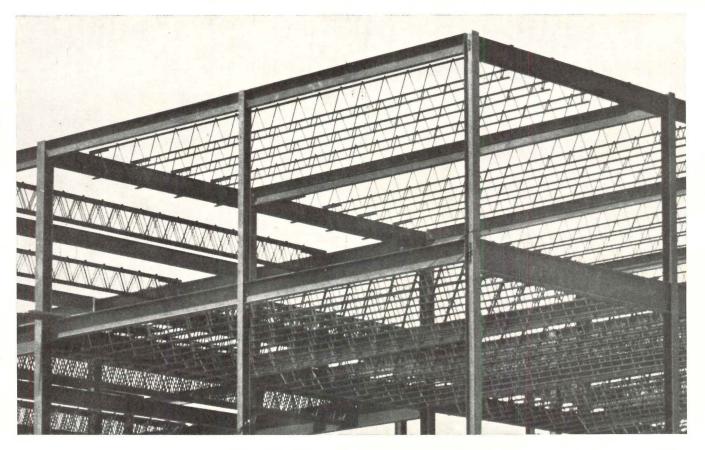


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Another Building Goes Composite with Laclede's Unique C-Joists

Composite construction is showing up in more and more buildings across the country. Here's one of the more recent: Adlai E. Stevenson Hall for Humanities at Illinois State University, Normal.

Almost 400 tons of Laclede Composite C-Joists were used in the floor system of this new educational facility, with an additional 52 tons of Laclede standard joists in the roof.

C-Joists offer distinct advantages for composite construction. They eliminate the time and cost of welding on shear connectors. The web panel points project several inches above the top chord, acting as built-in shear connectors. Inverted top chord provides a convenient shelf for fast, one-man placement of prefabricated deck.

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6754

PANEWS REPORT

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

May 1968

IS THE CROWD MADDING?

NEW YORK, N.Y. Feeling tense? Perhaps you're living and working under crowded conditions. To find out what effect density - both social and physical — has to do with the way people feel about their surroundings, and how they react to them, two researchers have begun a study with the help of a grant from the Department of Health, Education and Welfare. The researchers, Rober J. Beck, a psychologist, (see p. 47, DE-CEMBER 1966 P/A) and Rai Y. Okamoto, an architect and urban planner, are carrying out their research for the Regional Plan Association, a nonprofit group studying future expansion of the New York metropolitan region. Beck and Okamoto hope to study persons whose ethnic backgrounds, income groups, and patterns of density in the use of living space vary wide-

Anyone who can contribute information to the study is invited to write to the researchers c/o The Regional Plan Association, 230 W. 41st Street, New York, N.Y. 10036.

ENGINEERS OF THE WORLD UNITE

UNITED NATIONS, N.Y. In early March, representatives of the engineering profession from 60 countries and officials of four regional federations of engineering societies met at the Paris headquarters of UNESCO (the United Nations Educational, Scientific and Cultural Organization) to discuss the formation of a world-wide engineering organization. Without much fuss, they formed the World Federation of Engineering Organizations and proceeded to hold their first meeting, adopting a constitution (which had been under development for two years) and electing Dr. Eric Choisy of Switzerland their first presi-

Stated objectives of the new

World Federation are: first, to advance engineering as a profession; second, to encourage cooperation among engineering organizations throughout the world; and third, to undertake special projects to be carried out by cooperation among member organizations and other international bodies.

Among initial projects of the federation are programs to continue the development of professional engineers, and the promotion of a worldwide system of engineering information dissemination and retrieval. The federation also plans to undertake the formidable task of preparing a world-wide professional code of conduct for engineers.

PERGOLA SETTLES AND DANDER RISES

OAKLAND, CALIF. Kevin Roche, John Dinkeloo & Associates' much touted Oakland Museum has become inert: It lacks the power to move. It sits unfinished, its monolithic concrete slabs protruding above the ground like a relic from a bygone age. Originally scheduled to open this year, it is too young to be a relic, but the contractor has no money to do more work and his client, the City of Oakland, will not give him

Already more than \$1 million above the city's bondbacked budget of \$6 million (the original bid was \$5,200,-000), the contractor, Norman Robinson of B. & R. Construction Company, recently submitted a bill for an additional \$3 million for what it claims are architectural and engineering changes made after the contract was signed. If the Oakland City Council denies this claim, the matter may drag through the courts.

Since the monolithic shell was poured, it has cracked and settled, indicating that the entire building may be mov-

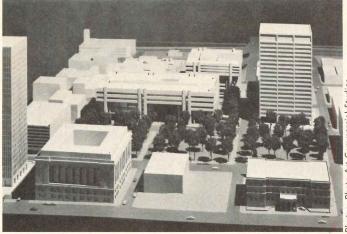
The contractor has settled too - into debt. B. & R. has no other jobs to keep it afloat; to compound its troubles, the city is holding back some fees, which it evidently plans to pass directly to 6 or 7 subcontractors that currently have liens against B. & R.

Robinson told the San Francisco Sunday Examiner & Chronical in mid-March that, "Right from the start we were told by the design engineers and the architects to 'put it there and don't question our plans.' We followed those instructions."

Architect John Dinkeloo, who is not sure whether he should sue the contractor, thinks he may if the contractor sticks to that statement.

Amidst the turmoil of charge and countercharge, museum director James Holliday said he might just start moving in. But even if he did, the museum could not open to the public before spring of 1969. And most observers see that as a dim likelihood. They forsee a long period of iner-

PORTLAND CIVIC CENTER



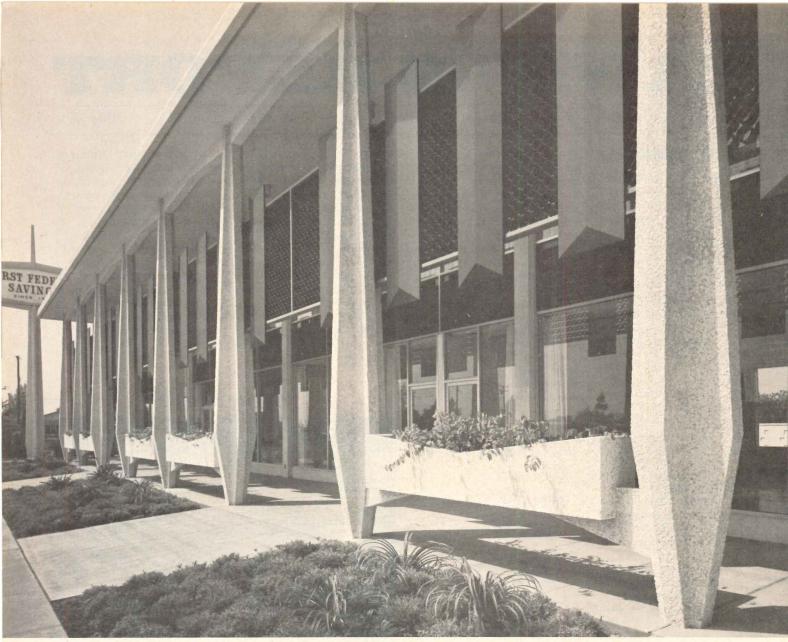
280,000 sq ft, and a parking structure with 11 levels of parking for 900 to 1000 cars.

Portland plans to spend about \$28 million on these three buildings, which will be built as part of the complex of government buildings bounded by First and Fifth Avenues and Jefferson and Salmon Streets.

The project is designed to meet city and county office needs through 1990, and eventually, according to a study of urban renewal needs prepared by the Portland City Planning Commission, the Hawthorne Bridge across the Willamette River just to the east of the civic site will be moved, making possible a waterfront mall running from the river to the Government

All three buildings will be connected by upper story pedestrian walkways. And the Courts building will straddle Main Street, covering the

PORTLAND, ORE. Portland has been planning and changing its government buildings since the turn of the century. Most of the planning was done by firms located outside Oregon (one, in 1943, was prepared by Robert Moses of New York), and the most recent plan, prepared two years ago by Space Utilization Analysts, Inc., of Los Angeles was no exception. But when the plans have come to be implemented, Portland has turned to local architects. Last June, city and county officials unanimously approved a preliminary report on the construction of a three-building civic complex. On March 1 of this year, they reviewed models and completed architectural plans. Plans prepared by Wolff-Zimmer-Gunsul-Frasca-Ritter of Portland, with Pietro Belluschi as consultant architect, show a Courts Building with 330,000 sq ft, a Public Safety Building of



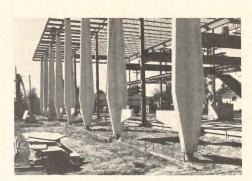
First Federal Savings & Loan Association / Anaheim, California / Architect: Melvin A. Rojko / General Contractor: Steed Brothers

Functional beauty in structural Mo-Sai

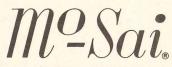
Precast Mo-Sai structural columns impart a distinctive charm to this suburban savings office. The glistening white columns (22 feet high) were cast in one unit, with the white quartz aggregate Mo-Sai exposed on all sides.

Floating Mo-Sai planter boxes, also cast in one unit, rest on wings cast on the columns.

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Structural Mo-Sai columns were bolted to concrete foundation and steel roofing system. Wings support Mo-Sai planter boxes.



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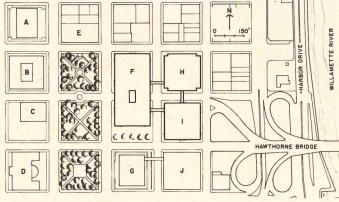


blocks on either side.

The architects plan to use reinforced concrete and some brick as the main building materials, finishing the concrete in an amber color to blend with the sandstone facings of the Courthouse and the City Hall adjacent to the area.

Perhaps one of the most

fortunate aspects of the project is the way it will take advantage of a small two-block park. Another block square of park will be added to the south, and by placing shops in the ground floor of the parking structure, it is hoped that the area can avoid becoming just a government enclave.



- Georgia Pacific Building
- County Courthouse
- City Hall Annex
- City Hall E Georgia Pacific Parking
- **Proposed Courts Building**
- Future GSA Office Building
- **Proposed Parking Garage** Proposed Public Safety Building
- J Future City Parking Garage

ADMINISTRATION CONSTRUCTION PROGRAMS TRAVEL ROUGH ROADS

WASHINGTON, D.C. The pencilthin (four-vote) margin by which the Senate was able to defeat a move to freeze almost all Federally-aided construction work is an indicator of just how much trouble the industry (and the Johnson Administration) can look forward to for the rest of this year. If anything, this trouble may be heightened by the President's recently announced decision not to run.

The move came as the Senate worked through a lengthy series of amendments to a reasonably routine, Housepassed tax bill (HR15414). An amendment offered by tax-conscious Senator John Williams (R., Del.) would have halted everything except highway construction and planning, pending a projectby-project review.

No Government agency at any level would have been permitted to proceed with planning or construction, no grants or loans could have been made until the Office of Emergency Planning had reviewed each job and had certified that the public health and welfare would be irreparably damaged unless the work continued.

Not only work of the Army's Corps of Engineers and the Bureau of Reclamation would have been affected. Programs of the Housing and Urban Development Department, the General Services Administration, the water and sewer loan and grant programs of the Interior and Agriculture departments, recreational construction and planning, and much else would also have been halted.

The fact that Congress would even consider such a move - much less come so close to nailing it into law is a reflection of how seriously the lawmakers view the nation's financial situation, and the political consequences they may face when they go home to campaign for re-election later this year. Normally, the public works programs in all their ramifications are considered sacrosanct. -E.E. HALMOS, JR.

ST. LOUIS CORRECTS A FALSE START

ST. LOUIS, MO. Like the persons who passed through this city on their way to the mountains, St. Louis, as it grew, reached out toward the west, turning its back on the Mississippi, which had given it birth. Then, within the last two years, with the completion of Saarinen's Gateway Arch on the riverfront and the presentation of a prizewinning scheme for Gateway Mall, it became apparent that the city could regain the river, to the benefit of both. Unfortunately, by this time the only piece of the original city left was a nine-block section just north of the Gateway Arch, between the Eads and Veteran's bridges. It was the only place in town where one could still walk down to the levee, and it had been used mostly for commerce and light industry since being rebuilt after the fire of 1849. (It was a time when the castiron front building was popular and several examples of the art still stand in the area.)

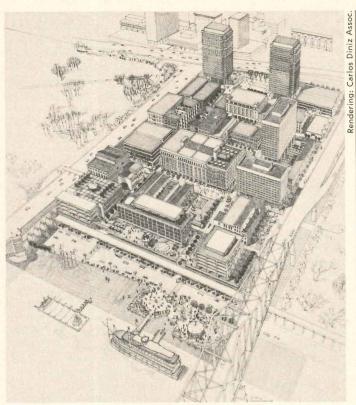
In January 1967, two groups submitted redevelopment plans for this area of the city. One, presented by the River Center Development Corp., and prepared by Schwarz & Van Hoefen (see p. 50, DECEMBER 1966 P/A), proposed pulling down all existing structures in the area and putting up office towers, one as tall as 50 stories, and apartments for the aged. The other, prepared by Hellmuth, Obata & Kassabaum, Inc., for the Levee Redevelopment Corp., called for retaining about two-thirds of the existing structures, giving some of them new uses, and adding office-apartment buildings (none higher than 24 stories) to provide a variety of functions, all in scale with the riverfront setting.

After much deliberation, the City Planning Commission recommended the River Center plan. This precipitated such an outcry in the St. Louis press that the scheme was quietly shelved. Objections were raised to the scheme's 50-story tower, which, many thought, would compete with Gateway Arch, and to the entire scheme's blatant disregard of the area's historic value.

Asked to submit new proposals, both groups presented the City Planning Commission with revised plans, on which a decision is imminent. The River Center group still proposes to tear down everything in the area, but it has removed the offending 50story structure and a strange S-shaped low-rise building

River Center.





Laclede's Landing . . .

that would have snaked through the site. The Levee Redevelopment group, which calls their proposal Laclede's Landing, after an early settler who laid out the original grid street pattern, has resubmitted its proposal essentially in its original form, with the additional provision that a licorice factory now on the site will be gradually phased out and replaced.

The Laclede's Landing plan has the vast advantage of offering more public spaces and greater variety. Although it establishes its own particular St. Louis flavor, it could easily turn the area into a sort of Ghiradelli Square, with warehouses converted into specialty shops and restaurants. The River Center plan, on the other hand, would bring a high density of elderly housing and private commerce to an area that would be better put to more public use.

Architectural critic George McCue wrote in favor of the Laclede's Landing scheme in the St. Louis Post Dispatch in late March, pointing out, among other things, the obvious benefit of preserving some of the considerable historic flavor of the old city.

Writing of the River Center plan, McCue observed: "Worst of all, River Center proposes the 'recreation of a selected number of the finest

Space space

and preservation.

buildings which once graced the St. Louis riverfront' in the space nearest the levee. One of the architects, in an unguarded moment, referred to these as 'goodies' for the tourist. This is a dismal idea. If we are going to tear down old buildings, let's let them die in peace. If we are going to build new buildings, let us please have the very best that contemporary design has to offer. River Center is a flop."

With the City Planning Commission's selection of the River Center plan in January 1967, St. Louis came close to making a monumental mistake. But from the turn of events since then, it appears obvious that a city that has gone so far toward revitalizing its downtown area will not blow its cool before the job is finished.

IT'S HAPPENING IN YUGOSLAVIA



BELGRADE, YUGOSLAVIA. The "most successful architectural achievement" in Yugoslavia in 1967 was, according to the Borba Publishing House in Belgrade, which grants the accolade, the Podgorica Hotel in Titograd. It is the work of Svetlana Radevíc, who, the

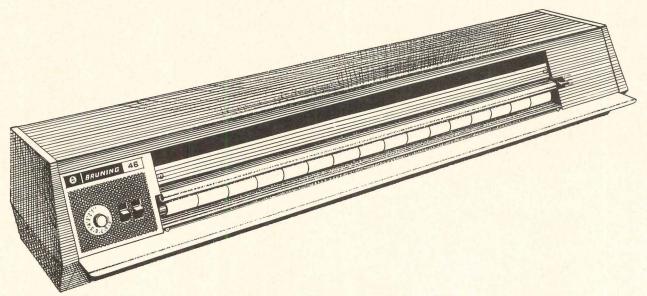
jury felt, tried to make the hotel blend with the natural surroundings: the gray green rocks of the Moraca River valley in Montenegro. The jury spoke of the building's "dynamic and rhythmical elements" and of its "high architectural quality."

AIA ANNOUNCES HONORARY FELLOWS

Toward the end of March, the AIA's Board of Directors in Washington made public its annual selection of foreign architects to receive the distinction of honorary fellowship in the AIA. This year's group of 10 will bring the total number of Honorary Fellows to 141. Elected were: Franco Albini of Milan, Italy, known primarily as a museum architect since completion of his three museums in Genoa; Georges Candilis of Paris, France, a former associate of Corbu and winner of the French Government's Urban Design Award in 1960, Candilis was architect for the Corbu housing project in Marseilles, and, after forming his own firm of Candilis, Josic & Woods, designed the Free University of Berlin. Charles-Edouard Geisendorf, a Swiss architect who has been influential in Sweden as well, has been a professor at the Swiss Federal Institute of Technology in Zurich since 1957, a member of the Commission of Townplanning in Geneva since

1958, and President of the Swiss Section of the Union Internationale des Architectes since 1960. His Swiss work includes housing for industry and a series of buildings and planning projects for the Institute where he teaches. In Stockholm, Geisendorf has executed projects for housing, tourist centers, vocational schools, and others. The vicepresident of the Royal Institute of British Architects, Eric Lyons, is principal of the London firm of Eric Lyons & Partners and has been engaged in various town and village planning projects in England. Frei Otto, German architect based in Stuttgart, is best known for his research and development work on suspended and pneumatic structures. Major executed works are in the field of city planning, lightweight structures, and exhibition pavilions (including, of course, the German Pavilion at Expo 67). He has taught at several U.S. universities. James E. Searle is president and Fellow of the Royal Architectural Institute of Canada, and a partner of the Winnipeg firm

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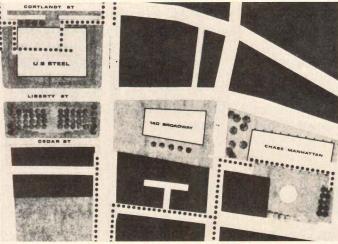
Smith Carter Searle. The firm has had commissions for the Place d'Accueil (entrance to Expo 67), Canadian Embassy in Warsaw, Pan American Games swimming pool in Winnipeg, and the \$50 million Richardson complex in Western Canada. Born in Shanghai, China, Gin Djih Su studied architecture at the University of Michigan, and now has offices in Hong Kong, Taiwan, and Formosa. In addition to influential work on government agencies for town planning and building ordinances, he was founding president of the Hong Kong Society of Architects, affiliated with the RIBA. Sir Leslie Hugh-Wilson, OBE, is president of the Royal Institute of British Architects and has been chief architect and planning officer of Canterbury and Cumbernauld new town, among others. Isoya Yoshida of Tokyo, Japan, heads Yoshida's Architectural Institute in Tokyo, which he established in 1926. A member of the Academy of Arts and professor emeritus of the Tokyo University of Arts, he is a councellor of the Establishment Committee of the Imperial Palace, the Highest Court of Justice, and a member of the Committee of the National Theater. Romanborn Bruno Zevi, who took a graduate degree at the Harvard Graduate School of Design, is Doctor in Architecture at Rome University and General Secretary of the Italian Town Planning Institute. He has written several books, and is known for his contributions to major architectural journals. Vice-president of the Italian Institute of Architecture and president of the International Technical Cooperation Center, founded in Jerusalem last year, Zevi has designed a town plan for Perugia, and various urban structures throughout Italy.

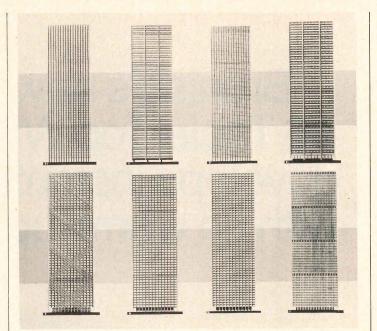
STEEL SHOWCASE

NEW YORK, N.Y. From the dust of Ernest Flagg's Singer Building in lower Manhattan will rise a 743', 54-story structure designed to be a showcase for steel. Its structural steel skeleton will be shaped to provide sun screening. And its massive, longspan exterior plate girders, which are to be 6' high and up to 56' long, will help the structure, which is located adjacent to the World Trade Center site on the windy west side of the tip of Manhattan, withstand heavy wind loads.

Architects Skidmore Owings & Merrill went through a series of design tests at the request of the client, U.S. Steel, to come up







Varieties of steel buildings considered by SOM.

with a building that proved the design flexibility of steel. The resulting U.S. Steel building will have much the look of the Civic Center in Chicago, for which SOM's Chicago office was associated architects. There is at least one major difference, however: Where the civic center has a framework of burnished, redish-brown weathering steel, the U.S. Steel building will use a high-strength structural steel, which, according to current estimates, will have a blue-gray color.

SOM's studies also led to the proposed use of steel flooring above long-span interior beams, and the use of four gigantic trusses running the full height of the building in the elevator core to aid stability. In all, there will be about 1,750,000 sq ft of usable office space flowing around the inner core, uninterrupted by structural elements. U.S. Steel announces, perhaps wistfully, that there are only 25 lb of steel per square foot of building space.

The building's blue-gray color will no doubt be in keeping with the lower Manhattan surroundings; and although SOM is doing much to change those surroundings

in their design of the Chase Manhattan Bank, the 140 Broadway building (see p. 67), and now the U.S. Steel building, the change has not been entirely bad. The impact of these buildings at ground level is as striking and altogether more pleasing than the impression given from above in a skyline view. Each has opened a bit of turf to air and light in an area that needs these commodities as badly as a politician needs an audience.

Each has a small open plaza. U.S. Steel sits on about 1 acre of a 2½-acre site. An entire block fronting the building will be turned into a park to be shared with 140 Broadway to the west.

Probably just as striking is the provision below grade for a series of arcades, which will, when completed at some unspecified time, connect the U.S. Steel building with three subway stops, with the World Trade Center, with 140 Broadway, and with the Chase Manhattan Bank. This type of underground circulation will be needed even more sorely than it is now, once the glut of people drawn into the area by the increased office space starts materializing.

COMPETITIONS

The 1968 Architectural Awards of Excellence program of the American Institute of Steel Construction is open to all registered and practicing architects. Submis-

sions of steel-framed buildings constructed anywhere within the U.S. and completed between January 1, 1967, and June 1, 1968 must be made before June 1, 1968. Details of the program and entry information may be obtained



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from: AISC, 101 Park Ave., New York, N.Y. 10017 . . . The Sixth Annual Awards Program of the Prestressed Concrete Institute is open to both architects and engineers who are practicing professionally in the U.S., its possessions, or Canada. Any kind of structure using precast or prestressed concrete, if it has been completed within the last three years, is eligible for entry. Deadline for submission of entries is May 13. Guidelines for preparation of entries are available from any PCI member plant or from: PCI, 205 W. Wacker Dr., Chicago, Ill. . . . An award for achievement in environmental pollution control has recently been established and will carry a cash honorarium of \$2500. Known as the Lewis L. Dollinger Pure Environment Award in honor of the sponsoring company, Dollinger Corporation of Rochester, N.Y., the prize will be administered by the Franklin Institute. The Institute's Committee on Science and the Arts will select the award winner from individuals or groups of individuals involved in a joint effort anywhere in the world without regard to nationality. Judging will be based on "the best . . . original contribution, available in print or otherwise, reflecting significant achievement in the recognition, detection, and abatement or control of environmental pollution" . . . The Institute of International Education offers grants of \$3000 under the 1968 Cintas Fellowship program, cosponsored by the Cintas Foundation. Architects as well as artists, musicians, and authors of Cuban citizenship or descent who presently reside outside Cuba are eligible for awards. Students may not apply. Applications, which will be accepted until July 1, may be obtained from: Secretary, Cintas Fellowship Program, c/o Arts Division, Institute of International Education, 809 United Nations Plaza, New York, N.Y. 10017 . . The National Society of Professional Engineers has instituted a program to encourage college journalists to include news of engineering and engineers in college newspapers. The new Student Journalism Award program will offer three cash prizes of

\$200, \$100, and \$50 for the best engineering articles written during the academic year September 1967-June 1968. Deadline for entries is June 10. Write for further information to: NSPE, 2029 K St., N.W., Washington, D.C. . . . The Sixth Annual Awards Program of the Prestressed Concrete Institute is open to all registered architects and engineers practicing in the U.S. and Canada. Structures completed in the last three years may be entered. Deadline for submission of entries is May 13. Details of entry requirements are available from: PCI, 205 W. Wacker Dr., Chicago, Ill. 60606, or from any PCI member plant ... The Royalmetal Corporation announces its Annual Student Design Competition, whose theme this year is the "Design of an Airport Ticket and Lounge Area." Competition entries, to be postmarked no later than midnight, May 15, should be sent to: Royalmetal Corporation, Dept. ADC, 1 Park Ave., New York, N.Y. 10016 . . . The U.S. Department of Housing and Urban Development offers university fellowships in amounts up to \$12,000 per year to managerial, technical, and professional personnel in the urban mass-transportation field. State and local public groups select employees of demonstrated ability and potential to receive the fellowships.

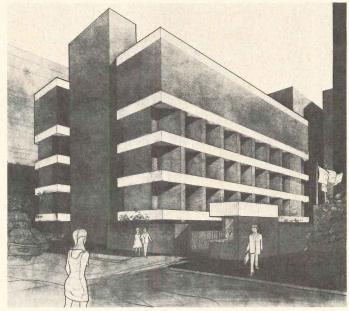
COURT AS AN ENVIRONMENT

WASHINGTON, D.C. A court is, of course, a chamber in which the administration of justice takes place, but, according to Webster's, it can also be the family and retinue of a sovereign, or — a motel. The Ford Foundation was talking about judicial chambers last month when it announced a \$197,-000 grant for the University of Michigan study to establish standards for modernizing the physical facilities of "courts and court-related agencies." Participating in the study will be a staff representing the university's law and architectural schools under the direction of Professor A. Benjamin Handler. The grant formally went to the American Bar Association Fund for Public Education, which will publish the results.

All types of law courts will be studied, from traffic courts to Federal and appellate courts. It is hoped that the study can establish standards for environments suitable to the functions of the various courts. Considered will be such physical details as spatial arrangements, structural systems, lighting, acoustics, and arrangements for court personnel.

The study will take two years.

NARCOTICS REHABILITATION: AN ARCHITECTURAL PROBLEM?



NEW YORK, N.Y. It is currently a crime in New York State to be addicted to narcotics. And whether you like it or not, if the state finds out about your addiction, it is going to treat you for it. Underway in New York State are seven narcotics rehabilitation centers, not nearly enough to treat the state's addicts, which, according to current estimates, number between 20,000 and 30,000, or about half the total in the U.S. By far the greatest

portion of New York State's addicts are in New York City, where only an estimated 2.7% are being treated.

A 400-bed, \$3,200,000 treatment center for women addicts in Manhattan, planned for completion sometime this summer, will not go far toward alleviating the situation. Designed by Gueron, Lepp & Associates, the center is in use while under construction. The facility will actually be a complex of three buildings:

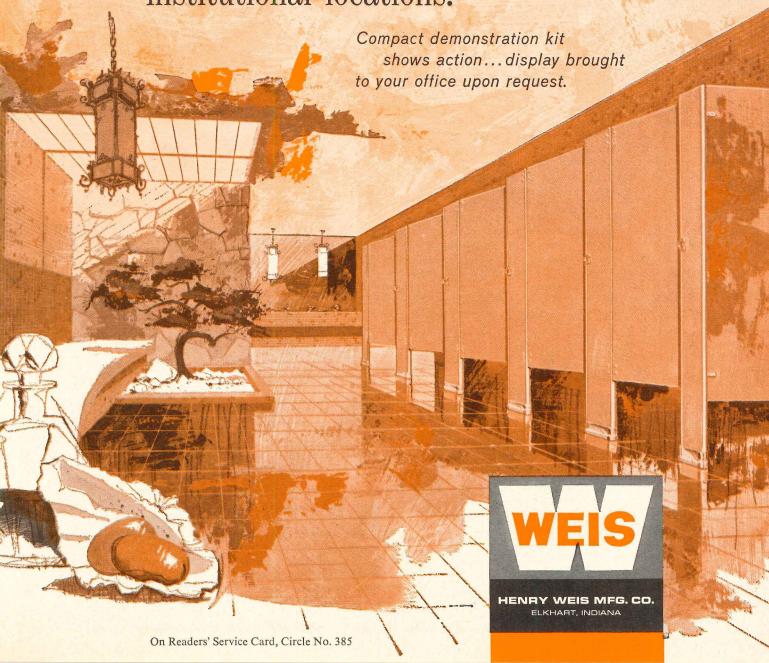


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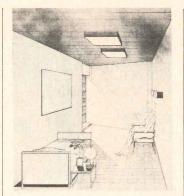
This Weis feature is especially important in hospital, school, and other institutional locations.



one, the former Riviera Congress Motel at 10th Avenue and 40th Street, is about seven years old, but looked, when work got underway last winter, more like 700. Next door to the motel is a pleasant former library turned meat packing plant, with an Italianate façade, which will be converted, like the motel, into dormitory space. Just behind this ex-library will go a new building (p. 60) with 25,000 sq ft designed to house reception and recreation facilities. Between the motel and the other two buildings will be an open walled courtyard, divided by a corridor-skylight lighting the dining room beneath.

Although the center is officially a medium-security prison (meaning that the guards do not carry guns), security posed a thorny problem for Gueron, Lepp. None of the windows, for instance, can safely face the street. And those in the existing buildings that already do must have a grilled covering that will let in light while cutting off a view of the street. A narcotics pusher is said to be capable of delivering a tiny drug pellet by pea shooter from 140' away. Moreover, the women inmates are just as likely as not to parade nude before uncovered windows, a practice disconcerting to passers-by.

It is this latter proclivity that has, in part, given the state authorities headaches over siting these centers. No one wants one in their neighborhood. The patients are noisy. Some try to jump from windows. And, occasionally, the argument goes, a patient may escape and burglarize

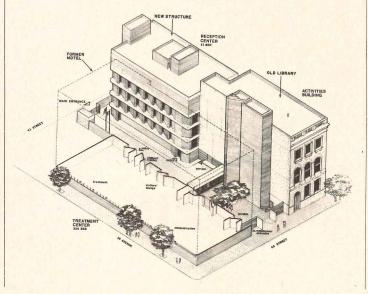


nearby residents.

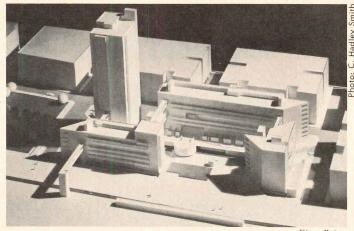
It is for these reasons that the Manhattan women's center is located near the entrance to the Lincoln Tunnel in an area filled with tunnel ramps, parking lots, garages, and light industry. Other state centers are being sited in the country. But even so, the projects are not popular in the areas surrounding them.

Just how much the centers can do to rehabilitate their inmates remains to be seen. Architects Gueron and Lepp are providing pleasing rooms in their Manhattan Center for either one or four women. (These are the best rooming divisions, the state maintains.) There will be a gym, class-rooms, medical facilities (most addicts need extensive dental work), and a well-stocked library. "They read like fiends," says Stephen Lepp. In theory, the patients are to stay three years. In practice, they stay only a little more than three months.

What happens to these patient-criminals when they return to the old neighborhoods where they picked up the drug habit originally? The answer cannot be supplied by even the best-designed rehabilitation center.



DEVELOPMENT ON A BROOKLYN BEACH



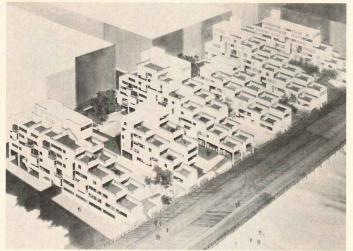
First Prize.

NEW YORK, N.Y. The architectural firm of Wells/Koetter of Ithaca, N.Y., has won first prize in New York City's first open international design competition. Held in the hope of introducing "imaginative new design standards in city housing and to focus attention on many promising young architects," the competition succeeded wholly in accomplishing its second aim, and has, at least, provided a basis for future thinking about the first.

Wells/Koetter received a \$5000 cash prize and the right to execute a contract for their solution to program requirements calling for a middle-income development, with about 60% of the apartments reserved for elderly residents. The site, in Brighton Beach, Brooklyn, is sepa-

are designed for efficiencies and one-bedroom apartments; larger families will occupy the other structures, which contain apartments with two and three bedrooms. All four buildings are connected by walkways that run, unbroken, through the fourth and seventh floors. Almost all apartments command a view of the ocean.

During the judging — by jurors Philip Johnson, chairman, Romaldo Giurgola, Donlyn Lyndon, Jose Luis Sert, Richard Ravitch, and Charles Abrams — discussion centered on the problems of scale and context that are common to large projects in built-up areas. Some jury members felt the project submitted by Venturi & Rauch, eventually awarded third prize, was more successful in



Second Prize.

rated from the sea by nothing more than a spacious boardwalk. The winning plan groups one 25-story tower, one 6-story and two 8-story buildings around a multilevel court that is open to the water for one-third of its length. The tower and six-story building

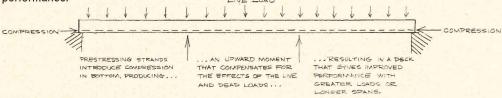
blending with existing structures and living patterns in the neighborhood. Others thought that the Venturi solution, by virtue of its high-rise, rectangular design concept (most of the neighboring structures are blocklike) was too reminiscent of a thousand typical

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Third Prize.

"housing projects," and did not add anything to the visual character of Brighton Beach. Although in this particular case the discussion terminated in the choice of the more monumental, somewhat formconscious design, some members of the jury felt that the underlying questions remain unresolved: At what point should the architect refuse to think of his design as formal entity; when does monumentality actually become obtrusive? When is variety of visual experience more important than the problem of fitting a proper piece into the puzzle of an existing environment?

The panel of judges awarded a total of five prizes. Sec-

ond prize went to Berman, Roberts & Scofidio & Stromsten, New York; fourth prize to Donald and Marja Watson, Guilford, Conn., and an honorable mention to Bentel & Bentel, Locust Valley, N.Y. The competition was administered by the city's Housing and Development Administration and sponsored by the Brooklyn and New York chapters, AIA. A group of private institutions and builders underwrote prizes and expenses.

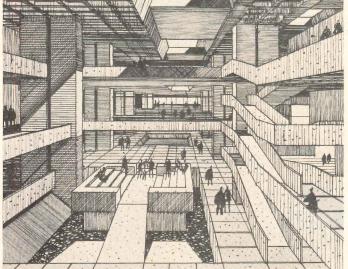
The prize-winning scheme will be executed under the city's limited-profit (Mitchel-Lama) housing program, and will cost approximately \$6 million, including the site.

CAMPUS IN MOTION

south Holland, Ill. Student mobility was the byword for design of the new campus of Thornton Junior College, a 41-year-old institution that is currently housed in overcrowded high-school buildings. Now, a local bond issue is raising \$7,800,000 for new facilities, and a \$1 million grant from the U.S. Office of Education will enable the school to begin construction.

The new, 91-acre site will, when developed, support \$21

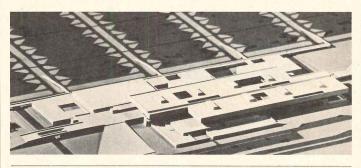
million worth of facilities for 5000 day-students and 10,000 evening students, many of whom will commute from the Chicago suburbs. Others will be drawn from the immediate community. The new location at 159th and Indiana Avenues near three expressways and several other major arteries led architects to accord one-quarter of the site to parking space. The vast, 4000-car lot will be depressed so that cars will not obstruct the view



from the bridges, ramps, and other expressions of mobility that link site and structure.

Inside the rambling building complex, other ramps lead to three levels of lecture halls, library facilities, classrooms, laboratories, and administrative offices. The main artery of interior circulation is a broad student street (see lower photo) whose galleries and occasional courtyards, topped by a slanted skylight, form nooks and corners, overhangs and depressions for a diversity of spatial effects. Board-formed and exposed-aggregate concrete add texture to interior surfaces.

The campus is scheduled for completion in September 1975; contracts for construction will be let in January 1969. Fridstein-Fitch & Partners are the architects.



OBITUARIES

Siegfried Giedion, the architectural historian and author of the studies *Space*, *Time and Architecture* and *The Eternal Present*, died April 10 in Zurich. He would have been 75 years old April 14.

Giedion was born in the Swiss canton of Aargau and received a doctoral degree from the University of Munich. At one time a student of Heinrich Wölfflin and an associate of Walter Gropius, Giedion began his long and varied teaching career at the University of Zurich. In 1938, he went to Harvard as Charles Elliot Norton Professor of Poetry. Spending the war years in the U.S., he concentrated on writing Space, Time and Architecture, which he based on his lectures at Harvard and which has become the standard work on the development of modern architecture. In 1947, he returned to Europe and joined the faculty of the Federal Polytechnic Institute in Zurich. The next year, his study of the effects of mechanization, called Mechanization Takes Command, was published in England.

During the 50's, Giedion spent much time writing and teaching in the U.S. In 1950–51, he taught at MIT, and from 1954–56 he taught again at Harvard, where he frequently served as visiting lecturer until 1964. His biography of Gropius was published by Reinhold in 1954.

Two of his last works, The Eternal Present: The Beginnings of Art, and the second volume (based on his A.W. Mellon Lectures at the National Gallery in 1957), The Beginnings of Architecture, were published in the U.S. in 1962 and 1964. The latter treated the problems of constancy and change.

Actively interested in modern architecture as well as primitive art, Giedion was a member of the Royal Institute of British Architects and has been General Secretary of the International Congress of Modern Architecture since its founding in 1928.

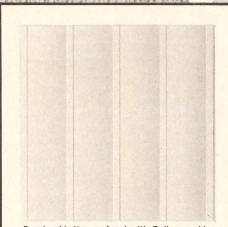


Stanley B. Tankel, urban planning expert, died March 31 of a heart attack at the age of 45. As planning director for the nonprofit New York Regional Plan Association, he was influential in shaping national thinking on the handling of urban planning problems. And in his other roles — he was also, at the time of

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his death, vice-chairman of New York City's Landmarks Preservation Commission, adjunct associate professor at Columbia University's School of Architecture, a member of the executive board of the Open Space Action Committee, and a member of the editorial board of the Journal of the American Institute of Planners —he tried to insure that the city would remain a lively, livable center of human activity. Two of the most widely known and most effective reports produced by the Regional Plan group grew out of projects headed by Tankel in 1958-60 and 1962. "The Race for Open Space" has been credited with influencing passage of Federal, state, and local legislation for the preservation of open space in cities, and the report "Spread City" pointed out the disadvantages of the Los Angeles phenomenon of urban sprawl.

When the Regional Plan Association, which was established to provide basic research and concrete suggestion on the development of the New York metropolitan area and its environs, predicted the growth of the area from the present 19 million to 30 million by the year 2000, Tankel refused to assume dire consequences of such a rapid and voluminous increase. Rather, he felt that man would continue to find ways of keeping his cities attractive and habitable, for, as he said last May, "If the city is going down the drain as many critics have said, then man is going down the drain. There is no alternative. Man wants to be where the action is." He did not, however, feel that the self-contained city, encompassing all of the functions and work force presently associated with the central city, could remain typical in the future. He advocated instead single-purpose subcenters located on radiating transportation arteries. This "network of hearts and arteries," he believed, "will give more people more choice of things to do by more modes of transportation at less cost to the public and the individual."

Before joining the Regional Plan group in 1955, Tankel, born in Mt. Vernon, N.Y., was a designer and builder of homes on Long Island and a

planner with the Ministry of Town and Country Planning for New Towns in England. He had also worked for the Westchester County (N.Y.) Planning Department. He studied architecture at Yale and received Bachelor's and Master's degrees in city planning at Harvard. In 1952, he studied city planning in France on a Fulbright grant.

WALRUS IN RESIDENCE



LONDON, ENGLAND. From John Nash to "The Magical Mystery Tour" might be a circuitous trip aesthetically, but not when it comes to buying houses with Beatlepounds. The £40,000 home of Paul McCartney in London's St. John's Wood is one of 30 in the area designated for a Building Preservation Order by the Westminster City Council because of "architectural, townscape, and historical value." The noted Regency architect John Nash (1752-1835) was the chief influence on the style of the townhouses. McCartney and his partner John Lennon are the chief influence on most of what we hear.

CALENDAR

The 12th Annual Convention of the Consulting Engineers Council, devoted to the theme, "The Engineer Confronts a Changing World," is scheduled for May 6–9 at the Statler-Hilton Hotel in New York City. For further information, write to: Raymond J. Rice, Convention Chairman, Raymond J. Rice Engineers, 2 Park Ave., New York, N.Y. 10016 . . . The University of Wisconsin Extension will present a seminar

on "Specialized Flooring Systems" May 21-22 on the university's Madison campus. Inquiries should be directed to: Dwight D. Zeck, Institute Director, 725 Extension Bldg., 432 Lake St., Madison, Wis. 53706 . . . The Chicago Chapter of the Producers' Council, Inc. plans a Seminar on Medical Facilities, to be held May 22 at Chicago's Conrad Hilton Hotel. Program information is available from: John J. Pembroke, General Chairman, American Saint Gobain Corp., O'Hare Plaza, 8501 W. Higgins Rd., Chicago, Ill. 60631 . . The Spring Membership Meeting of the Aluminum Association will take place May 22-25 at The Greenbrier, White Sulphur Springs, W.Va. Write for details to: The Aluminum Association, 420 Lexington Ave., New York, N.Y. 10017 . . . Under the sponsorship of the Illuminating Engineering Society, the Fourth Annual Theater, Television, and Film Lighting Symposium will be held May 26-28 at the Barbizon-Plaza Hotel, New York, N.Y. Program schedule is available from: T.M. Lemmons, Sylvania Lighting Center, 100 Endi-

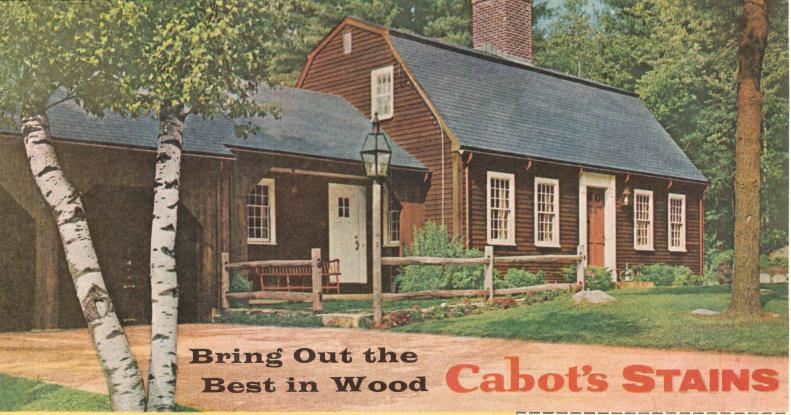
cott St., Danvers, Mass. . . . The First International Congress on Lightweight Concrete will be held May 27-29 at the Royal Lancaster Hotel, London W2, England. The congress is sponsored by the Concrete Society, Ltd., with offices at: Terminal House, Grosvenor Gardens, London SW1, England . . . New York City's Coliseum will be the scene of Contract 68, a national conference and show for the contract furnishing industry, June 4-6. Write for details of the conference to: Jerome H. Brown, National Expositions Company, Inc., 14 W. 40 St., New York, N.Y. . . The Graduate School of Design at Harvard University will sponsor the 12th Annual Urban Design Conference, June 7-8. Those interested in the meeting should write to: Graduate School of Design, Harvard University, Cambridge, Mass. 02138 . . . New York City's Coliseum has been chosen to house the International Electrical Industry Show, June 9-12. Complete program information may be obtained from: Robert Pomerance, Show Director, IEI Show, 331 Madison Ave., New York, N.Y. 10017.

WRIGHT'S MADISON PLAN COMES TO LIFE

MADISON, WIS. Frank Lloyd Wright's long-delayed plan for a civic center for this state capital and university city are underway again. Under the direction of William Wesley Peters of the Frank Lloyd Wright Foundation, the project will eventually occupy

land around the shore of one end of Lake Monona in downtown Madison. First stage of the undertaking will be a civic auditorium, located on the lake just two blocks from the state capitol. The city council, in approving the master plan for the entire develop-





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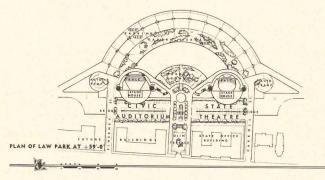


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ment, approved \$5,500,000 for this first stage development.

Wright first drew up his plans for the Madison Civic Center in 1938, and although completion of the scheme has been postponed for 30 years, the residents of Madison always knew that someday it would be realized. Now, at least a start is being made.

According to a spokesman for the Frank Lloyd Wright Foundation: "Wright's fundamental design is preserved and incorporated in the present planning. William Wesley Peters and the Foundation have been commissioned for services for the entire project, including all buildings and furnishings, improvements, site development and landscaping."

THE RED AND THE BLACK

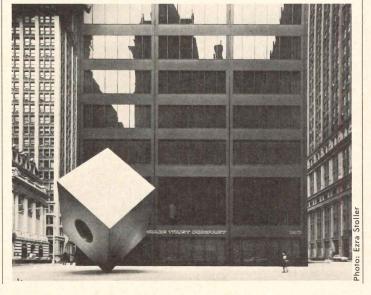
NEW YORK, N.Y. It could have been a pushy upstart. With 1 million sq ft of office space and 52 stories, the recently completed Marine Midland Building could easily have thrown its weight around

among its neighbors in Manhattan's financial district. Instead, its presence is felt for very different reasons. With a black anodized aluminum façade set with large panels of bronze solar glass, the build-

ing, at 140 Broadway, has a quiet, sedate demeanor suited to its financial location. It is quiet enough so that the rigor of its crisp lines merely offset nicely the gingerbread façades of the older buildings surrounding it. And by using only 40% of the site, it opens about 30,000 sq ft of pavement to light and air.

Actually, by surrounding the 140 Broadway building with this expanse of travertine plaza, architect Gordon Bunshaft of Skidmore, Owings & Merrill has provided a proper setting for his building. But, equally important, he has created a space that shows off the surrounding buildings and in doing so heightens the effect of his own.

It is a handsome, dignified structure, and the bright red steel cube by sculptor Isamu Noguchi, which announces the front entrance, provides a cocky flair that says the world is not all black and square.



May 1968

WASHINGTON/ FINANCIAL NEWS

By E. E. HALMOS, JR.

Free Architectural Advice?

— Architects were a bit taken aback by the possible implications of a statement by their soon-to-be-installed president that "if it is physically possible, this [architectural] service will be supplied free to those unable to pay."

The statement, made to a Senate Subcommittee on Housing and Urban Affairs by AIA President-elect George E. Kassabaum, was a highlight of a period in Washington which saw increasing interest in the whole area of housing — particularly for the poor and low-income population of urban areas.

It was a seemingly complete departure from longheld professional tenets which preclude free services. And it was so surprising a turn that AIA's Executive Committee, meeting in Washington at the end of March, felt it necessary to approve establishment of a task force to study its implications.

AIA spokesmen in Washington seemed to hold that Kassabaum was referring to group or chapter services — such as have been rendered in a few spots recently — to aid in getting some community redevelopment started in the right direction. But they wouldn't say that absolutely; hence the new task force.

Said Kassabaum, in his statement to the Senate (and to a similar House committee):

"The architectural profession considers it an obligation to render a creative response [to achieving the President's goal of 6 million new low-and-moderate-income housing units in 10 years]. This means that we will provide architectural services individually or through neighborhood design centers to anyone needing design advice.

"If the client can pay a fee, he will be expected to. But if he cannot, he will still be served, if it is physically possible."

The Kassabaum statement
— in which he also advocated
elimination of what he called

the "negative approach" of housing laws, with their stress on cheapness, and was critical of the administration of present housing laws — was the topper on several weeks of renewed activity in this area.

New Bills — Other developments included:

- A series of new bills (S. 3128, 3129, 3130, 3131), which would provide "interim" assistance for blighted areas (repairing of streets, sidewalks and other public property); extend rehabilitation grant and loan programs to such areas for immediate upgrading without waiting for a Federal grant; expand the demolition program to include nonresidential buildings harboring rats; and extend the acceptable uses of air rights to include construction of educational facilities.
- A House bill (HR 15866) to improve home ownership possibilities for low-income families by providing an extra \$30 million in a revolving fund that enables nonprofit groups to buy up and rehabilitate slum housing, then turn over the properties to low-income families for purchase on easy terms.
- The House passed a bill (HR 10477) to raise allowable Veterans Administration home-loan guarantees from \$7,500 to \$10,000.
- In Washington, the Equitable Life Assurance Society said it would make \$2 million available to city residents who want to buy and rehabilitate homes in the inner city, if they can qualify for FHA guarantees.

Another Attack on Capitol Architect — In Washington itself, the architectural pot came to a new boil several times — once with a new aspect of the perennial battle over Capitol Architect J. George Stewart; another time over a plan to abolish the powerful National Capital Planning Commission; and then again over Federal Government contract forms.

Trigger for the new goround over Mr. Stewart and his works was a hearing on a bill (HJR 914) introduced by Rep. James H. Scheuer (D., N.Y.), which would curb the architect's powers by creating a development plan for Capitol Hill; setting up a new Congressional committee to select

architects; and creating a committee of architects to advise Congress on planning, construction, and selection of architects.

Testifying for his own measure, Scheuer said the selection of architects, at present, is under a "monopoly system," with a small group of architects getting all the work while "no other firms are encouraged to apply."

Scheuer's comment "monopoly" was immediately echoed by Philip Hutchinson Jr., director of government affairs for AIA, who pointed out that eight of the nine major design contracts awarded by Congress since 1955 have gone to the seven architects who are now partners under the firm name of DeWitt, Poor & Shelton. (Actually, selection of architects for Capitol Hill projects over the past 13 years has been done by six different committees of the House, Senate, or both.)

Reorganization May Do Away with Capitol Planning Commission — On front, the Johnson Administration was reported to be circulating a new "reorganization" plan that would, in effect, abolish the present National Capital Planning Commission by shifting its major functions to the newly reorganized government of the District of Columbia, and to a new "Federal Capital Area Planning Agency." Present powers of NCPC such as setting boundaries of urban renewal areas, adopting major highway and mass transit programs, approving height, location and size of District government buildings, and the like, would go to the District government. Supervision of Federal building, over-all Federal planning for the national capital region, location, height, size of new Federal buildings anywhere would go to the new agency.

And architects could take heart from a development on fees: The National Bureau of Standards—first Federal agency to accept interpretations of the law that insisted on competitive bidding for A-E contracts—has now rejected the idea. NBS contracting officers have now been instructed that they are no longer "to seek services of architects... on the basis of competitive negotiations."

Financial — There were strong indications, as of mid-April, that the Johnson Administration was seriously considering a return to wage-price "guidelines," with special emphasis on the construction industry. More than 450 labor contracts are up for renewal in the industry within the next few months, and unions have given no sign that they will relax demands for added pay and benefits.

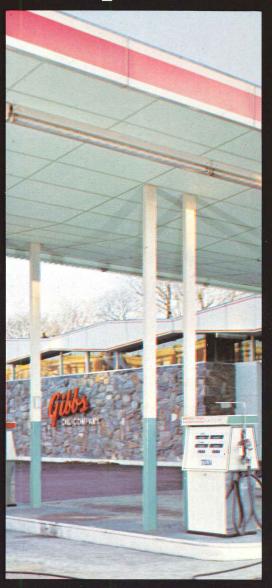
■ On the subject of construction costs, a bill before Congress (S. 3149) worries contractors: Among other things, it would demand labor participation in management of "industry promotion funds" now handled exclusively by contractors. The powerful National Contractors Association, for one, told Congress recently that such access to these funds would give unions another bit of leverage to force up prices.

■ Under heavy pressure from Congress and industry, the Treasury has retreated from an announcement that it will strip tax-exempt features from industrial revenue bond issued by many municipalities to attract new industry. Many feared that Treasury action would kill industrial building booms

- January sales of new onefamily homes was reported at a seasonally adjusted rate of 508,000 units — down 4% from December but up 21% over a year ago; while construction of new units rose to a value of \$1,800,000,000, compared to \$1,400,000,000 a year ago.
- Total value of new construction put in place in January, at a seasonally adjusted annual rate of \$80 billion, was up about 8% over a year ago, in terms of current dollars. In terms of 1957–59 dollars, however, the Census bureau reported the rate up only 2%.
- Voter approval of new municipal bond issues continued to run substantially behind the previous year, according to Investment Bankers Association figures for the final quarter of 1967. For the full year of 1967, voters approved a total of \$4,400,000,000 worth of such bonds, compared to \$6,500,000,000 in 1966. In 1967, voters approved 63.3% of all bond issues presented (by amount), compared to 76.8% in 1966.

The worst place ceiling.







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Even in a steam room

Armstrong Ceramaguard™ goes places that'd raise havoc with conventional acoustical materials . . . if you'd dare try them there in the first place.

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Like more facts? Details and specs? Just write Armstrong, 4205 Watson St., Lancaster, Pa. 17604. Or on Readers' Service Card circle No. 300.



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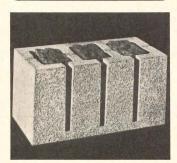
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RODUC

ACOUSTICS



Slots for sound. A patented slot design on two concrete blocks absorbs sound most efficiently when the frequency is below 500 cps; the units, however, cover the entire range of 125 to 4000 cps. Both blocks have three slots on the face; "Type 'AA' " has narrow slots and unfilled cavities; "Type 'B'" has wider slots and contains an incombustible fibrous filler. The comprehensive bearing strength is claimed to equal that of regular hollow concrete blocks, and the units may be used in running bond or stacking patterns. The blocks meet ASTM C-90 requirements. For data on this firm's previous blocks with two-slot faces, see p. 77, No-VEMBER 1966 P/A. The Proudfoot Co., Inc., P.O. Box 9, Greenwich, Conn. 06830. Circle 100. Readers' Service Card

AIR/TEMPERATURE

Hushed ventilator. "Silent-Vent SV-90" ventilator mounts in a 4" wall stud, operates with standard ductwork, and is claimed to be "extremely quiet." U.L. listed, the ventilator comes in four sizes (400-900 cfm), and is rated at 1.4 sones. G.C. Breidert Co., Box 1190, San Fernando, Calif. 91341. Circle 101, Readers' Service Card

Automatic ventilator. Set in motion by outdoor temperatures, a residential ventilator reportedly prevents pipes from freezing and eliminates dry rot. The ventilator is sensitive to heat, uses an opening 6" x 12" and 73/4" deep. Maximum opening occurs at 70 F and it closes at 50 F and 90 F — all automatically. The ventilators are claimed to require no power, assuring operation in emergency conditions. Erwin L. Weber, 1117 Second Ave., Seattle, Wash.

Circle 102, Readers' Service Card

DOORS/WINDOWS

Reversible window. "L.L.S. Reversible Window" turns and reverses itself in an orbit that does not cross the inner side of the sash frame, a feature that eliminates the problem of water dribbling into rooms from sashes pivoting over frames. Maintenance costs are claimed to be lower because windows are cleaned from the inside. Schacht Associates, Inc., 1175 E. 156 St., Bronx, N.Y. 10474.

Circle 103, Readers' Service Card

FURNISHINGS





Utzen furniture. A basic, aluminum, U-shaped frame component that may be added to in all dimensions creates design flexibility for a Jorn Utzen designed furniture series that includes sofas, chairs, chaise-lounges, and showcases. Upholstery: oxhide or fabric. Aluminum finishes may be specified. Fritz Hansen, Inc., 979 Third Ave., New York, N.Y.

Circle 104, Readers' Service Card

Storage design. "Omni Plus" is a free-standing or wallmounted storage unit. Flexibility is reportedly made possible by a bracket that permits horizontal or vertical extensions for the units of drawers, files, panels, and table



tops. The materials of the components include walnut veneer, clear or bronze glass, and plastic laminates. Accessories: variously sized drawers, sloped racks, electrical strips, and dust seals. Hoover Ball and Bearing Co., Charlotte, Mich. 48813.

Circle 105, Readers' Service Card



Dorm-space siege. A line of wood dormitory furniture includes bunk beds flanked by wardrobes, shelves, and storage drawers. Desks may be built onto the units on either end. Also, larger closets may be specified. Corco, Inc., 2956 W. Peterson Ave., Chicago, Ill. 60645.

Circle 106, Readers' Service Card



The Herbert sled. Sled runners merge with mirror-polished stainless-steel legs of this Albert Herbert chair. Dimensions: width, 231/2", depth, 24"; seat height, 171/2"; over-all height, 311/2". Upholstery is customer specified. Eppinger Furniture, Inc., 306 E. 61 St., New York, N.Y. 10021.

Circle 107, Readers' Service Card

INSULATION

Tape insulation. Adhesivebacked foam, sponge, cork, rubber, and plastic tapes are claimed reliable substitutes for calking where insulation and noise control are needed. The tapes will not dry or crack, are manufactured in varying thicknesses, and purportedly expand with the joints. Arlon Products, Inc., 23924 S. Vermont Ave., Harbor City, Calif. 90710. Circle 108, Readers' Service Card

Foamed urethane. Urethane is sandwiched between felt skins to form "Armstrong Urethane Roof Insulation." It is manufactured in five thicknesses and 36" x 48" boards. Support of normal roof loads in built-up roofing specs is claimed, and ratings of thermal conductivity are 0.13 (initial) and 0.16 (aged) in ASTM tests. Armstrong Cork Co., Lancaster, Pa.

Circle 109, Readers' Service Card

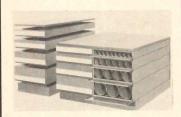
LIGHTING

Flashing bulb. "Colorstrobe," an attention-attracting or safety flasher light bulb, flashes color repetitively, producing intervals of black perceived in the mind's eye as color. Similar to discothéque lights, the strobelight is sold in six colors, is weatherproof, and may be used outdoors. Lighting Services, Inc., 77 Park Ave., New York, N.Y. 10016. Circle 110, Readers' Service Card

OFFICE EQUIPMENT

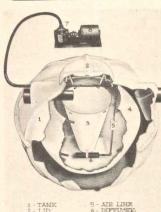


Drafting on the ball. "Microdraft" ink drafting tip held in the photo is ball tipped; inserted in a holder for drafting, its point is claimed to produce more finely detailed lines than lead. The ink traces over graphite lines and may be reproduced on acetate and polyester materials. Corrections can be made with a special eraser. Three line widths are offered. Micropoint Engineering Co., 6230 E. Taylor Ave., Sunnyvale, Calif. 94084. Circle 111, Readers' Service Card



Stacked filing. Round filing tubes of diverse diameters are shelved inside "Staktube," a file for architectural drawings. Cabinet width is standardized at 15\(^{\mu}\), but heights and lengths vary in 32 combinations. Stacor Corp., 285 Emmet St., Newark, N.J. Circle 112, Readers' Service Card

SANITATION PLUMBING



- TANK 5 - AIR LINE - LID 6 - DIFFUSER - CONE 7 - COMPRESSO - FILTER 8 - MOTOR

Sewage treatment. "Chromaglass," a residential waste treatment unit for on-lot installation, uses a fiber-glass reinforced tank. The tank has no moving parts and contains solids in compartments until oxidation reaches 97%. A plastic filter mesh intersticed at 50 mu encases the aeration compartment. An alarm indicates decrease of air pressure below operative levels. Cromar Co., Williamsport, Pa. 17701.

For the "Abundance Society." Unobstrusive containers for the ever-increasing waste that our society leaves in its wake are without doubt needed. These modular-type waste receptacles are semirecessed to either 4" or 6" as specified, and offer four vari-

Circle 113, Readers' Service Card

ations of cabinets and containers — the containers coming in either 12- or 18-gal capacity. Stainless steel with a satin finish. American Dispenser Co., Inc., New York, N.Y. 10003.

Circle 114, Readers' Service Card

SPECIAL EQUIPMENT



Concrete sculpture. "Castle," a "play sculpture," sports holes for limbs, bodies, and fun. The reinforced, precast concrete is mounted on a 3" thick base. Height: 6', width: 48", length: 10'6", wall thickness: 2½". The units are available in natural concrete or four colors. Form Inc., 12900 W. Ten Mile Rd., South Lyon, Mich. 48178.

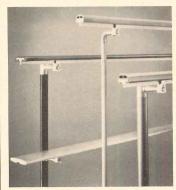
Circle 115, Readers' Service Card



Floating seats. Floating indoor bleacher seats will make it easier to change seating arrangements. A urethane rubber pad attached to steel plates at the base of the bleacher supports is inflated with 2 to 5 psi air pressure. Air is allowed to escape from beneath, floating the seating. The Device is available for units weighing 12 tons or less, and a portable compressor supplies the air pressure. Behlen Manufacturing Co., Columbus, Nebr. 68601.

Circle 116, Readers' Service Card

Colored handrails. "Colorail" consists of colored, plastic handrail moldings; colored,



plastic-clad aluminum posts; and aluminum rail support sections. Mounting options: wall, floor, or fascia. Julius Blum & Co., Inc., Carlstadt, N.J. 07072.

Circle 117, Readers' Service Card

Hospital aide. T.H.I.S., "Total Hospital Information System," is a computerized communications network for hospitals. Claimed to be the first of its kind, the system, which uses a small computer but relies substantially on less expensive support equipment such as punch-card printers and processors, was intended to reduce the time of sorting minutiae and relaying vital information. Several "stations" may receive the output of the computer or submit data for receipt at other stations. A substantial reduction of clerical costs is claimed, and no limitation on the size of the hospital served by the system indicates a flexibility adjustable to patient population. Scam Instrument Corp., 7401 N. Hamlin Ave., Skokie, Ill. 60076.

Circle 118, Readers' Service Card

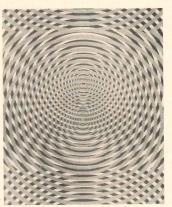


Drop-out partition. Vinyl-surfaced steel tables and benches for cafeterias drop out of accordian-fold partitions in "Duo-Wall." An electric-hydraulic device (key operated) extends the walls from folded position to flat (wall) position. Another turn of the key lets tables and benches

fold out 7' on each side of the partition. Partition panels containing the equipment are 4" thick, use concealed hinges, and may be alternated with other panels containing doors. Robert Haws Co., 12955 Inkster Rd., Detroit, Mich. 48239.

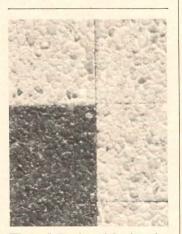
Circle 119, Readers' Service Card

SURFACING



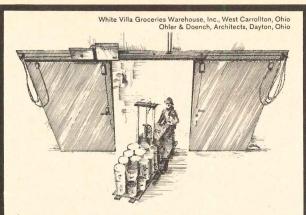
Vinyl wall covering. A vinyl wall covering called "Groovy" spins circles and eyes. Colors: green and blue on white, fluorescent orange and green on white, and black on white. United Wallpaper Co., 3101 S. Kedzie Ave., Chicago, Ill. 60623.

Circle 120, Readers' Service Card



Floored. Designed for interior and exterior use on floors or walls, "Co-ti-co" floor pavers are now available in a lighter weight for use on walls. The hexagonal or square shapes are formed under a minimum pressure of 300,000 psf and reportedly have flexural and compressive strengths exceeding precast units. The resistance to freeze-thaw cycles is high. Granite, marble, quartz, or glass aggregates may be specified. Compressed Concrete Corp., Box 167, Lake Worth, Fla. 33460.

Circle 121, Readers' Service Card



Aluma-Cold™ Cold Storage Door opens and closes at 3'-per-second

New Clark Aluma-Cold door opens and closes at the unprecedented speed of 3'-per-second—cuts refrigeration loss by as much as 400%. It's the lightest and fastest ever built, yet is sturdy and virtually maintenance-free. Handsome, 20-gage textured aluminum skin adds new beauty to your doorways. Write for complete details.

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On Readers' Service Card, Circle No. 333



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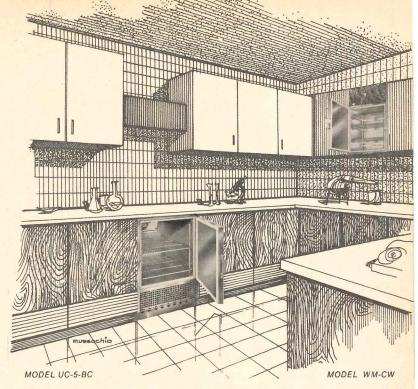






Plan Hold corporation

On Readers' Service Card, Circle No. 405



INTEGRATED DESIGN IN EYE-LEVEL AND UNDER-COUNTER REFRIGERATORS

Designed to fit flush with adjacent cabinet work in stainless steel or custom finished to your specifications, these space saving refrigerators provide a clean, uninterrupted line of design. The thin-wall construction incorporates polyurethane insulation and an air-tight neoprene thermo-break door seal. The undercounter models have outside dimensions of 24" x 24" x 341/2" and a capacity of 5.4 cubic feet. The single door wall mounted models come in four sizes 18" W. x 13" D. x 30" H. with 1.5 cubic foot capacity up to the 4.3 model with dimensions of 24" W, x 18" D, x 36" H. Also available are double door models with capacity of up to 9.6



Gleaming stainless steel interiors.

- Explosion-safe and total explosion-proof construction,
- Removable front grille through which all fittings and controls can be easily serviced without moving refrigerator.
- Dished interior bottom to protect floors from spilled products.
- Automatic and semi-automatic defrost system with built-in condensate evaporator and accumulator. Eliminates need for floor drain.



MODEL UC-5-CW

MODEL UC-5-CW

Cold wall type cooling system with automatic push button defrost. No freezing compartment. Explosion-safe and total explosion-proof construction available on this model only.

MODEL UC-5-BC

(illustrated above)

Blower type cooling system with automatic off cycle defrosting. No freezing compartment.

MODEL UC-5

Two-tray ice cuber cooling system and semi-automatic defrost.

MODEL WM-CW

(illustrated above)

Cold wall type cooling system with push button defrost.

NOTE: Jewett also makes a line of freezers with the same dimensions and features listed above.



FOR INSTITUTIONS

Since 1849

MODEL WM-CW



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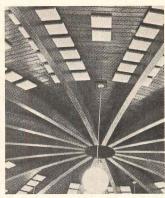




On Readers' Service Card, Circle No. 410

MFRS' DATA

ACOUSTICS



Doomsday for echoes. Acoustic panels made up of a labyrinth of glass cells smother echoes and distortion while boosting intelligibility of desired sounds. "Geocoustic" patches, 13½" square and 2" thick, are cemented on walls and ceilings; backs of the units are shaped to form a resonant cavity. Because units are not set against each other, six working surfaces per patch are claimed. The integral glass construction may be painted, and is not affected by delamination or moisture problems. Performance data includes reverberation comparisons, absorption Sabins; specifica-tions. 12 pages. Pittsburgh Corning Corp., 1 Gateway Center, Pittsburgh, 15222

Circle 200, Readers' Service Card

CONSTRUCTION



Concrete data. Safe load tables and construction details for "Spancrete," a precast, prestressed hollow-core concrete plank, provide additional information on this product that can span up to 48' without intermediate support and may be cut to desired lengths. The data and details span the 4 thicknesses of the 40"-wide Other information noted: the surfaces may be left exposed, a version with exposed aggregates on one side is manufactured, and the planks may be also used for sloped roofs. The specs include data relevant to mechanical distribution conduits through the cores. 8 pages. Spancrete Northeast, Inc., South Bethlehem, New York 12161.

Circle 201, Readers' Service Card



up-and-coming team: glass and plastic. Glass-reinforced polyester can be fabricated as beams, pipes, or other custom-ordered shapes. Manufacturer claims "Extren" structural shapes have an extended list of qualities: light weight, high strength, dielectric properties and corrosion-resistance. Discussed are thermal and insulation properties, technical services, availability, fabrication, and joining methods. Charts. 4 pages. Universal Moulded Fiber Glass Corp., Koppers Company, Inc., Pittsburgh, Pa., 15219.

Royal Flush. "Sanpan" translucent panels, available in a host of rich colors, are sold with optional incombustible and fire-retardant skins. Radiant heat transmission ranges from 9% to 45%, and light transmission from 0% to 72%, depending on panel type and opacity. The panels may be bonded to form sandwich construction. Design possibilities are increased by "Formagrid," which permits selecting from the curved or angular designs in 12 patterns or even in your own grid patterns through special order. Specifications, details. pages. Panel Structures, Inc., 45 Greenwood Ave., East Orange, N.J. 07017. Circle 202, Readers' Service Card



Joist tables. The current catalog of specs and load tables for longspan and open web steel joists includes the series "J," "H," "LJ," and "LH." The Steel Joist Institute also includes details of accessories, end designs for chords, and other construction details. 32 pages. Steel Joist Institute, 1346 Connecticut Ave., N.W., Washington, D.C. 20036. Circle 203, Readers' Service Card

DOORS/WINDOWS

Door dissertation. Residential, commercial, and industrial doors in wood or steel, fiberglass or aluminum are catalogued in booklet. Flush and panel models are shown. Hardware available with the doors includes locks, hinges, trusses, and motor equipment. 12 pages. Wagner Manufacturing Co., Waterloo, Iowa 50705

Circle 204, Readers' Service Card

LIGHTING

Ceiling firmament. Although all six of the illuminated ceilings catalogued by the manufacturer are designed with air conditioning provisions, "Celestial" integrates its air conditioning into the ceiling pan's circular castings; the five other ceilings use perimeter or plenum-pressure methods for the same function. The circular pan castings in "Celestial" are further emphasized by the suspended acrylic rods casting illumination, and speakers or sprinkler heads of circular shapes are said to blend easily



with the pan castings. Lighting data, specs. File. 78 pages. Integrated Ceilings Inc., 2231 Colby Ave., Los Angeles, Calif. 90064.

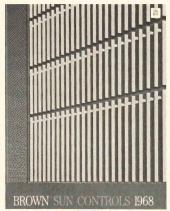
Circle 205, Readers' Service Card

OFFICE EQUIPMENT

See-through stamps. Clearstamp, an architectural rendering stamp, has a transparent handle and base to make possible exact positioning of the stamp. Trees in plan views (10 patterns), and elevation (18 varieties) are included in the brochure, which also notes stamps for cars, people, compass points, and section arrows. A price list is included. 8 pages. Architectural Delineations, 552 Roosevelt Way, San Francisco, Calif.

Circle 206, Readers' Service Card

SPECIAL EQUIPMENT



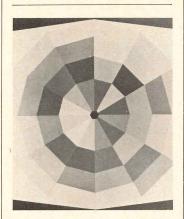
Sun deflection. Automatic sun louvers that stalk the sun to provide shade are described in the first half of the catalog; the second half traces designs for fixed sun controls. Movable and fixed-position versions are manufactured in vertical or horizontal slat designs and also in grill screens with different patterns and slopes to meet the varying orientations of buildings. Fascia and other equipment are designed for compatibil-

ity with the sun deflecting devices. Custom designs may be specified. Details, specifications. 20 pages. Brown Manufacturing Co., Box 14546, Oklahoma City, Okla. 73114. Circle 207, Readers' Service Card

SURFACING

Plastic floor. Seamless and recoatable "Flecto" plastic flooring does not require sanding between coats and, according to manufacturer, it will not vellow. The 10 color combinations resemble the flake-like appearance of terrazzo and reportedly never need waxing. Flecto coating may also be used on walls. Specs, brochure. 4 pages. The Flecto Co., Inc., Box 30, Oakland, Calif. 94604.

Circle 208, Readers' Service Card



Umbrella of color. Named "Kaleidoscope," vinyl floor tile is available in 50 color combinations. The somewhat reptilian-textured surface and color combinations were a Natalie Marcus design, and the concept was awarded a prize in the 23rd International Design Awards program. The tile appears in "Limited Edition," a sample handbook that also contains samples of a basket-weave texture, a Romanesque pattern, and a stone texture. 6 pages. American Biltrite Rubber Co., Inc., Trenton, N.J. 08607.

Circle 209, Readers' Service Card

Plastic laminates. "Wilson-Art Plastic Laminates" describes decorative melamine surfaces available in three thicknesses and several designs. The "Leather" group resembles mottled paper, but the 50 wood grain patterns are convincing duplicates of the real thing. Solid colors and You talk "zoning" with your client when you plan lighting, heating, air conditioning, and the flow of materials, production and people. We talk "zoning" when helping you design internal communications to attain maximum efficiency in the free flow of vital information.

Zoning is a planning concept. It has proven to be the most effective way to provide for all the specialized needs of various people and departments in a completely integrated communications system.







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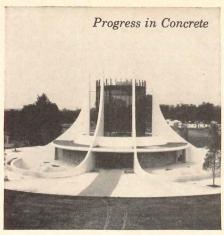
may be as simple as a conversation between two people or as complex as a group conference. It may also include paging, time and emergency signals, and music distribution. Requirements for private conversation, hands-free operation, remote answering, direct or automatic dial connection can all be met with Teletalk equipment.

WIDEST CHOICE OF SYSTEMS You have a choice of Teletalk® loudspeaking intercom, private and automatic dial equipment, and sound. They may be used in combination in a zoned network to provide the best communications tool for each zone.

EXPERT COUNSEL Only Webster offers such a variety of methods and such a full range of special features. Only Webster, too, offers such expert counsel. Webster consultants are highly skilled at planning and installing communications systems tailored to meet the immediate and future needs of business and professional offices, industry, schools and churches. Teletalk — Reg. T.M. of Webster Electric Co., Inc. for communications equipment.

COMMUNICATIONS DIVISION WEBSTER ELECTRIC COMPANY, INC. subsidiary of Sta-Rite Industries, Inc. Please send me complete information THE FACTS on Webster communications Send coupon for the new "ZONED COMMUNICATIONS" brochure. Or, call your Webster Distributor*. Either way, there's no obligation, of course. *See Yellow Pages -"Intercommunication Equipment"

On Readers' Service Card, Circle No. 384



LABOR COSTS CUT 20% WITH SYMONS GANG FORMS



Kansas City's newest attraction . . . The Great Ape House at Swope Park Zoo. The circular ape house features six concrete pylons that extend 56'8" above ground level.

Callegari-Kahn Construction Com-

pany, the contractor, working with Symons engineers in Kansas City worked out plans where gang forming could be used on the pylons, and moat

Pylons were poured in three lifts, and for the first 20', gangs 20' x 30' were erected. The top gang sections were also formed on the ground with the reinforcing steel tied in. Formwork, a barried and find the property of the property of the period of th re-bars and scaffolding were then lifted

into position as one unit.

On one of the pylons, a steel rung ladder was specified to be set in the concrete. The steel rungs were fastened to the gang sections by placing them right through the panel faces. In stripfight through the paner races. In stripping, the rivets which hold the plywood face to the form's steel frame were taken off, allowing the gangs to be broken back. This type of "gang" forming cut costs considerably.

William M. Linscott, of Linscott, Kiene, & Haylett, was impressed with

the economy of gang forming, and will

approve it again on other jobs.

Complete illustrated story sent on request. Just ask for the Ape House

Symons forms can be rented, purchased or rented with purchase option.



CONCRETE FORMING EQUIPMENT SYMONS MFG. COMPANY 158 EAST TOUHY AVE., DES PLAINES, ILL. 60018

MORE SAVINGS WITH SYMONS

On Readers' Service Card, Circle No. 380

other patterns supplement those previously mentioned. Ralph Wilson Plastics Co., 600 General Bruce Drive, Temple, Tex. 76501.

Circle 210, Readers' Service Card



Wall done. Ceramic wall surfacing in nearly 100 patterns and glazed or unglazed surfaces include relief-sculptural units. The manner in which lighting angles affect the textures of the surfacing results in several "lighting classes" or different pattern depths for most of the units, and an architect may specify designs other than those catalogued. Also included: "Mural Water Walls" for those desiring trickles with their background textures. Details, specs 36 pages. Design-Technics, 160 E. 56 St., New York, N.Y. 10022. Circle 211, Readers' Service Card

Tile format. The more than 160 tile colors and 100 tile patterns catalogued are intended to satisfy any desire for tile. The various tiles illustrated: glazed, unglazed, mosaic, heavy duty, conductive, and swimming pool. Trim assembly details are also included with their specifications. 20 pages. United States Ceramic Tile Co., 1375 Raff Road, S.W., Canton, Ohio 44710.

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PROGRESSIVE ARCHITECTURE WEWS REPORT

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

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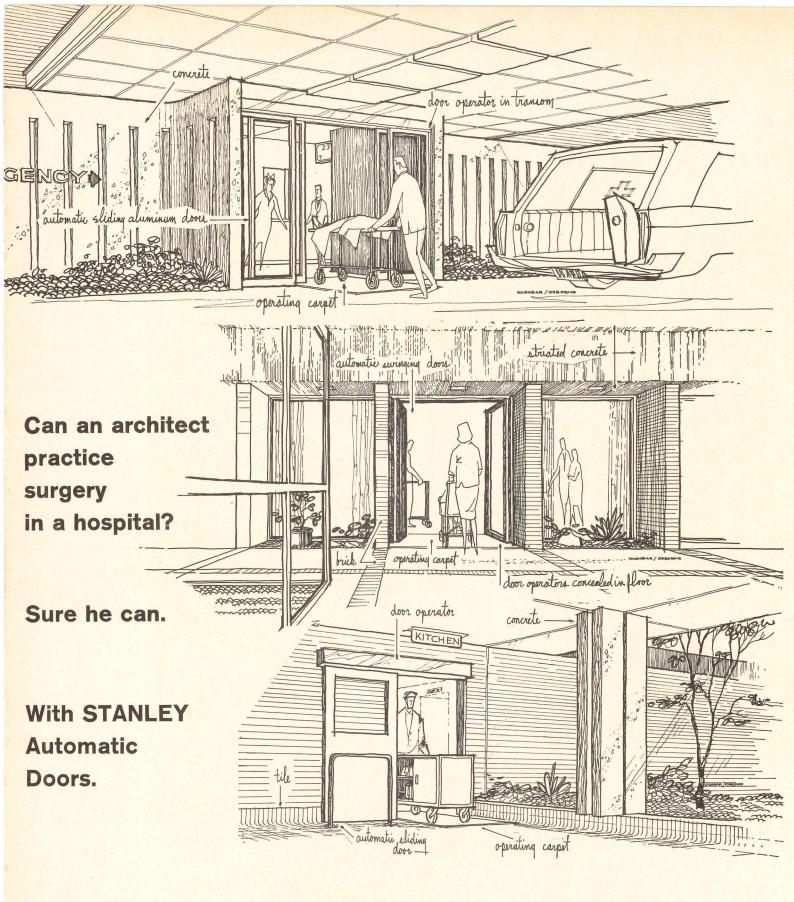
NEXT MONTH IN P/A

The predilection of the nation's economic analysts to hang on to a few "hallmark" areas or "guideline" markets has caused homebuilding to take on an ofttimes ambiguous role in our country. At times, its true role of sheltering people has taken second place to an alleged pump-priming function in keeping the pockets of entrepreneurs filled and keeping the governmental statistics charts pointed upwards.

LOWERING THE COST OF HOUSING, the subject of the June issue, will restore the problem of housing to its proper focus: on providing good and plentiful housing for people at low costs and with pleasant amenities for living. This is an area the building industry and government agencies, as well as some forward-looking architects, are investigating, and the June P/A will examine and document a number of interesting proposals and research developments in the field of housing.

Included in "Lowering the Cost of Housing" will be a 32-page section of current investigations in the field; a documentation of three winning research and development projects for the U.S. Department of Defense by Carl Koch, General Electric, and Aerojet-General and the University of Michigan; and a penetrating view into the future of low-cost housing.

The implications of this report go beyond housing and into the realms of the future nature of architectural practice. It will be another must issue of P/A, one which you can obtain for your professional library — along with 11 other equally stimulating issues — simply by filling in and sending in the subscription card at the rear of this issue.



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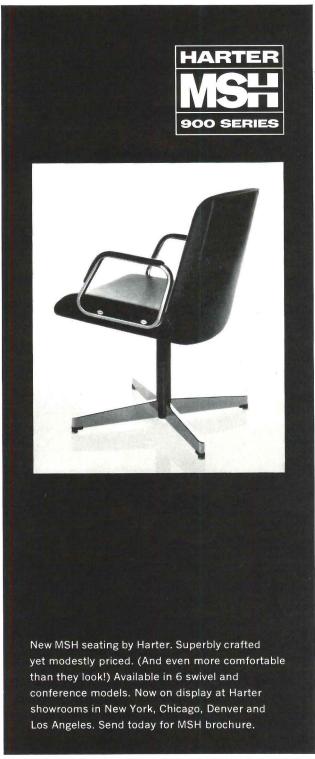


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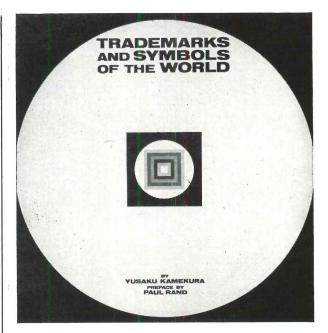


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by Yusaku Kamekura, Preface by Paul Rand

"It is easier to remember a person's face than his name" is a statement often used to explain the importance of trademarks. In this extraordinarily beautiful book, the best trademarks designed during the last 10 years are reproduced at large scale in black and white and color. The high level of imagination and skill that designers of many countries have brought to bear on this most important design assignment is clearly visible. The trademark designs presented cover a wide variety of fields, such as advertising, packaging, and television. Since a recent trend in trademark design is the use of color, the book contains pages printed in as many as six colors. Complete new designs for old and new firms - as well as examples of the re-design of old trademarks - are included. Examples range from Erik Nitsche's design for General Dynamics and Saul Bass's design for Alcoa to Giovanni Puitori's signs created for Olivetti products and Paul Rand's complete design programs for I.B.M. and Westinghouse.

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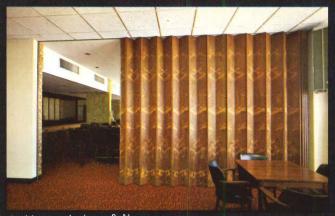


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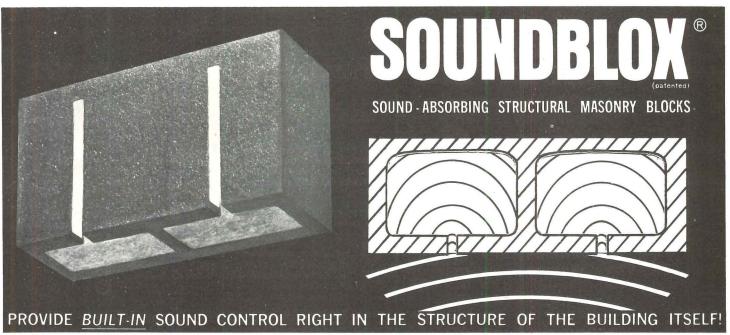
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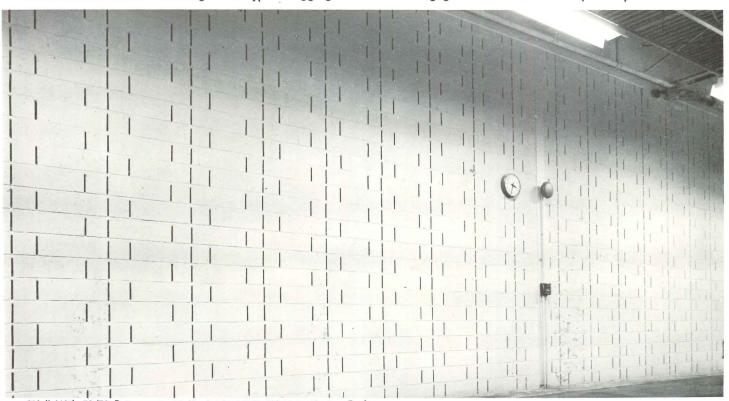
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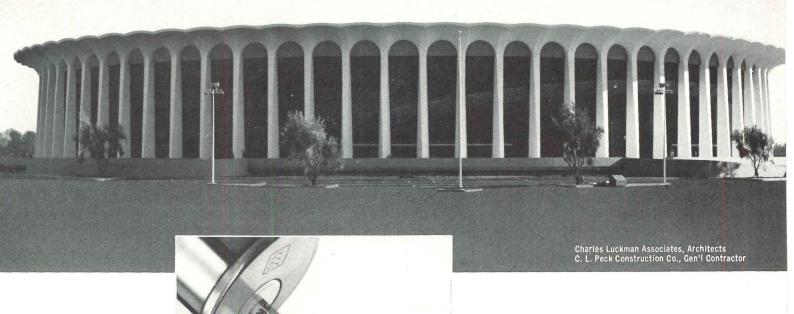
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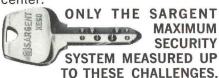


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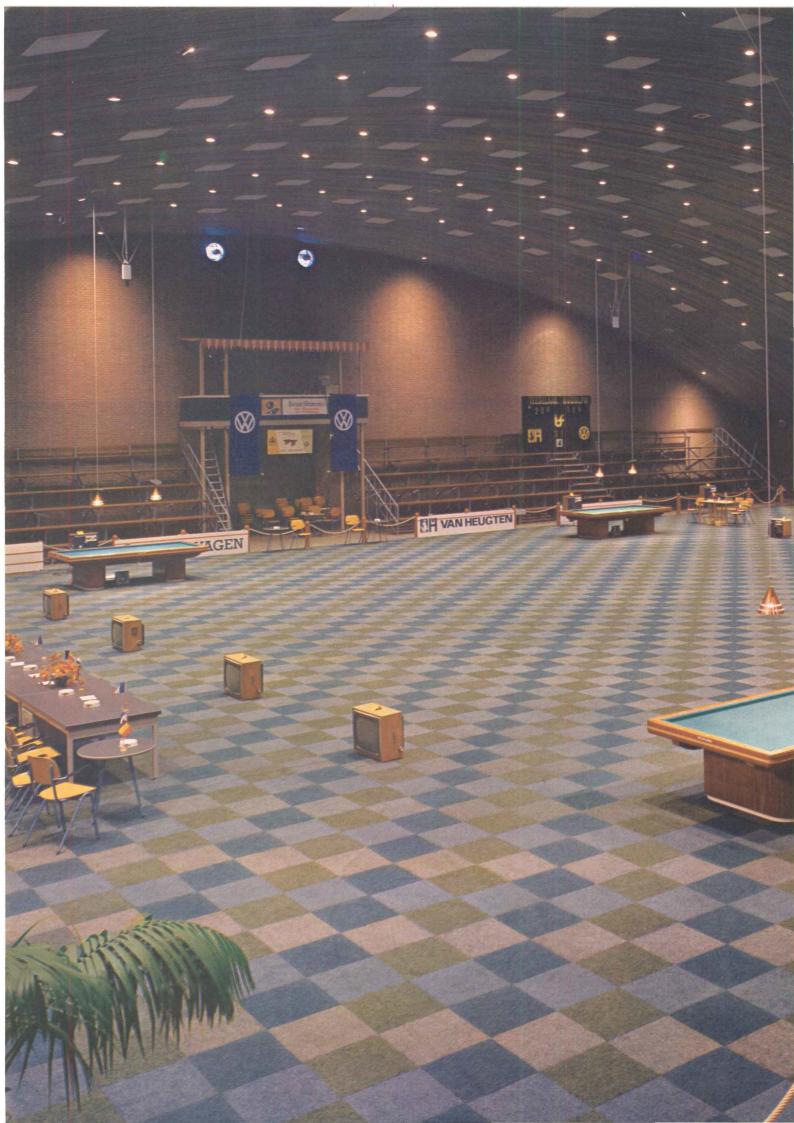
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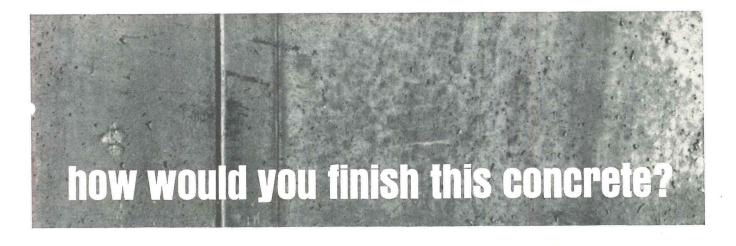
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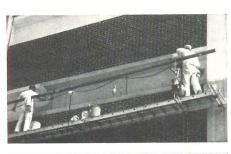
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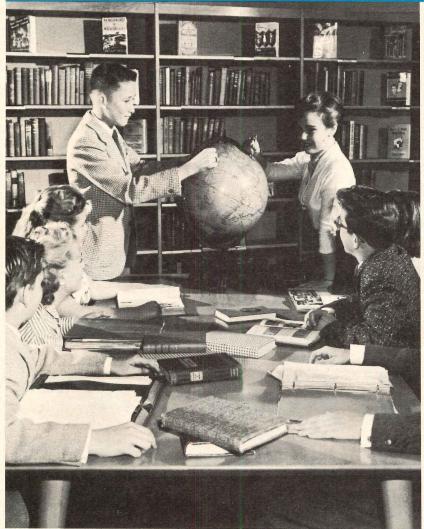
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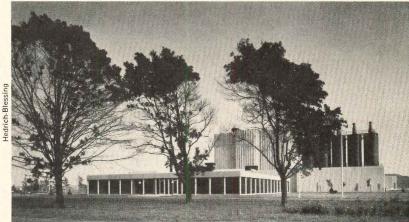
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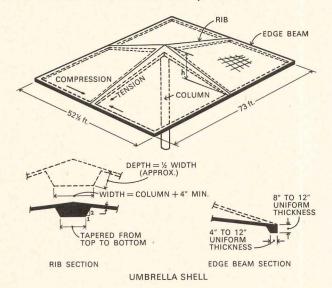
Throughout the plant complex attractive concrete treatments and structural systems are in evidence.

Of particular note is the HP umbrella shell system that roofs the distribution warehouse area. Here again, an important cleanliness contribution is made by the concrete surface of the shell ceiling. And the shell system with its widely spaced columns provides more uncluttered, usable storage space. Only concrete could offer the long spans of shell construction combined with freedom from dust-catching projections.

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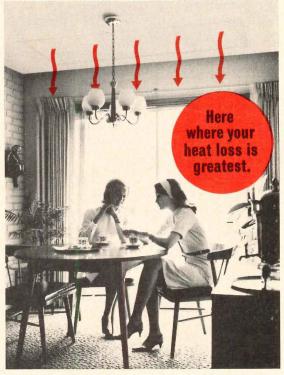
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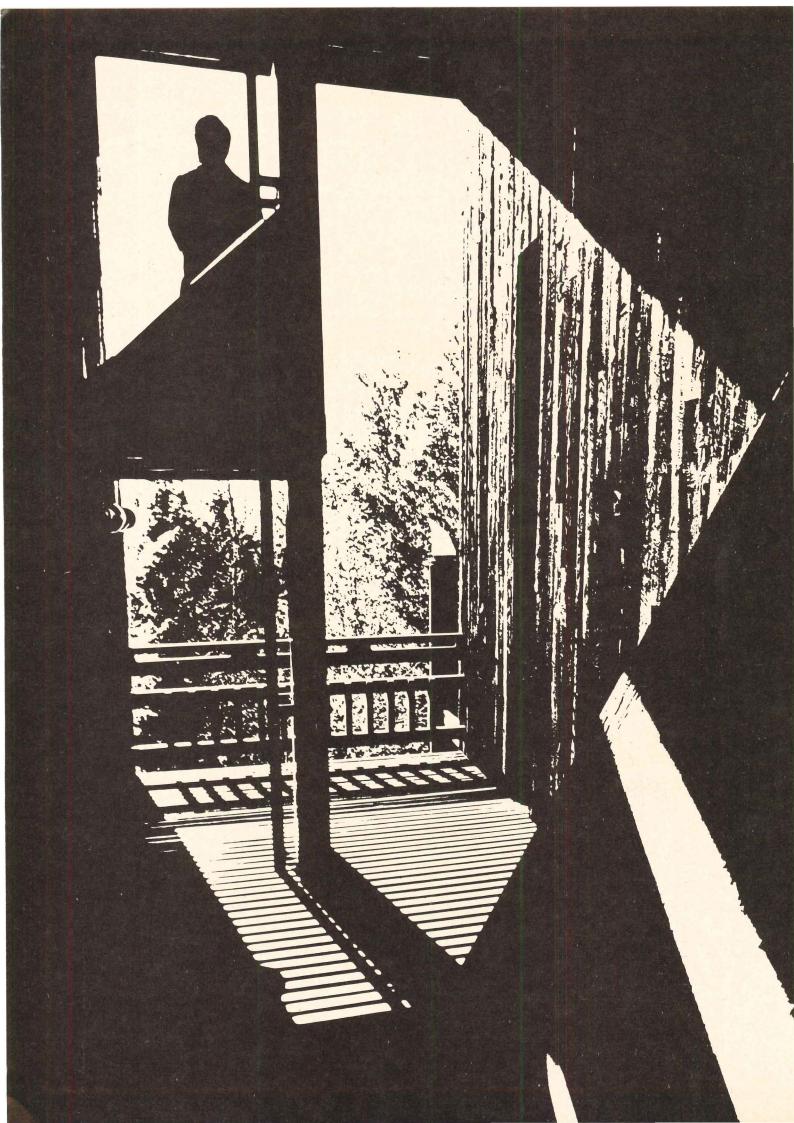
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May 1968 PROGRESSIVE ARCHITECTURE

"There is a thin line everywhere today between art and accident, or even art and atrocity; it is a characteristic of our time. Current architectural theory calls for complexity and disorder (in a kind of tastefully arranged, properly evocative counterpoint of aesthetic experiences, of course), using the happy accidents of unplanned construction as examples. The unhappy accidents don't count. There is a perfectly good case to be made for subtleties and variations of design outside the Cartesian order, but the idea is already being carried to extremes of heady intellectual irrelevance."

ADA LOUISE HUXTABLE



Student Power is jolting campuses. The Berkeley phenomenon is not a freak incident any longer. Similar flare-ups have occurred by now all over the country—and the movement is spreading. Although race, draft, and other social and moral issues are often the kindling that starts the fire, the academic unrest goes even deeper than that. The students are beginning to demand a re-evaluation of the whole concept of education, its method and purpose, thus questioning simultaneously the nature of the world they will inherit and their place in it.

Architectural schools are not exempt from this fundamental questioning. As this page is being written, several schools are undergoing a confrontation between the students and the administration:

At Carnegie-Mellon University (Carnegie Tech it used to be), the school is in process of setting a joint faculty-student committee that will make recommendations about how the school ought to change. According to Paul Schweikher, head of the school, the students are dissatisfied with the jury system and with some teachers who "don't teach me what I want to be taught"; they want greater voice in "everything, from curricula to drafting tables"; there is much basic questioning "about what architecture really means" and a request for those three new ideals that seem to be becoming the slogan of the electric-age revolution: demand for "Participation, Representation, Communication."

At the University of Pennsylvania, the students together with the younger faculty members have come up with a manifesto of principles on which a curriculum ought to be based. According to Dean Holmes Perkins, the manifesto asks for "more social involvement of students, faculty, and the school in the surrounding community and in the world at large, more freedom of choice of courses, and more student participation in the development of new programs and courses." There is again the general questioning of "what an architect is and what he should do for his society." Dean Perkins thinks this development to be positive and is willing to "change gradually in the general direction indicated by the students."

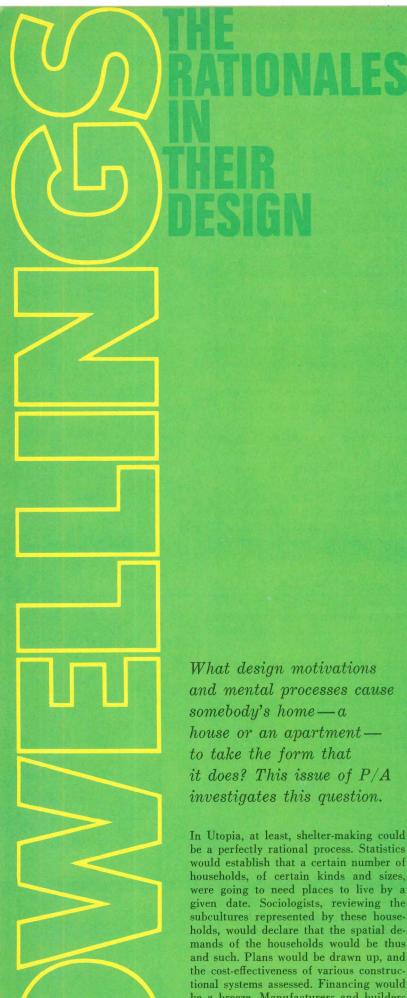
At Pratt Institute, the students' action was more drastic. They declared a "state of emergency," called a students' "strike," boycotted all classes, and demanded the resignation of the Dean and other members of the faculty who are responsible for the administration of the school. In a letter to the President of Pratt Institute, the students said:

"To be viable, a School of Architecture must at all times contain and reflect the realities of the present; it must also contain and project the possibilities for the future. Education as a force can only survive in an energetic environment in which students feel involved and committed to the serious and purposeful effort of postulating and solving meaningful and relevant problems. Pratt has failed — drastically — in this very area. There exists at our Institute a dangerous feeling of cynicism and apathy among the students engendering an unproductive attitude and limiting creativity. Having stated this in the past, the Administration has repeatedly backed away from the problem with its usual flurry of promises and tokenism which merely indicates an unfortunate failure to perform their jobs. As a result, nothing was accomplished; good teachers resigned; good students — stifled — withdrew. We, the students, now refuse to let any more students take the punishment for the incompetency of the Administration."

Rumor has it that Cornell and several other schools are undergoing similar re-evaluations. No doubt, the trend will become universal and architectural education will change.

Will the profession change as quickly? There are hopeful signs from many quarters. Even the AIA is finally loosening up some of its prehistoric attitudes. But vested interests and mental fossilization being what they are, will the profession adjust quickly enough to changing conditions—or will it be overtaken by swiftly moving events? Time is running out.

for C Rowan



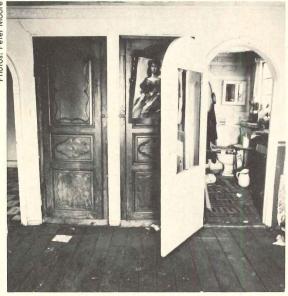
What design motivations and mental processes cause house or an apartment it does? This issue of P/A investigates this question.

be a perfectly rational process. Statistics would establish that a certain number of households, of certain kinds and sizes, were going to need places to live by a given date. Sociologists, reviewing the subcultures represented by these households, would declare that the spatial demands of the households would be thus and such. Plans would be drawn up, and the cost-effectiveness of various constructional systems assessed. Financing would be a breeze. Manufacturers and builders would work to schedule as a well-orchestrated whole. Government and union officials would smile. And if the goddess of Chance, now a severely limited monarch, would also smile, the doors would open on the predicted day, and the whole enterprise would be a testimony to what reason can do in an atmosphere of good

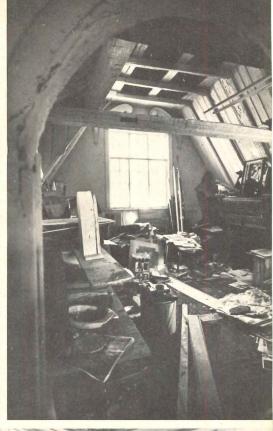
Homemaking is quite another matter. Whether a person lives like Citizen Kane or pastes up a couple of art reproductions in a dormitory room, home-making is an affair that speaks to and for a specific person (or perhaps a specific family), declares that this is an individual's own place, and makes his immediate environment more secure, more amusing, or meaningful than the rest of the world is. Not everyone, of course, sees home as an affair of walls and roofs, with a bed in the middle. Certain businessmen are more at home in the office than they are in the nice suburban houses they own. One of Joseph Conrad's sailors, signed up for a voyage in a well-found ship with good shipmates, might be said to make the voyage itself his home: home as a period of time rather than an area of flooring. A few picaresque types doubtless make the world as a whole their home, and some ascetics expect no real home this side of death. Nothwithstanding all this, home to most people has a specific location and assignable dimensions, and is created by giving instructions to architects and pointing to things in shops.

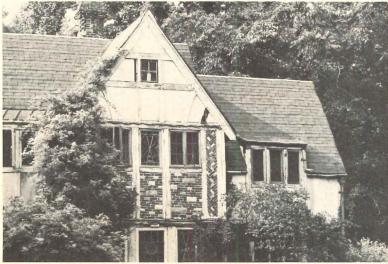
In ordinary, physical home-making, one's theoretical rights are very broad. If one person wants an Elizabethan-style long gallery to pace up and down in, or if he wants to dine on a Roman triclinium wearing a purple toga, there is no specific law to stop him. In practice, though, most of our homes are standardized environments to which we adjust our appetites and fantasies. Usually, we have to take ready-made or conventional shelters, severely limited in area, and fill these with furnishings like those of most other people. Our financial limitations push us partway toward standardization, and our neighbors and the various pundits of taste we stand in awe of take us from there. The housewife next door is as powerful an agent for standardization, in fact, as Henry Ford ever was. Our nonconformities are quantitatively limited, so to speak, by the conventions of our subcultures; we must be no more unconventional - and possibly no less - than the others around us. And within these limitations we establish the odds and ends, architectonic and otherwise, that create in us feelings of affection, serenity, excitement, or pride.

Here and there, though, there are people who refuse to accept standardization. If they use the objects and images we recognize, they use them in ways that make them like the imagery of a dream -incongruously, to create a dialogue with or expression of something inside themselves. Before going on to mention projects that exist in our conventional world, to which such things as plans, working drawings, and data listings are relevant, we present two such houses.











The first is that of architect Walter Pleuthner, in Scarsdale, New York. Pleuthner, now an energetic man of 82, had a comfortable country house practice in the Scarsdale area in the 1920's, and in 1922 built his present "summer palace" as a suburban residence for himself. At that time, the house was no more pixyish than many another in the high Eclectic period, and was distinguished only by having true half-timber construction, a massive braced frame with brick nogging. Loving hand-made things and solid workmanship, he had the house put together by craftsmen who used a minimal amount of millwork and ready-sawn lumber. One of the timbers in the living room is a heavy stick from the privateer Hornet, of War of 1812 fame. Originally, the house reflected in a conventional way Pleuthner's triple artistic role as architect, painter (the youngest exhibitor at the Armory Show of 1913), and sculptor, as fragments of old ironwork and woodwork and paintings accumulated on the walls. The great living room was the rehearsal room of the Wayside Players, an amateur group that included Robert Benchley, Dorothy Parker, and the car-



The quaint 1920-period exterior of the Pleuthner house is not remarkable; inside, collected objects, improvised ornamentation, and the accidents of recent years have combined to produce something half-gay, half-desolate, like a ruined amusement park.

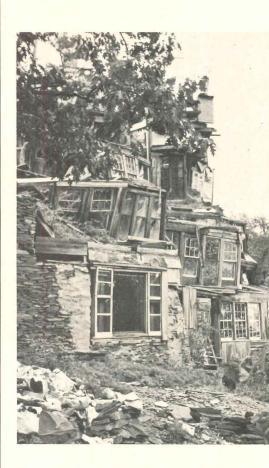


toonist Rollin Kirby. At some point, the cultured clutter to be expected in an artist's house passed over into whimsy, and Pleuthner decided to work on the walls, ceilings, floors, and furnishings of the various interiors. The kitchen at one period was transformed into an Italian garden. floorboards were painted to imitate polychromed tiles. Other floors were carved out and inlaid with mosaic. A bathroom scale had the outlines of two feet painted on the platform, while the dial became a screaming baby face. Unpleasant book bindings were painted white, with code words daubed on the spines in red. An automobile hood became a canopy over the entrance to a summer house. And more and more odds and ends were added inside and out. In 1963, the house caught fire, but its substantial construction saved it. Two other fires followed, however, with vandalism and thefts after each, and the house is now in sad shape. The authorities claim that it is unsafe, and want to tear it down, but Pleuthner is confident that he can restore it. This winter, the house was leaky, drafty, and uninhabitable, but Pleuthner is already experimenting with the textural effects created on the floorboards by the latest fire.



In the bedrooms (top), the
Jacobean plasterwork is
falling away, and the
living-room ceiling (above)
appears none too secure.
Outside, a tablet (right)
lists the "restorations" that
followed mishaps to the
house, with plenty of room
at the bottom
for more dates.





The other house has recently been destroyed by fire. This was the house of Clarence Schmidt, a retired mason and plasterer, in Woodstock, N.Y. Begun as a small cabin, the Schmidt house ended as a magpie collection of house fragments, junk, and bric-a-brac, made more magpie-like still by the frequent inclusion of shining objects and the wrapping of things in aluminum foil. At its peak, the house had 35 or more rooms, whose habitability varied with the season. The essential habitation was a single room in the heart of the building, into which Schmidt would withdraw as the cold season approached. In the summer, he would sit in the lavishly decorated grounds, receiving visitors, many with donations for the building. The inner structure of the house was supported partly by the hillside it was built against, partly by piers of dry-wall fieldstone construction, all surprisingly substantial even though the house sloughed off portions of itself now and then. The roofline was perhaps the most sensational feature, bristling as it was with rods, poles, laths, and junk, but the interiors were not far behind. Where natural light failed, in the depths of the building, Schmidt had colored lights rigged to play over compositions whose complex obscurity might be rivaled by the interior of a Tibetan monastery, but hardly anywhere else.

Schmidt, like Pleuthner, is undaunted by fire damage; he is said to be planning to rebuild.



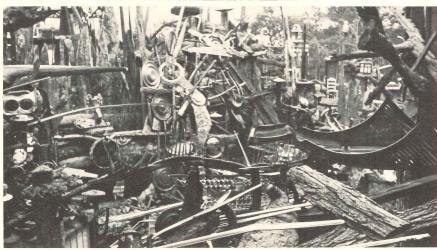




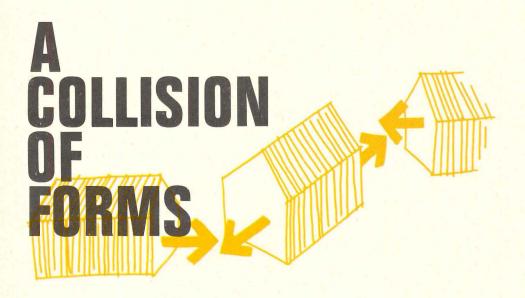




The Schmidt house was a magpie accumulation of found and donated objects, from large house fragments to toys. Many smaller objects were wrapped in metal foil so that they would gleam in the sun. Somewhere at the end of the path, within the house fragments, under the bristling rooftop, was the habitable core of the house, a small cabin.



Tired of the ordinary balloon-frame box, architect pulls plan elements apart, then stages



"We are bored," says Hugh Hardy, exasperatedly. "The world is so full of shapes and none of them appear in architecture. Architects are still bound up in Euclid: When we plan cities, houses, we stuff every activity into a preconceived shape. Our architectural vocabulary is... what's the word... moribund, destitute. We make choices between long malls, thin towers, and squares. Have you ever seen the way an architect draws a car? It's a box. Car is chrome, moving, flashing. If you're still in the arms of Euclid, you can't accept 6-ft stretch pants on the side of a bus."

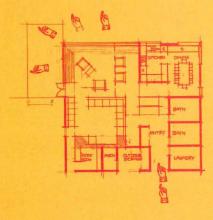
The client, on the other hand, wanted a design that would never tire. Arthur Hadley, author and playwright, requested a house that would be nourishing. It had to be a place where he could work day in and day out (there was no downtown office to escape to); preferably it would have several places where he could cook and eat — 3 meals a day, 21 times a week (all the restaurants on Martha's Vineyard close in the winter). The house would have to warm and shelter him on

gloomy days (when the sun does not shine or work goes dismally), and also serve as a summer home. In short, it was going to be used continuously, intensively, and had to wear well.

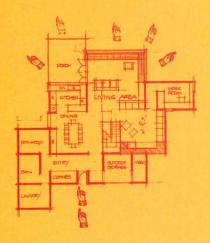
Fortunately, the client's imagination was not bound up in boxes. Maybe a bed in a cupboard is better than a sick room for a child. Maybe each of his children should have trailers so they could haul them away when they felt like it. Like the architect, he also had a broad level of acceptance: A thoroughly adult respect for the child still lurking in the man: a delight in flagpoles, and crow's nest hideouts in the eaves of a house, and a scientific respect for the hardware of the age: TV antennas, exposed heating ducts, whirling weather instruments—6-ft stretch pants on the side of a bus.

The crux of the problem for both architect and client was to avoid the doldrums, to avoid getting exasperated and stay that way. The house had to be surprising to an old hand like the architect, and continually provocative to the client. "It couldn't be some perfect, pristine

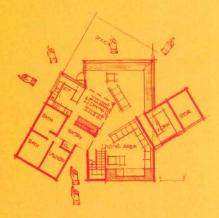
During the preliminary design stages, the architects briefed the client on three possible solutions to his program, and tested his reactions:



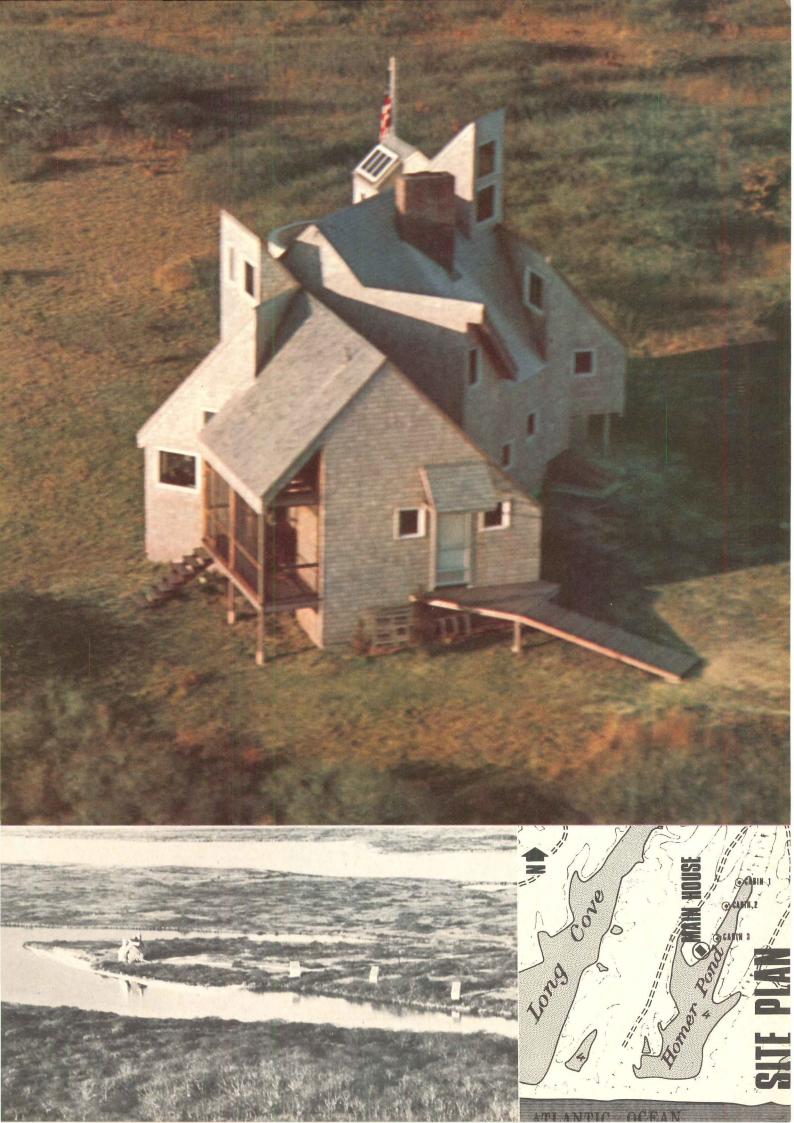
THE BOX: "Stuffing all the activities into a preconceived shape" was the most mundane solution, thoroughly uninspiring.



THE PINWHEEL, a latter-day architectural favorite, was more interesting, and, according to the client, the most resolved of all the plans. However, the architects had done several of these "push/pull" variations on the square; they favored the last alternative:



THE COLLISION: "Sometimes architects just do things for the sake of doing them," observes Hadley. "This was the most fascinating of all the plans, but also the most complicated and unresolved. There were too many ears [dormers] in this first design and I seemed to end up with my nose in a corner most of the time." The client's challenge was to make it simpler, make it functional.



shape," recalls Norman Pfeiffer, an associate; "it couldn't be the exclusive and predictable brain child of one man, but a design we could all throw something into." "What could be worse," says Malcolm Holzman, project director, "than to go down to the same corner every day, and know how it's going to be, every day."

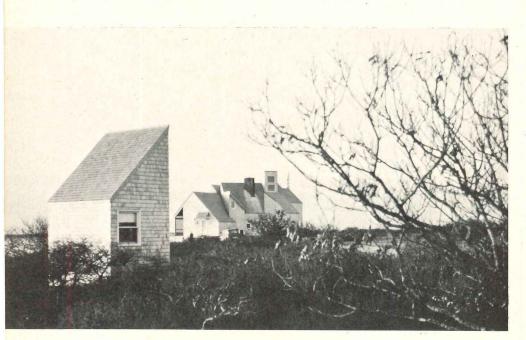
The architect's solution was to become a catalyst for the unpredictable. They took three Euclidian boxes, smashed them together, and then took a look at what came of the collision. "You ought to be able to feed this kind of complexity into a computer and get an answer. We didn't know what would happen."

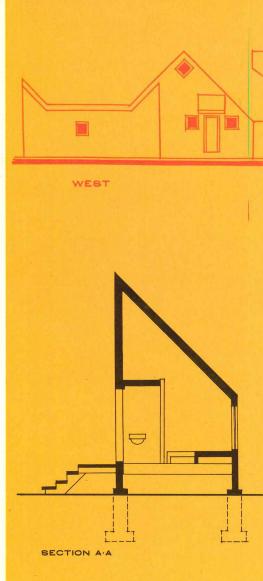
When the architects smashed together three triangular boxes, it was not a headon collision, or a crack-up from a side street, but an impact at 45°. The rectangles intersect, and overlap, carving out diagonal, triangular rooms within the rectangular volumes. The effect is baffling to conventional, right-angle Bauhaus buffs. There is just enough of the 90° package remaining to tease the mind

into ordinary presumptions. "It's like a pinball machine," explains Pfeiffer. "You start out straight, through a corridor with laundry rooms and bathrooms to the left and right, but once into the dining room, the axis goes askew, a wall at one end goes off on a diagonal. The whole house is that way; it sets you up for the expected and then surprises."

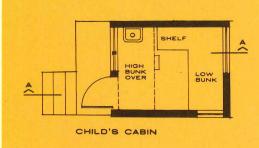
Although the volumes look shattered on the floor plan, the space in the house flows continuously from the living room, revolving around the chimney, passing through the kitchen and dining room, spiralling up the staircase, and doubling back on itself on the balcony above the living room. Outside of the bathrooms, utility rooms, and the workroom, the bedroom is the only "room," or isolated space, in the house. The house reads as a single volume, with a chimney trunk in the center and a suspended bedroom above. Light enters from all sides.

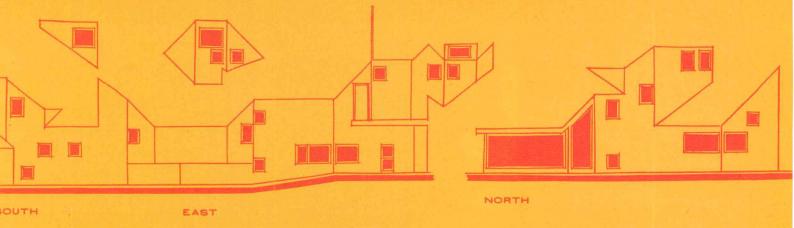
On the exterior, the collision produced shattered eaves, odd-shaped dormers that catch the light and throw it into the interior, unpredictably. "We didn't know

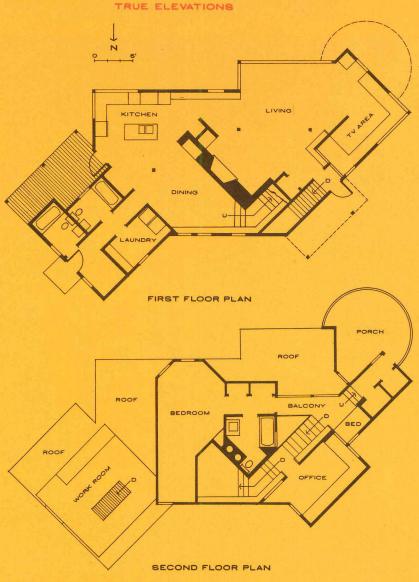




Originally, the client thought of buying individual trailers for each of his three children. Tackiness of trailer construction drove him to permanent buildings. Each cabin is slightly different on the interior, with varied window arrangement and bunk positions. Height is a little excessive, even for the architect. They are, almost literally, chips off the old block of the main house.



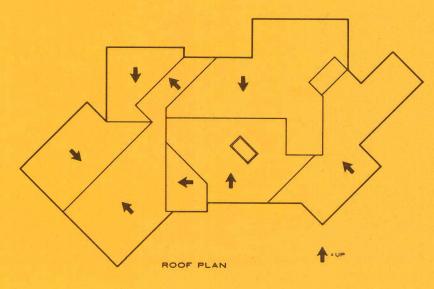


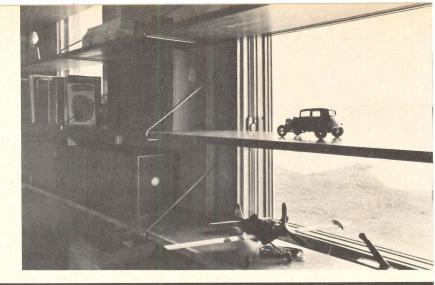


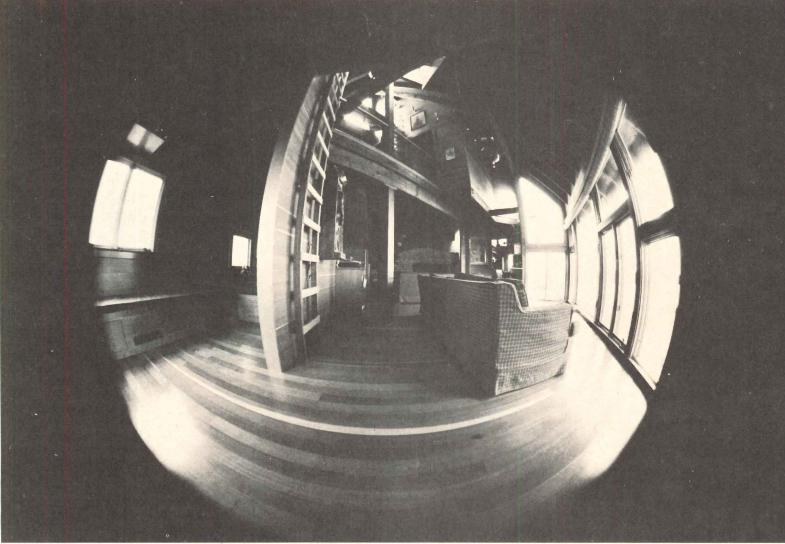
Only the most basic dimensions were given to the contractor. Equally important in staking out the house were the angles and points of intersection. Often, the exact length of a wall would be determined by the intersection of two lines.



ARTHUR T. HADLEY HOUSE, Martha's Vineyard, Mass. Architects: Hardy, Hölzman & Pfeiffer Assoc.; formerly Hugh Hardy & Associates. Site: 320 acres bordering on Homer Pond, West Tisbury. Program: Client requested a house designed for yearround living and work. Major requirements included an isolated workspace, a kitchen connected to both living and dining areas, a fireplace big enough to cook in, laundry room, sheltered porch, perhaps a guest room, and cabins or trailers for each of his three children. Structural System: Standard wood frame construction. Major Materials: All exterior surfaces (including the flagpole) shingled; interior surfaces finished with fir boarding; rafters and plywood roof sheathing exposed. Mechanical System: Oil burning, forced air heating system (ducts exposed and painted red and blue). Cost: \$70,000 including three cabins, well, and appliances. Consultants: Paul Gugliotta, Structural. Photography, except as noted: Maude Dorr.









Variety of Living Spaces

As one visitor commented, the main living room (above) is both cathedral and cave, offering a variety of spaces and moods. The fireplace, tucked under the bedroom, faces inward. The architects thought of it as a cave, a shelter, with low ceiling. It serves as a nighttime or bad weather space. South area, right, faces pond. Light, airy, it provides a cheerful daytime sitting place. To the left is an alcove with the TV suspended above the window. It was the brain-child of the client, who wanted to know why one needed a separate room for TV when its distractions can be obviated by use of a screening wall and a set of ear-phones. Fluid space allows large family to be together, and separate at the same time. From this corner, it is possible to see straight through to the kitchen at the other end of the house — to keep tabs on the cook without being there.

A View from the Stove

Window is placed above range at the client's request: "I spend more time cooking than washing, and don't need a view over the sink." Shelving is all exposed.

Overlapping Systems

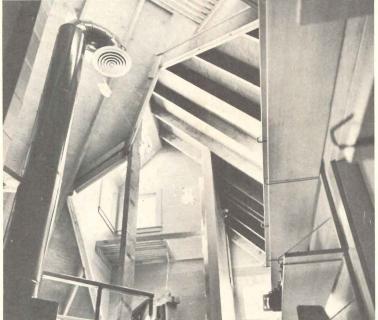
Bookshelves in the dining room (facing page, top) line the wall regularly, in spite of a variety of windows behind. The collision between shelves and windows provides some interesting back-lit openings in the stacks, and, to Hardy, is completely in harmony with his theory of overlapping systems.

exactly how the light would bounce around the interior," admits Holzman, "but we knew it would bounce."

One of the intriguing things about the house to Holzman is that it was not planned down to the most minute detail. "If we had planned some spaces consciously, they wouldn't have happened that way," he says of an attic that turned out to be a perfect workroom for children. Although the house is complex, the working drawings were minimal. The builder was handed two sheets: one containing floor plans, sections, and elevations; the other, electrical specifications, rough dimensions for the fireplace, and layout of the kitchen. The remainder was left up to the carpenter. "Door knobs are not important," says Hardy, exasperated again at the amount of labor most architects spend over minute details. "If the volumes are strong enough, virile enough, the details are less important. There are no 16th Century anatomical drawings for joints in this house." As a result, the foreman on the job, Vern Jernegan, had ample leeway to exercise his own ingenuity and creativity. Luckily for Hardy, he is a master craftsman. "Perhaps one of the most notable qualities about the architect, however," says the client, "is that he can listen, listen to the men on the job and find out how they do things." Jernegan could take advantage of opportunities as the house developed: When an extra nook and cranny turned up near the bathroom, he suggested putting the toilet in the space - no use boarding it up. Because specs were somewhat fluid, he could substitute 1" x 8" boards for the specified 1" x 3"'s. It was more practical, and the architects could agree that it was an aesthetic improvement as well; it served to make a sharper distinction between the floors and walls.

The unexpected spaces, unpredictable floor plan, and elusive shifting patterns of light, all contribute to making the house come alive, to create a dynamic, surprising environment. The spaces are so well resolved (the client forced the architect to make them larger) that it is not apparent that the axis is askew. Not being a Bauhaus buff himself, the client finds it natural to wake up on a diagonal. What is important is that the house has a built-in variety that is nourishing.

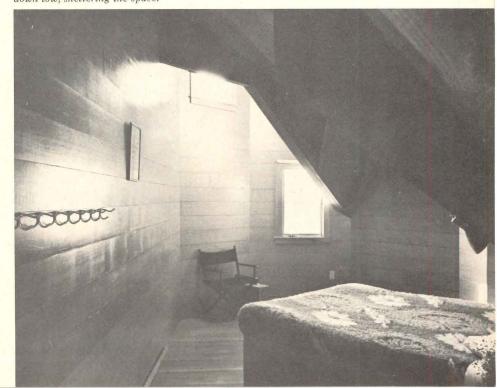




A Delight in the Whimsical, The Mechanical
This is evident in the balcony areas. Two ledges at the top of the houses
are available for reading, thinking, and a quiet retreat. Return air duct,
left exposed, painted blue, resembles some artificial flower. Bedroom
lies straight ahead.

Diagonal Orientation

Built-in bed juts out into room at an angle to main wall. Eaves drop down low, sheltering the space.

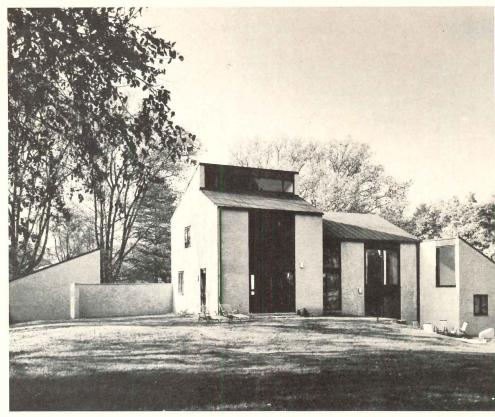


Architect Thomas Todd, in designing a house for himself and his family, let the environment impose two constraints on his plan. In the first place, he wanted to build something that would fit well into the neighborhood in which the house was to stand; secondly, he wanted to face the house away from a noisy road so as to

obtain peace and privacy.

The Mount Airy-Chestnut Hill section of Philadelphia, built up from 1880 to 1930, is an area of quiet streets, old trees, hedges, lawns, flowers, rhododendrons, laurels, fieldstone walls, willow fences, and houses for the well-to-do. The houses are designed mostly in the Colonial Revival, pseudo-Norman, and Cotswold styles and executed mostly in silvergray micaceous schist rubble-work, exposed or with a finish of gray, duncolored, or whitewashed stucco with white or grav trim. Todd's immediate architectural neighbors are the houses of "French Village," a tasteful promotion of the 1920's designed by the locally active architect Robert R. McGoodwin. Although he was not willing to imitate their pseudo-Norman style or to pay for stonework, Todd wanted to produce something whose scale, massing, color, and texture would be in harmony with them and with the neighborhood generally. One great asset of this site is the presence nearby of Cresheim Valley, a wooded arm of Fairmount Park. Unfortunately, McCallum Street, which passes the Todd property on its southwest side, is one of the few roads across the valley, and is thus a traffic bottleneck that is much used in the rush hours.

As the design evolved, the main rooms of the house, with the exception of the kitchen, were turned away from the direction of the road. As seen from the southwest, the house appears as a quiet composition of broad stucco surfaces, small windows, and interacting geometrical forms, composed with a slightly formal air and a somewhat exaggerated verticality. The front is enframed by the blank end walls of a bedroom wing and a detached garage, whose rooflines point upward and inward toward an off-balance combination of vertical and horizontal surfaces, projecting and receding at the center. The front has a double focus in the doorway and the cleft chimney. two vertical, off-center elements that serve to "humanize" the otherwise severe front by saying that this is a habitation. although without giving any detailed inIn scale, complexity, and character, the house exhibits sharp contrasts from area to area: the rear (below) is simple and open to the view and the northeast light, while the front (facing page, bottom) is more intricately composed and opaque; the living room (facing page, top) is low and cavelike under the studio balcony, but abruptly triples in height, rising to a monitor that serves to light the studio.

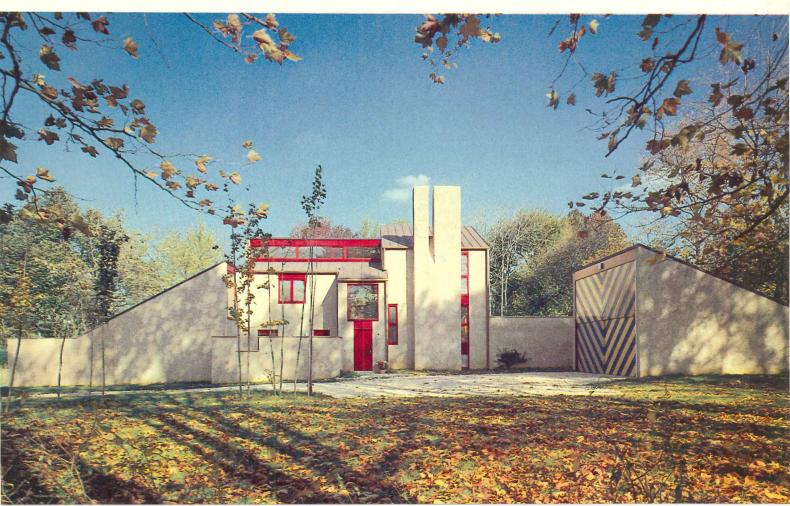


For peace, privacy, and visual harmony with the surroundings

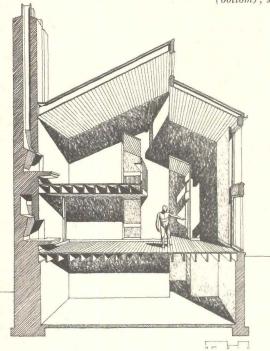
OPAQUE FAÇADE SCREENS SPACIOUS INTERIORS

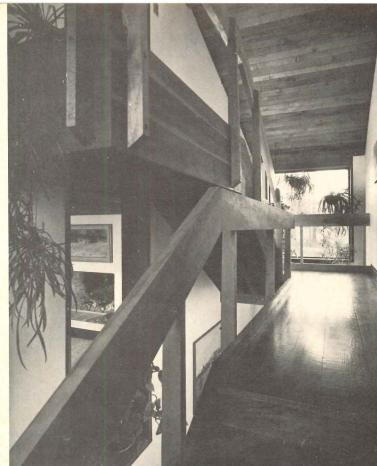
HOUSE FOR MR. AND MRS. THOMAS TODD, Philadelphia, Pa. Architects: Wallace, McHarg, Roberts & Todd. Site: A wooded neighborhood of upper and upper-middle-income houses, most dating from the early 20th Century. A road, busy during rush hours, passes in front of the house. Program: To build a house for the architect-owner and his family. Structural System: Masonry bearing walls, with conventional wooden floors and roofs. Major Materials: Stuccoed concrete block; redwood door and window frames; fir interior trim; rough-sawn cedar boarding on ceiling; random-width red oak, flagstone, and vinyl flooring; terne metal roofs. Mechanical System: Gas-fired warm-air heating, with ductwork adaptable to air conditioning. Costs (construction only): \$40,000 budgeted, \$41,500 actual (\$16.50/sq ft). Consultants: Joseph Hoffmann, Structural; Vinokur-Pace, Mechanical and Electrical. Photography: Cortlandt Hubbard.

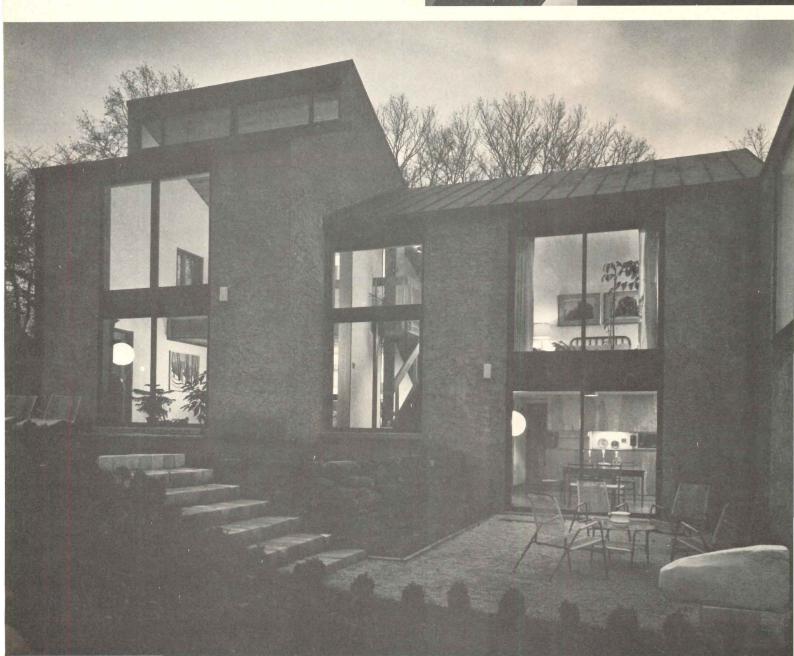




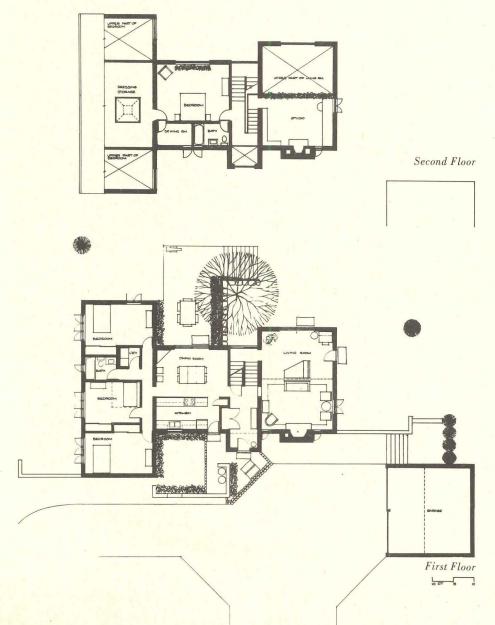
Most of the house's spaces are shaped by combinations of single-pitched roofs: section through living room and studio (below); stair hall, with glimpse of living room (right); rear of house at night (bottom); studio (facing page).











formation about the life within. The surface material, a warmly colored, roughly troweled stucco covering a concrete block wall, bears a general resemblance to stucco used in some other houses on Mount Airy. The dark red trim color, however, is without precedent, and the blue-and-yellow striping of the garage wall (the yellow being a "Colonial" shade called by the manufacturer Todd House Yellow) is a quiet jeu d'esprit.

The kitchen, which does face southwest, is provided with an ample window, but its view is severely framed by an embrasure in the rather high wall a few yards away. Incidentally, the kitchen is not the family room that it is in most houses; it is a place where meals are prepared, not where they are eaten, and the dining area and the yard beyond are more visible to someone working there than the view out the kitchen window.

The rear, northeast front is quite different. Here the major spaces of the house are on display through broad, floor-length windows intended to let the relatively mild northerly light into the rooms. This front is divided into vertical strips of void and solid, quite drastically, and its masses are simple. Inside, the spaces are either low and cavelike or else soar to the undersides of the two great criss-crossing shed roofs that end in monitors, one lighting a balcony studio from the northeast while the other lights the master bedroom and the stairwell from the southwest. The detailing, executed in unstained wood and dead white plaster, is austere and rather prim. The inner openings, for instance, are lined with boards whose edges are set off from the plasterwork by quirks. The walls are conceived of as neutral areas on which quietly composed, plainly framed pictures can be hung and against which other objects of art can be placed. Furnishings are simple, traditional in feeling, and formally arranged. The plans of the living room, dining room, studio, and master bedroom have strict symmetry about the southwest-northeast axes of their spaces; this axiality is echoed to some extent in the furniture arrangement.

In the abstract, the composition of the Todd house is somewhat inconsistent. The complex, charming and slightly manorial street front shields what is essentially a plain shelter, admitting light and a view of woods between widely spaced piers into a few large rooms. One side of the house, that which the passer-by sees, is meant to be looked at; the others are to be looked through primarily. To these theoretical objections, it can be countered that the house was not intended to be seen in the round. Everything up to the southwest façade is public domain, and is composed in a way to satisfy both architect and public. The rest is an instrument for the satisfaction of the architect, his family, and their guests; and this satisfaction exists.

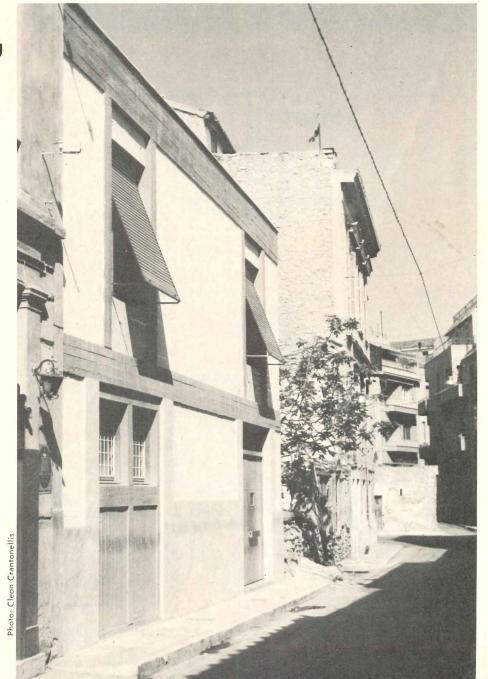
Desire for a "timeless" exterior and a sumptuous interior results in

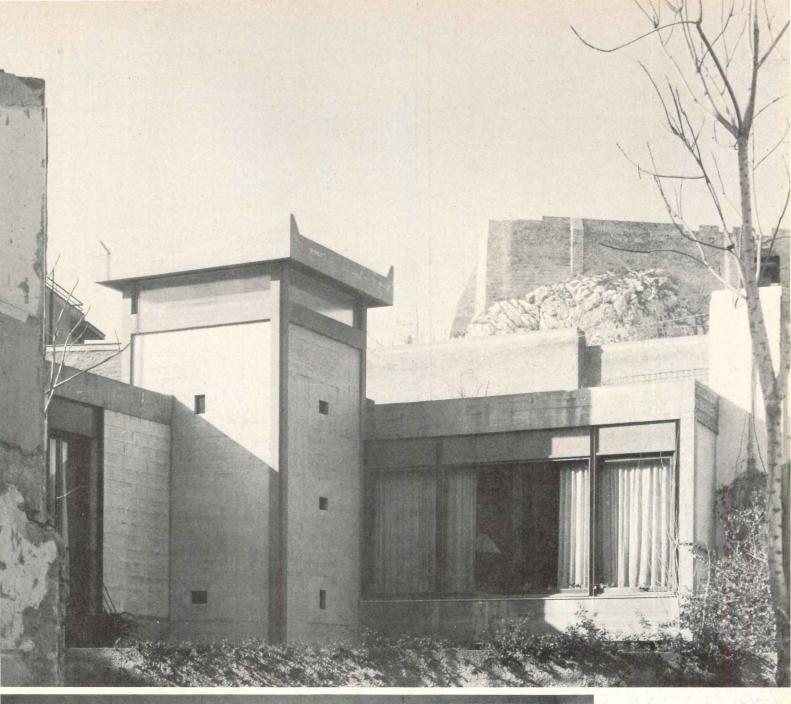
When Greek architect Cleon Crantonellis decided to build a house for himself and his wife in the Plaka district of Athens, he felt a special obligation to design something that would harmonize with the character of the neighborhood. Plaka is the oldest quarter of the city, with many historic associations. The Choragic Monument of Lysicrates and the Tower of the Winds are two of its landmarks, and the Acropolis overlooks it to the southwest. Since the middle of the 19th Century, when the development of Athens as a national capital shifted the center of activity to newer parts of town, Plaka has been a quiet neighborhood, not too different in appearance from the way it was before that time; and Crantonellis was anxious to produce something that would fit quietly into this old-fashioned

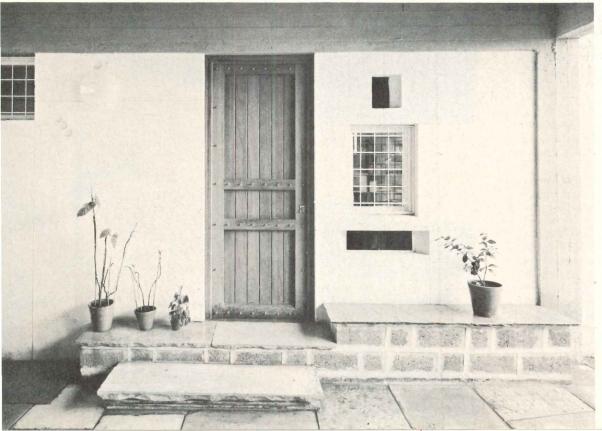
The street front, then, is very taciturn

and geometrical, and its combination of exposed concrete framing, white marble, stucco, and planked door construction seems to have been chosen for its ability to suggest a timeless regional quality. The house, in fact, ended up more "Mediterranean" on the street exterior than its next-door neighbors, Greek Revival buildings that could pass unnoticed in an early Victorian commercial street in Philadelphia or New York. The traditional look of things persists beyond the double gates that close the entrance from the street; the actual entrance to the house has small, barred windows, a planked door, and well-buttered mason-ry, again "timeless" even though set in an exposed frame of roughly cast concrete. No part of the exterior is really archaistic, however, except for the rudimentary acroteria that the architect cast onto the roof slabs in order to create a

WALLS, BOTH PLAIN AND FANCY





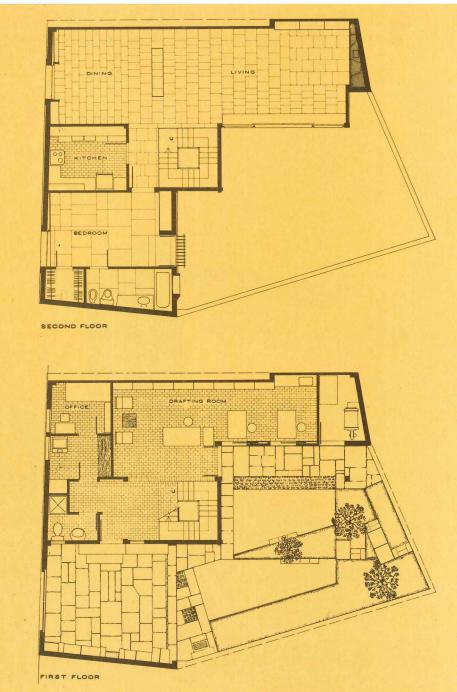


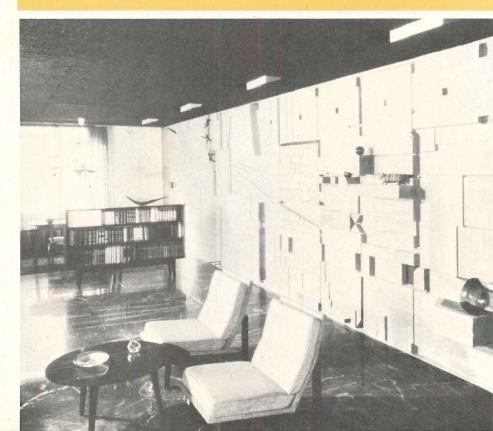
The exteriors of the house are quiet and influenced by tradition, as can be seen from the street front (facing page), the actual entrance to the house, inside the passageway to the courtyard (left), and even the stair tower (above), whose roof slab has been provided with acroteria (in background: the walls of the Acropolis).

skyline that would be more interesting.

Inside, everything is unmistakably modern, elegant in materials, but severe in effect, until one comes to the living room, the pièce de resistance and the real revelation of the house. This interior, about 30 ft long and 10 ft wide, takes up the entire front-to-back dimension of the second floor, and almost the entire length of the reinforced concrete party wall has been carved and molded by a Greek artist, Cosmas Xenakis, into a combination sculpture and whatnot, into which reliefs of cast aluminum and bronze are set. This slab (for it reads as a slab rather than as a bounding surface) is placed in splendid isolation between a floor of Chios marble, graybrown with white and copper-colored veins, and a ceiling of indigo-colored composition material. Near the fireplace wall, a composition in its own right, the sculpture gives way to a neutral area of wooden shelving. The fireplace wall is made of a buff, porous stone from Chios. The use of sumptuous materials, here and there, in this building of reserved overall design is to be found elsewhere. Thus, the staircase landing continues the Chios marble of the living room. Some of the living-room benches are made of slabs of Epidaurus marble, red with fossil marine shells. The bedroom is paved in Kokkinara marble, bluish-gray and white, and the bathroom in white-veined Ayia Marina marble. Most of the woodwork, inside and out is of iroko, an African wood resembling teak. The stair tower is inset with stained glass slabs in various

The garden is small, and mostly paved or pebbled, with a design that dramatizes the fact that the inner walls of the house and the property line are not on the same system of coordinates. The concrete-block garden walls are planted with climbing flowers, and trees and shrubs have been or will be planted along the edges. Close to the house is one final sumptuous touch: a small, shrine-like wall fountain, faced with red Epidaurus marble bordered with white Pentellic marble.



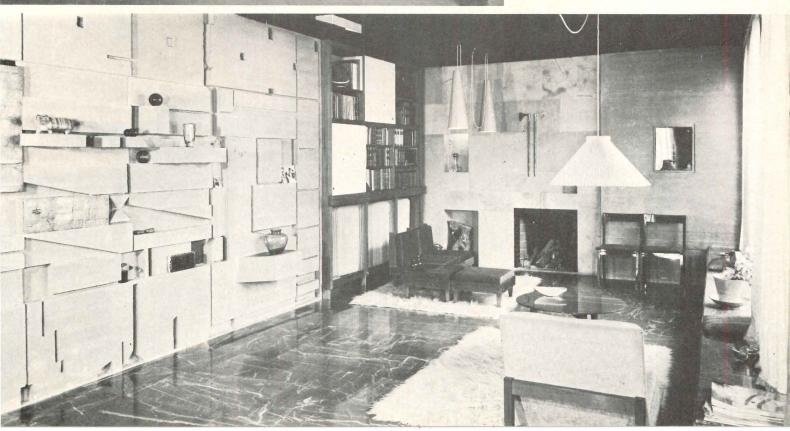


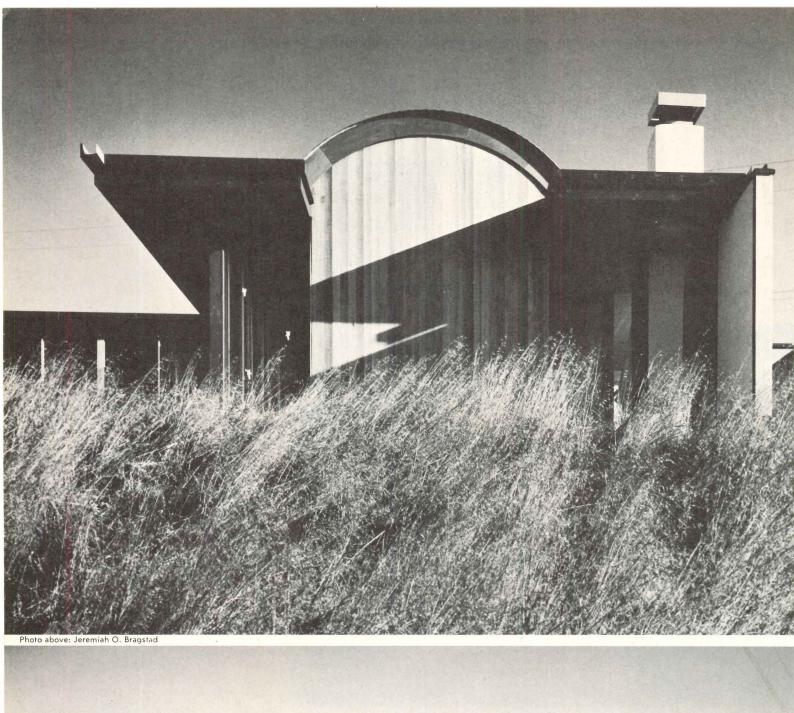
The detailing is either spare or lavish; the courtyard façade of the living room wing (right) and the stair hall (below) are of an austerity that make the upstairs living and dining room (bottom and facing page), with its marble floor and sculptured concrete wall, surprising by contrast.

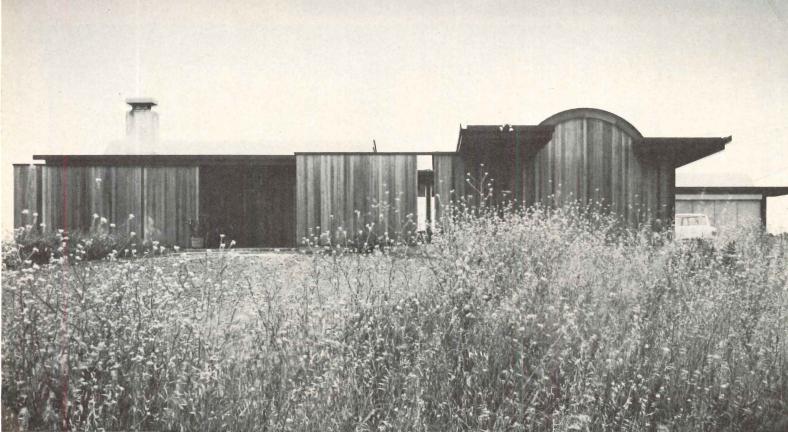




HOUSE FOR MR. AND MRS. CLEON CRANTONELLIS, Athens, Greece. Architect: Cleon Crantonellis. Site: A small lot (approximately 1800 sq ft) in an historic residential neighborhood of Athens, close to the Acropolis. Program: To design a residence for the architect-owner and his wife, including a drafting room and maid's quarters. Structural System: Reinforced concrete frame, flooring, and outer walls. Mechanical System: Hot water heating. Major Materials: Concrete, hollow brick, concrete block, iroko wood, and various kinds of marble and stone. Consultants: Cosmas Xenakis, sculptured wall in living room. Photography, except as noted: D. A. Harrissiadis.





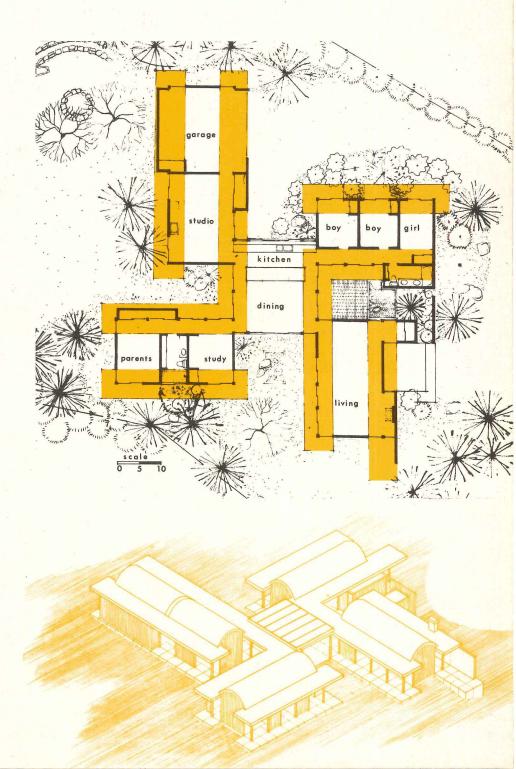


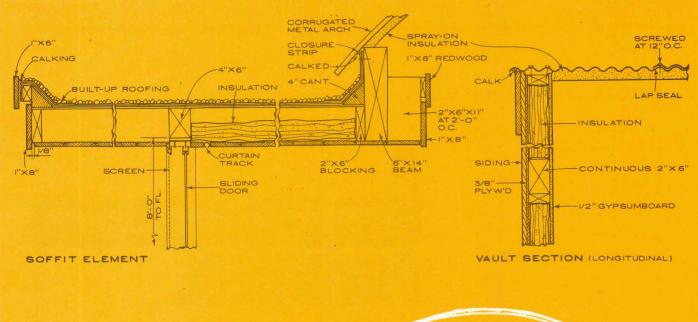
A WELL-BALANCED PINWHEEL

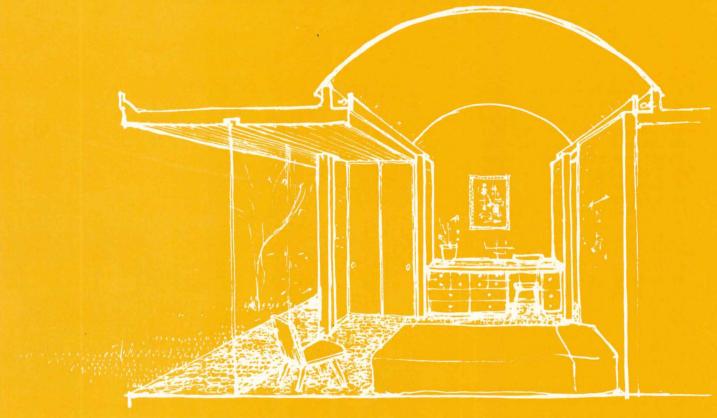
The clients made three demands on their architect that helped shape the design of their house. First, they naturally wanted to take advantage of the view, and stipulated that at least one space should have windows facing in all directions. Second, they wanted a single-story house. Third, they wanted a plan that would confine noise in the house to the immediate area. Architect Robbins met these demands with a clear and rational plan and capped it, so to speak, with a roofing system that welded together the diverse elements of the house.

To meet the problem of noise isolation, he divided the floor area into four wings, housing a living room, studio and garage, parents' rooms, and children's rooms, and set them pinwheel fashion so as to allow a central area, designated as the cooking and dining space, to have views toward the four cardinal points of the compass. Pondering the over-all composition, Robbins decided on a policy of bold contrast between the central area and the wings. The central area is treated as an open space, with light entering from all sides, and even from the roof, which is built after the manner of a horticulturist's lath house, with translucent glass fiber sheeting laid over joists. The cabinetwork that separates the kitchen from the dining area is carefully treated to allow the two areas to read as one. As a part of the policy of contrast, incidentally, this woodwork is of ash, a wood used nowhere else in the house.

For the wings, Robbins devised a roof system that imparts a quality of uniformity to the varied plans. Essentially, this consists of a vault of corrugated steel, exposed to the weather on its upper side and sprayed with asbestos insulation on its soffit, that is abutted and supported by two broad, level "soffit" elements which, according to the ins and outs of the house walls, play the role of frowning cornices, dropped ceilings, corridor roofs, and indirect lighting troughs. The







House, Oakland, California. Architect: Jacob Robbins. Site: A lot on the ridge of a windswept hill, without natural tree growth, but with windbreaks of planted conifers. Views in all directions, including views of Oakland, San Francisco Bay, and of an adjacent public park. Upper middle-income neighborhood. Program: To design a one-level house for a married couple and their children, within a moderate budget. Structural System: Posts and frame walls, supporting a flat central roof of joists and translucent fiber glass, and wing roofs of mixed joist and vault construction. Major Materials: Corrugated steel; natural cedar siding; redwood posts, ceilings, and soffits; fiber glass; concrete floors with exposed marble chips; gypsumboard partitions, painted white. Mechanical System: Hot-water radiant heating. Costs: \$36,000 budgeted; \$42,000 (\$16.50/sq ft) actual. Consultants: Nicholas Forell, Structural; Eva-Marie Lieberman, Landscaping. Photography, except as noted: Morley Baer.





The soffit elements of the wings, varied from area to area of the house, unify its composition. In the center of the house (left), soffit elements appear as opaque dropped ceilings terminating the translucent roof of joists and fiberglass; in other parts of the house, as in the living room (below), the soffit elements form cornices, ceilings, or lighting troughs, depending on the position of the wall.

plan is so worked out that the general cross-section of the wing roofs is identical in all four wings, and so that the vaults always cover enclosed spaces, while the soffit elements freelance in their various roles, terminating as bold projections from the ends of the wings. The sides of the wings are opaque enough to increase the formal contrast with the central area.

But contrast is not all. The central area is not allowed to exist as an element in total isolation from the wings. The connecting doorways are so disposed as to create natural "paths" along the north and south sides of the central area, that on the north being strongly emphasized by the kitchen gangway. On the east and west sides, the translucent ceiling yields to lower, opaque areas that are none other than prolonged soffit elements from the north and south wings; these elements eventually merge with their counterparts in the east and west wings so as to form catercornered L's in plan. Thus, standing in the central area, one gets a reminder, or a foreshadowing, of the different experience to be found in the wings. Only two interiors escape from this comprehensive system: an alcove in the living-room wing and a jutting, skylighted bathroom in the children's wing.

All this subtle and carefully workedout unity is gained, of course, at a price. The roofing of the garage is not particularly logical, nor is the shading of some blank wall areas while others, orientation notwithstanding, go exposed. For all that, the elegance of the system makes a purely rationalistic criticism seem as carping as it would be if applied to a Palladian villa.



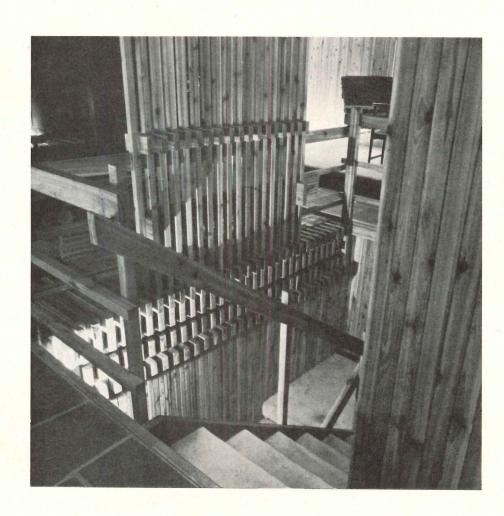
NAILED SCANTLING TECHNIQUE

Carpenters make things, architects design them. The difference is that the architect cannot content himself with the carpenter's simple answer, "It works." He must decide "what it all means." Although form is the architect's objective, it is seldom enough. It must have some kind of rational justification.

Architect Neil Astle wore both hats. As his own carpenter and contractor, his solution "worked," and as architect he has plausible reasons for "what it all means."

The result is a rationale of a new method of shelter making discussed from the point of view of both builder and designer. Instead of the usual frame house engineered by rule of thumb, Astle rethought the theory of the light wood framing. He came up with a house designed on the basis of interconnected logic of the laboring force, which was primarily the architect's family; the logic of available milled lumber; and the logic of a budget.

He was not concerned with style, public image, aesthetics as an end in itself, or any arbitrary consideration that did not grow out of the specific need and conditions of the building. However, his objective was not the universal 2 x 4 panacea, which would be a prototype solution to mass housing or a revolutionizing of wood house construction. His ob-



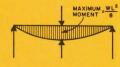
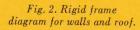


Fig. 1. Simple beam diagram.



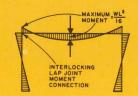
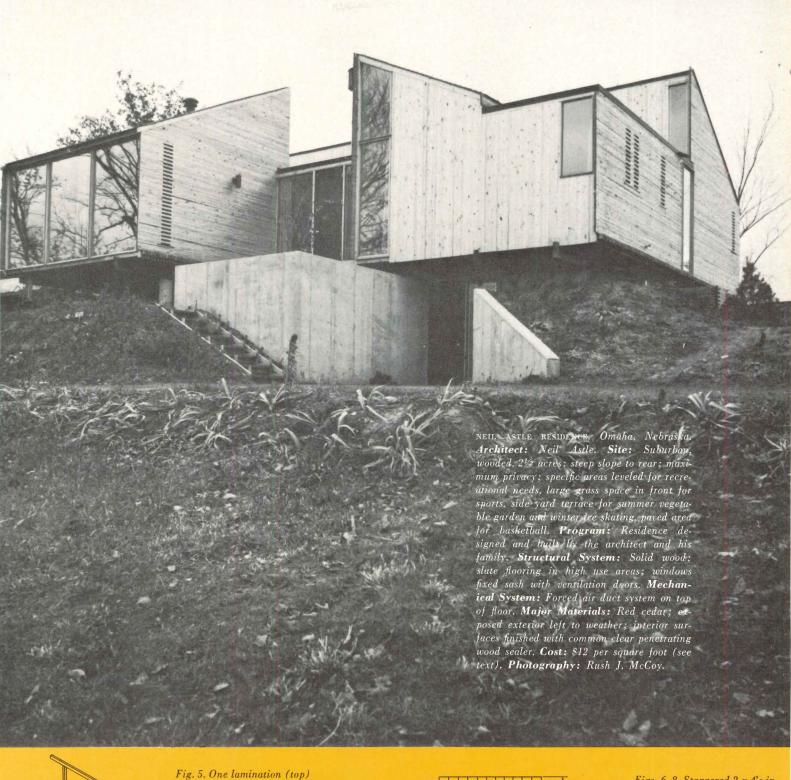




Fig. 3. Rigid frame diagram with supports moved in for floor and walls.

Fig. 4. Lap joints create rigid frame.





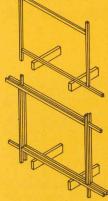


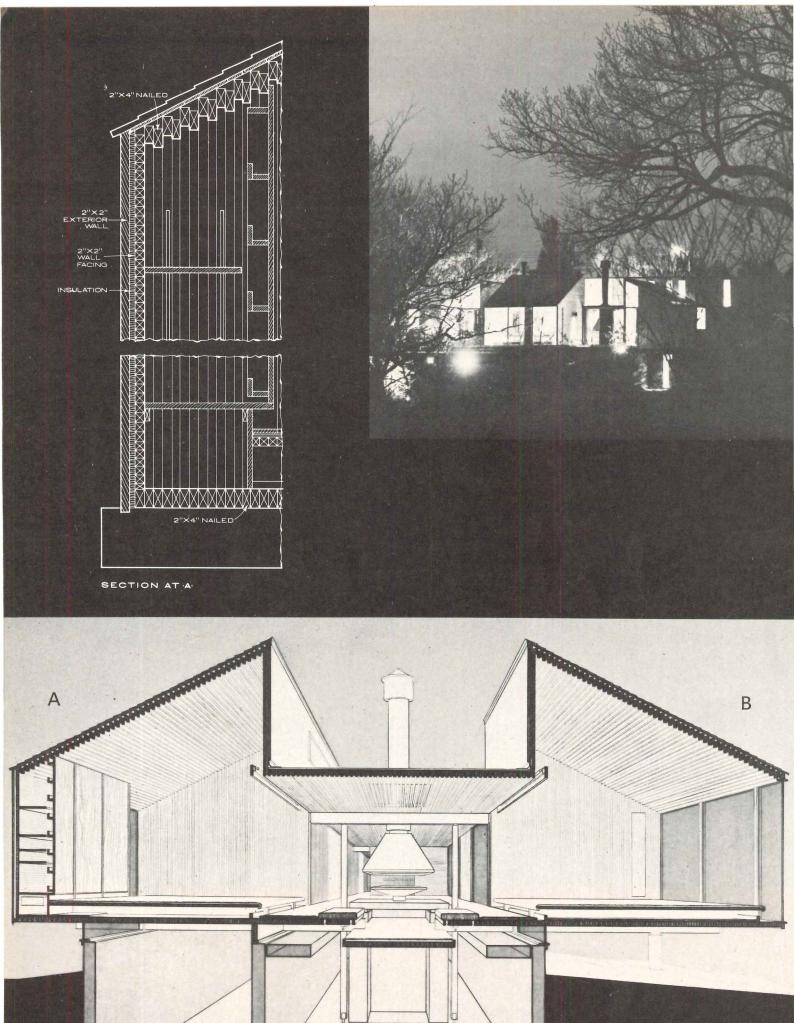
Fig. 5. One lamination (top) placed in clockwise rotation. Three laminates placed in alternating rotation (bottom), beginning with the first clockwise, the second counterclockwise, and the third clockwise (ends trimmed later).

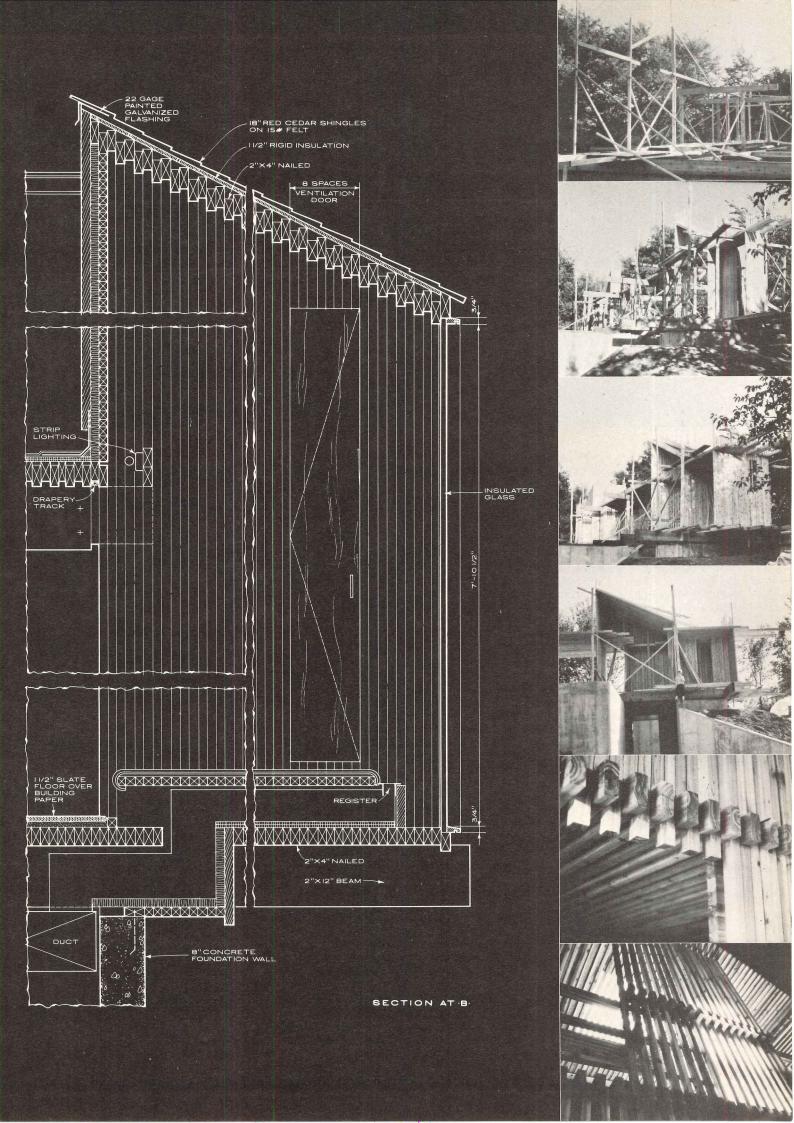


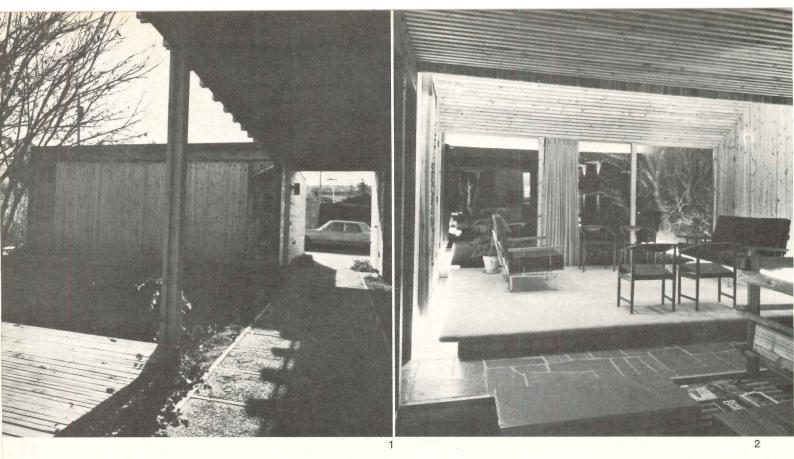
EFFECTIVE DEPTH

EFFECTIVE DEPTH

Figs. 6-8. Staggered 2 x 4's increase effective depth of roof construction.







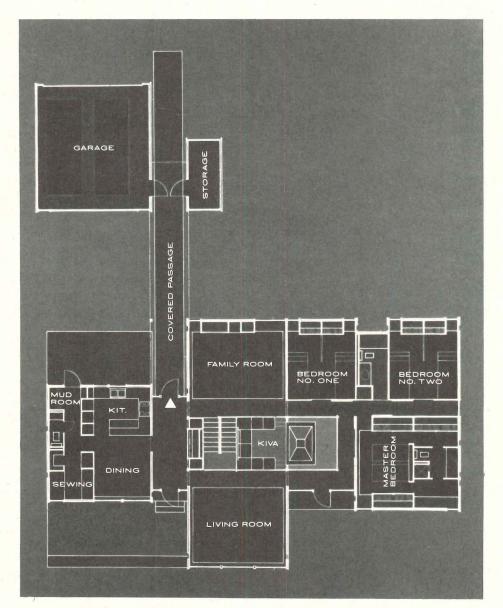
jective was simply a rational solution to a particular problem at a particular time on a particular site.

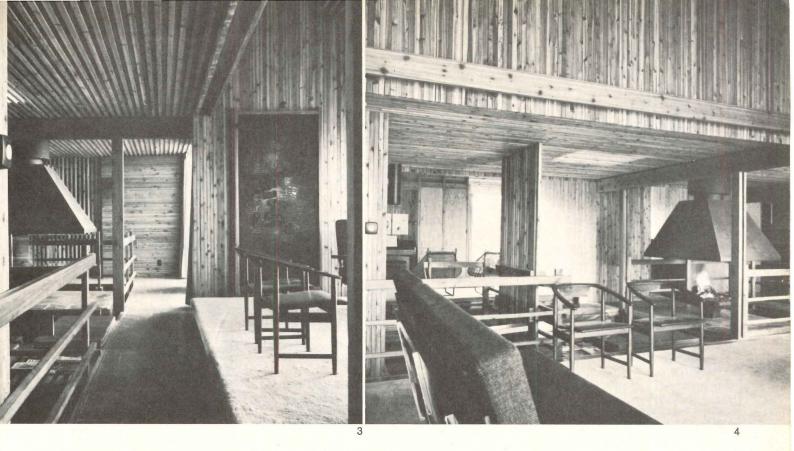
The Rationale

Ideally, a detailing system should accomplish all of the following: it should afford a solution to a maximum number of construction conditions with minimum effort; be appropriate to the skill of the builders; be relatively refined in relation to the material and its working tools; be flexible enough for design changes to accommodate field conditions; and should minimize handling, cutting, measuring, and scheduling. Astle satisfied all of the foregoing demands with the simple lap joint.

The basis of the construction system is scantlings nailed to each other, forming a solid laminated interlocking structure. Successive layers rotate in opposite directions, engaging walls, roof, and ceiling in the form of an open-ended solid box. Ends fall where they may, are trimmed, and the cut-offs used for other parts of the construction. Material waste was cut to about 2 per cent, according to Astle. Floors, walls, and ceilings were erected simultaneously from the center of the house in both directions, the laminated shell growing outward.

The building is limited almost exclusively to the one material, resulting in a unit-cost saving based on quantity purchase. The 2-in. dimensional lumber was readily nailed in successive layers. It built up rapidly and had an adequate structural section for the limited spans of residential construction. The thickness was adequate for insulation and uniform sizing automatically created a highly flexible module.





The architect estimates that a 1 sq ft area of wall, consisting of solid wood wall with a vapor barrier, had a material cost of approximately 45¢. He compares this with traditional wall construction of 65¢ per sq ft.

The construction method eliminated trade congestion on the job and simplified coordination. Only light woodworking tools were required. The species of wood selected was Western red cedar of standard and utility grade.

Cedar has good weathering characteristics with a natural resistance to decay, fungus, and termites, and is light, clear and easily handled. It has highly favorable insulating qualities as a species, and costs less than a comparable grade of pine or fir. The major disadvantage is its strength, which has a working unit stress of 1000 psi.

Structure

The rigid frame eliminated the need for plates, stiffeners, or corner bracing. Normal beam action, according to Astle, permits a 12 ft span for 2 x 4's placed side by side. Laminated lap joints, creating a rigid frame, allowed an increase in span by transferring some of the bending moment to the walls. The depth of section of the roof members was increased by staggering alternate members vertically. Floor spans were increased by moving in the supports. (See structural diagrams on the preceding two pages.)

Design Implications

Today's frame house has changed very little since the inception of the balloon frame more than a hundred years ago. The balloon frame was a rational building system. Today, bastardized and perforated by mechanical equipment, it cannot justify itself as a structural system in comparison with any of the reasons Astle used to rationalize his building

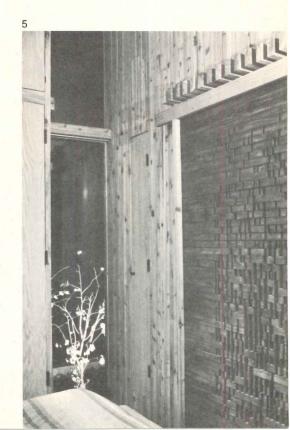
However, Astle's logic will have to stand the test of time. The unforeseen action of weather and natural forces working on this mass of solid wood will be the proof of the design.

The economics are impressive, even though peculiar to this particular house and its building system. It is a lot of nicely designed house for \$12 per sq ft. However, it is impossible to assess cost factors accurately when the designer is so intimately associated with a project. It is doubtful that Astle's time and concern can be accurately measured in square foot cost.

This house will not supplant today's mass-housing building systems, nor was it meant to. The present system of home building is contingent upon many factors that have little to do with structural innovation, engineering efficiency, or architectural design. They are, instead, efficient adaptions of financing, contracting procedures, labor conditions, manufactured items, etc. — in short, the logic of the tail wagging the dog of design.

Astle was not placing stick on stick as an answer to anyone's housing problem other than his own. It is doubtful that wood itself is the answer to mass industrialized housing, although its economics makes it attractive. Compared to manufactured building materials, wood has many problems. Yet some architects are willing to design around these defects for one reason that outweighs them all. Wood is a remarkably beautiful material, and this is the rationale of Astle's house.

Life seen from inside a wooden shell: Covered passage leads from the house to garage and storage (1). Raised wooden living room floor holds air-conditioning ducts below, while the staggered 2 x 4's of the ceiling form a corrugated roof (2). The living room overlooks the Kiva and the railed opening to the floor below (3, 4). A bedroom wall has been formed of sculptured 2 x 4 cut-offs (5).



If P/A's printer gets a photograph of Charles Hosford's house upside down, it will not be his fault. So ambiguous are the black-and-white shots—showing spruce flooring on the ceiling and indooroutdoor carpet resembling plaster on the floor—that, understandably, it takes a first-hand knowledge of the house to get some of them straight.

Ambiguity, much in evidence though it may be in the appearance, planning, and circulation of the house, is not its basic rationale. If there is a single motivating force, it is the desire for experience—both the tyro-architect's own and that of the inhabitant and visitor.

Started when Hosford was between his third and fourth years at architecture school, this first house grew over a period of three years with an aim of expanding his education—"in a situation where, unlike architecture school," as he says, "effort yielded tangible results." Since he did all electrical, mechanical, and plumbing work himself, as well as all structural work, interior detailing, and finishing, his opportunities for construction experience were frequent. In the finished house, the opportunities for varieties of visual and tactile experience are also frequent.

Because the view of the surrounding mountains is concealed by rich evergreens and hardwoods, the only way of making it visible was to build a viewing place high above the trees. So the house has an 80-ft stair tower—started as an experiential means to the spectacular view (1, 2).

The stair is, according to Hosford, "a kind of fun tower." Along its way, it provides a 32-ft high relief sculpture and painting by Vaino Kola (3), slit windows at each landing, peepholes made of black plastic sewer pipe, hiding places for the kids, sundecks and platforms that face different points of the compass and

are reached by steel ladders, all culminating in a crow's nest that offers a 360° view of the entire countryside.

Little of this liberating panorama is apparent from ground level. Even in winter, from the parking area to the house, tall and flourishing evergreens spread a canopy through which glimpses of the building are fragmentary—the crow's nest, a nearly windowless façade, a gantry-like balcony. Along its route, the path changes materials from gravel to brick, then (4) tunnels underneath the house (past a massive rock outcropping on which the structure rests) and begins its climb.

Not everyone feels, as Hosford does, that he is entering the house at the base of the tower, or that the superstructure of viewing platforms is other than an additive feature. Primarily, this is because the mass of the main floor overhangs the entry to the tower, concealing any strong expression of its verticality. And, once the visitor has begun his ascent, he can easily continue to the top of its separate, unheated enclosure without going inside the main body of the house. Nevertheless, the tower also serves as a circulation core, feeding out at six levels.

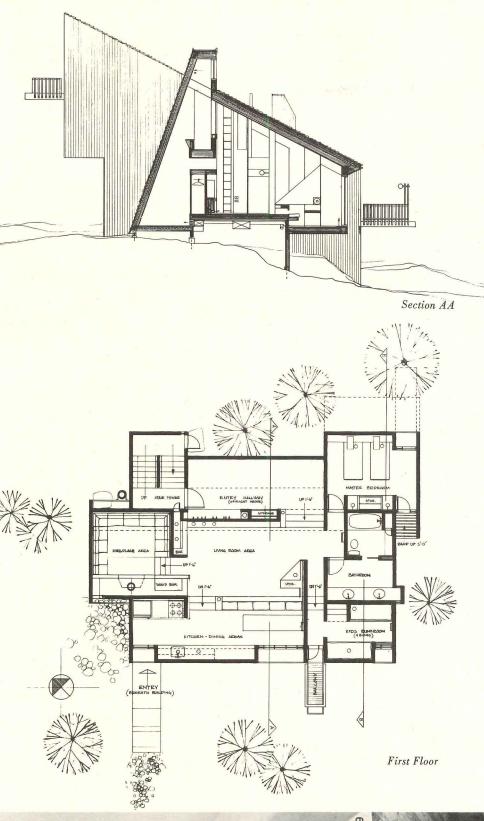
This double function produces an inherently ambiguous entry. For there are several doors leading off the stair tower, and indication of the main door to the living spaces is not immediately obvious. For example, the first door one comes to, after entering at the base of the tower, leads directly outside again - to the back of the house. The next door, one level higher, is wider and more substantial, but its adjacent electrical panels, fire extinguisher, and delivery bins (in effect, outdoor iceboxes) suggests that it is the door to a mechanical room. On the next level up, a door opens onto a narrow bridge-balcony. In fact, the main floor entry is the lower door, with the control

INWARD-LOOKING SKI LODGE









equipment appropriately adjacent. But many pass right by it.

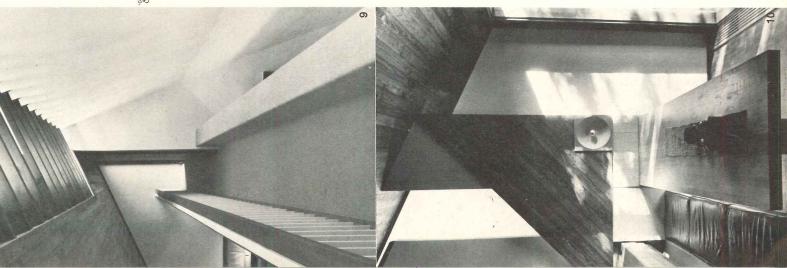
Here, one enters from the tightly enclosed, sometimes low-ceilinged, semidark stair tower into a bright hall (5), lined on one side by a partition of ledges, coat pegs, and closets, and, on the other, by a taller, raked plaster wall. Immediately ahead, where an unconnected iron stove stands as a sculpture, one must turn right, climb several steps, and, because of a lighted panel that is diagonally inflected (6), virtually make a U-turn.

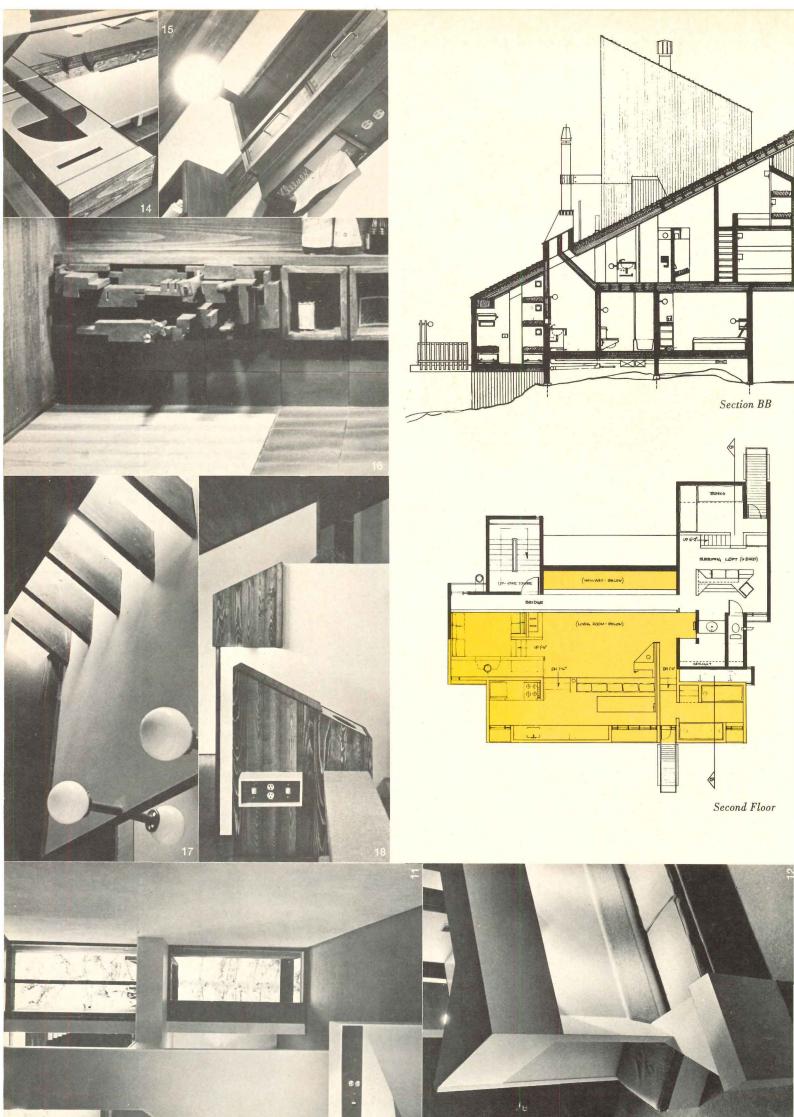
There, unexpectedly, a major space unfolds (7)—spreading down to a dining-and-kitchen area along one side, and swelling up to a radiant, battened skylight (9), past a fireplace and inglenook spanned by a bridgeway above (8)—all of this volume unannounced by the exterior.

Devoid of movable furniture, this space has the air of a reception salon in a formal 18th-Century house, and, perhaps because of its skylight, overtones of a Scandinavian church. (Much about the house may be explained by the fact that Hosford spent a year in Finland on a Fulbright Scholarship studying architecture.) Programmatically, this major space functions as the family-room with both its dining-kitchen and its fireside seating area open to it. That the very center of the house is its living core yet also a furniture-less reception space produces another kind of ambivalence.

Changes in floor level (responding somewhat to the rock ledge foundation) not only define the subordinate spaces, but also help to seclude them from constant view. In the case of the fireplace area which is three steps up from the central space, its elevated seatbacks act as partitions. Yet these smaller areas gain from being juxtaposed to the major volume, and vice versa.

When this central space is understood as a single unit, the organization of the plan becomes clear. The house consists of three basic elements: first, the stair tower rectangle at the rear left; second, the major rectangular space in the middle; and third, a block for sleeping and bathing at the right (11, 12, 13). Each





of these, however, interacts with the others—the major space flows across the front of the tower; the sleeping block is linked to the circulation tower by the bridge through the central volume (to which they are also visually open).

The spatial manipulations and the intermediate floor levels not only produce the ambiguities in the house but also give it constant variety.

Supplementing this vitality is a variation of materials and of lighting (both natural and artificial), as well as an obvious wealth of lovingly executed and craftsmanlike details, which give the house a sculptural quality. They also, as Hosford says, "punctuate intersections and turning points and accentuate paths of movement."

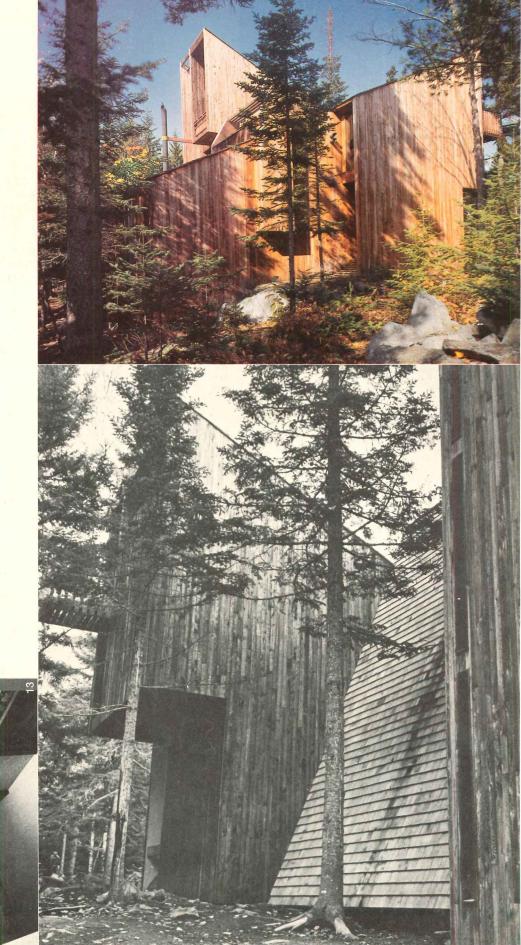
The house is, in fact, a rich jewel box of an assemblage, and a seemingly inexhaustible revelation of focus and flow. It achieves Hosford's intention of making "something that was endlessly explorable and a source of joyous discovery."

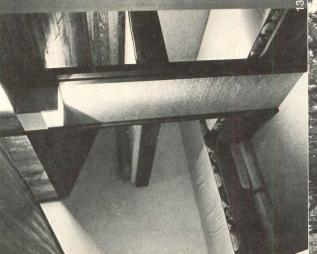
Not unexpectedly, however, the house also reveals some paradoxes:

First, a building intended to exploit the view is, in effect, an inward-looking house. One cannot sit and look at the out-of-doors from any of the fixed seating—except the dining bench (10). To see even small areas of woods and rocks, one must go to the windows (11), which are recessed 3 ft from the perimeter walls. The effect is that the walls serve as blinders and bounce light through the windows like the indirect skylights.

Second, the house reveals both the solid and thorough aspect of the designer's personality as well as his playful permissive streak.

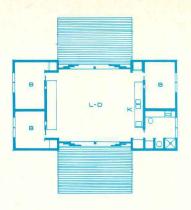
In the bedroom block (11, 12, 13) as elsewhere, varieties of visual and tactile experience abound. Lighting details—from switching (11, 18) to sources above beds (15), above basins (17), and above living room sofa (14)—have been carefully considered. So also was a sculptural knife rack in the kitchen (16).





Designer of numerous beach houses manipulates

VARIATIONS ON A PLAN



In seven years of designing in seven different beach communities on the south shore of Long Island, Horace Gifford has completed a total of 45 vacation houses. Not many designers who do not yet have their registration can make that statement. Still fewer can claim such variety and special elegance as the work of this Florida-trained, New York-based designer shows, despite relatively low cost and speedy construction for modest beach houses.

If there is a single rationale apparent in his development so far, it is the simple one of making variations within established limits. This approach, however, depends on a set of fixed forms or elements or traditions, such as those known formulas the 18th-Century writers and musicians elaborated and ornamented. For Gifford's projects, the constants have been similar sites, similar programs, and similar prices. He has pursued skillful manipulation within these narrow courses, rather than purity of invention or ambitious reaches into unknown areas, and has developed a secure-looking design craft in the process.

The Constants

The sites, all in beach communities within 50 miles of each other, have been ap-

proximately the same size. Most are 60' x 100', but others have been 60' x 80', 80' x 80', and 80' x 100'. Only one has been appreciably larger. Zoning in these areas has permitted most houses to be close, and setbacks are much the same.

The essentially similar programs with which he has worked have called for a large living space, which is also used for dining and sometimes has a kitchen in it, two to four bedrooms, one or two baths, electric heat if any, and ample deck space for sunning. Square footage varying from 800 to 2000 has averaged 1100 sq ft of enclosed space with 600 to 100 sq ft of deck space.

Prices also were fairly constant for any one year, although, as Gifford observes, "Prices have gone up in the last 6 years from \$11 per sq ft to \$18. Some of this," he adds, "is due to the upgrading of materials and to people's desire for more convenience and comfort in a beach house."

To these basic constants, the designer voluntarily added another—structure. Standard stud construction, set on locust posts, is used throughout. Neither steel, concrete, nor block have been employed, because, first, few of the houses are year round, and, second, transportation of materials is frequently a problem, since at

some of the villages all materials have to be hand-hauled the last 200 ft to the site.

The Variations

If these constants were the only determinants, all the houses might look as much alike as those in Levittowns—or like the many shacks in the communities where Gifford himself builds. In fact, a steady progress is apparent in manipulating a basic plan toward some fairly complex environments. Obviously, it is only by sensitive attention to other determinants that such rational variety could have been produced.

"The fact that I had to do so many houses with similar programs, similar budgets, and similar sizes," he says, "brought about a desire to change and vary them as much as I could. So any slight variations in the site or the client's real requirements were eagerly watched for."

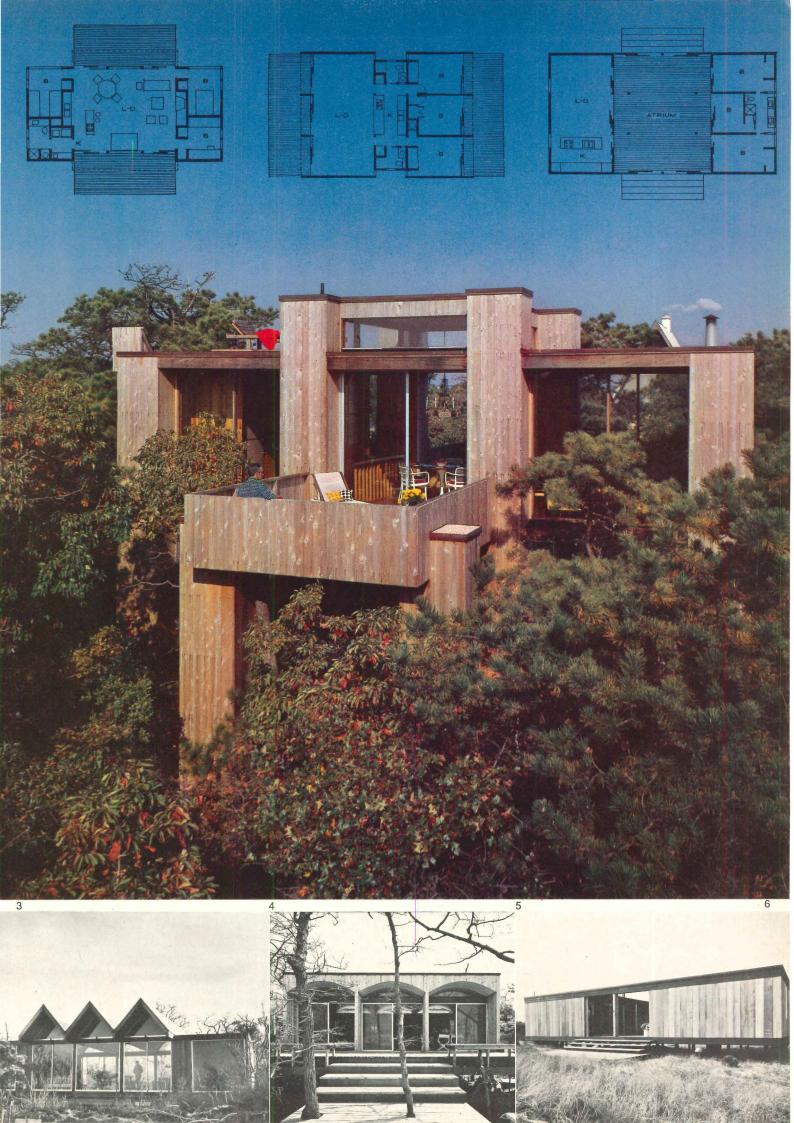
Starting with a simple rectangle as a plan, Gifford first divided it into a central rectangular living space and a strip of sleeping and bathing spaces on each end. The living space was open to the out-of-doors through sliding glass doors on both long sides; the sleeping areas were pretty much solidly enclosed.

"In all of the houses," he observes, "the

Manipulation of the section was Horace Gifford's first direction in varying the basic rectangle of his beach houses (top of page) from peaked roof (1), to clerestory (2), to folded (3), to arches (4), to atrium-void (5).

Photo credits: (3) Richard Jeffrey. (4) Hans Namuth. (5) Maris—Erza Stoller Assoc. (6) Bill Maris. Courtesy, "House and Garden."





Gifford's development of his rectangular plan shown on the opening pages has taken two directions (right) — toward asymmetry and staggered elements, on the one hand, and toward pinwheel arrangements on the other.

sleeping and service elements have been used as the solids in the design and the larger elements have been treated as the voids."

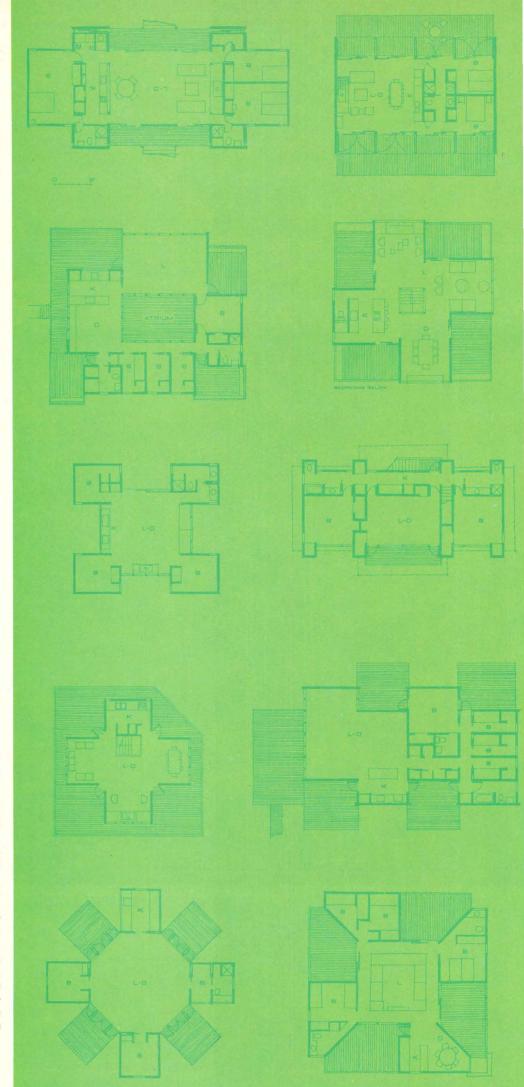
From this beginning, the plan was varied, first, simply by altering its direction from north-south to east-west in order to gain a view or to insure privacy. Next, sleeping elements appear on only one end of the living space or on the long side of that main element.

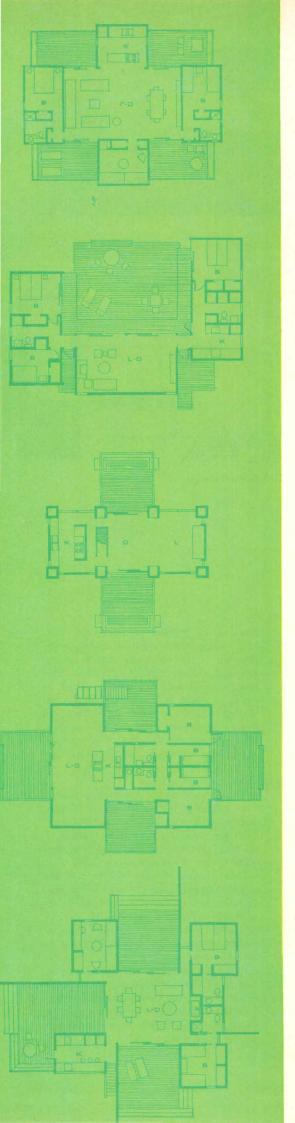
Variations in the section of the central space (as clients became more adventuresome and affluent) provide different kinds of light; they include a peaked roof (1), a raised flat roof with clerestory (2), a series of peaks like a folded plate (3), and a series of vaults (4). Another of the variations in section was a sunken conversation grouping. So as to improve the view and conceal the large glass areas from passers-by, some of the houses were made two-story structures, either by leaving an open mud room underneath the living space or by placing all bedrooms downstairs and all living space on the elevated level, as in a house designed by Gifford with William Fuller (7). The stepping of spaces slightly above adjacent ones is Gifford's most recent area of investigation.

In this manipulation of plan, the solid elements have become more and more separately expressed, often as tubular towers. Two concurrent lines of development appear: a move from the original symmetrical plan toward asymmetry and staggered elements, on the one hand, and, on the other, an investigation of pinwheel arrangements. Yet always, clarity and economy remain apparent.

Between these two directions, Gifford seems to have worked in a healthy number of the currently desirable components of a house: the atrium (5), the deck outside the bath, the acoustical isolation of bedrooms from living space, and so on.

Within his simple geometry, he has also rung the changes on materials, textures, and detailing in order to produce a special, custom-design appearance. The









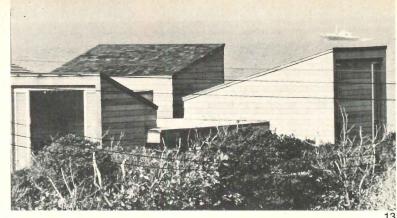




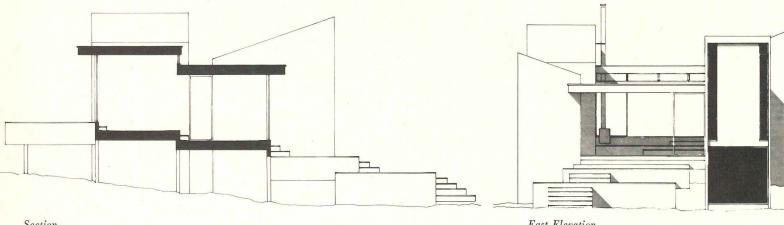
Solid elements are expressed as separate tubular towers in several houses (6, 7, 8, 9). Staggered and pinwheel boxes (10, 11, 12), some with an atrium at the center, show another direction in the manipulation.





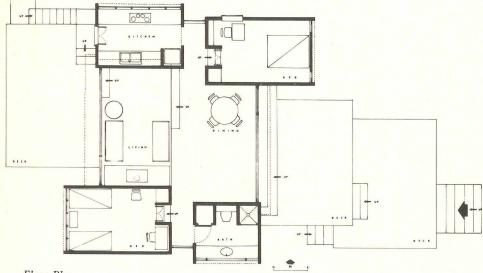






Section

East Elevation



Floor Plan

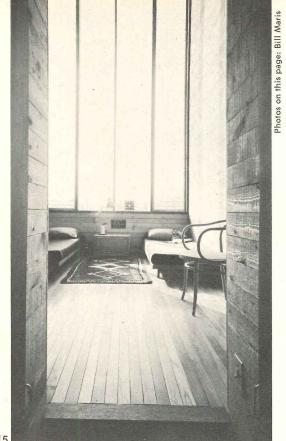


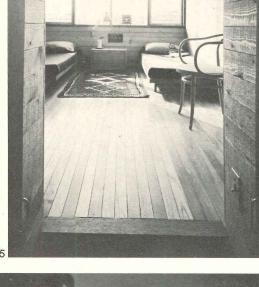
textures of natural woods used are: rough sawn cedar, redwood, and cypress; shingles or boxing crate wood inside; diagonal siding, and boards that have been grooved with a router in order to cut their scale. Windows are always jalousies, sliding, or fixed glass. Standard doors are avoided as much as possible; sliding doors are frequent. And nonstandard sizes are preferred because "this tends to give an ambiguity to the scale of the houses," he feels.

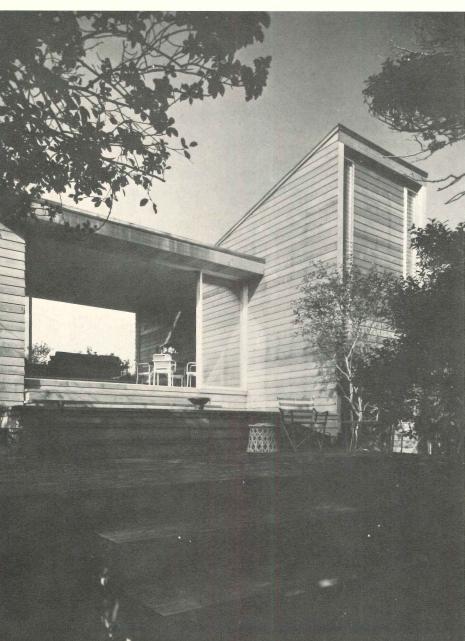
Yet, in spite of the appearance of custom detailing, the small group of contractors with whom he has worked most often has built up such a knowledge of his way of detailing that they can feel confident about submitting low bids.

Since it now appears that he will get sufficient opportunities to explore the possible variants on his plan, Gifford seems unusually willing to redesign to suit clients' changing whims. He has happier clients for not pressing a single point as the only way, of course, but he also gets on with the game of design development.

It is a markedly high quality of work at a good rate for a one-man office - and it is work that any community can be proud of. Other beach towns could use similar upgrading.



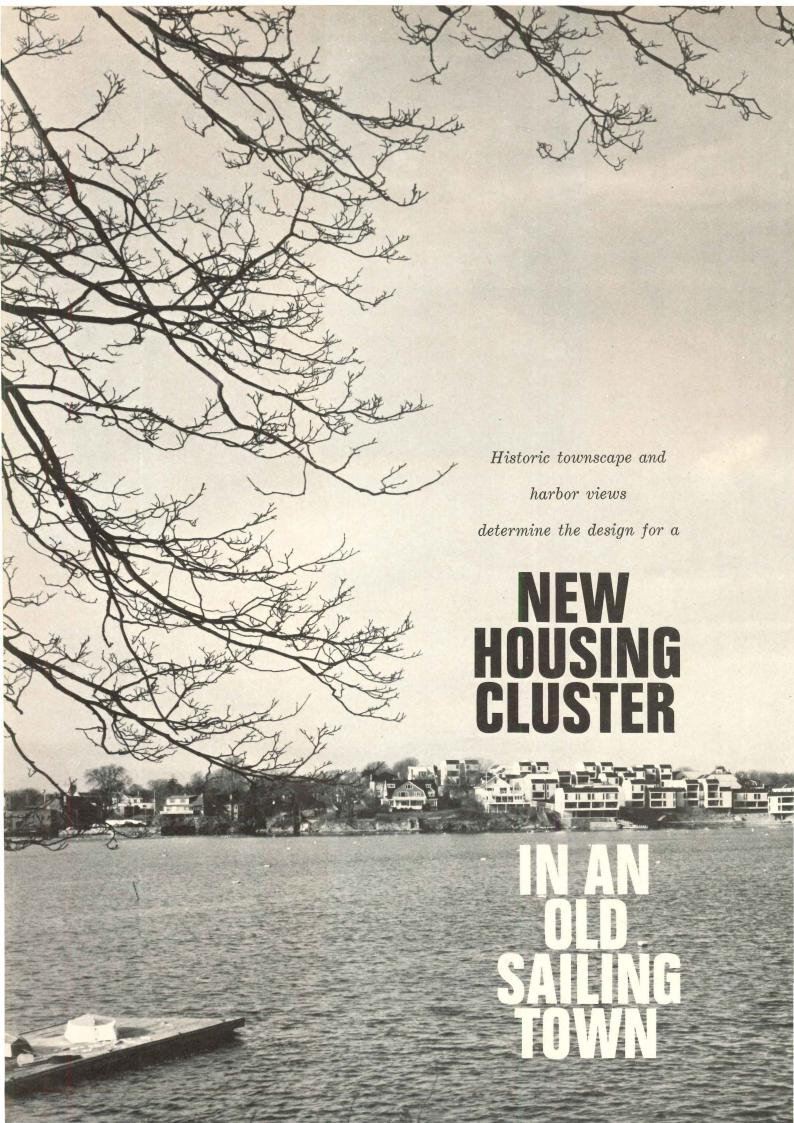






16

At Horace Gifford's own beach house (this and facing page), one steps off the boardwalk, down onto tan bark, and comes out into a clearing among the holly trees. Ahead is a series of long platforms rising one behind the other, like a broad stair (17), through a covered breezeway-like space for dining and conversation, which is enclosed by sliding glass doors, and culminating in an outdoor deck from which there is a view of the water (13). From noon to dusk, the house is backlighted so that one mounts (14) as if on ascending stage elevators and into some remarkable pastoral setting by Boulée. The difference between Gifford's first house, which was oriented north-south, and this east-west one, was not determined on the basis of getting a different kind of light, as one might have expected, but on insuring privacy against the rather close neighbors. The view of the water is di-minished, Gifford explains, in an effort to avoid seeing the house next door. Sleeping (15), bathing, and kitchen (16) blocks are shed-roofed elements that effect a pinwheel around the enclosed central space.





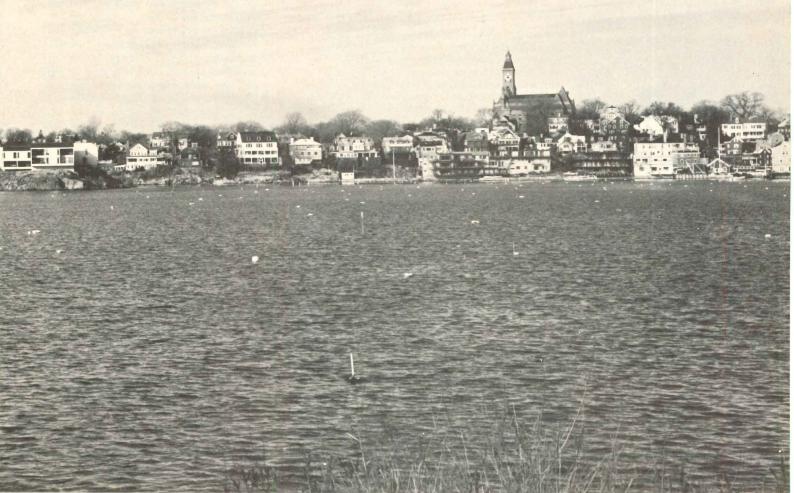
The roots of tradition are deep and still very strong in Marblehead, Masaschusetts. Since its incorporation in 1649, the town has changed from a fishing village to a popular resort held sacred by several generations of sailing buffs, and is now resisting the painful transition to suburban status in the metropolitan area around Boston, only 15 or 20 miles away.

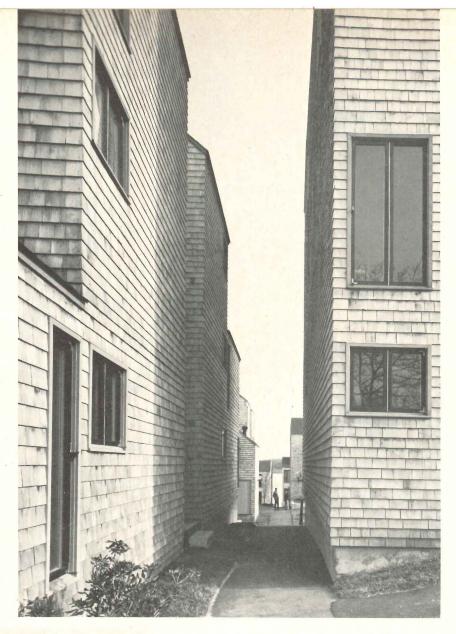
The change, however, has been a comparatively slow one. The tight-knit old town center is a collection of buildings representing 300 years of colonial and New England tradition; some Marble-

head residents live in the houses built by their great-grandfathers, and signs of the neon age are scarce. A few lobster boats still put out of the harbor, and the town, with good reason, proudly retains its title of "yachting center of the world."

With such attractions, it seems inevitable that, despite the spirit of enclave and a lack of convenient rail transportation, Marblehead will be increasingly commuterized by tradition-starved mobile man.

As might be expected, plans for a rental condominium on a prime harbor site







Narrow slits cut by footpaths through the closely clustered buildings (above) frame a series of close-cropped views toward harbor and town. The opportunity for variety and movement was fully exploited in court groupings, which provide a rich counterpoint of size and shape. Overhangs (left) minimize the intrusion of automobiles. Walks connecting second and third levels are for fire safety. Mezzanine (underside visible at top of photo below) opens up living area. Floor plan (facing page) is one of several variations on the three-bedroom unit.



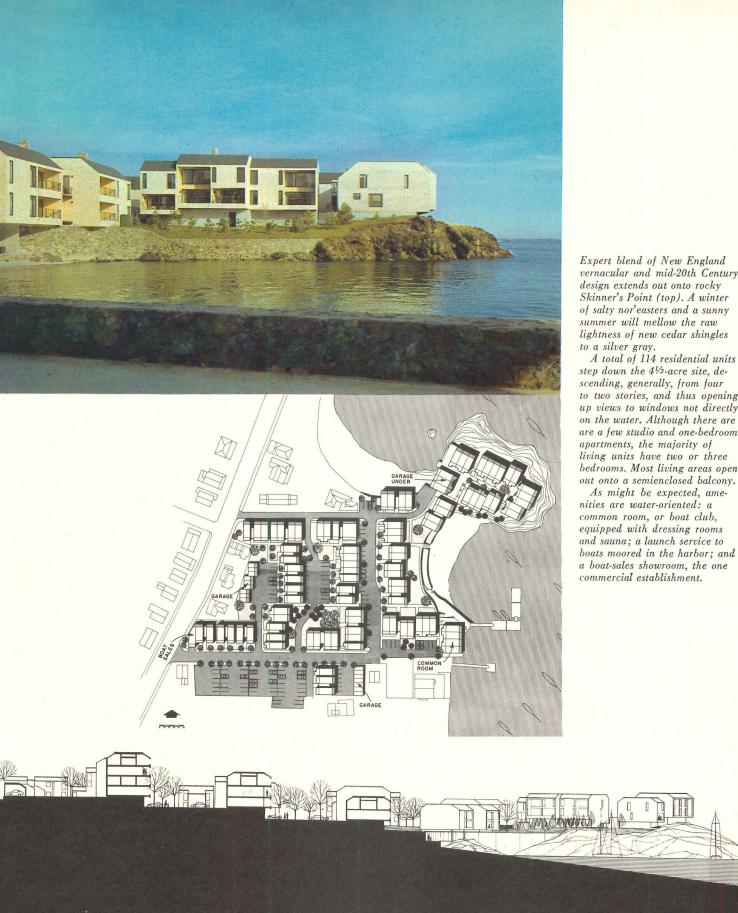
close to the old town center met with resistance. But residents anxious to preserve the integrity of "historic Marblehead" could hardly have asked for a more appropriate architectural solution than the plan developed by Chapman & Goyette (Citation, JANUARY 1965 P/A). Although it is obviously a mid-20th Century solution, the buildings, whose form and materials have been abstracted from traditional town architecture, are a visually satisfying complement to the existing townscape. And at least some residents have apparently been won over to its merits, since a number of families from the town are now residing in the project.

Named after an old Marbleheader who was the country's first general of Marines, Glover Landing imitates tight-packed densities common in the hilly town, and descends a sloping site from the mainland onto the small rocky point of Skinner's Head in a compact village of town houses and small apartment buildings.

Elements of continuity are a modified gambrel roof profile and white cedar shingle siding, left to weather silver-gray in the traditional New England manner; varying combinations of a modular bay, recessed balcony, and standard floor plan provide diversity. Secondary fenestration furnished another opportunity for variety, and was often extemporized during construction to take advantage of views.

The rationality of exploiting the natural setting was inevitable, and, whereever possible, windows frame views—prospects both intimate and vast—of town, harbor and ocean. The near view in summer, when the water is alive with sailboats and racing yachts, is perhaps one of the most exciting.

GLOVER LANDING, Marblehead, Mass. Architects: Chapman & Goyette. Site: Skinner's Head in Marblehead Harbor (4½ acres). Program: High-density rental condominium congenial with town architecture and oriented to views. Structural System: Wood frame. Mechanical System: Individual, heating (gas-fired) and air-conditioning units for each apartment. Major Materials: Cedar shingle siding, asphalt shingle roofs. Wallboard interiors, wood floors, brick fireplaces. Cost: \$2,050,000 (including sitework and landscaping); \$14.50 per sq ft. Photography: David Hirsch.

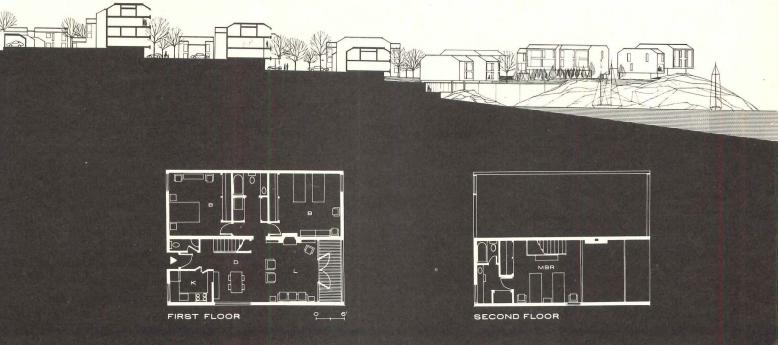


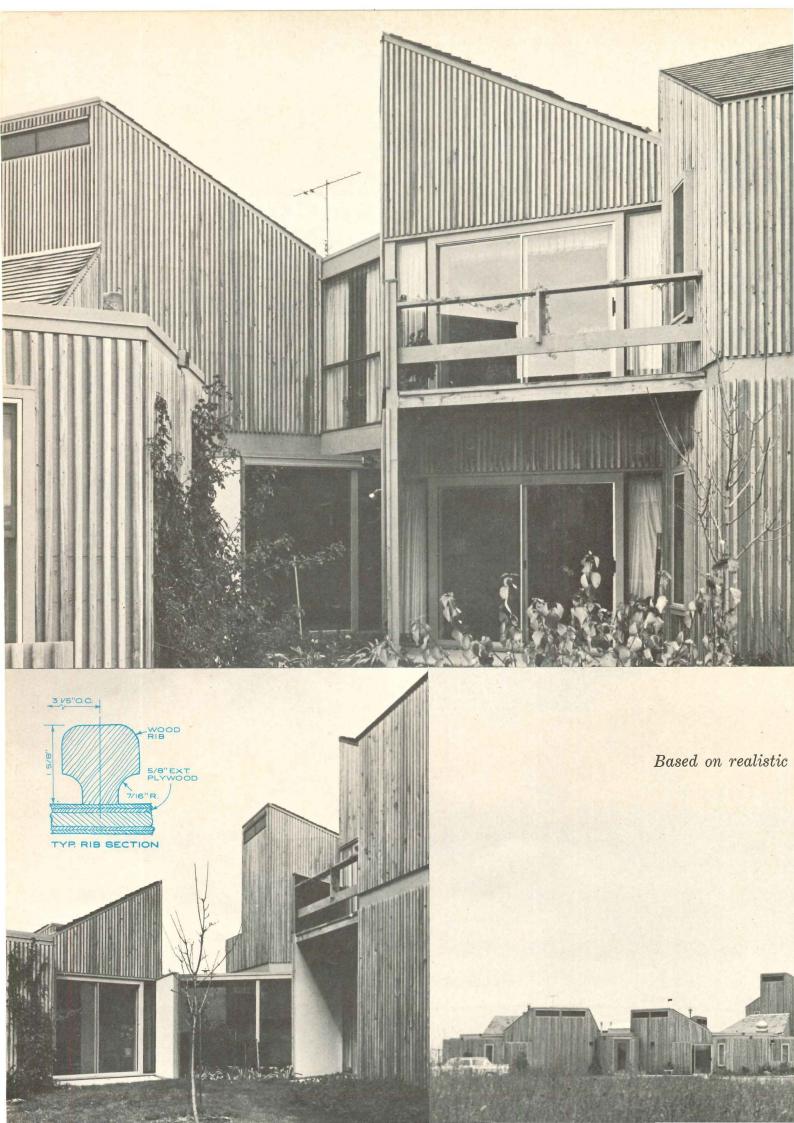
Expert blend of New England vernacular and mid-20th Century design extends out onto rocky Skinner's Point (top). A winter of salty nor'easters and a sunny summer will mellow the raw lightness of new cedar shingles

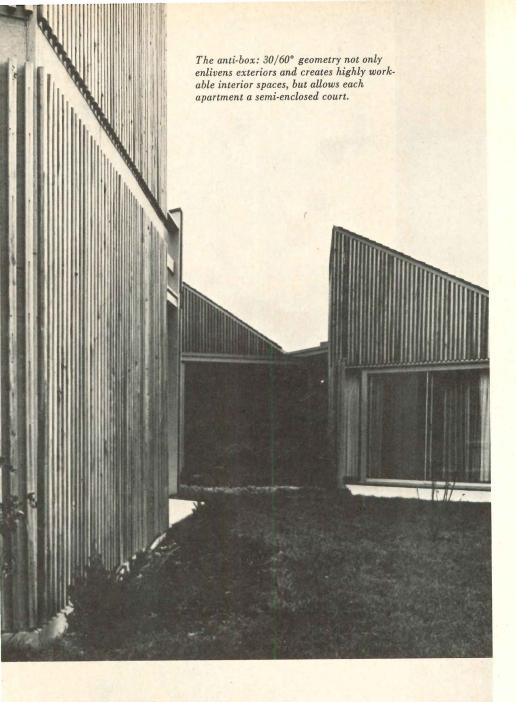
to a silver gray.

A total of 114 residential units step down the 41/2-acre site, descending, generally, from four to two stories, and thus opening up views to windows not directly on the water. Although there are are a few studio and one-bedroom apartments, the majority of living units have two or three bedrooms. Most living areas open

As might be expected, amenities are water-oriented: a common room, or boat club, equipped with dressing rooms and sauna; a launch service to boats moored in the harbor; and a boat-sales showroom, the one commercial establishment.

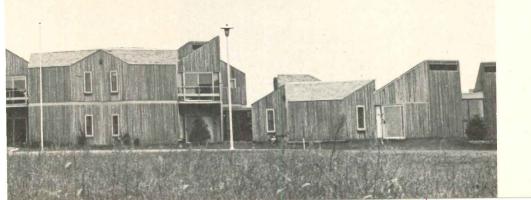




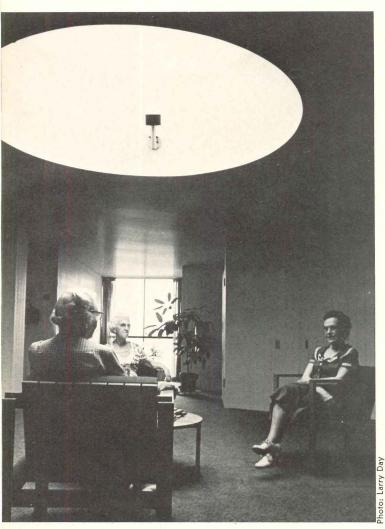


NORTHCREST RETIREMENT COMMUNITY, Ames, Iowa. Architects: Brooks Borg & Skiles; formerly, Brooks-Borg (Partner in charge, John S. Rice; Designer of first stage, Mark C. Engelbrecht). Site: See text. Program: To provide housing, recreational facilities, and total medical care for senior citizens from retirement onward. Structural System: Low-rise is wood frame; projected high-rise will be concrete. Mechanical System: Each apartment is equipped with a gas furnace and condenser unit. Major Materials: Exteriors are weathered cypress battens, or ribbing, over painted plywood, cedar shingles on pitched roofs. Apartment interiors are drywall; corridor and center lounge walls are grooved plywood painted white. Flooring is either carpeting or vinyl asbestos tile. Cost: \$390,123, or \$14.81 per sq ft for first phase, exclusive of furnishings, central kitchen, garage, and site development. Photography, except as noted: Rush J. McCoy.

analysis of the aging process, retirement condominium offers

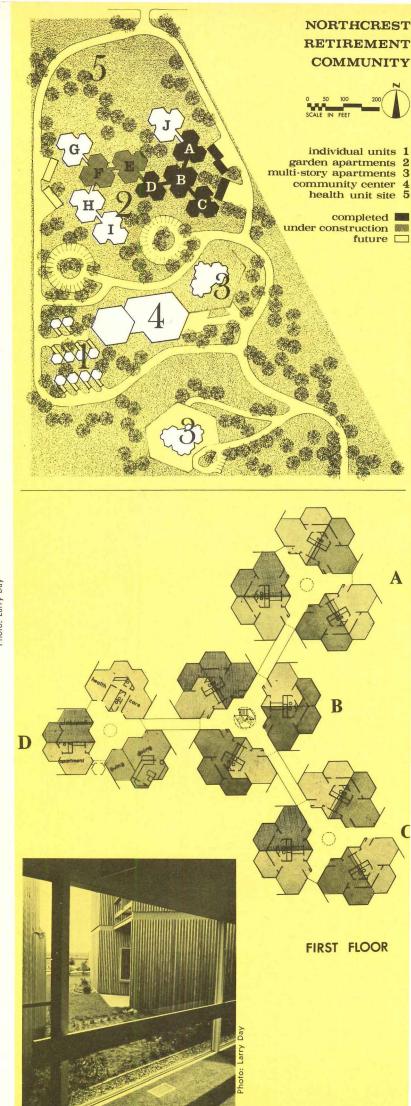


TOTAL CARE FOR THE AGED



Architects achieved their goal of noninstitutional spaces through compressed circulation and imaginative cluster plans. Short, bright connecting corridors (right, bottom) lead into skylit lounges (above) at the center of each building. Architect Engelbrecht thinks of corridors, "the architecture of connection," as being similar to neighborhood streets, affording "an intimate sequence of visual events" and opportunities for informal meetings.

Latest revision of Northcrest's 22-acre site plan includes individual homes (1), over which the architects hope to maintain design control. To shorten walking distances, the community center (4) is sited close to highrise apartment towers (3), where older and less mobile residents are expected to live. Community facilities are temporarily being housed (D) in the first completed cluster. This first cluster contains 24 units (efficiencies, and apartments with one and two bedrooms) in three one-story buildings grouped around a two-story hub.



On the slightly rolling Iowa plain at the edge of Ames, a retirement and old-age condominium is beginning to take shape. A low cluster of interconnected units, now occupied, is only the first stage of what will be a community capable of administering to most social and medical needs of its residents—a well-defined community, "distinct within the confines of the greater urban sociology," as architect Mark Engelbrecht puts it.

After purchasing an apartment, the resident pays a monthly fee that covers all health and hospital care, as well as utilities and maintenance. A community center will house recreational and communal dining facilities (for those who do not care to cook for themselves), and a fully equipped nursing facility will be able to care for both the chronic invalid and the temporarily ill. Surgery is covered in the plan, but will be performed by special arrangement at a local hospital.

Eventually, there will be a choice between a number of interconnected lowrise apartment clusters and two residence towers. The two housing types were provided not only for variety, but also in the expectation that some residents, as they grew older, would find the compactness and vertical circulation of a high-rise building easier on the heart and legs.

Preparation for the gradual slowing down of residents, both socially and biologically, was "magnificently antisentimental," says Engelbrecht. Transitions from active self-sufficiency to a quieter old age or a nursing bed, if necessary, can be made within familiar surroundings, without condemning less active residents to complete isolation.

Reactions to the rather playful but severe simplicity of this first cluster were not those of overwhelming approval. Citizens of Ames felt the architecture was "strange" and only came to accept it after completion when they had been on a tour of the well planned interiors. Even now, two years after completion, "50 per cent like the building and 50 per cent think it's ugly." Residents, however, seem to enjoy living there, and, like their city cousins, find the arrangement of interior spaces particularly satisfying and workable

Despite strong town opposition facing the project before construction began, Northcrest's Board of Directors (which grew out of a citizen's group working under the auspices of the American Baptist Convention) stood behind the rational architectural solutions of basic social problems and built the project as designed.





For today's senior swingers, architects must obviously plan for more than rocking chair spaces (left). Multi-sided staircase is focal point of the two-story building (above). Board-formed concrete complements resawn, grooved plywood walls of corridors and lounges. High-rise structures and central facilities will also be concrete.

When the client approached architects John Fisher and Barry Jackson, one of the program requirements was for a building that would house his laundry. Although forced to move his shop from a building on Telegraph Avenue, "Main Street" for Berkeley's University of California students, he wished to remain in the neighborhood where he had been established for eight years, and decided to invest in his own building—on a site across the street from his previous address.

The mid-block site, running through the block from Telegraph to Regent Street, was zoned exclusively for residential use on Regent, but for multipurpose use on Telegraph. The architects designed a "double" building—all apartments on one side, and apartments, offices, and shops on the other—separated by a small court. A parking garage and work space for the laundry connected the building below grade.

Maximum land use and minimum cost were goals that called for "stretching the building code and zoning constraints" to their limits, the architects recall. The urban solution, for instance, of taking the entire site for the structure and orienting most apartments toward the street meant the elimination of 8-ft side yards "so typical of Berkeley apartment 'motel' plans." Since the street orientation is east and west, apartments can also take advantage of Golden Gate views (west) and views toward the Berkeley hills (east).

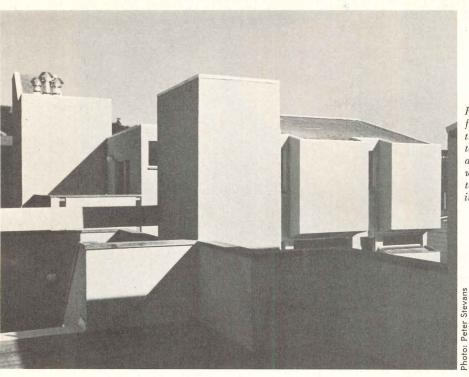
Decks and a number of small balconies make the mild California climate available to most tenants. The recessed balconies, fixed sunshades, and shadowcasting structural masses are calculated to control solar heat gain, which is intense from the west and southwest.

As planned for by client and architect, most apartments have been rented by



Split zoning for a small site leads to a

TWO-FACED BUILDING

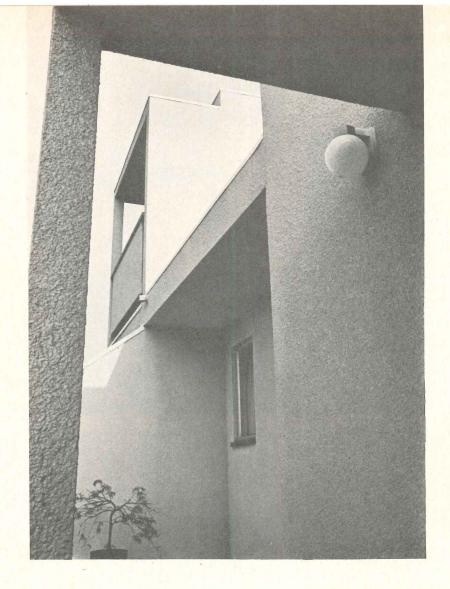


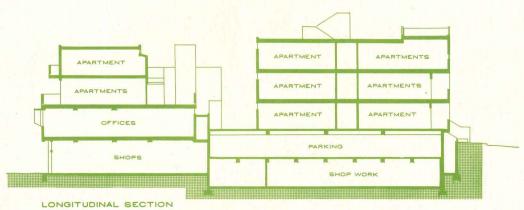
Residential face (opposite) and commercial face (below) express two personalities of the building. Fragmented forms seen from top deck (left) include "exterior" closets, at right of photo, that alternate vertically with clerestory windows. If they had it to do over again, architects say they would insist on control over signs.

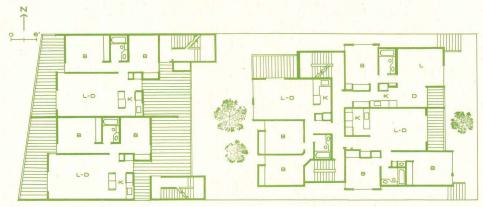


students. Simple interiors allow the young tenants freedom of expression in detailing their own distinct brand of interior decoration.

WING LEE BUILDING, Berkeley, Calif. Architects: Fisher/Jackson Associates. Site: A 48' x 136' lot, four blocks from the University of California. Program: Small multiuse building to meet divided zoning restrictions (see text). Structural System: Lightweight concrete over steel beams and columns below grade; block bearing walls; standard western frame construction with quake-protecting plywood shear walls above grade. Mechanical System: Gas unit heaters in apartments; electric baseboard heaters in offices. Major Materials: Off-white, sprayed stucco exterior; wall board interiors; carpeting. Cost: \$232,200, or \$11 per sq ft. Photography, except as noted: C. Ray Moore.







TYPICAL FLOOR PLAN

Building contains two offices, two shops, and eleven apartments, rented mostly by students. Kitchens in one-bedroom apartments were placed close to entries to encourage cleanliness. Architects claim the stratagem "works so far."

An alternative to anonymity and isolation of most public housing:

A LOW-RENT MICRO PROJECT



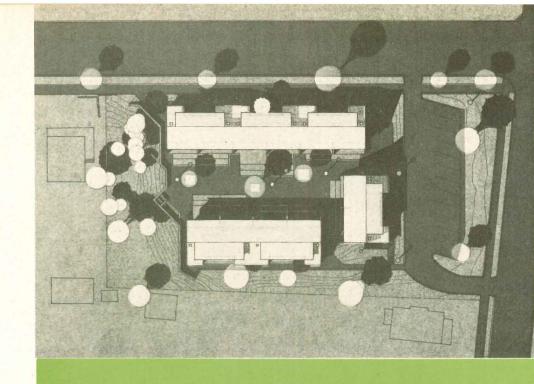
As an alternative to the ghettos that have been created by giant housing projects, the Housing Assistance Administration (a branch of HUD) several years ago initiated a program of "scattered siting." Reasoning behind the campaign is simple: small sites with manageable projects salted into established communities. Integration into the community must be on all levels — physical, social, and economic.

Carlin, Pozzi & Associates' small Riverview complex in New Haven, Connecticut, was one of the first built under the program. The neighborhood that set design parameters for the low-rent project was some 50 years old, primarily low-income, dominated architecturally by individual frame houses.

The site, reclaimed from a trash dump, is in an excellent location, virtually on the banks of the Quinnipiac River, at a point where views of the opposite shore are tranquil and not obviously industrial.

Housing is broken up into three structures grouped around an inner court. A total of 12 three-bedroom units were built, in contrast to the usual project that contains hundreds, or even thousands, of units.

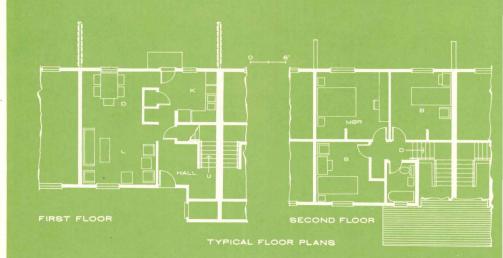
The unconventional section of the twostory buildings and their warm, brownstained shingle siding, punctuated by orange entry doors, make the project a breath of fresh air on the public housing scene. And the small-scale approach seems a sensible break with more traditional thinking about slum problems.

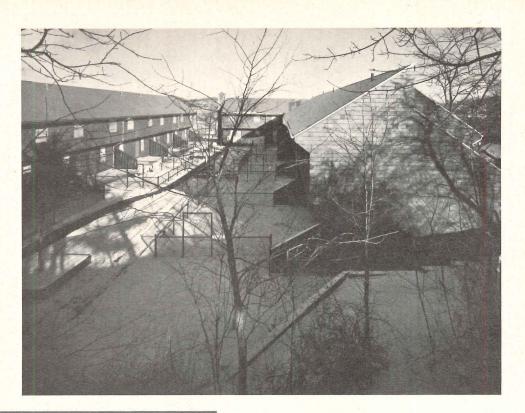




RIVERVIEW, New Haven, Conn. Architects: Carlin, Pozzi & Associates, Architects (Associates: Bart Kaltebach, Peter Millard). Site: Corner lot by river. Program: Small multiunit housing compatible with neighborhood. Structural System: Wood frame. Mechanical System: Central hot-water heating. Major Materials: Stained shingle siding, asphalt shingle roofs; wallboard interiors. Cost: \$189,751 or about \$15,800 per 916-sq-ft unit. Photography, except as noted: Robert Perron.











Keeping in mind the neighborhood milieu of single-family dwellings, the architects chose a row-house approach in preference to the apartment building. This offers the advantage of providing a semi-private territorial preserve for each family — separate entrances and a tensed area for each apartment. It dis and a fenced area for each apartment. Individual yards, fenced off from the common court, accommodate clotheslines and a small planting space. Chain link fencing, while not aesthetic, is durable, and public housing must be built to take a lot of abuse. The common space is fragmented by tree planters and by staggering fenced areas, explains architect Earl Carlin, to protect young children from the "hyperactive play of older children." In an otherwise straightforward interior, the entry hall-stairwell (bottom) is not only an imaginative architectural space, but an amenity in circulation that is unusual in low-rent housing where tenants usually enter their

living space directly.

The project won an Honor Award from the Connecticut Society of Architects in 1967.

could prevent such action. Moreover, every piece of land is owned by someone, usually with a clear title, unlike Peru, where land is generally government-

Disputes over legality arouse furious debate wherever squatter movements occur. In Peru, the middle and upper classes maintain that taking government land is illegal and the squatters maintain it is all a matter of timing - that is, who seized the land first. The squatters' argument is not a strong one because, in fact, the small middle and upper classes control the land and the country's wealth through their control of the government. In any case, many of the barriada residents rapidly identify themselves as respectable property owners once they have consolidated their seizure of the land. In effect, they have succeeded en masse in forcing their way into patterns of control that have been dominant in South American politics for decades. (This is probably the explanation for most of the bad publicity barriadas receive.)

But there are other fundamental patterns involved in America's problems of housing and urban decay than property ownership and government control. For instance, zoning codes and local ordinances require construction companies, sellers of materials, and building trades unions to be involved in all construction work. It is difficult even to get a training program started in the now-defunct "war on poverty" if the program involves any kind of construction. (This may also be one of the obstacles to the success of the Model Cities Program.)

Other aspects of the basic differences between Peru and the United States are aspiration levels and relative deprivation levels in the two countries. Most Peruvians are poor, but they are not defined by the powers of the society as people who cannot enter the system. The small, white upper class is extremely close-knit and the Quechua-speaking Indian population in the mountains is terribly abused, but the bulk of the people are at least scrambling in the same over-all system for the same goals. Envy, distrust, and fierce competition exist, but there are many more real opportunities to act than in this country. This is partly because, in Peru, social class divisions are important and powerful, but the lower and working class populations account for an enormous percentage of the population total; in the U.S., they are outnumbered by the vast suburban middle class. Barriada residents, therefore, have roughly the same social characteristics and come from the same cultural backgrounds as Lima's central city slum inhabitants and the great bulk of the population.

Once they consolidate their seizure of the land, the barriada dwellers' stake in Peruvian society goes up. Barriadas are therefore not slums, because they become communities of people on the way up socially. And their way up the social ladder is not barred by racial prejudices, as in the United States, where even Negro college graduates have a slim chance of entering the dominant middle-class culture.

Keeping the Poor Poor

Another important reason why the squatter "movement" could never be exported to America is the intervention of the welfare bureaucracy in the lives of the poor. In Peru, the family is its own last line of defence against starvation, sickness, and homelessness, so that people are almost forced into helping themselves. In the U.S., the poor get so much "help" in the form of welfare payments and the like that the government, in effect, controls them. There is simply nowhere for them to go. When people began to move out of the slums of Lima and seize land of their own, no one succeeded in stopping them. It is quite possible that the success of the barriadas in terms of community organization and self-help development is partly due to the fact that the government did not help, but opposed without crushing or controlling them. In the U.S., the agencies that are supposedly helping the poor, in the light of Peruvian experience, actually seem to be keeping them poor.

Another aspect of the problems associated with the current "urban crisis" in the United States is the phenomenon of perpetual poverty: Generations of slumdwellers inherit their economic status. The poor develop a culture of their own, quite different from the dominant culture. This is particularly evident in Negro ghettos, but exists as well in Appalachia and wherever there is continual poverty. Oscar Lewis has described it in his book, The Culture of Poverty. Considerable evidence indicates that putting people into government housing projects does little to halt the economic cycle that develops into the "culture of poverty." When people move on their own, seize land, and build their own houses and communities, it has a considerable effect. It also has an effect on absolute poverty, since the land becomes valuable as it is developed.

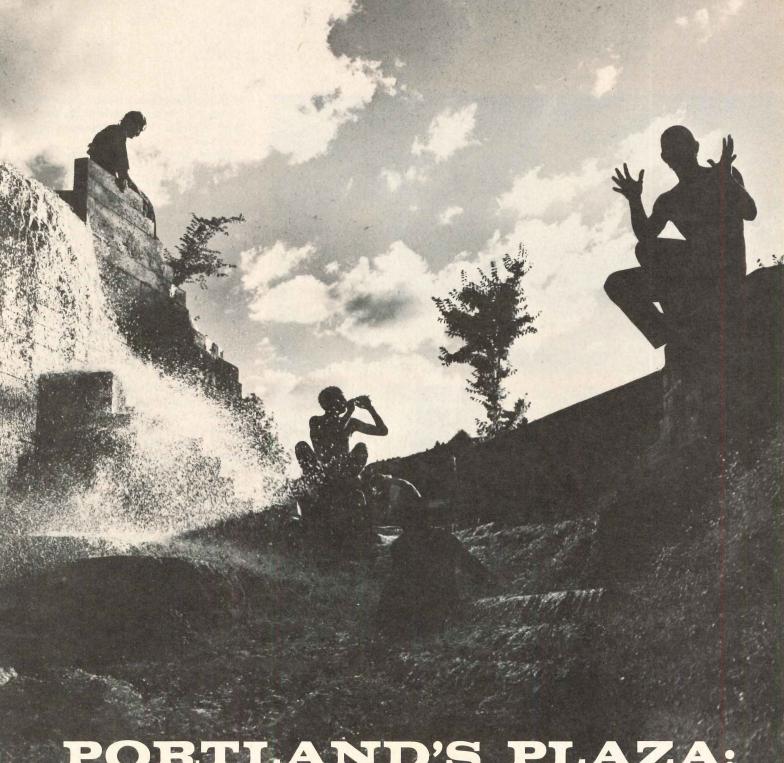
Lewis has pointed out, for example, that there were many social strengths in the self-created communities of San Juan that were lost, along with their precarious but real economic security, when families were moved to public housing projects. Similar stories have been told in Rio, Bogota, Caracas, and Lima. The rents and the initial investment for public housing are high, at the precise time the family can least afford to pay. Moreover, public housing is created by architects, planners, and economists who would not be caught dead living in it, so that the inhabitants feel no psychological or spiritual claim on it. Fortunately, in less industrialized countries like Peru, people can still escape: Many

of those now living in barriadas have done just that.

Our studies of the Peruvians show that they have a strong tendency to look to outside means for solutions to their problems. Perhaps fortunately, no one is there to help. Autonomy is born of desperation and the resulting intitiative of the squatters has its own reward in increased selfesteem, high morale, and the achievement of creating a community. The squatters come to feel they have some control over their own destinies - a change of attitude that anthropologist Edward Sapir has called a "transformation of ends." They see initiative and creativity rewarded. Their risks - of life and property - in defiance of the police last long enough to be exhibited but harassment generally stops. Their confrontation with power has been dramatic rather than petty or bureaucratic. When they begin their endless petitioning of agencies and their dealings with housing authorities, electric companies, and so on, it is as equals in negotiation - rather than as clients.

Going Hungry, American Style

A quotation from an article Sapir wrote, entitled Culture, Genuine and Spurious, makes an appropriate ending. Hopefully, it will not sound overly romantic to state that the condition described by Sapir not only makes the squatters' action seem valuable as compared to the actions of most slum dwellers, it provides many of us with a basis for envying them. Sapir said: "The transformation of ends is of the greatest cultural importance because it acts as a powerful force for the preservation of culture in levels in which a fragmentary economic functioning of the individual is inevitable. So long as the individual retains a sense of control over the major goods of life, he is able to take his place in the cultural patrimony of his people. Now that the major goods of life have shifted so largely from the realm of immediate to that of remote ends, it becomes a cultural necessity for all who would not be looked upon as disinherited to share in the pursuit of these remoter ends. No harmony and depth of life, no culture, is possible when activity is wellnigh circumscribed by the sphere of immediate ends and when functioning within that sphere is so fragmentary as to have no inherent intelligibility or interest. Here lies the grimmest joke of our present American civilization. The vast majority of us, deprived of any but an insignificant and culturally abortive share in the satisfaction of the immediate wants of mankind, are further deprived of both opportunity and stimulation to share in the production of nonutilitarian values. Part of the time we are dray horses; the rest of the time we are listless consumers of goods that have received no least impress of our personality. In other words, our spiritual selves go hungry, for the most part, pretty much all of the time."



PORTLAND'S PLAZA:

"It's groovy; it sings; it screams; it whispers. I can touch them all," said a 17-year-old hippie.

"I hate baths. When I come here, she don't make me take one," remarked a boy of eight more practically.

A 48-year-old-lady tourist from California exclaimed, "I came to the fountain just to see it. I put my toe in and I was lost. I had to walk up the steps — dress, nylons, who cares? What a feeling! Such freedom!"

"I'm sort of scared of people," con-

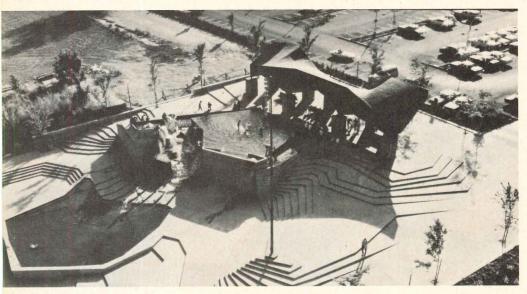
It's Like Wow fided a girl teenybopper, "but here I can do my thing, and if I have to talk to someone we can talk about the

"If I couldn't see," said a thirtyish woman, "I'd come here just to listen and touch. It's a living creature, giving something of life to everyone."

"Wow! It's just like Wow!" ex-

claimed a teen-age boy.

Sherry Volz, the 24-year-old who collected these comments and sent them to the designer of the place that occasioned them, added, "I like







View toward downtown Portland

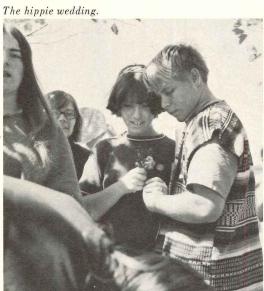
to give presents but I don't have any money, so I bring friends to the fountain. It's nice to give something you can't buy."

When architects attend the AIA Convention in Portland, Oregon, next month, they will be able to see and experience the place that occasioned such effusions. It is a fountain and plaza by Lawrence Halprin & Associates (Moore & Turnbull were the associated architects) that has turned on the entire hippie population of Portland and not a few of its over-30 inhabitants. They treat it as a public place should be treated, revelling in it, eating in it, making music in it, resting in it, being loose and open and free in it, even getting married in it, as a hippie couple did last summer. This free behavior does not go down well with everyone, needless to say, particularly some of the inhabitants of the buttoned-down, Skidmore, Owings & Merrill-designed apartment buildings that form an up-tight backdrop to the fountain, plaza, and Moore-Turnbull pavilion. Inaccurately considering the plaza their front yard, some of these citizens have sought surcease from hippiedom at City Hall, with, we are happy to report, small success (an evening curfew in the park was imposed). With any luck, when architects get there in June, the place will still be swinging and alive.

Halprin says that the theatrical quality of the place is on purpose. The designers provided a series of platforms that they intended to be used in daily "living-rituals." They were not exactly sure how they would be used, and are overjoyed at the involvement in the place. The fountain, seeming to burst out of the eminence overlooking downtown Portland, was designed to recall the falling, spurting, and dashing cascades that Halprin sketches and photographs in the High Sierras every summer. While the designers were working on the fountain, they were subjected to countless slides of water formations in the mountains, until the way water acts in nature became almost subliminal with them. The success of the technique is evident from the way people tend to throw themselves happily into participating with the fountain, literally getting bodily involved with it.

The place is an excellent example of a healthy trend away from look-but-don't-touch design and planning. It has the people of Portland involved in part of their city. Its name, appropriately, is Lovejoy Plaza.



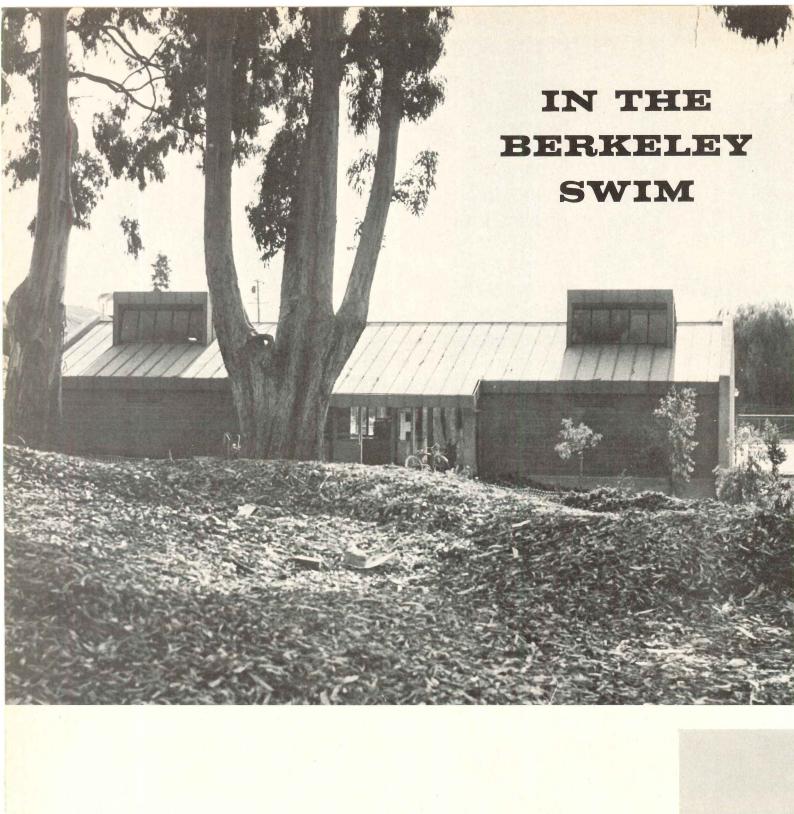


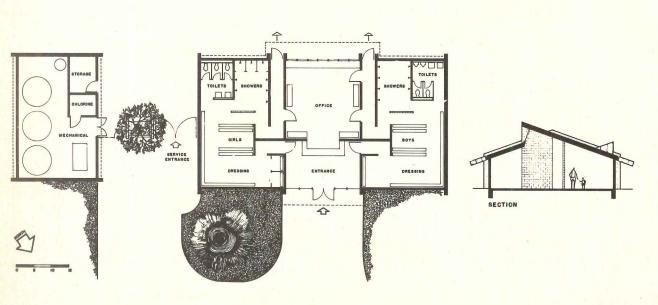












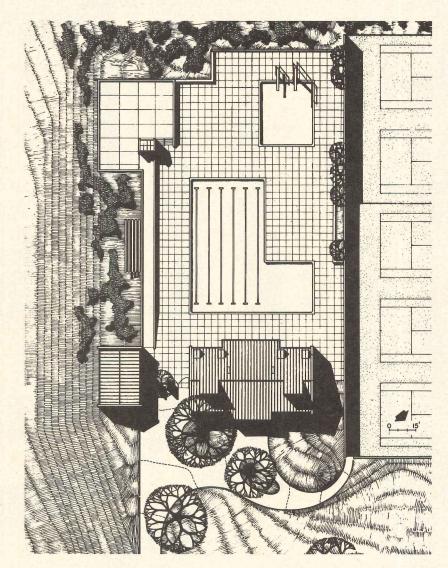


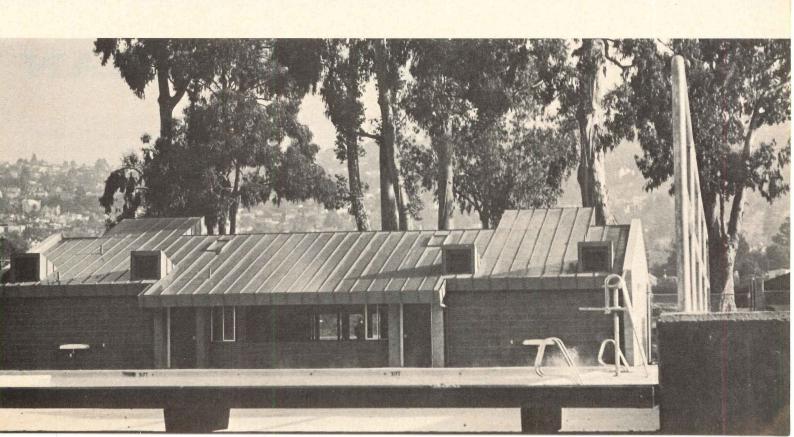
A neighborly swimming and recreation center that complements the physical facilities of an existing junior high school and provides fun for the community is under development

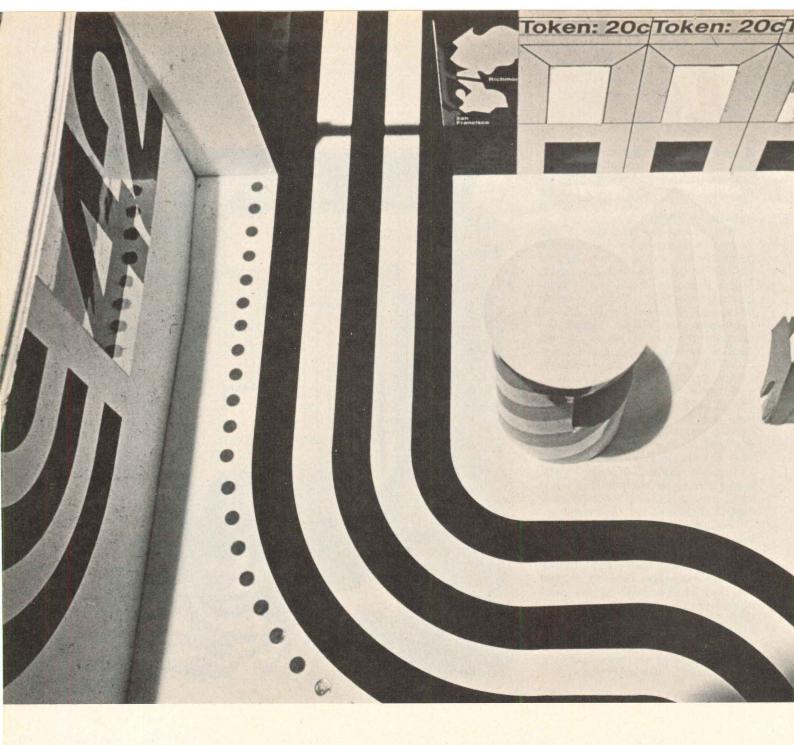
in Berkeley, Calif.

First completed element of the recreation complex is the Garfield Swim Center, a modest but pleasing facility by Chan-Rader & Associates of San Francisco. Fashioned of sandblasted, integrally colored concrete block with a terne metal roof, the bathhouse is a simple shelter for dressing rooms and offices. A mechanical services building is nearby. Chief distinction of the bathhouse architecturally is its manipulation of roof forms. Here, diagonal expression of skylights and vents has been used not for effect, but to satisfy "two requirements of the problem: the need for natural light with privacy and the need to exhaust odors and steam vapors efficiently." The profile is, nonetheless, effective for so small a building, and befits its residential neighborhood becomingly.

The bathhouse serves as entry to the swimming pool deck, encompassing the L-shaped pool (racing courses and shallow play area) and a diving pool. As lagniappe, there is a little sun deck at the south of the compound, approached by steps or through a little "torii" gate. Fixed seating for about 100 spectators completes the scheme. It looks like a good, quiet place to cool off after a trying summer demonstration.







SUBTERRANEAN

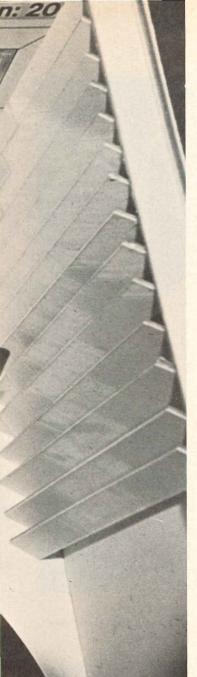
The most noisome environment devised by man since the Nawab of Bengal suffocated the British garrison in 1756 by shutting it up in the Black Hole of Calcutta is undoubtedly the New York subway system. Feeble attempts have been made in the past to alleviate its grimness, but to no avail. Now, a hopeful note for more salubrious subterranean surroundings has been introduced by The Architectural League of New York.

The League, which in the past couple of years has shed its fustian traditional garments and emerged as one of New York's swingiest organizations, for all the world like a dow-

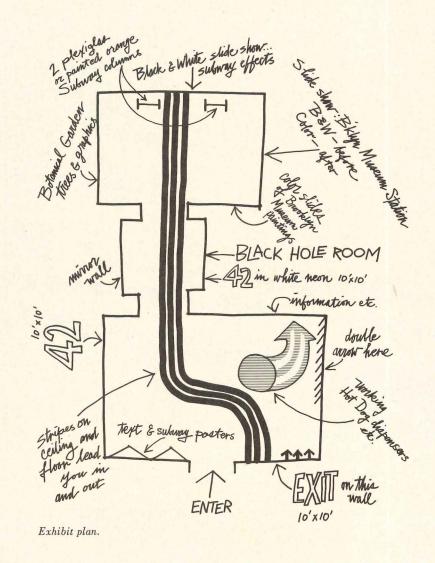
ager frugging at the Electric Circus, is currently featuring a turned-on subway exhibition by San Francisco graphics artist Barbara Stauffacher (pp. 156-161, MARCH 1967 P/A).

The means to give a visual boost to subway stations is through new graphics, colors, forms, and symbols, according to Mrs. Stauffacher. She describes her proposals as purposely a cosmetic job that would "in one comparatively simple move make an effective, clear, and joyful change for the city," adding that the designs should "be used in the world, not just in refined 'environments.'" To this end, she is having talks with Arthur Rosenblatt, who is head of

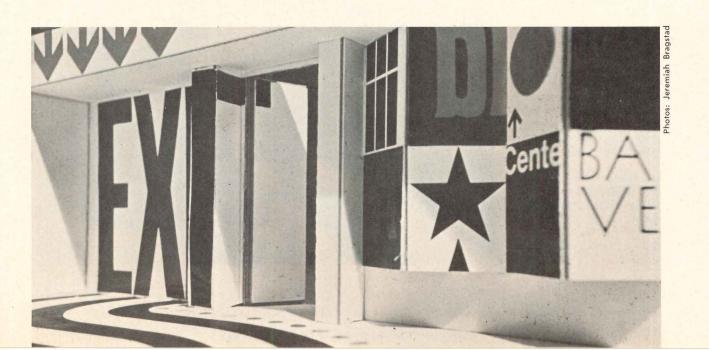
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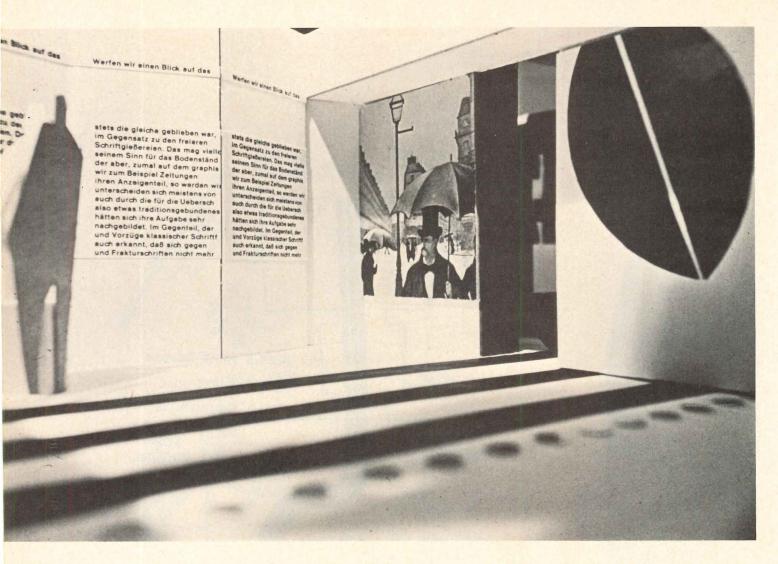


Hot-dog kiosk, strong directional indicators, bright colors characterize a prototypical station.



BEAUTIFICATION



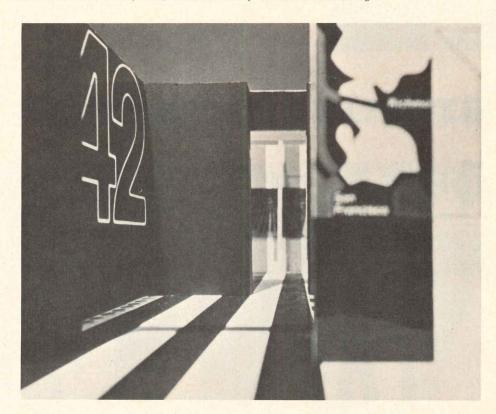


Rear room of League exhibit (above) is an "environment" of subway slides and sounds. Connection between rooms (below) simulates subway corridor with station sign.

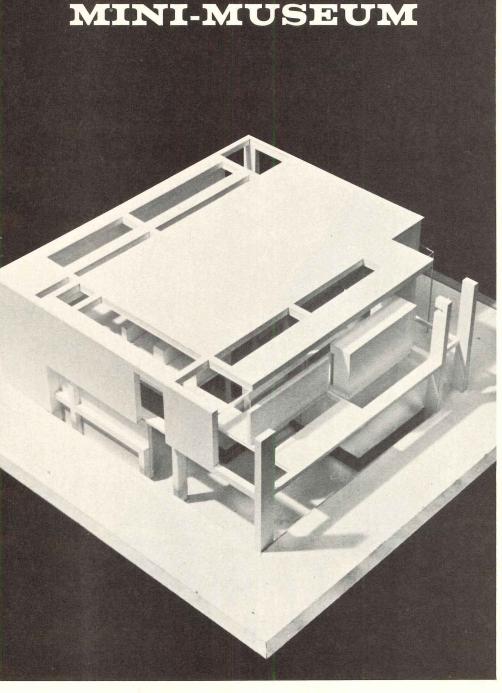
architecture and planning for the Metropolitan Museum of Art and the Brooklyn Museum, with a view toward reviving and enlivening the subway station at the Brooklyn institution (her design associates on this project would include such graphics enthusiasts as Moore & Turnbull, Hugh Hardy).

The major tools in subway revitalization will be paint, porcelain enamel, and new lighting. With these, and with some three-dimensional graphics such as directional arrows mounted on two-sided blades so that they indicate different directions depending on the point of view of the subwayite, Mrs. Stauffacher believes that each station can have its own character to reflect the neighborhood it serves.

"I hope these things will improve depressing areas where a lot of people spend a lot of time," she says. "Hopefully, people will enjoy it. Hopefully, if they like it, they will maintain it. It is a New York problem which is solvable."



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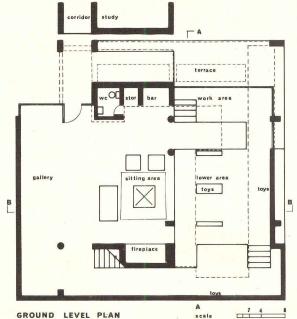


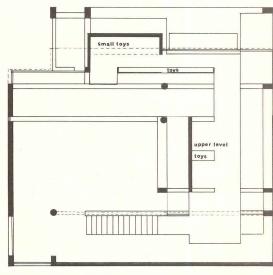
A proposed private museum for the display of antique toys will take on appropriately minuscule dimensions in Princeton, New Jersey. The museum, to be attached to an existing private residence, will have an area for work and research on old toys and an entertainment and lecture area for students, collectors, and others who visit the collection. Since direct sunlight must not fall on the toys, and since security was a given of the program, the museum will be in the form of an opaque pavilion with fenestration occurring only at the entrance, in the work area (where it will be screened), and on the second floor. Major natural lighting will be by means of a system of translucent skylights that will, according to Peter D. Eisenman, the architect, accentuate the contrast between deep and contained spaces as well as lighting the displays.

Incandescent strip lighting in the skylights and rear lighting in the displays will form the artificial lighting, also providing a variety of effects: to silhouette toys, to accentuate high and low spaces, and to wash exterior walls beyond the generally free-

standing balcony.

In addition to the permanent display areas on the lower floor and balcony, and the work area, there will be a ceiling-high gallery and sitting area for entertainment and talks, embellished with a fireplace, bar, and a restroom. Structure will be steel columns and girders, with nonbearing walls of wood frame. Exterior finish will be appropriately residential in character: white-painted tongueand-groove vertical siding with no bevel. Interior finishes will include white-painted plaster, beech flooring on main and balcony levels, and gray quarry tile on lower display and work level. Eisenman was assisted by Russell Swanson and Robinson O. Brown.

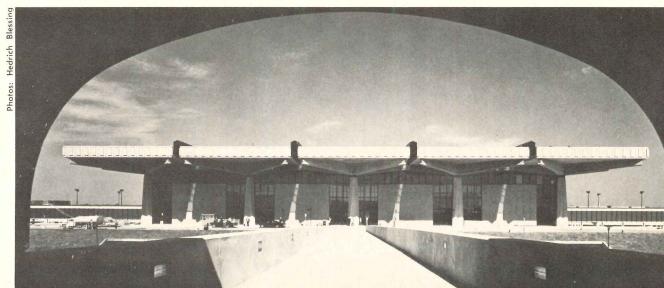




LEVEL PLAN

DETROIT TERMINAL:





Advanced But Traditional

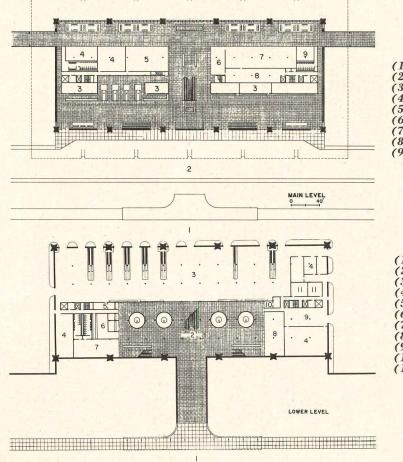
According to Sigmund F. Blum, Vice-President and Director of Design of Smith, Hinchman & Grylls Associates, Inc., designers of the new North Terminal at Detroit Metropolitan Wayne County Airport, "the most significant" element in the composition of the building was "the structural system employed for the roof. We feel it accomplishes the job in a very successful manner, both from an engineering and aesthetic point of view. The most interesting aspect, once we had established the concept, was the working out of the structural details in keeping with our design intent."

The roof, consisting of six panels set on doubly-curving roof beams supported by concrete columns at their two crossings and separated by continuous skylights, is indeed the star of the design, and a most impressive one. (Complete details of the structural system were published in P/A during construction, pp. 190-191, MARCH 1966 P/A.) Moreover, the roof shelters a commanding multilevel space (which will improve if Blum gets to rework the mezzanine space on top of the interior island the way he wishes, plus some other changes in the concessions area). The two-level traffic system - departing upstairs, arriving downstairs

- works smoothly and simply, and the palette of the terminal — black, whites, grays, browns - acts, as it was intended to, as a neutral foil to the activities and commotion of the terminal. The over-all exterior tone of the place is tan concrete with gray glazing, and is effectively muted in its strength, the glass catching the play of the sky forms and the bustle of the airfield from the muscular frame of the concrete structure.

It is all the more curious, then, to see that the designers chose to vitiate a gutsy building's appearance by the use of a number of stuck-on, Ed Stonesy, decorative effects. These oddly traditional details sit on the strength of the terminal like false eyelashes on a heavyweight, and are as convincing. They include the treatment of the roof fascia with a kind of squared-off, stylized egg-anddart pattern, the scoring of the concrete panels at the front and sides of the terminal in a repetitive pattern of rectangular shapes, and even the notching of the underside of the beams as though to emphasize their "beamishness." Such arbitrary touches belie the inherent power of the building, and undercut its potential impact. The designers should have quit while they were ahead, with pure structure.



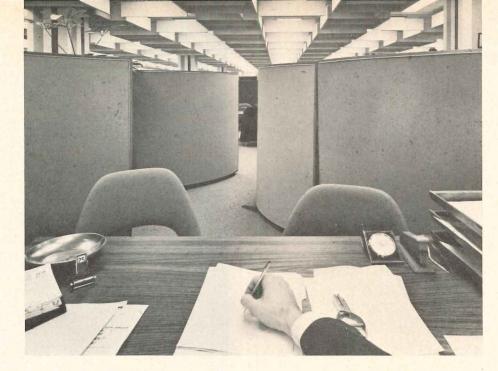


- (1) lower level roadway
- (2) main level roadway (3) airlines offices
- (4) shops
- (5) cocktail lounge
- (6) snack bar
- (7) coffee shop
 (8) kitchen
- (9) nursery

- (3) baggage concourse
- (4) storage (5) lost and found
- (6) bar
- (7) baggage lockers
- (8) rental
- (9) receiving
- (10) porter
- (11) employees' lockers

BÜROLANDSCHAFT U.S.A.





At some of the desks in duPont's office landscape, visual privacy and isolation from the clutter plan is fairly complete (left).

Like a nearly imperceptible spray mist, the duPont Company's Freon Division, makers of the volatile liquid used in refrigeration and to activate aerosol cans, cooly revealed to the world the details of their new offices — the first "Office Landscape" in America.

Three years to the month after P/A published the first report in this country on that German system of office planning (SEPTEMBER 1964 P/A), the Freon Division moved into the fourteenth floor of the Farmer's Bank Building in duPont's home town, Wilmington, Delaware.

Designers of the offices were Hans J. Lorenzen, managing partner of the Quickborner Team Inc., Millburn, N. J., in association with duPont's P. G. Twitchell, Manager of Industrial Engineering; J. E. Cathell of the General Services Department; and J. O. Wright, Jr. of the Freon Division.

Like all office landscape ("Bürolandschaft" in German), the duPont offices are based on systems analysis of work-flow and communication, and they arrive at a circulation pattern and furniture plan that, unlike the typical American office layout, is irregular, nonrectilinear, and chaotic looking. By no great leap of imagination, Freon's "landscape" seems appropriately expressive of its product: an open, unenclosed space with activities swirling to diffusion in a free-form pattern (Plan B).

In place of the customary floor-toceiling, metal-and-glass partitions, the open work areas are only minimally enclosed by low, arc-shaped, movable screens. These 55-in.-high and 72-in.-high, unfixed partitions stop short of the 9-ft ceiling, which has acoustical baffles hung so as to leave an 8 ft headroom; consequently, they afford a fairly expansive view over the upper part of the space.

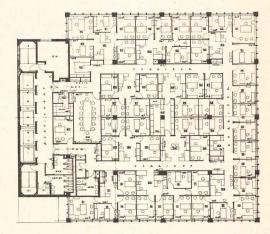
In place of vinyl or asphalt tile flooring, the entire office has wall-to-wall, dull orange, nylon carpeting. Upholstery of muted orange and muted yellow nylon covers the low screens, making them acoustically absorbent also. But the columns, rather than being upholstered for the same reasons, are (surprisingly) painted with stripes in an attempt to slenderize them. Luxuriant tropical plantings foliate among the contours of the furniture plan for added acoustical diffusion.

All the advantages that are claimed for office landscape — economic, efficiency, and environmental — cannot be judged after only six months of occupancy, duPont management cautiously maintains. However, some aspects of these advantages can be judged.

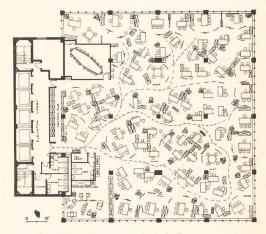
Economics

Square footage economists will be intrigued by the claim of "intensive space utilization" for the 9965 sq ft area, which was considered adequate for 73 work places under the standard partitioned method (see plan A), yet actually is laid out to accommodate 75 work places plus two small conference alcoves and a generous employee lounge with wardrobes (see plan B).

Cost of this installation, however, was 10 per cent higher than the norm, according to duPont, because of the special, prototype furniture,



Plan A: Conventional Partitioned Scheme



Plan B: duPont's Bürolandschaft Layout

such as screens, open-sided file carts, and table desks, which minimize sound-reflectant vertical surfaces as much as possible.

Flexibility, on the other hand, has been found to be both easier and less expensive. Two months after initial occupancy, duPont completely rearranged the floor to its own design by removing 7 work places and 4 small conference areas to reduce overcrowding and by adding 16 screens to increase visual privacy. The cost of this work, which was done in 12 hours over one weekend and which included relocating 17 telephone floor outlets, came to 33¢ per sq ft as compared with duPont's average cost of \$5 to \$10 per sq ft.

As far as maintenance is concerned, cleaning people report that 15 to 20 per cent fewer man-hours are required for the Freon offices than for a conventional floor.

Efficiencies in paper flow and in face-to-face communication are also thought to be improved, duPont people say, but no definitive ways of measuring these efficiencies have yet been established.

Environment

In terms of environment, duPont is favorably impressed by the fact that the open, upholstered, living-room atmosphere contributes materially to improved personnel efficiency. "The system realizes our objectives of making a better place to work," comments one company spokesman, but he is quick to point out that there are no ways of measuring these subjective responses.

He admits that office landscape takes longer to get used to, which is a negative vote in the sensitive area of personnel relations. "We have had no great clamoring from other departments to have this type of layout, but we have not had anybody resign or refuse to work in the area

either. There is neither great enthusiasm nor serious objection."

Negative response concerns the fact that there are visual distractions (even after increasing the number of screens), and that acoustical goals have not been achieved. The floor was designed to maintain a constant noise level of 45 to 50 db — a level that is not maintained due to the daily occupancy rate, which was estimated at 17 per cent below maximum capacity but actually appears closer to 25 per cent below full occupancy. (Whether the marketing people merely want to be elsewhere is not mentioned.) Management will probably attempt to mask high-frequency noise, which is distracting at present. (Whether the wear of this added noise on the psyche will counteract the benefits of the warmer, more casual living environment remains to be seen.)

Draperies cut acoustical reflectancy at the windows but also cut the view, which is a claimed advantage of "landscape."

Basically, what duPont's office system is weighing are the benefits of face-to-face communication and the economics of flexibility and maintenance as against the disadvantages of visual and acoustical disturbances.

The atmosphere of the cushy, if kinky, study hall environment is an undoubted gain. But the somewhat foreign appearance of the duPont space still leaves a desire to see the system "designed" with an American eye.

However, the office soil of the U.S.A. seems ready for this transplant — perhaps because of the hideous fascination with which American designers have watched the system spread in Europe. And however healthy our skepticism, office landscape will, incontestably, become firmly rooted here. — CRS





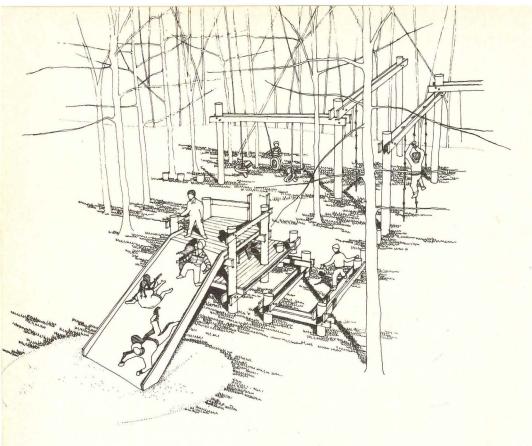




Arc-shaped movable partitions, contrasting with the grid of acoustical baffles on the ceiling (left), are both high and low (bottom left). One of two small conference areas within the open plan (below) is partly screened by its blackboard. The executive office, with its own conference area (facing page, middle) is at one corner of the core. At the other corner, the employee lounge (facing page, bottom) offers wardrobes and lockers as well as vending machines and chaise longues.





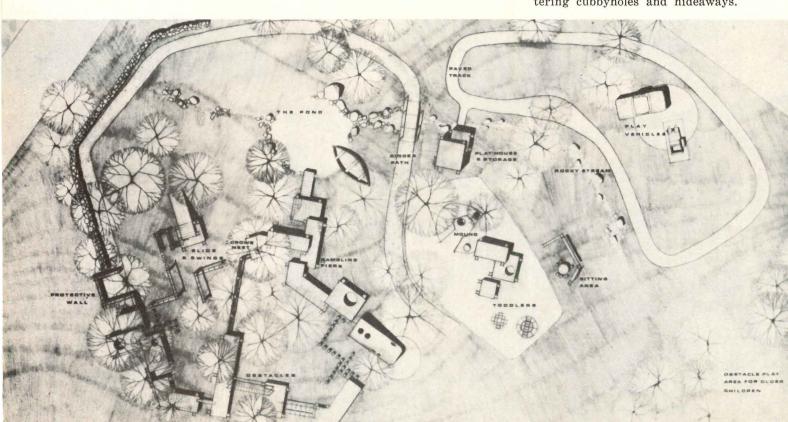


ADVENTURE ON CAPE COD

The "adventure playground" to be built for a Head Start Program at Teaticket, Cape Cod, Massachusetts, will use a limited spectrum of homey materials and will be built as a community do-it-yourself project, using muscle and materials contributed by parents and other interested citizens. What the playground has going for it is an imaginative plan by Hammel, Green & Abrahamson (Ronald W. Haase, project architect; Jeffrey A. Prescott, project designer) that will encourage the zeal of the builders during construction and the adventuresomeness of the kids when the project is completed.

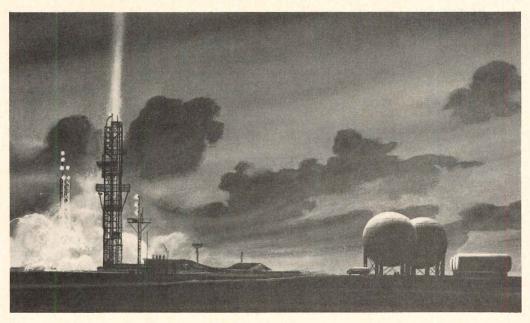
Using timber planking, fence posts, stone walls, cinder walks, sand pits, railroad ties, slides, cable cars, climbing platforms, and balancing rails, the designers have created a plan for a play environment that will keep children occupied and amused while at the same time taxing their inventiveness and imagination, as well as exercising their bodies.

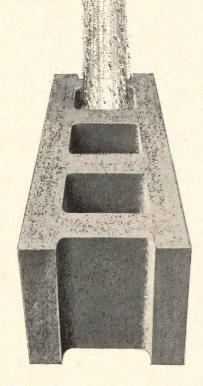
The playground will be in four areas: a sandpit for toddlers near an existing school, with an adjacent sitting area for parents; a playhousetool shed at the head of a circular track that surrounds two "play sculptures," an abandoned auto or tractor and its facsimile constructed by the kids out of materials at hand; a sand "pond" with an old lobster boat moored in it that can be wetted down when an artificial rocky stream is activated; and a rugged play area for older children (not shown) consisting of obstacle courses and the like. The playground will be protected from a neighboring road by a stone wall that will become, halfway along its length, post and plank fencing supporting play platforms and sheltering cubbyholes and hideaways.



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MECHANICAL ENGINEERING CRITIQUE

SNOW MELTING AIDS MUSEUM SECURITY

tem. Because the museum management wanted to close street doors to the galleries if a fire emergency arose, they had to provide an alternate escape route for visitors. This route will take visitors from the four buildings surrounding the courtyard into the central court and then down a flight of steps into a street.

The City of Hartford approved this method of evacuating the occupants, but, with an eye on the New England snowfall, required the museum management to insure that the outdoor exit path be kept free of snow at all times. To conform with this, the management decided to install a snow melting system for the whole courtyard and the main exit steps (see shaded area on plan).

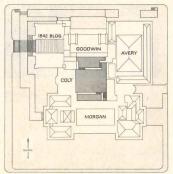
Difficult Requirements

Because there are storage rooms containing valuable art works beneath the courtyard, it was imperative that no water should seep through the base slab. Since a heating system embedded in concrete causes the concrete to expand and contract, expansion joints must be provided. However, these joints can, under adverse conditions, lead to water seepage, so the designers ruled them out.

Instead, they called for heated concrete slabs raised 15 in. above the basic slab. From this raised floor, water drains onto a membrane protecting the basic slab. This water then

drains to the basement through drains located outside the area where the art works are stored.

In order for maintenance men to service the basic slab, the upper slab has been cast in removable, 4-ft-sq panels supported on pedestals. Melted snow runs down through 3%-in. wide gaps between the panels (see sketch). But because the heating panels are removable, a hot water piping system could not be used. Instead,



the designers called for an electric heating mat to be embedded 1½ in. from the top surface of each panel, and provided a long lead connecting the mats to terminal boxes. Thus a panel can be lifted out and placed on an adjacent slab without disconnecting the electrical supply while maintenance men inspect the base slabs.

Permissive Load Control Lowers Fuel Bill

Although electric power rates are dropping, peak demand often causes high energy bills. A sudden snowstorm could create just such a peak load. The Hartford Electric Light Company estimated that, with

uncontrolled and intensive periodic use, the snow melting might incur a yearly electric bill of about \$6700. By the use of a PLC system supplied by the Climate Control Division of the Singer Company, which also furnished the mats, this estimate was reduced to \$3240.

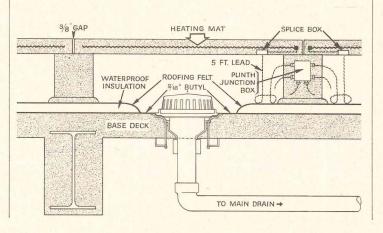
Only three steps of the usual eight-step control were used for snow melting. Each step is connected to a 100kw zone of the thermal slabs. The zones switch on concurrently if the selected peak control setting is not exceeded, or some zones may be briefly deferred. Output of the mats is 55 w per sq ft operating at 208v.

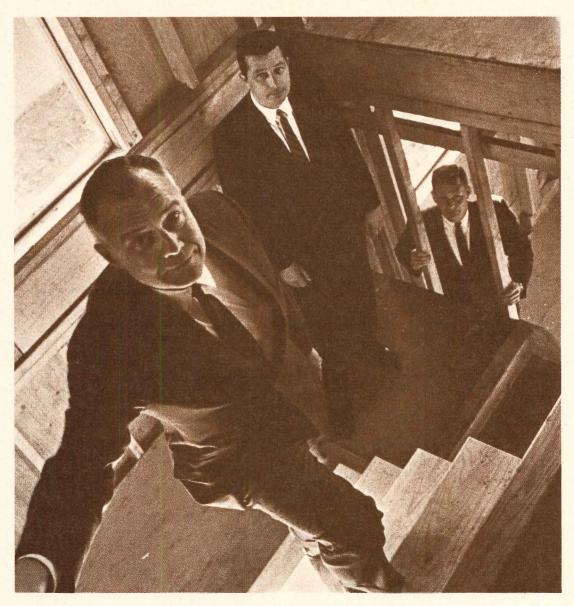
Architects for the modernization were Huntington, Darbee & Dollard. The mechanical and electrical consultants were Fred S. Dubin Associates.

BY WM. J. McGUINNESS

Heated removable slabs over a courtyard melt snow to provide safe emergency exit for museum visitors in Hartford, Conn. McGuinness is a practicing engineer in New York City.

A courtyard in the Wadsworth Atheneum, Hartford, Conn., combines its aesthetic role as a display center for sculpture with a not so obvious duty as part of an emergency exit sys-





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SPECIFICATIONS CLINIC

VITREOUS WALL COATINGS

BY HAROLD J. ROSEN

Rosen discusses the events leading to the Federal specification for tilelike wall coatings, and comments on how to make best use of the specifications. The author is Chief Specifications Writer for Skidmore Owings & Merrill, New York City.

In December 1960, this column decried the lack of standards in the field of vitreous wall coatings. It suggested that the manufacturers of these tilelike coatings get together and establish standards of minimum performance based on abrasion resistance, washability, hardness, impact resistance, chemical resistance, fire tests and weathering. No action resulted, and a plea for standardization was repeated here in

August 1961 and April 1964.

The need for standardization in this field was quite apparent. A rash of manufacturers flooded the market with coatings purporting to be tilelike in their characteristics. These coatings included the cementitious types; the resinous types including polyesters, urethanes, vinyls and epoxies; and a combination of cementitious and resinous coatings. Application recommendations varied from three coats to seven coats, and manufacturers' literature described physical data in Tower of Babel language. It was by far the most difficult morass through which a specifier had to struggle to assess and compare competing products.

The New York Chapter of CSI created a committee to look into the possibility of standardization, but it was obvious that the manufacturers or a standards writing group would have to get involved in such an undertaking. The Los Angeles Chapter of CSI issued a study on specifying vitreous wall coatings. It remained, however, for the General Services Administration to tackle the problem by getting the manufacturers together, and, after considerable investigation, it promulgated a Federal specification, TT-C-550a, dated October 11, 1965 and entitled "Coating System, Glaze, Interior, for Masonry Surfaces."

The Federal specification is not written around any specific material. It permits a manufacturer to use any liquid organic coating system, or any combination of coating materials, provided that it meets the requirements of the standard when applied to masonry surfaces in not more than four coats. The manufacturer is given wide latitude in the selection of raw materials. This is as it should be, since the architect and specifier could not care less whether manufacturers use exotic components such as epoxies, urethanes, and polyesters, or less sophisticated materials. The ultimate concern is whether the finished product can measure up to the evaluation required under the Federal specification.

The Federal specification establishes both qualitative requirements and quantitative requirements. Under the heading of qualitative requirements are included such characteristics as color, appearance, flexibility, washability, resistance to chemicals and cleaning agents, resistance to perspiration, fungus resistance and moisture resistance. Under the heading of quantitative requirements are listed fineness of grind, curing time, dry opacity, specular glass, directional reflectance, hardness, abrasion resistance, burning characteristics (flame spread and smoke development), and adhesion.

Any standard produced by any of the standards making bodies must be a compromise. It is quite obvious that this Federal specification is a compromise, but at least it does establish a plane of reference. For those specifiers who desire to upgrade the standard, there is no reason why some of the minimum and maximum requirements established cannot be modified in their project specifications.

For example, under burning characteristics, the following requirements are listed:

Flame Spread — 25
Smoke Developed — 50
The specifier can very well require these modifications if a building code requirement demands a Class A Interior Finish, and he can specify the following:

Flame Spread — 25
Fuel Contributed — 0
Smoke Developed — 0
Additional test requirements,

not listed in the Federal specification, may be added by the specifier if the projected use is demanding and requires resistance to certain specifics. For example, if it is to be used in animal rooms or food processing plants, hot water or steam cleaning may be used for maintenance purposes. Tests for resistance to scrubbability and resistance to heat and cold cycles may be specified. However, whenever additional requirements are introduced, the changes should be discussed with a materials manufacturer to ascertain if a product can be formulated that will meet these deviations from the Federal specification. If so, the specifier will want to know what the premium is to accommodate the change.

Although it has taken a long time, it is encouraging to find that one sore spot in the specifier's armament of materials has been eliminated by the establishment of a standard on which a better and enforceable specification can be built.

WILLIAM LESCAZE architect HARRY H. LEFKOWITZ associate architect DIESEL CONSTRUCTION CO. general contractor ELLWOOD TOWER mechanical engineer PAUL SUPPLY CO. plumbing wholesaler ECONOMY PLUMBING & HEATING CO. SAUER CO., INC. plumbing contractors



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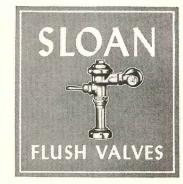
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IT'S THE LAW

MALPRACTICE SUITS

BY BERNARD TOMSON AND NORMAN COPLAN

Indemnification for errors or omissions suits hinges on two major aspects investigated by P/A's legal team.

With the number of malpractice (errors and omissions) suits against architects and engineers on the increase, there is a growing concern within the profession with the legal rights and liabilities of the architect or engineer on the subject of indemnification. This was manifested in the discussions held among the architectural, engineering and contractors' associations prior to the issuance of the latest form construction contracts issued by the AIA and the National Society of Professional Engineers, which dealt with the type of indemnification provisions that should be contained in those documents (see IT's THE LAW, NOVEMBER 1967 P/A and February 1968 P/A). Insofar as the architect or engineer is concerned, the right to indemnification involves two major aspects. The first deals with the circumstances that may subject the professional to liability for indemnification to the owner or to the contractor arising from a legal action instituted by a third party against the owner or contractor. The second aspect involves the circumstances entitling the architect or engineer to indemnification from the contractor in the event a claim for damages is asserted against the architect or engineer by a third party for injury sustained during construction of a project.

If suit is instituted by the owner against a contractor for damages arising from faulty construction, and the contractor seeks indemnification from the architect or engineer on the grounds that defective plans were the reason for the damages accruing to the owner, such action for indemnity, under the legal rule generally applicable, will be dismissed for legal insufficiency. The reason for this rule is that if the contractor establishes that he followed the plans and specifications and that therefore the defect must have been occasioned by faulty plans, this will constitute a complete defense to the owner's action and thus there is no occasion for indemnification. The owner then would have direct recourse against the architect or engineer.

A different situation arises, however, when the owner is sued by a third party for personal injury resulting from some dangerous condition at the project, and the owner seeks indemnity against the architect or engineer on the grounds that the plans or specifications resulted in such hazardous condition and therefore the architect should ultimately be held responsible. The liability for indemnification in such a situation is dependent on whether the hazardous condition was known to the owner or was latent or unobservable. If it was apparent, the courts generally will consider the owner and the professional as equally fault and therefore deny any right in the owner to be indemnified by the professional. If, however, the owner's acceptance of the project was without knowledge of the defect in the project, indemnification may be awarded.

If it is the architect or engineer who is sued by a third

party sustaining personal injury at a project site on the theory that his supervision of the project was inadequate, in that it failed to prevent the contractor from creating a dangerous condition causing the injury, the supervising architect or engineer will, of course, seek indemnification from the negligent contractor. If the construction contract does not clearly provide for indemnification in such a situation, the architect or engineer will be compelled to rely on the applicable judicial rule. Such general rule is that the architect or engineer is entitled to indemnification if the contractor was the active or primary wrongdoer and the professional's negligence was passive or secondary.

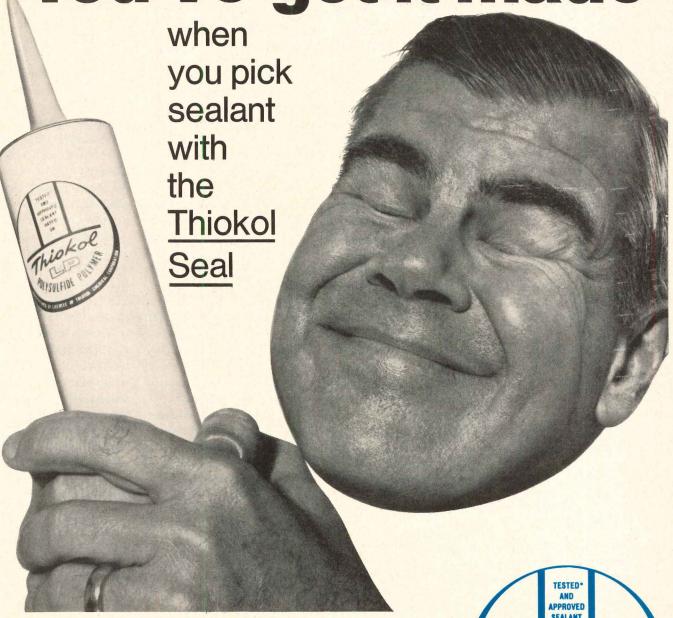
There have been decisions which, at least superficially, seem to weaken the general rule that the "active" wrongdoer is required to indemnify a "passive" participant in the conduct claimed to be tortious. For example, in the leading Illinois case of Miller v. De-Witt (see IT'S THE LAW, OCTO-BER, NOVEMBER, DECEMBER 1966 and JANUARY 1967 P/A), the Illinois courts held that an architect was not entitled to indemnification where a contractor was guilty of negligent construction, on the grounds that he failed to stop the contractor's work and thereby avoid the creation of the hazardous condition. The court in this instance treated the contractor and the architect as equal wrongdoers. However, in a recent New York decision the general rule was reaffirmed (Coffey v. Dormitory Authority, 26 App. Div. 2d 1). In this case, a student at the University of Plattsburgh collided with a clear glass panel adjacent to a door and sustained injuries. She alleged that the school authorities were negligent in permitting an entranceway to be installed in a dangerous manner, the clear glass panel not being perceptible to users of the entranceway; in failing to give warning of a danger by signs or markers; in failing to furnish adequate light to illuminate the entranceway; in failing to provide a safety grill in front of the glass; and, in general failing to take appropriate steps to prevent such an accident. The owner brought the contractor and the architect into the action seeking indemnification, claiming that the architect created a defective architectural plan and that the contractor had negligently constructed a trap. The lower court dismissed the third-party (owner's) plaint seeking indemnification. On appeal, this decision was reversed. The Appellate Court stated:

"Generally, the failure of a land owner to discover and remedy a dangerous condition affirmatively created by another is deemed to be passive negligence only unless after discovery of the danger, the landlord acquiesces in the continuance of such condition . . .

"The third-party plaintiff's complaint alleges that the third-party defendants caused and created the defective condition alleged in the original complaint and that the third-party plaintiff merely failed to discover the defects. . . . These allegations may be construed as charging passive negligence . . . and accordingly, in this case, sufficient to warrant recovery over."

Since the determination of whether an architect or engineer is guilty of active or passive negligence is factual in nature, the rule that a passive wrongdoer is entitled to indemnification from an active wrongdoer is inconsistently applied by the courts when the architect or engineer seeks indemnification from a contractor. Under these circumstances, the best protection for the professional is a clear and comprehensive indemnification provision incorporated in the construction contract.

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BOOK REVIEWS

FOUNDING FATHER RECAPTURED

BY LEONARD K. EATON

LE MONDE DE HENRY VAN DE VELDE. By A. M. Hammacher. Librarie Hachette, Paris, France, 1967. 353 pp., illus., \$50. The reviewer is Professor of Architecture at the University of Michigan, Ann Arbor, Mich.

This large and extraordinarily handsome volume is a triumph both of bookmaking and scholarship. Originally published in 1966 in Dutch, it appeared last year in a French edition sponsored by the Banque de Paris et des Pays-Bas at Brussels and in a German translation with the cooperation of the Deutsche Bank at Frankfort. The assistance of these worthy institutions was obviously necessary to underwrite the cost of the numerous exceptionally fine color plates that adorn the book and that the reader will undoubtedly want to study closely before plunging into the text. Superficially, the work looks like a "coffee-table book," but it is in reality much more than that. It is, in fact, the product of years of mature scholarship by Professor A.M. Hammacher of the Technological Institute at Delft, who has been working in the Van De Velde archives at Brussels for several years. Like many works of art conceived in the Low Countries, the book is both sumptuous and restrained. Professor Hammacher's object was to recapture for us the achievement of one of the founding fathers of the modern movement. To say that he has succeeded admirably is an understatement.

Henry Van De Velde (1863–1957) was a designer who, for a variety of reasons, has always had a bad press in the United States. In the first place, his work seems to belong largely to the Art Nouveau movement of the early 20th Century, which we have only recently begun to re-evaluate. Many of his finest achievements were in the minor arts (furniture, cutlery, candlesticks, and so on), and these accomplishments have been little known in this country.

Secondly, his reputation has been tainted by associations with the Kaiser's government in the First World War and with the Nazis in the second. In 1947, feeling against him in his native Belgium ran so high that, despite the entreaties of the queen, he removed to Switzerland, where he spent his declining years. Perhaps the passage of time has softened the attitudes of his countrymen toward him, as has happened with Maurice Chevalier and Herbert von Karajan.

Finally, Van De Velde's career was almost exclusively European in its orientation. He never heard of Sullivan until years after the latter's death, he was uninfluenced by Wright, and he made only one trip to the United States, which occurred in 1939 in connection with the New York World's Fair. Our ignorance is perhaps understandable, but no longer excusable.

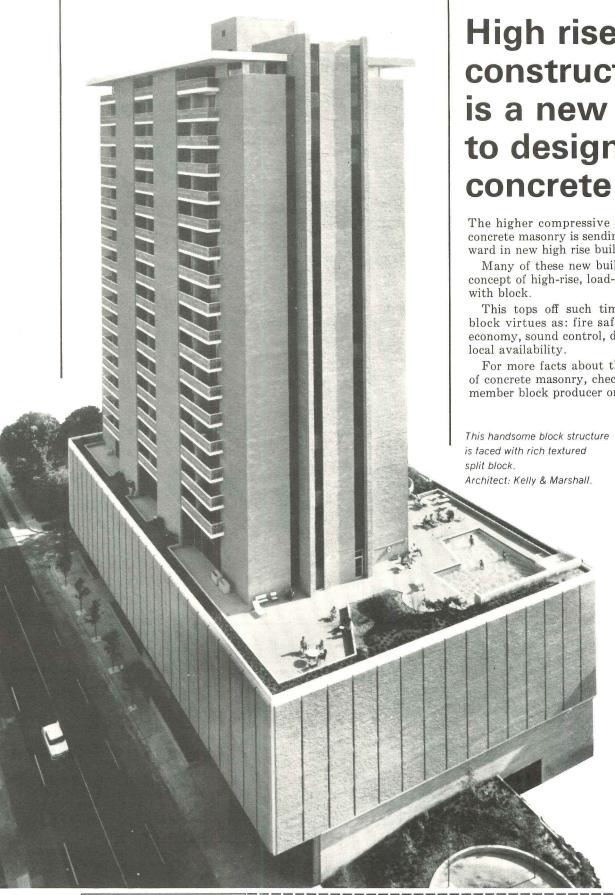
Born in Antwerp of middleclass Flemish parents, Van De Velde belonged to a generation that was first attracted to painting and then forsook that art for architecture. In this respect, his career offers interesting parallels to those of Peter Behrens and Eliel Saarinen, both of whom began as painters. Van De Velde studied at local academies, and in 1884 moved to Paris, where he encountered the work of Millet, Renoir, and, most important of all, Seurat, who opened up a new spatial vision for him.

As a painter, his own best work is in a pointillist vein, and in the excellent reproductions in this book it appears to be of amazingly high quality. (New York has recently seen some of it at the Guggenheim Museum.) In 1894, however, he gave up painting to devote himself to architecture and handicraft. In 1895, he built "Bloemenwerf," a small house he designed for himself and his new bride in a suburb of Brussels where he also started a workshop for the production of furniture and "honest" household articles. All this was very much in the tradition of William Morris. He attracted the attention of the Paris art dealer Samuel Bing, whose shop he decorated, and of the Germans Eberhard von Bodenhausen, Karl Ernst Osthaus, and Count Harry Kessler, at whose instigation he moved to Berlin in 1900. For the next 16 years, Germany was to be the setting for his career. Professor Hammacher observes that, although that country offered him great opportunities, he never felt fully at home there. Throughout his life, as the author shrewdly indicates, his psychology was that of an exile. This frame of mind undoubtedly was partly traceable to his family situation, and partly to his Flemish background. Flemish was his native language, but he had to use French in most of his dealings with the world. He admired French culture profoundly, but found himself rejected by the French Establishment in the famous affair of the Theatre des Champs Elysees in 1911-12, where he was outmaneuvered by August Perret.

Van De Velde's major achievement during his frenetically active pre-World War I period was the reorganization of the arch ducal school of art at Weimar. His heroic efforts here foreshadowed the later and much more thoroughgoing reorganization carried through by Walter Gropius, which transformed the school into the famous Bauhaus. It is suggestive that Gropius and Van De Velde evidently had a relationship based on mutual respect. A poignant letter of 1915 from Gropius to the older man remarks that Germany will one day realize what she owes to him. When the directorship of the school was filled, Gropius was Van De Velde's candidate for the job. A busy teaching schedule did not prevent Van De Velde from carrying on an active practice, and he also took a vigorous part in the violent theoretical controversies of the day. Although he lost the Théâtre des Champs Elysées, he was able to embody his ideas on theatrical design in a large building for the Werkbund Exposition of 1914 in Cologne. This theatre, since destroyed, was probably the best of his early work in architecture. In the bitter debates that racked the Werkbund, he was a proponent of individualism as opposed to the "typiserung" advocated by Hermann Muthesius.

The extraordinary quality of this book is most apparent in the sections in which Professor Hammacher examines Van De Velde's connections with the European artistic and intellectual world of 1900-1914. In these portions of the work, his attitude toward his subject is respectful and searching, but never filial pietistic. He shows that Van De Velde was deeply affected by the poetry of Baudelaire and Mallarmé, by the aesthetics of Count Kessler, and by the theories of Loie Fuller on the modern dance. The au-

Continued on page 198.



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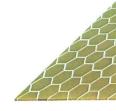
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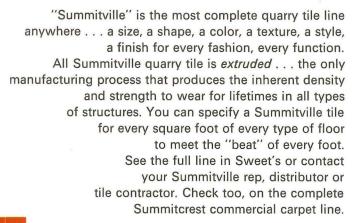
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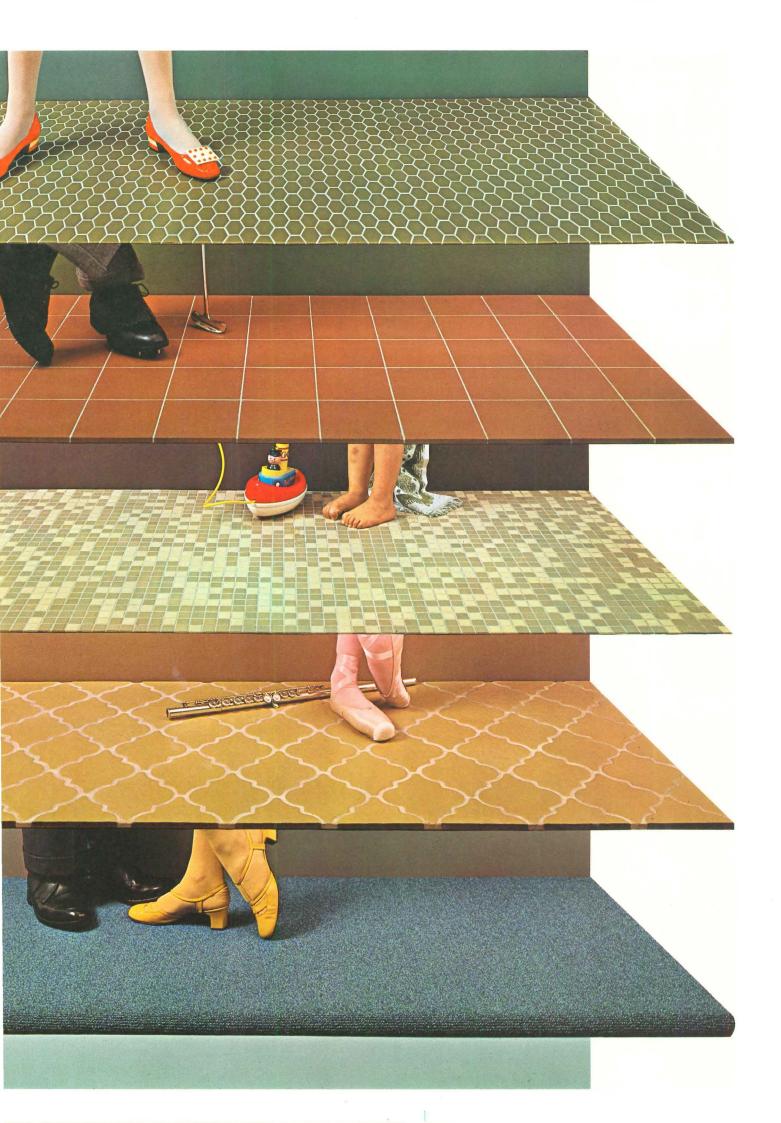


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Continued from page 186

thor handles the complicated literature on all these characters with consummate skill. Indeed, the selected bibliography he supplies obviously represents only a part of the critical appartus he brought to bear on his problem. Van De Velde also, he remarks, had close relations with the major painters and sculptors of the period, but was far less sympathetic to the important figures of the postwar era. He was very much a personality of la belle époque, and he could never, as did Gropius, deeply identify with the art of Klee and Kandinsky.

To establish the position of Van De Velde with regard to the vexed question of architectural ornament, Professor Hammacher analyzes his thought in relation to the writings of Louis Sullivan and Adolf Loos. Here, he notes that Van De Velde was much closer to Sullivan, whom he did not know at all, than to Loos, whom he knew well. It is a pleasure to this reviewer to find a European scholar treating one of the major figures in our architectural history so justly. The only dubious point in this generally scrupulously fair treatment is the assertion of Professor Hammacher that Loos made contact with Sullivan and Wright during his 1893-96 sojourn in the United States. Since Loos spoke no English whatever (and as a consequence could only obtain menial jobs), it is a little hard to see how fruitful personal relations could have been established. He could, of course, have seen many important buildings in the Chicago area.

My other criticism is that the street addresses of some (not all) of the buildings illustrated are missing. In general, the appendixes and indexes are extensive, well-organized, and useful, so that this slight oversight is the more surprising. Still, Professor Hammacher is likely to stir up a good deal of interest in his subject with this book, and people will want to visit these places. In the text, there are indications that "Bloemenwerf" still exists and could be restored as a monument to its creator.

After the First World War, Van De Velde, once a leader, was forced to come to terms with newer artistic movements. That he did so in any degree whatever is a tribute to the resilience of his character. After an interlude in the Netherlands, during which he was architectural advisor to the Kroller-Mullers on their great museum project at Otterlo, he finally returned to Belgium in 1926 to assume a professorship created for him at the University of Ghent. From this time until his retirement from academic life in 1936, he was occupied with his teaching and with a series of commissions that seem to have been mostly villas in the Brussels area. Like the contemporary work of Dudok, these structures were quite out of tune with the dominant international style of the 1920's and 30's. They may now be reappraised as a substantial architectural achievement. Van De Velde's finest completed building was, however, undoubtedly the Kroller-Muller Museum, which was carried through on a grandiose scale than originally planned, in the years 1937-53. Many museums have been built in the last two decades, but the Kroller-Muller will compare favorably with any of them.

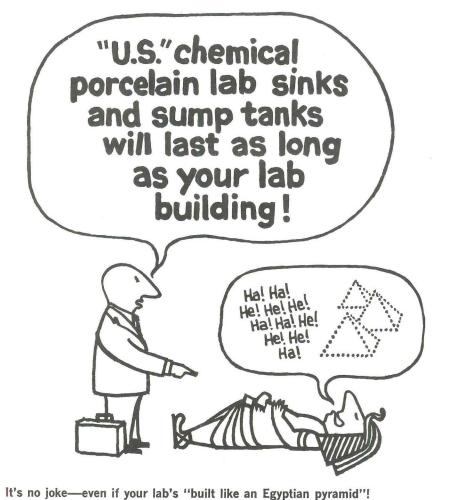
In short, we have here a major work of art-historical scholarship in the grand manner. It is lavishly illustrated, thoroughly documented, and rich in insights that go far beyond the realm of architecture. It should be required reading for every one interested in the history of the modern movement.

Yale's Little Magazine

BY NATHAN SILVER

Perspecta 11: The Yale Architectural Journal. Edited by Peter de Bretteville and Arthur Golding. Yale University School of Art and Architecture, New Haven, Conn., 1967. Illus., \$4, or three issues for \$10.50. The reviewer, an American architect teaching at Cambridge University, is architectural critic for The New Statesman and author of Lost New York.

Continued on page 212



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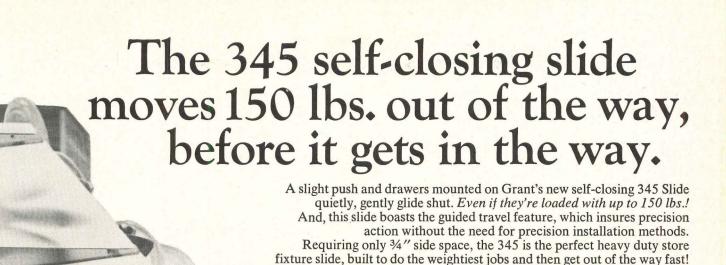
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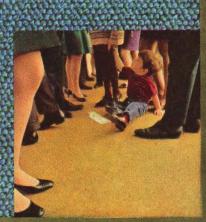


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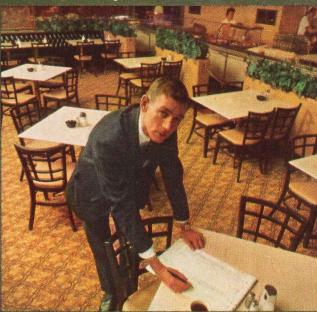
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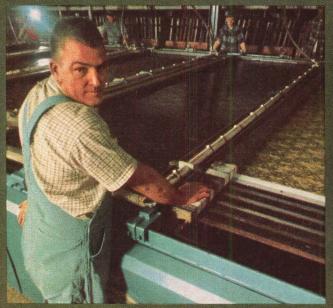
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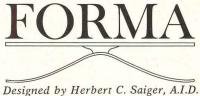
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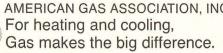


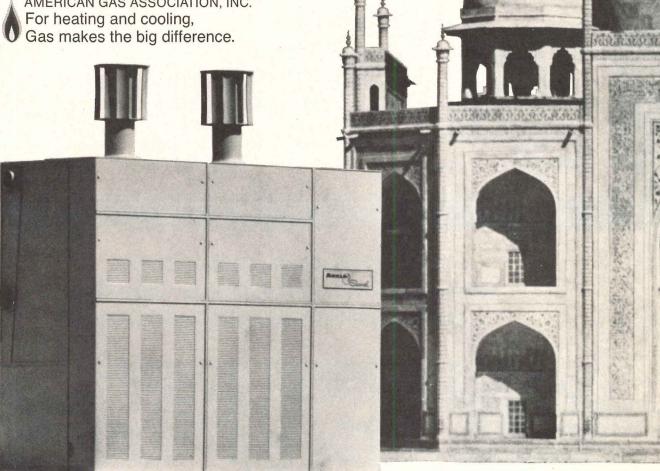
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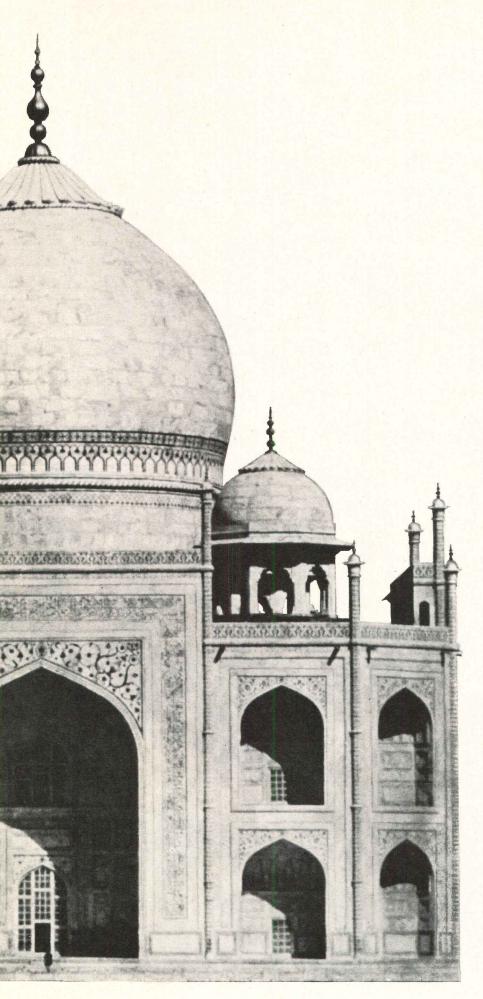
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A couple of years ago, there were so many people making movies — underground movies, overground movies — that a friend of mine in London decided the truly inside thing was to have not done a film. I've come to similar conclusions about the founding of little magazines. New ones are appearing all the time on culture (emphasis on communications) or art (emphasis on mixed media). I really don't want to start one and it's not a question of being inside or out: When I hear about a new magazine now, I feel vaguely threatened.

As soon as a little magazine actually emerges on the strength of three previously unpublished pieces, two friends who can write picture captions, and an article reprinted from Sight and Sound, my heart sinks; I know I'll subscribe, and probably will pile up the successive issues (if any) unread.

But the real threat, I feel, in little magazines is quite apart from their intrinsic quality or lack of it, apart from the rich veins of material that turn out to be a few dozen manuscript pages deep or editorial manifestos so broad that the coverage of

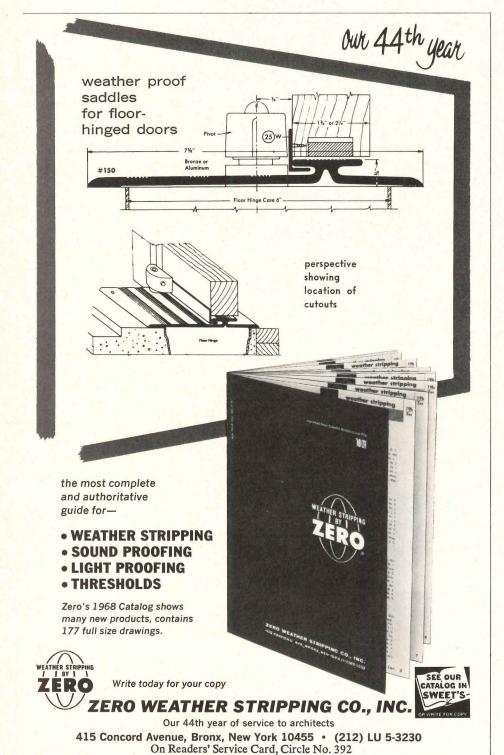
each issue is shallow. My perhaps ludicrous worry is this: I suspect that a minority medium that tempts or nags contributions will get a proportion of excellent ones. But how many interested people will be able to find those excellent articles, scattered as they are among obscure quarterlies, university journals and occasional publications? In short, where is the public for these pieces? Big journals are threats, too. Those of us secretly glad when Architectural Forum died (one magazine less to read) had to scramble for our free copies when it phoenixed back with Alexander's fine piece, "A City Is Not a Tree." Maybe engineers and scientists can escape the keeping-up problem with published indexes and abstracts of periodicals, but publications in architecture and the arts aren't abstracted. Among the little magazines, for every consistently superior one like Landscape or ICA Bulletin (Institute of Contemporary Arts, London), there are scores that come with a few fine articles, then quietly go. Or worse, stay around chewing on their tails. The little arts magazine Form has been reduced to doing pieces on historic little arts magazines.

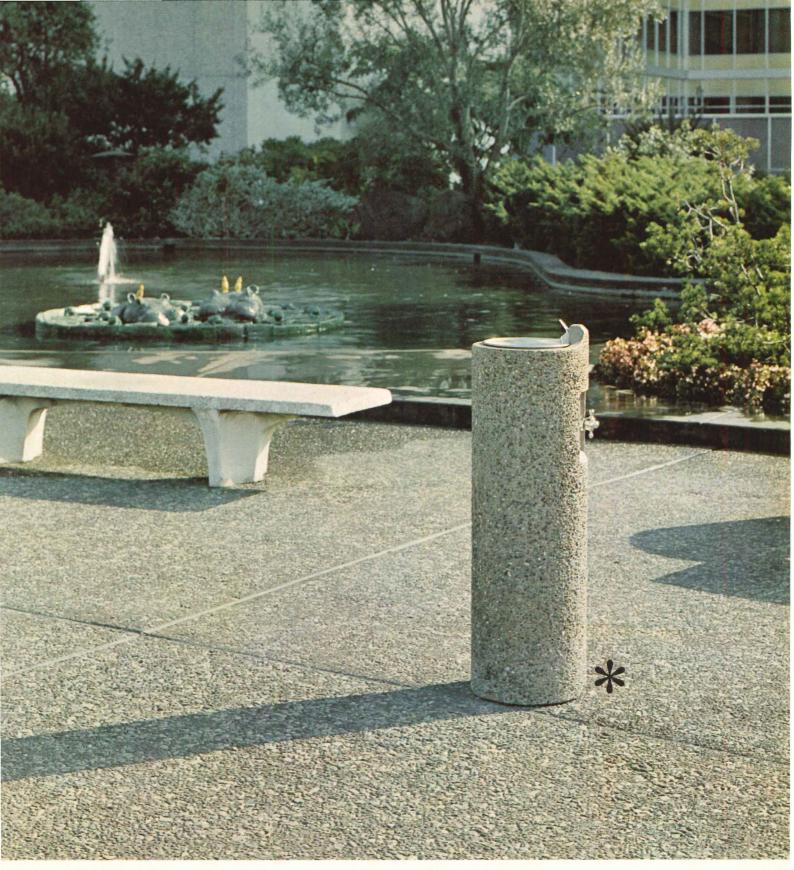
Which brings me to Perspecta. Edited by Yale students, Perspecta is a biggish-little arts magazine now 17 years old, during which time 11 issues have appeared. In format and contents it is definitely a superior product, though I'll say more in a moment about how consistently so. To think of the pestering that must have gone on to get even a reprint from Shadrach Woods in Europe, or a speech text from Marshall McLuhan! But Perspecta is no ordinary little arts magazine, and mere students have a lot of leverage when they are standing on the accomplishment of 10 estimable issues.

Perspecta 11, like its forebears, can hardly be called scholarly or even serious; if it were it could not contain the blather by Buckminster Fuller and John McHale from Southern Illinois University (center of the "World Resources Inventory"). That is, the substantive issues are serious, but the discussions of them are not. There is an atrocious piece of writing by Sheldon Nodelman on "Sixties Art" that might be scholarly. In which case I hope Jackson Pollock's widow privately confided to Nodelman that Pollock committed suicide through despair about where he could go after drip painting, as Nodelman alleges, because the rest of the art world thinks he died in an accidental car crash and was well into a significant new period of his work.

If not "scholarly" and "serious," what then? The tone of *Perspecta* isn't that of

Continued on page 218





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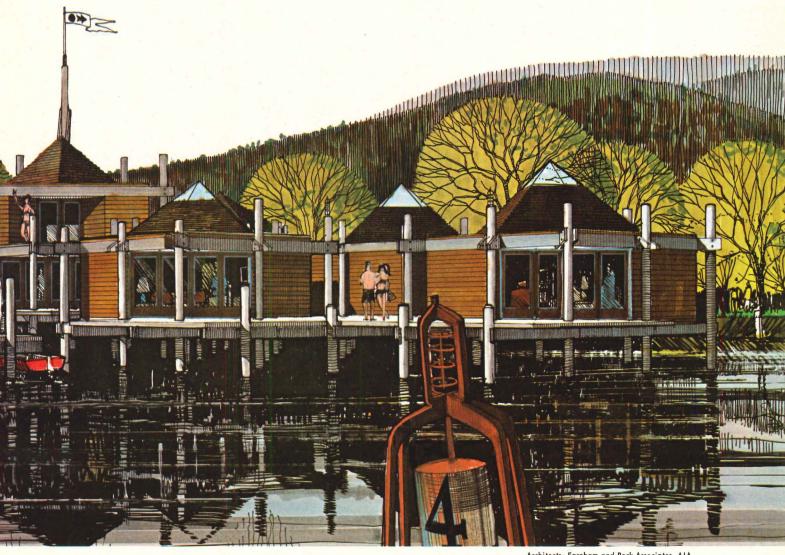
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Office blocks in Holland and Switzerland; An English University; A Swiss School; and the Italian Institute for Export Trade.

Section three, *Details of Interiors and Fittings*, considers wall decoration and provides examples of various types of wood paneling, concrete reliefs, and internal surfaces which have been treated with plastic, fiber, and quartz. The pages illustrating the Teichert "Printer" process are especially interesting. The remainder of this section covers exhibition details of the Swiss country exhibition of 1964.

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Structural Use of Natural Stone Walls
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Building With Concrete
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Canton School, Winterthur, Switzerland
University of Sussex, England
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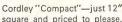
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a research report, but that's all right: As George Howe wrote in Perspecta 1 (1951), the magazine hopes to offer a medium "through which the potentialities of contemporary expression in architecture might be explored without programmatic implications." The lack of program (or shall we say, theme) continues today, and even the coincidences are not structured. A reprinted article in Perspecta 11 by George Nelson on "Obsolescence" thoughtfully overwhelms the glib references to the same subject by McHale and Peter Cook. Also in the current issue, John Cage thinks McLuhan is pertinent to understanding the future; Robert Theobald, on the other hand, thinks McLuhan is interesting but unsystematic. By the way, how did editors de Bretteville and Golding get on to Theobald? The tape-recorded interview with him is one of the longest pieces in the journal, and by far the most stimulating. Here is a real avant-garde, but it is not prophetic architecture or art. Theobald is an economist - the man who introduced the guaranteed income concept in 1963. He talks about the future of society in terms of work, goals, and systems that can be applied as soon as we feel like it - a refreshing change from the distant architectural utopias one frequently sees conjured up, where the ground between here and there is unclear, to say the least.

In fact, the Theobald interview represents Perspecta at its best. Rather than serious research or scholarship, the magazine offers assertions, hypotheses, declarations and convictions. Sometimes these are pretty flimsy, as when Peter Cook says "the prepackaged frozen lunch is more important than Palladio." (Maybe lunch is more important than Palladio, but "prepackaged frozen" is merely a crafty way of making technology sound more important than cultural continuity. I deny the conflict exists.) Sometimes they are brief and beautiful, as Paul Davidoff's simple statement on "Democratic Planning," or, yes, Marshall McLuhan's concise talk on "The Invisible Environment," apt for architects in a way that his speech at the 1967 AIA convention was not. Besides these, the editors produce portfolios of design work that certainly explore contemporary expression without programmatic limitations.

The subjects on which the fullest assertions are made in *Perspecta 11* are planning, network-type; disposability and obsolescence (some cant here); the funny stylistic diversity of art at the moment (my observation, based on the reports given). There is less concentration on architectural expression than one would have ex-

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New Haven, August 19, 1967....

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"New Haven comes closest to our dream of a slumless city."

—Robert C. Weaver, Secretary of Housing and Urban

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At the height of last summer's rioting, Mayor Lee paced his map-lined basement command post, tears in his eyes. "Why? Why? Why?" he asked.

Even before police removed their sky-blue riot helmets, and the last armored car rumbled off the street, a team of P/A editors arrived in New Haven. They, too, wanted to know "why?" What went wrong in this showcase of urban renewal? And how responsible were the architect-planners of the "new" New Haven for what happened?

Their straightforward and provocative answers appeared in the January *Progressive Architecture*, in an article titled "Urban Planning and Urban Revolt." It took a hard look at New Haven's touted renewal programs and their effect on the poor of the city.

It described how the "renewal" of certain older neighborhoods actually helped increase tension between races. And it frankly pointed out the noncurative nature of most U.S. urban planning programs. The report made it clear that, as one of our readers put it, New Haven is "not a model, but a warning."

"Urban Planning and Urban Revolt" is typical of P/A's unique editorial approach. The article went beyond telling merely what happened in New Haven. It analyzed why it happened. And it reported this analysis in terms consistently meaningful to architects.

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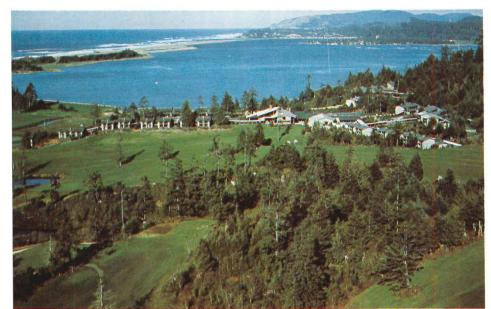
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Continued from page 218

pected, which is, I think, a hopeful sign. But Perspecta 11 is basically inconsistent, as always before. The bad and indifferent far outweigh the very good. Maybe it is time that Yale published a hardbound Best of Perspecta, which would reprint the declarations of old that are most rewarding to see now. A hard-boiled hardback publisher probably will not put together a volume as good-looking as Perspecta 11 with its expert design by Keith Godard and mirror-plastic cover. But it would be a great help for people like me who are terrified about missing the occasional really-eye-opening piece like the Theobald interview in the avalanche of little magazines.

NOTICES

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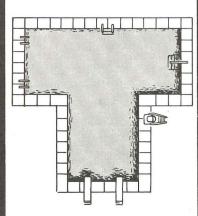
ASHLEY, MYER & ASSOCIATES, INC., Architects, Cambridge, Mass., announce that Douglas Cole Smith has joined the firm as partner and vice-president.

FRED BASSETTI & COMPANY, Architects, Seattle, Wash., have named John W. ALVING and KENT JOHNSON associates of the firm.

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Dry-film finishes, the microthin miracles

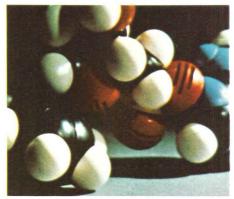
It's not hard to believe that modern chemistry can produce microthin plastic films tougher than any paint. But it is rather hard to believe that a polyester film can be produced that is more than twice as resistant to rubbing wear as high-pressure laminate—and that a polyvinyl fluoride can be unsurpassed in stain resistance. Yet these are facts.

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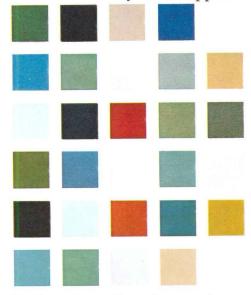
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For exterior applications U.S. Plywood also surfaces doors, panels and siding with a 2-mil opaque, pigmented film of polyvinyl fluoride. This coating on doors and panels is called Vigilar[®]; on siding,

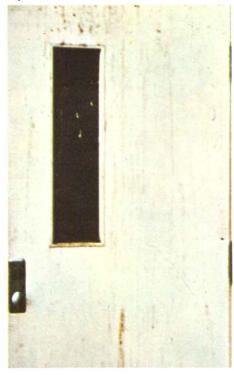
PF-L.® It is available in 11 colors. Vigilar is also recommended for interior use in swimming pool areas, showers, toilets and other areas requiring constant cleaning with harsh cleaning agents.

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Permacolor—A ½-mil film of clear polyvinyl fluoride laminated to an 8-mil film of colored polyvinyl chloride, Permacolor is a cleanable finish which is wear- and stain-resist-

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Permagard—A clear 3-mil polyester film which is an ideal cleanable finish for Weldwood custom-designed hardwood paneling and doors. Also available toned to change the natural color of the wood

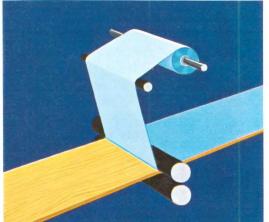
while retaining and enhancing the grain pattern.

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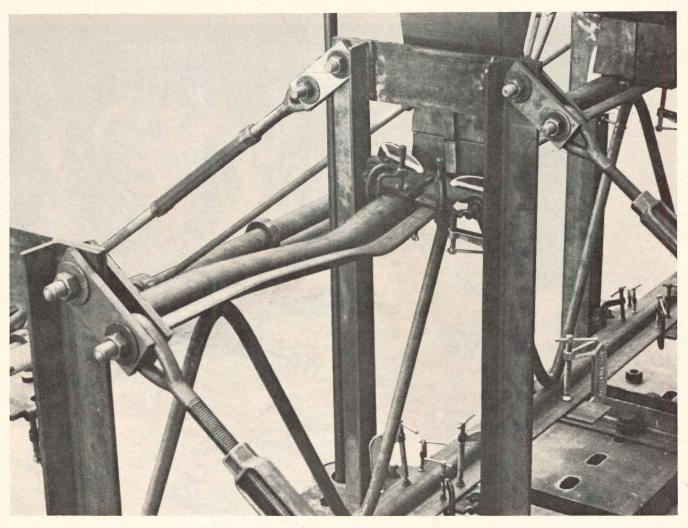


Performance Chart of U. S. Plywood Dry-Film Finishes and Comparable Service Materials

Test	Weldwood Permagard (Interior)	Weldwood Permacolor (Interior)	High Press. Laminate (Interior)	Weldwood Vigilar (Exterior)	Enamel (Exterior Type)
Accel. Aging by Humid—Dry Cycling ASTM D2571-67T	Outstanding No Checking or Crazing	Outstanding No Checking or Crazing	Excellent Crazes at 12-15 cycles	Outstanding No Checking or Crazing	Satisfactory Checks at 3-4 cycles
Tape Adhesion ASTM D2571-67T	Excellent No Damage	Excellent No Damage	Excellent No Damage	Excellent No Damage	Excellent No Damage
Hoffman Scratch Test	Excellent 500 Grams	Excellent 600 Grams	Outstanding Over 1000 Grams	Excellent 600 Grams	Satisfactory— Excellent 300-900 Grams
Taber Wear CS-17 Wheel 1000 Gram Loan Fed. St'd FS141-A (6192)	Outstanding 3000 Cycles/ Mil	Satisfactory 500 Cycles/Mil	Excellent 800 Cycles/Mil	Excellent 450 Cycles/Mil	Satisfactory 210-280 Cycles/Mil
Resistance to Color Fading NEMA LD1-2-06	*Outstanding Exceeds NEMA requirements by over 500 hours	Outstanding Exceeds NEMA requirements by over 1000 hours	Excellent Exceeds NEMA requirements by over 200 hours	Outstanding Virtually fade-free	Satisfactory Exceeds NEMA requirements by over 100 hours
Resistance to Staining NEMA LD1-2-05	Satisfactory Stains 7 out of 29 agents	Outstanding No staining	Excellent Stains 2-4 out of 29 agents	Outstanding No staining	Satisfactory Stains 7-16 out of 29 agents

^{*}Rating refers to clear finish only—substrate will have normal wood color change.

Note: Performance ratings should be compared only to the finish(es) shown in the adjacent column(s) in same category.



The Cold Hard Facts of Lab Research: Starting Point for Steel Joist Improvement

An aggressive program of research and development by the Steel Joist Institute has played a big role in the continuing improvement of open web steel joist designs and their acceptance by the building industry. For many years the Institute has sponsored R & D projects on steel joists at leading university engineering laboratories.

The photo above is a case in point. In this project, performed at the University of Kansas, tests were conducted to determine the ultimate strength and load-bearing capacity of compression chords in variously designed joists under concentrated and uniform loads. Manufacturers can also have investigations conducted on their J- and

H-Series joist designs to determine conformance with SJI standards and specifications. New ideas in joist materials and design are also carefully checked out before standards are established.

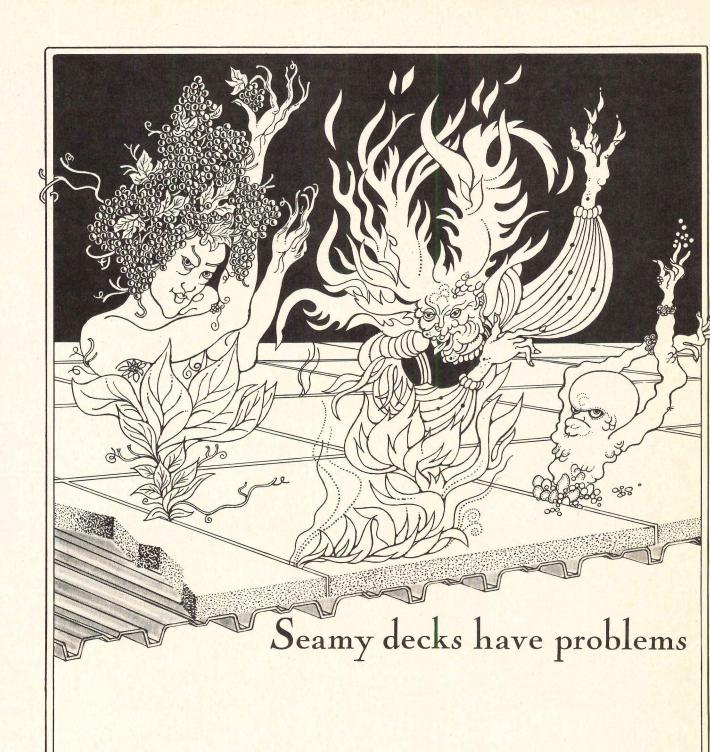


The Steel Joist Institute has just published a new edition of the SJI standard specifications and load tables. It's a practical working handbook for anyone specifying or using open web steel joists. Write today for your complimentary copy.

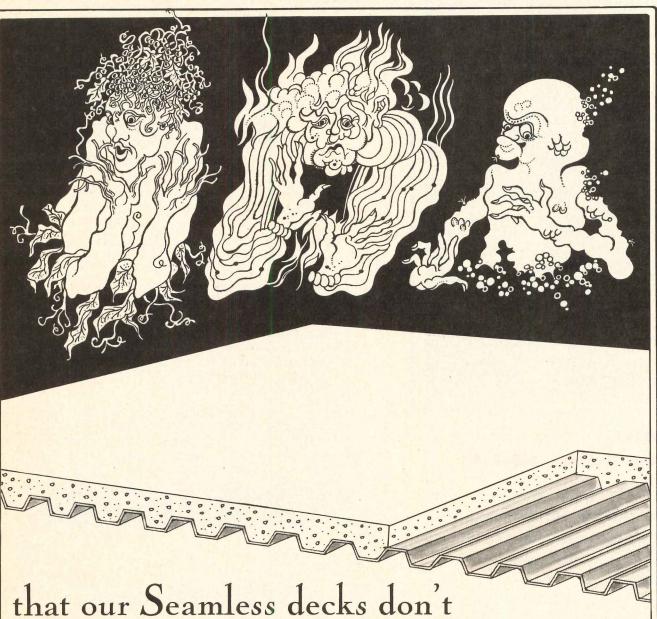


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Incidentally, for the literal-minded among you, the horrid characters above represent (left to right) Miss Vegetable Matter, Mr. Fire and Monsieur Rot.



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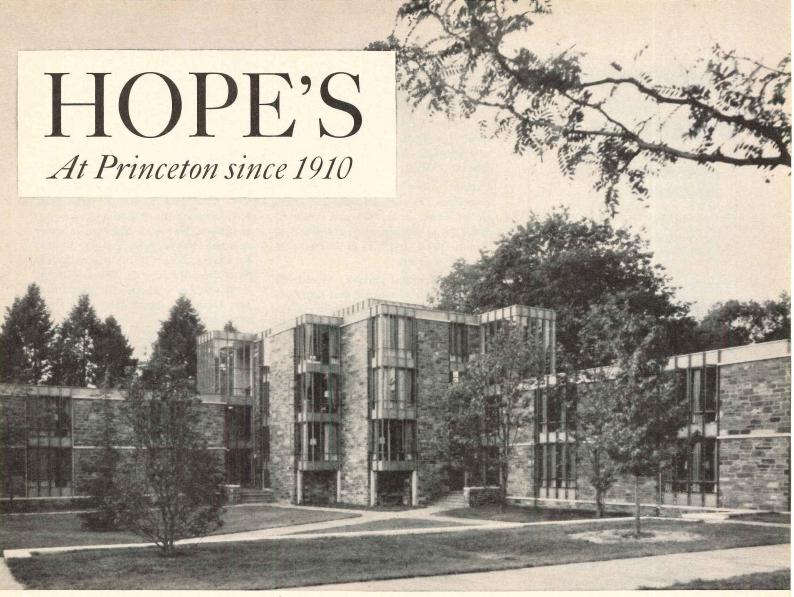
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Architects: Day Brothers & Klauder

1913 Graduate College
Architects: Cram & Ferguson

1925 Isabella McCosh Infirmary

Architects: Day & Klauder
1929 Henry C. Frick Laboratory

1929 Henry C. Frick Laboratory Architects: Charles Z. Klauder

1930 Dickinson Hall

Architects: Charles Z. Klauder

1947 Herbert Lowell Dillon Gymnasium Architects: Aymar Embury

1952 Edward S. Corwin Hall

Architects: Voorhees, Walker, Foley & Smith

1960 Dormitories and Social Hall Complex Architects: Sherwood, Mills & Smith 1962 John Foster Dulles Library of Diplomatic History Architects: O'Connor & Kilham

1963 Woolworth Center of Musical Studies Architects: Moore & Hutchins

1963 John C. Green Hall (re-designed) Architects: Francis Roudebush

1963 Henry C. Frick Laboratory Addition Architects: O'Connor & Kilham

1964 Undergraduate Dormitories Architects: Hugh Stubbins & Associates

1964 Guyot Hall — Geology Addition Architects: O'Connor & Kilham

1965 Magie Apartments

Architects: Ballard Todd Associates

1965 McCormick Hall — Art Museum Architects: Steinmann & Cain

1968 L. Stockwell Jadwin Gymnasium Architects: Walker O. Cain & Associates

1968 Physics Building

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Continued from page 224

BRODSKY, HOPF & ADLER, Architects and Engineers, have admitted JOHN N. BRATICHAK to partnership in the firm.

J. GORDON CARR & ASSOCIATES, Architects, New York, N.Y., have named two new partners: Paul Gifford Lips and Edward J. Meyer.

CAUDILL, ROWLETT, SCOTT, Architects, Engineers, Planners, Houston, Tex., have elected James B. Gatton and Philip C. Williams as partners and Paul Kennon, Bob H. Reed, and Dan R. Stewart as associate partners.

DEETER, RITCHEY, SIPPEL, Architects, Pittsburgh, Pa., announce that ARISTIDES J. MILLAS has become an associate in the firm, directing urban design and planning.

DEIGERT & YERKES & ASSOCIATES, Architects, Washington, D.C., have opened a branch office at 5 Swann St., Biltmore, Asheville, N.C., and have announced the addition of MORGAN V. RAINES to the staff.

ECKERLIN-KLEPPER-HAHN, Consulting Engineers, Syracuse, N.Y., announce that R. Donald Wintringer and Gordon R. Hyatt have become associate members of the firm.

FRIDSTEIN FITCH & PARTNERS, Architects and Engineers, Chicago, Ill., have named five new associates: Robert Edward Alfe, Michael Gelick, Anton E. Kampf, George Loschky, and Wallace A. Rappe.

GEORGE, MILES & BUHR, Architects and Engineers, Salisbury, Md., announce the admission of JOHN L. GRAHAM III to the firm as an associate.

GOLEMON & ROLFE, Architects, Houston, Tex., have named EDWARD A. TUFTS an associate.

HOLFORTY, WIDRIC, O'NEILL & ASSOCIATES, INC., Consulting Engineers, Troy, Mich., have appointed Frederick G. OLESZKOWICZ and DAVID SILBERG senior associates in the firm. Alfred L. Lopez was named an associate.

JOVA/DANIELS/BUSBY, Architects, Atlanta, Ga., have made HAYDEN H. HARRISS an associate in the firm.

NARAMORE, BAIN, BRADY & JOHANSON, Architects, Seattle, Wash., have named DAVID C. HOEDEMAKER a partner in the firm, and announce that JAMES W. EVANS and ROBERT S. HOOPER have become senior associates. Four new associates have also been named: CHARLES B. CHISOM, THOMAS R. HICKMAN, ALVA D. MYERS, and ROBERT R. SOWDER.

NEUHAUS & TAYLOR, Architects and Planning Consultants, Houston, Tex., announce that CARROLL C. RUDD is now an associate and director of design for the firm.

PETROFF & JONES ASSOCIATES, Architects, New York, N.Y. have named LEROY E. TUCKETT an associate partner. He will continue as the firm's director of production.

Schwarz & Van Hoefen, Architects, St. Louis, Mo., have named Richard T. Henmi to partnership in the firm.

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON, Consulting Engineers, New York,
N.Y., announce the following promotions:
to partner, Wayne A. Brewer; to senior
associate, Frank Hoelterhoff, Robert
E. Levine, Kent R. Rogers, Charles
Sandusky, William D. Ward, Lorents
L. Widing; to associate, Richard Chauner, Ernest T. Liu, Jostein Nes, Richard Taylor.

WILBUR SMITH & ASSOCIATES, Consulting Engineers, Columbia, S.C., have named George H. Aull, Jr., an associate with responsibilities in the field of municipal engineering.

JONAS VIZBARAS, Architect, New York, N.Y., announces that MARVIN J. RICHMAN has joined the firm as senior associate.

VOLLMER ASSOCIATES, Architects, Engineers, Landscape Architects, New York, N.Y., announce that Edward J. Moloney and Peter E. Shrope have joined the firm as partners.

JOSEPH S. WARD, INC., Consulting Engineers, Caldwell, N.J., have named ROBERT S. WOOLWORTH an associate and project manager.

ZION & BREEN ASSOCIATES, Site Planners and Landscape Architects, New York, N.Y., announce the promotion of three members of the firm to associates: JOHN G. VREELAND, ANTHONY FAVELLO, and MICHAEL L. GUERRIERO.

Elections, Appointments

LEO A. DALY COMPANY, Architects, Omaha, Neb., has established three vice-presidential positions, and has named the following men to fill them: HAROLD K. LOCKWOOD, Vice-President for Operations; HOWARD M. LUNDGREN, Vice-President for Administration, and FRED J. MATTHIES, Vice-President for Business Development.

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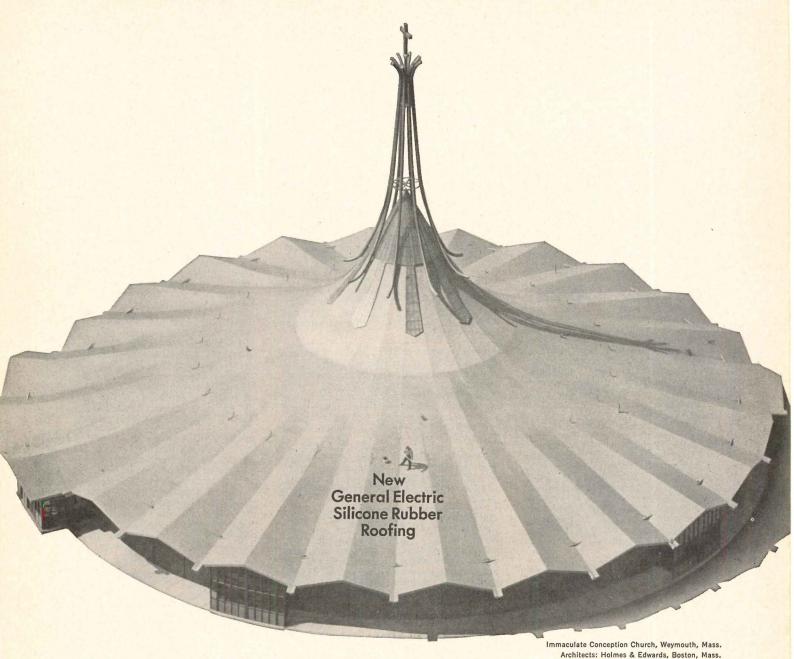


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JOBS AND MEN

Continued from page 236

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ARCHITECT—Experience: 12 years own firm with some work published; now on managing staff of expanding AE firm billing over 3 million annually; have had responsibility for all aspects of projects up to 10 million. Salary expected: \$20,000. Having enjoyed constant growth and profit in diversified practice, I have found that I need to relocate to benefit the health of one of my children. My objectives: continued challenge; a progressive, aggressive firm; warm and uniform climate; and if possible, low humidity. Partnership investment possible, but would rather become engaged prior to becoming married. Box #610, Progressive Architecture.

ARCHITECT—Korean arch. degree. Excellent command of English. Education sponsored by American. Age 29, unmarried, 4 years diversified commercial, residential, institutional buildings. Good sketching ability and perspective water coloring rendering. Won two prizes in Korean national exhibit. Desires cultural exchange architectural position in the United States. Has American sponsor. Box #611, Progressive Architecture.

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ARCHITECT—Registered, N.Y., Conn., and NCARB. Twenty years experience includes medical, educational, industrial, religious and residential work, supervision of 30 man office, multi-million dollar construction, contract administration, client contact and specification writing. Native, family man, can relocate. Desires responsible position with progressive firm. Salary \$12M minimum. Box #613, Progressive Architecture.

ARCHITECT—Registered, professional associate of the American Institute of Architects. BBA. B.Arch. Desires responsible position in Metropolitan St. Louis. Experience on commercial and public projects include client contact, design, development of contract documents, observation of construction and personnel management. 30. Married. Two children. Box #614, Progressive Architecture.

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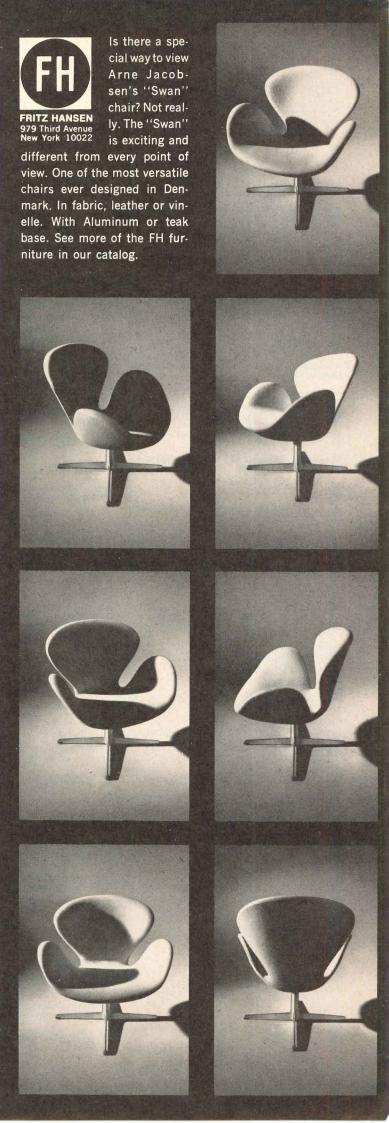
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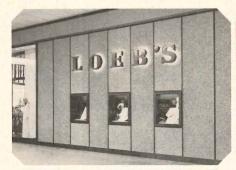


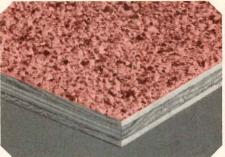
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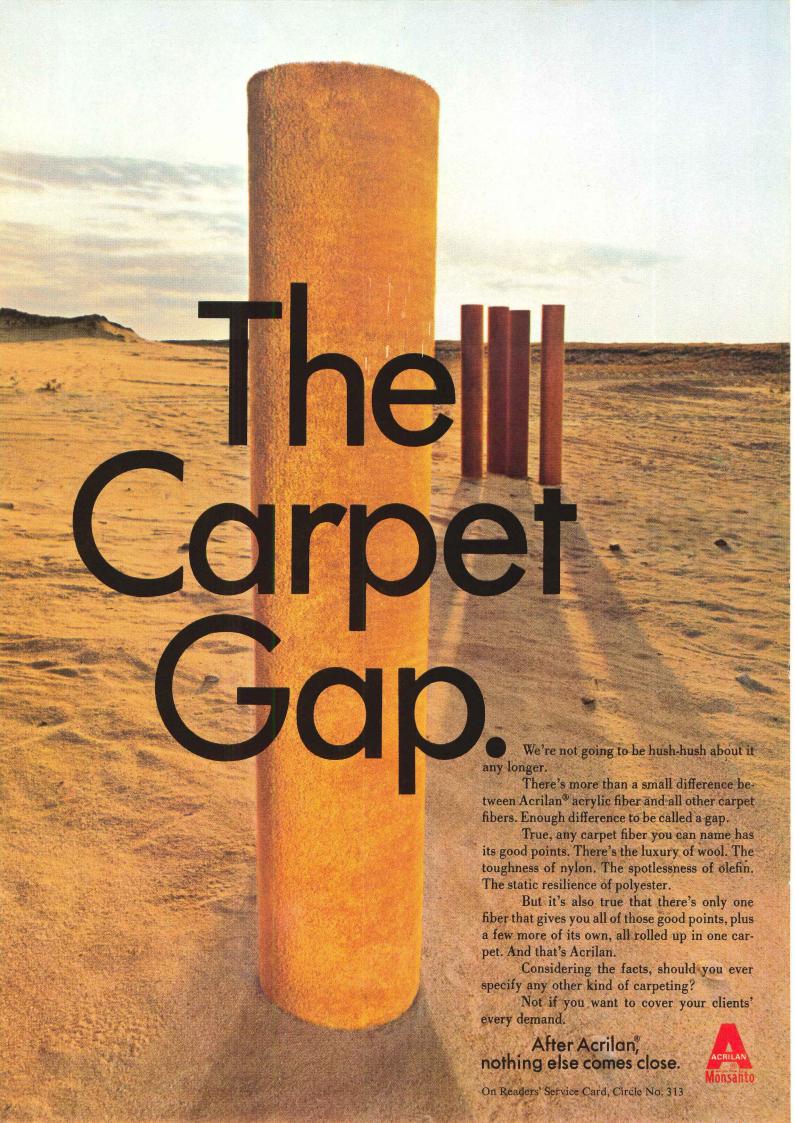
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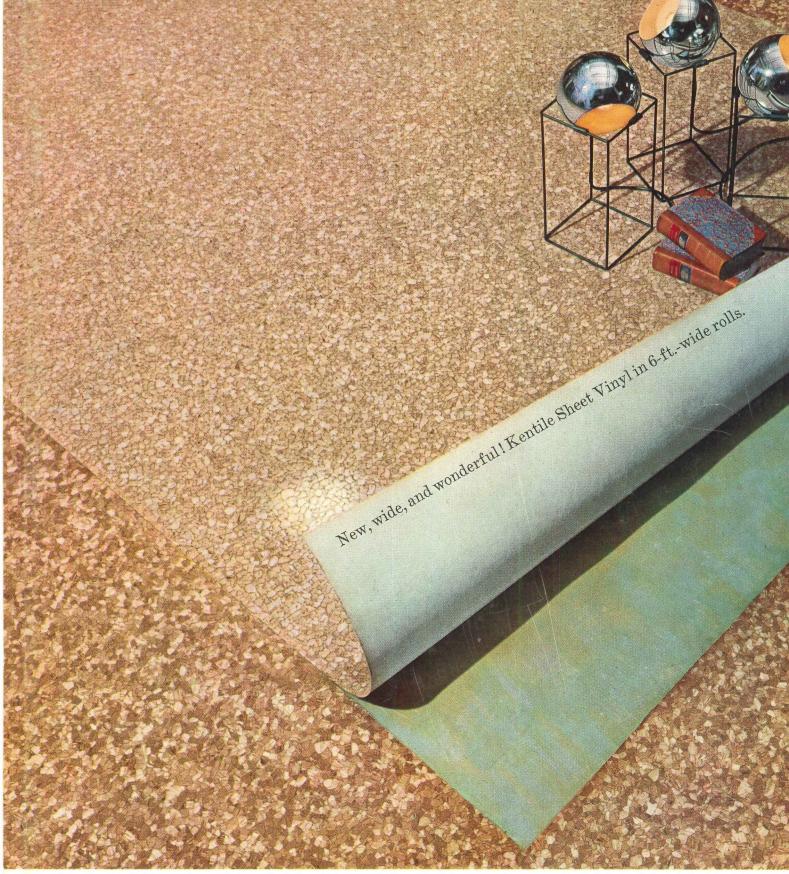
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