PA-1964-05
What a heavenly floor!

How do they achieve that textured surface?

Easy to install?

We've just done our good deed for today.

Yes... and a fresh new example of the creative styling that's a hallmark of Azrock vinyl asbestos tile.* This one's called Pebbled-Onyx.

By encasing fine chips of actual marble in translucent vinyl. Beauty you can see and feel, in a floor that's built for endurance!

A breeze... over wood or plywood subfloors, or over concrete above, on or below grade. The people at Azrock will gladly supply samples, color charts and cost comparisons with other resilient floorings.

Why are you smiling?

an exclusive floor by AZROCK®

*Also known as Vina-Lug.
It's new! It's nylon-quiet!

Hager 400S

EMERGENCY DOOR STOP/RELEASE
for center-hung doors

Attractive nylon "latch" with off-white rubber bumper insert gives double cushion for quieter closing.

Release spring-action latch with finger-tip pressure to swing door in emergency direction. The stop resets automatically.

Safety factor for
- HOSPITALS
- PATIENTS ROOMS
- NURSING HOMES
- CONVALESCING HOMES
- PRIVATE BATHROOMS

Hager 400S Forged brass mounting plate with Satin Bronze or Chromium Plated finish. Packed 1 to box with machine screws.

Use with Hager*
395-P DOUBLE ACTING DOOR PIVOTS

Top Pivot Assembly is cast iron equipped with a walking beam operated by a lever for easy installation. Bottom jamb bracket is cast brass. Bottom door plate is wrought steel with ball-bearing pivot sleeve. Regularly packed with wood screws for door and machine screws for jamb.

*Can also be used with most double-acting door pivots.
Armstrong makes every kind of resilient floor. The best is the one that suits your design.

HERE, THE BEST IS CUSTOM CORLON TILE.

Every hospital floor should be attractive yet hard wearing, comfortable yet easily maintained. It should be dimensionally stable so that joints between tiles do not open up and harbor contamination. And in this particular area—a hospital cafeteria—it must also resist grease, alkali, food stains and cigarette burns. Here, the floor is Armstrong Imperial Custom Corlon Tile, a homogeneous vinyl formulation, in a recessive, non-directional design that creates a handsome, monolithic effect. Used in the majority of areas in this new building, Custom Corlon Tile has aesthetic values and physical properties which are particularly well suited to the needs of a busy, modern hospital.

Because Armstrong makes every kind of resilient floor, your Armstrong Architect-Builder Consultant can make an objective recommendation of the floor best suited to your design. For more information, call him, or write Armstrong, 305 Watson Street, Lancaster, Pennsylvania. Credits: Research Hospital and Medical Center, Kansas City, Missouri. Architects: Gentry & Voskamp, Edgar B. Voskamp, A.I.A., Partner in charge, Kansas City, Missouri. Design Consultant: Gill Miller, Kansas City, Missouri.

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When you ask for Dur-o-wal®...

make sure it's Dur-o-wal®

the original masonry wall reinforcement with the truss design

Yep. We're kind of proud. Across and up and down the continent, ours is by far the most used brand of reinforcement for all sorts of masonry walls. Every once in a while, however, somebody tries to sneak in a substitute. So when you say Dur-o-wal, make sure you really get Dur-o-wal: (A) look for the truss design. And (B) look for the Dur-o-wal end-wrap shown above. That way you'll know you've got the quality reinforcement that increases horizontal flexural strength of 8-inch block walls up to a proved 135 per cent, does better than brick headers for the compressive strength of composite masonry walls. Want the facts? Write for Dur-o-wal Data File.

STRENGTH WITH FLEXIBILITY — this basic masonry wall requirement is met for sure (and economically) when Dur-o-wal, above, is used with the ready-made, self-flexing Rapid Control Joint, below.
New LHR* TWINDOW® reflects solar energy, vastly reduces heat gain

*Light and heat reflective.

In this simple demonstration, a 500-watt projector is used to simulate the rays of the sun. It projects a color transparency through an LHR™ SOLAR-GRAY® TWINDOW unit. The image to the left of the unit demonstrates the reflectance characteristics of the LHR coating.

Glass Conditioning with LHR TWINDOW. Because it reflects considerable light and heat toward the outside, LHR coated glass substantially reduces the rate of solar heat flow to interiors. Thus, interior temperatures are easier to control. And, while LHR glass allows for plenty of daylight, it reduces sun and sky brightness to a comfortable level.

As you might expect, the reduced solar heat load lowers air conditioning operating costs. And the insulation value of double-glazed TWINDOW reduces heating costs.

Esthetically, LHR glass has unique appeal. The transparent metal oxide coating fired onto its surface gives it a handsome metallic sparkle.

As a multi-functional glazing material, LHR TWINDOW's environmental

---

 Rays of sun simulated by projector

Demonstrates solar energy reflectance
control properties allow greater latitude in building design and orientation.
For full details, contact your local PPG Architectural Representative or write Pittsburgh Plate Glass Company, Room 4018, 632 Fort Duquesne Boulevard, Pittsburgh, Pa., 15222.

For more information, circle No. 427

Glass Conditioning... a new idea from PPG

<p>| COMPARATIVE PERFORMANCE DATA — LHR 140 TWINWINDOW INSULATING GLASS |</p>
<table>
<thead>
<tr>
<th>Visible Light Transmittance-%</th>
<th>Shading Coefficient</th>
<th>Maximum Heat Gain BTU/hr/sq. ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; Clear Plate, both sides</td>
<td>77</td>
<td>0.80</td>
</tr>
<tr>
<td>With LHR, one side</td>
<td>43</td>
<td>0.55</td>
</tr>
<tr>
<td>With Solargray, one side</td>
<td>37</td>
<td>0.54</td>
</tr>
<tr>
<td>With LHR Solargray, one side</td>
<td>22</td>
<td>0.40</td>
</tr>
<tr>
<td>With Solarbronze, one side</td>
<td>45</td>
<td>0.54</td>
</tr>
<tr>
<td>With LHR Solarbronze, one side</td>
<td>25</td>
<td>0.40</td>
</tr>
<tr>
<td>With Solex, one side</td>
<td>65</td>
<td>0.54</td>
</tr>
<tr>
<td>With LHR Solex, one side</td>
<td>32</td>
<td>0.40</td>
</tr>
</tbody>
</table>

1 In sun; refers to 1963 ASHRAE guide procedure.
2 July 21, 40 N Lat., West Elevation at 4 P.M.

* PPG makes the glass that makes the difference

Outdoor

LHR SOLARGRAY TWINWINDOW UNIT
"U" Value = 0.6
(Single glazing = 1.0)
LHR coating applied to air space side of outdoor light

Indoor

Visible light transmitted = 22%
Rudolph's A & A Building

Dear Editor: I think your presentation of the Yale Art & Architecture building (February 1964 P/A) is absolutely tops. I visited both the A&A building and the Beinecke Library, and think your presentation expresses the character of both buildings in fine style.

Harold D. Hauf
Los Angeles, Calif.

Dear Editor: For those who compare, it's PROGRESSIVE ARCHITECTURE one out of three.


Alex Weinstein
Omaha, Neb.

Dear Editor: Your Editorial in the February 1964 P/A was extremely well written and a good, strong statement.

I think the coverage that you people did on Paul Rudolph's building was an exceptionally fine piece. You ought to be congratulated!

Philip Meathe
Crosse Pointe, Mich.

Dear Editor: I commend you and your staff for the entire presentation of the Yale School of Art and Architecture building. It is by far the most graphic, penetrating, and alluring presentation I have seen.

I am looking forward to quality work of this degree in future issues of P/A.

David E. Calvin
Cascadia, Calif.

Dear Editor: Your presentation of Yale's A&A Building was superb. Such an unnecessarily complex building is difficult to represent well in a two-dimensional medium. Yet you and your staff did a most commendable job reporting it and far outclassed your sister publications graphically, editorially, and just plain professionally.

As for Rudolph's effort—well, it was just spatial exhibitionism.

Denis C. Schmiedek
Dearborn, Mich.

Dear Editor: It was unnecessary to print Paul Rudolph's face in the composite photograph on the cover of your February issue. His personality is everywhere in the architecture.

In one careful stroke he has pruned the trees of American Architecture back to the trunk, and this was necessary. He has started where Wright left off, and the pupil has made a poem of the stuff the master tossed aside.

The building is beautiful architecture. It is a joy and a wonder, as great architecture always is. One asks, "How did he make that inhuman pile that was the Larkin Building, come alive?" The answer is, gentlemen, that at last we have an artist in architecture, in America, again.

Reginald Caywood Knight
Longboat Key, Fla.

The Penn Station Obituary

Dear Editor: Congratulations on a terrific Editorial in the March 1964 P/A. Those of us here in Chicago who miss the Garrick will also miss Pennsylvania Station.

B. E. Graves
Chicago, Ill.

Dear Editor: I should like to express my commendations to you for drawing my attention among the millions of travel- ers who know how places "feel" and what buildings mean in purely human terms.

It makes the cause of preservation one for preserving the feelings and place associations of people, and less a movement of professionals bent upon preserving the sterile abstraction of an architectural history.

I hope your Editorial receives wide circulation among the millions of travelers who will pass there no more.

Nancy Williams
Daniel, Mass., Johnson, & Meadenhall
Los Angeles, Calif.

Total Environment

Dear Editor: I enjoyed the VIEWS column in the February 1964 P/A. I see little evidence that today's architect has become so good at designing buildings that he is ready to take on additional duties and responsibilities. One can, of course, refuse to accept my definition of "architect" as "one who designs buildings." But this still leaves us with the problems of getting better buildings designed by somebody.

The "shaping of the total environment" is another matter. Architects' writings on this subject have the appeal of over-simplification, like bedtime stories. The reality is much more complex; ask any planner. Besides which, there remains the nagging doubt: If we don't like their buildings, why would we like their cities?

Meredith T. Richards
Boston, Mass.

Dear Editor: Congratulations for stirring up the lethargic profession. The letters in P/A's February issue clearly indicate that once a real challenge is fired it will cause reverberations.

Joshua D. Lowenfish
New York, N. Y.

Carlin's Fire Station—A Disturbing Dissonance

Dear Editor: Perhaps this letter is unwise, and does not convey, moreover, an impressive thought. But I feel compelled to suggest that either your coverage of the Carlin Fire Station (March 1964 P/A) was poor, or, more likely, your Editors are a little nuts.

Regardless of the approach taken in solving the problems involved, the resulting building is the strongest statement of disturbing dissonance that I have recently witnessed. The designer's integrity is most visible, but the graphic results seem to be combined with no other qualities.

This building reminds me of a New England boiled dinner, no doubt a compliment in New England, but considered rather tasteless elsewhere.

Edward East
San Antonio, Tex.

The Kahn-Noguchi Playground—One Reader's Protest

Dear Editor: Concerning the Kahn-Noguchi "playground" for Riverside Park, N.Y. (p. 67, March 1964 P/A), it is only fair that criticism, lightly mentioned in your article, be heard.

This is not merely a playground built at the request of simply "interested citizens." This is in fact yet another memorial on parkland—this one named for the late Adele Rosenwald Levy, whose family and friends form the large influential part of that group of "interested citizens."

New York City is providing, among other things, free park land. Creating a new small park rather than consuming what little Manhattan has would better serve the community.

The "only actual buildings" need more description. It should be pointed out that, besides the buildings around four lightwells, the present ramp will be re

Continued on page 12
STANLEY HARDWARE GOES TO THE WORLD'S FAIR HOUSE OF GOOD TASTE

Stanley Hardware has been selected for the New York World's Fair House of Good Taste . . . including the Modern, Traditional and Contemporary Houses and the Hidden Assets Building. Here, millions of people — many that you'll be doing business with in 1964 and 1965 — will see Stanley Hardware in use. Below are a few representative items.

(A) Decorative 2915 Bi-Fold Door Hardware with exclusive ramp-type track socket that permits easy, snap-in installation of folding doors.
(B) Decorator approved Shelf Brackets and Support Strips with hidden slots for wall shelf beauty.
(C) Slim-Trim Shelf Standards and Clips for attractive, adjustable bookcase shelves.
(D) Modern BB93 Hinges, styled for contemporary architecture, that show only a slim, attractive knuckle when door is closed.
(E) Handy Folding Utility Legs that attach in minutes for making instant ping-pong tables, saw horses, and patio picnic tables.
(F) New 3-knuckle BB600 hinges that combine slim-silhouette styling with strength and durability.

See all these and many more Stanley Hardware and Hand Tool Products in use or on display at the wonderful World's Fair House of Good Taste.
INTRODUCING THE MAGNIFICENT MILANO LINE...
FRESH FROM THE ROYALMETAL DESIGN INSTITUTE
Leading designers note great scope of application.

STRIKING: “Of contemporary European persuasion, MILANO’s clean yet classic lines permit a pleasing blend of antique and modern. Elegance and function can thus be brought to the office reception room.” E.W.
"Pleasing proportion in a chair is not all arms and legs. MILANO's simple functionalism and restrained opulence permit very broad applications." R.C.H.

"The clean, strong shapes and variety of colors in the line lets one actually compose with MILANO. It becomes a medium of expression." J.E.

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"In excellent taste and delightfully versatile. Chairs with two arms, one arm and even without arms are wonderfully adaptable to interesting combinations of sofa units for reception room and office settings." J.McD.

"Finally a contemporary chair warm, comfortable and friendly enough to breathe some life into the outdated gentlemen's club. A happy victory." P.R.

"I felt that MILANO was too beautiful to limit to the commercial field so I brought one home. One wife and one long-legged son agree heartily." A.M.

Write for full-color detailed brochure. Royalmetal Corporation, Dept. 11-E, One Park Avenue, New York 16, New York.

MILANO Chairs, Benches, Ottomans, Tables. The new choice of the contemporary world, from ROYALMETAL®
The innocent-looking “or equal” phrase has been around for years. Manufacturers of quality equipment don’t like it. Price-cutting suppliers of inferior equipment hide behind it. Still, architects and consulting engineers include it in their specifications. Let’s look at some of the devastating effects of “or equal”.

Presumably, the phrase has the creditable task of encouraging a number of suppliers to bid on a job. In fact, it causes buyers to select equipment on the basis of price alone by implying that all bids cover products which are equal in quality. Obviously, no two products are ever really equal... especially when it comes to complex equipment. No two companies have equal know-how or service.

The Base Bid type of specification does away with many of the evils of “or equal”. It’s better for clients, contractors, architects and manufacturers. And, except for certain Federal work, there is no legal basis for prohibiting it.

Actually, the “Base Bid with Alternates” type of specification assures accurate definition of quality and preserves maximum competition. And the contractors can price their bid with confidence. As a result, lower prices prevail, and the architect and his client can decide on quality, price, design, life and service of a manufactured product in advance.

In Base Bid specifications, each item of equipment is clearly defined as to quality, capacity, function and performance. In addition, the manufacturer’s name and model number is given. In other words, the choice of equipment is up to the owner, architect and engineer... not the contractor or the suppliers.

The contractor is not forced to “shop” to cut his bid. He knows exactly what he and his competitors must furnish. And, if he objects to the specified brand of equipment, he may specifically ask for a change.

Finally, manufacturers of quality equipment are not penalized. Differences in price and quality are out in the open. Buyers can specify as much quality as they feel reasonable and necessary.

How do you answer those who cry “favoritism” at Base Bid specifications? Any judgement on quality will be subject to criticism from a personal opinion standpoint, but the professional knows that this is not a valid excuse for not making the judgement. Favoritism? Yes— to the client.

Architect, contractor, and manufacturer can all share pride in the finished job... a job completed as it was conceived (and specified). And, in the last analysis, the owner of such a building benefits most of all.

Honeywell

Continued from page 8

This Maginot Line of dim lightwells and labyrinthine concrete walls may express this decade’s architectural mystique, but it is hardly appropriate to a playground and does not say “park” no matter how hard one tries to imagine it.

Grass on roofs does not eliminate continual maintenance of a building, for which a need was never established.

Actually, this project duplicates existing park facilities:

A large playground, incredibly just 50 ft west and down a stair, which should be improved but not ignored:

A playground building, for storage and 46 toilets, which could be heated, its large portico enclosed for winter, at a fraction of the Levy Memorial’s cost without consuming park land;

A large wading pool lined with trees and benches, which renders the 20 ft round proposal minute;

An amphitheater just 2½ blocks from this proposal’s excuse for a building hidden below. A demountable shell would improve the existing facility at far less cost without use of further park land;

Finally, the most ludicrous duplication: the climbing-sliding “mounds.” The park is endowed with broad climbing hills, which make these proposals puny. Where is the sense of building little hills on the big ones? The “sense” exists only within a framework of artful contrivance, not within that of a park.

As for the hill—you call it a “shrubbery covered slope,” implying that if it is shrubbery covered it is not used and
This attractive kitchen is even more practical and efficient with a Princess® phone at arm's reach. For help in telephone-planning your homes, call your Bell Telephone Company Architects' and Builders' Service. See Sweet's Light Construction File, 11c/Be, for other residential telephone installation ideas.

ADD CONVENIENCE to the homes you design by providing for built-in telephone outlets and concealed wiring. Homes are more functional because concealed wiring offers flexible arrangements for a family's changing telephone needs.

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See the latest in public phones at the Bell System exhibit, Booths 314 & 315, A.I.A. Convention, June 14-18

For more information, turn to Reader Service card, circle No. 317
For sculptured facades...

**Plexiglas**

On these pages you see a few of the design effects which have been achieved through the creative use of formed facing panels of Plexiglas® acrylic plastic. Because of the easy formability of Plexiglas, such facing panels can be produced economically in sculptural shapes that cannot be obtained with most commonly used facing materials. Note the complex three-dimensional patterns in deep, medium and shallow relief shown above.

Plexiglas is rigid, strong and completely weather resistant.

Yet because of its light weight, panels of Plexiglas can be installed using simple supports and installation methods, resulting in significant cost savings in building construction.

With Plexiglas you can give individual design expression to building exteriors in a formable, colorful, practical material. Our new brochure "Plexiglas for Facing Panels" contains detailed and helpful information. We will be pleased to send you a copy.

For more information, turn to Reader Service card, circle No. 381

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Continued from page 12

not really valuable; therefore, this memorial is a better use of the land. On this slope are 45 to 50 trees, about 10 in. in trunk diameter, and this is not shrubbery. But what is proposed to replace them? A vast treeless tract, which in a New York summer is grotesque. The Parks Department should tend trees, seed slopes, and produce a more beautiful park at far less cost than the Levy Memorial.

If a community center is allowed in Riverside Park and a café is allowed in Central Park, what is to prevent invasion of other projects that ultimately will destroy our parks?

DONALD C. MALLOW
New York, N.Y.

The Seagram Decision and Distinctive Design

Dear Editor: I hope you will let a layman voice his shock and anguish at the Philistinism of Gerson T. Hirsch’s attitude toward the Seagram Building and the manner in which it is taxed (VIEWS, March 1964 P/A). Darkly psychic, he suspects the client’s motives in obtaining “... a distinctive building... with reduced land coverage.” Is this an AIA member speaking, God help us? Has he heard that architecture is one of the arts, a noble one? I suspect that he hasn’t, but looks upon it as a Uris Brothers rulebook for dispiritedly enclosing maximum space for the rapid recovery of costs.

The only piece of architecture I own is a two-bedroom frame house that was carpentered by an industrial designer in his after-office hours—a house that has some graces and numerous architectural gaffes. I aspire to a better-designed house, and object furiously to Mr. Hirsch’s view. Extended to my situation, it would mean that my willing act of commissioning an architect to design me a handsome as well as utilitarian two-bedroom house, an ornament on the cityscape and a joy to occupy, would bring upon me the penalty of taxes exceeding those demanded of my neighbors in two-bedroom boxes put up from a plan book without site considerations.

The fact that Seagram, like Johnson's Wax, in another day, is a commercial client is irrelevant to the issue. I might well have proportionate reason, in commissioning the design of the house, to gain, be identified with, bask in the approval and admiration earned by the beauty and efficiency of the honor. If, as a result, I were considered to have good taste, must I be disparaged and financially penalized because I may have sought to be so regarded, for whatever reason? Hasn’t the patron often been freely granted such reward, and doesn’t he warrant it?

As corporate and Government patrons are today the only sources of the funds and needs for design and structure on a scale of the Seagram Building, and therefore our only collective hope for the noble art of architecture to be expressed prominently, the attitude of Mr. Hirsch and the tax court is egregiously cavalier. What frightens me is, to repeat, the extension of their view to the individual, the private client—a dismal prospect indeed.

Incidentally, I have found today’s landscape architects refreshingly more thoughtful of human values, utilitarian and aesthetic, than architects, and far less fee-greedy and status-crazy, as perhaps is often true of an outnumbered, mainly young body of professionals. They are bursting with ideas, eagerness, and ready recognition of their unique usefulness and resourcefulness, at a time when everyone suddenly sees the dire need, in view of the growth of population and the compulsion toward outdoor living and recreation, for planners and planning of the total environment of life and work, not just the four-walled environment.

Central New York has an especially spirited group of landscape architects: they spearheaded the 1960 proposal for licensing of landscape architects by New York State, and succeeded in getting the proposal legislated into law, first attempt—and from them I’ve come to share their irreverence for the Colonel Blimps who’ve harrumphed disapproval at you for your Editorial of last fall suggesting that AIA stop acting like a trade association.

From the responsible view of the landscape architects as designers of the total environmental concept, it is manifestly pompous for some of your architect correspondents to insist that of course only the architect can—harrumph, harrumph—the chief and controlling decision-maker of the design team. Such a claim seems to me, too, to be absurd and blindly self-protective when you see how badly and extravagantly land is being used at the decision of architects, and plants, air space, and sunlight disregarded, or nearly so.

The situation causes me to remind architects of Satchel Page’s general advice, “Don’t look over your shoulder. Something may be gaining on you.”

CHARLES D. BONSTED
Syracuse, N. Y.

16 Views
custom crafted light fixtures for "way back" or "way out" architecture
(and all styles in between)

Each building, each room reflects individuality. This is why NL still (after 59 years) hand-crafts each fixture ... to esthetically satisfy any architectural period, style, type or decor. NL will design or translate your fixture designs into functional beauty. You may want the full story. NL has a 'light' man near you or write for catalog.
the most exciting ideas take shape in plywood
The sculptured curves of this pavilion look as though they could have been shaped only with a plastic material. Instead they were achieved with flat panels of plywood. Each roof unit is a hyperbolic paraboloid, laminated from four layers of 1/4" plywood and bolted to steel "T" sections rising to 28' at the center. Despite the complex curvatures, in-place roof cost was only $3/sq. ft., one-fifth that of aluminum and well below steel or concrete. For information on plywood building systems write (USA only) American Plywood Association, Tacoma, Washington 98401.
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Built by Florida's Miami Herald, the building is believed to be the second largest newspaper plant in the United States. The stainless was used in the main entranceway and in window framing, in elevator and escalator components, wall panel divider strips and railings, column covers and newspaper chutes, kitchen and office equipment, and many other applications.

The unusual use of Type 316 chrome-nickel stainless steel assures a proven defense against corrosion attack, a serious problem in Miami's salt-laden atmosphere. This is the same type of stainless used in process applications to combat highly corrosive salts, acids, dyes, and other chemicals.

The metal's resistance to impact, abrasion, and scratching promises lasting beauty and utility in The Miami Herald's fast-moving, round-the-clock publishing operations. Maintenance costs will be low because stainless steel requires no paint or special finishes, and eliminates the need for scouring. Dirt won't cling—is removed with simple soap and water cleaning—because stainless is smooth and nonporous.

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For more information, turn to Reader Service card, circle No. 424
The Miami Herald Building, photographed from the air over Biscayne Bay. The building was planned by Naess and Murphy, Architects and Engineers. General contractors: Gus K. Newburg Construction Company. Architectural stainless fabricated and installed by Rippel Architectural Metals, Inc.

The building entrance at night. Note that vital storm-proofing is achieved by closely criss-crossing stainless mullions which anchor 1/2-inch-thick glass. Doors are stainless, too.

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View of part of The Herald's business offices offers a close look at the sturdy stainless window frames and the lavish use of stainless in railings.

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Of the 17,487 stainless-framed windows in The Miami Herald Building, hundreds are equipped with sunshades secured to the building with stainless steel anchors, plates, and bolts.

Worm's-eye view of a stainless expansion joint employed to seal the open space between The Herald's offices and press structure. Joint eliminates vibration caused when the giant presses roll.

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Even in the Middle East the Men from Devoe offer

It's no accident that here in Lebanon and Kuwait—as around the world—so many new buildings colorfully wear Devoe paints.

First of all, the architects and engineers who build here know they need outstanding paint quality to resist the intense heat, the beating sun, the harsh winds and rains. And so they turn to Devoe interior and exterior paints—among them Vinyl Wonder-Tones, Velour Semi-Gloss, Mirrolac Enamels, alkyd Velour Flats.

Then, the Middle Easterners possess a keen insight into color—it's a special genius of theirs.
They demand subtle tones and harmonies... they insist on accurate color matching for the best aesthetic effects. Here is another reason for Devoe: with its vast Library of Colors® system, there is a range of over 1,000 shades—all tightly controlled so that every drop of Devoe paint is a precise match of the colors specified, even the most difficult and esoteric.

Wherever you may be building, Devoe paints are available. And so are the services of the Man from Devoe—who provides skilled, professional help with on-the-site problems from color choice to paint formulae. Just write or phone the nearest Devoe office to contact him. Naturally, there’s no charge for his services.

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For more information, turn to Reader Service card, circle No. 420
Creative use of Andersen Windows

accents entry
design of 126-unit
apartment complex

Stock window units, proportioned in a two-story panel, combine beauty, comfort and dependability

In the new Trenridge Apartments, Lincoln, Nebraska, combination Andersen casement and picture windows are used to complement distinctive styling while adding extra value for owner and occupants.

For the owner, these extra-weather-tight windows (more than 3 times industry standards) will mean significant savings in heating and cooling costs . . . and lasting tenant satisfaction. And occupants will like the way Andersen wood windows provide weathertight comfort the year around. (The entire project is equipped with Welded Insulating Glass.)

Andersen’s complete line of windows offers maximum design flexibility for your next light construction project. There are 7 kinds of windows, 30 different types, and more than 600 cataloged sizes.

Check Sweet’s File or write for Detail catalog and Tracing detail files. Andersen Windows are available from lumber and millwork dealers throughout the United States and Canada.

Andersen Windowwalls

ANDERSEN CORPORATION

BAYPORT, MINNESOTA
At last... electronic controls you can rely on.

CYBERTRONICS

SOLID STATE

ELECTRONIC CONTROL SYSTEMS

BY JOHNSON
Johnson's new solid state controls are the simplest, most accurate and reliable electronic devices ever made for controlling air conditioning, heating, and ventilating systems. Here's one of the greatest improvements in automatic control systems since Johnson introduced pneumatic controls!

**THE CYBERTRONIC CONCEPT**
The human nervous system comprises the most perfectly coordinated and most sensitive control system known. Johnson Cybertronic Systems simulate this unique complex to a degree never before achieved in commercial applications. Hence the name Cybertronics, which is derived from the word cybernetics.

**SEMICONDUCTORS REPLACE MOVING PARTS**
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Another Art Center by Rudolph Unveiled

Last month saw one of the strangest conferences within memory when a select group of editors was invited to New York’s University Club to view Paul Rudolph’s design for the proposed Creative Arts Center at Colgate University at the same time the major donor for the center was seeing it for the first time. The donor, 83-year-old industrialist and philanthropist Charles Dana (Columbia College, ’02), seemed somewhat startled by Rudolph’s receipt, which invites comparison in any ways with his Art & Architecture Building at Yale University, and was not loathe to question the architect on many facets of the project, never: on siting (“Never mind the dormitories, they’ll disappear in 10 years or so. As long as you’ve covered the dormitories”); on shape (“Don’t they have better ones in Carnegie Hall that work well?”); on the economics of design (“You can save money on these dormitories,” pointing to the porte cochere); and on physical fitness (“Why have that bridge? Walking is good for the students”). Colgate’s rector M. Barnett called the design “new and vigorous answer to our needs, yet consistent with the more than 140 years of tradition represented by other buildings at Colgate.”

Rudolph’s scheme consists of a basically four-level plan, the focus of which is a 400-seat auditorium for music and dramatic performances. Surrounding this space on varying levels will be practice rooms, rehearsal rooms, scenic, backstage facilities, lounge, garages, exhibition spaces, and studios. The balconyed auditorium will be subdivisible into classrooms by fold-down partitions. A proscenium partition will separate music activities on the projecting stage and pit from activities of drama groups on the main stage. Second stage of construction of the center (not yet designed) will be additional facilities for art and sculpture over the auditorium.

The building is sited on a hill in a manner respecting the right-angled shape of the old quadrangle above it. A bridge will connect the hillside and roof terrace of the building. The entrance, which will function as a sort of “entrance to the campus,” according to Rudolph, will feature a three-story-high porte cochere framing the quad (p. 55) and furnishing an introduction to the campus. Construction will be of exposed aggregate concrete similar to that used by Rudolph in Yale.
CRITICAL TRIALOGUE ON JOHNSON’S
LINCOLN CENTER THEATER

NEW YORK, N.Y. The opening of a significant new theater is a time for both rejoicing and critical stock taking, particularly when the theater in question is such a one as Philip Johnson’s New York State Theater at Lincoln Center. P/A’s Ilse M. Reese, John M. Dixon, and James T. Burns visited Johnson’s theater and give their opinions in the trialogue quoted below.

JTB: The concept of a large-scale “court theater” for the democratic crowds that will throng here to see Rodgers and Hammerstein and the New York City Ballet is a dubious one, at best. The attempt to force a square crowd into a round hole is unjustified, to my mind.

IMR: One is surprised to see the distinguished collaborator of Mies van der Rohe, the advocate of understatement, simplicity, and purity in architecture, going so far in this building as to cheapen his architecture with an overabundance of gilding in an obvious attempt to dazzle the audience. This is true of the exterior, where his design (like that of Abramovitz for Philharmonic Hall and that projected by Harrison for the Metropolitan Opera) comes dangerously close to the pretentious Italian monumentality of the Mussolini era.

JTB: Johnson reportedly had a lot to say about retaining some sense of scale in the Lincoln Center plaza between the three buildings. But he should have been more of his own man in his own building. The huge Pop Art chandeliers he hung in the colonnade seem to be Johnson arching a cynical eyebrow at the whole pretentious undertaking.

JMD: Approaching the theater across the plaza, one gets the impression of a building of great strength and assurance. The colonnade is monumental but not overbearing—a design that is symbolically appropriate to the materials used; travertine cladding an armature of reinforced concrete. The stone here is not made to appear a mere veneer as it is on Philharmonic Hall (where shallow reveals at the corners of the columns emphasize its thinness).

IMR: Johnson’s three-dimensional talents are undeniable. They are evident in the progression of spaces from the entrance lobby to the dramatic, three-tiered promenade—the two being interconnected by two magnificently modeled travertine staircases.

JMD: The entrance lobby is a polished quarry of travertine, its sequences of stairs carved out of the stone with sensuous curves. These stairs carry one up to the promenade with massive, sinuous balusters lining the route. Then, at the top of the stairs, comes the first big let-down. At this point, it seems, Johnson ran out of both steam and travertine. In this whole vast room, nothing above the red marble and travertine floor sustains the character established in the exterior and lobby. All is subdued tinsel and blunted glitter. The balconies that encompass the space look downright flimsy.

JTB: This dichotomy of strong against weak, travertine against can box frou-frou, is where Johnson’s attempt to épater le bourgeois backfires. Had he carried it to the ultimate one direction, the theater could have been a successful jab at a never-never land bit of fluff; emphasized strong in an opposite vein, it might have achieved a significant monumentality. As it is, it falls between stools and becomes neither one nor the other.

JMD: The auditorium itself seems like a fine place to see a performance and the rest of the audience. But here again the choice of materials seems wrong in some cases as to appe delirious. The circular lighting fixtures, designed in collaboration with the lighting consultant, Richard Kellogg are meant to provide glitter, but they don’t. Set almost flush with the balcony fronts, like rows of blank-faced classroom clocks, they lack the reflective effect associated with glitter, hanging only the oily transparency of aging plastic. The ceiling, the chandelier, the proscenium, and the balcony fronts—all of the salient features of the space—are obviously related to traditional opera houses: specifically the old Metropolitan Opera House. Is this homage or parody?

JTB: This is going to leave Peter Harrison in quite a quandary over how to handle the interior of his Met.

IMR: Johnson’s choice of art work is, as usual, impeccable, and their scale and placement in perfect union with the architecture. But Lee Bontecou...
Powerful sculpture of welded steel, oxy, and stretched canvas must compete with gold bead curtains, and the long travertine stair balustrades just stand against the scalloped balconies upstairs.

J.B.: I feel that the two great spaces, the auditorium and the promenade, *almost* succeed as spaces, but are jarred too frequently by finicky and stodgy touches that give volumes that should be (indeed really are) solid and enduring a feeling of ephemeralness.

J.D.: No matter what one may think of the visible surfaces of the interior, the fault can be found with the spatial organization of the building. All the spaces promise to serve their complex functions very well, and all of them—considered solely as spaces—are handsome. Only the intrusion of the cylindrical auditorium form into the promenade is disconcerting—only because the enveloping balconies turn the potentially strong cylindrical form into a mere shallow niche (just as they obscure the strong lines of the colonnade across the promenade). The interrelationship of these major spaces—lobby to promenade, promenade to balconies (both inside and outside the auditorium)—is ingenious and highly effective. We have here, then, a series of useful ceremonial spaces to rejoice about, decked out (above the promenade floor) in metal materials that are, after all, as essential as they look. Maybe this is what Johnson is telling us, but he hasn't made it a pretty story.
Trade Center to Advance Montreal Downtown

MONTREAL, CANADA Place Bonaventure is a trade center proposed for Montreal's burgeoning downtown business district that would provide, for the first time in Canada, a permanent facility for manufacturers and wholesalers of all kinds to maintain permanent showrooms. Designed by Affleck, Desbarats, Dimakopoulos, Lebensold & Sise for Concordia Estates Ltd., the project will occupy six acres over the Canadian National Railway tracks. The center will be at the hub of Montreal's traffic pattern, both vehicular and pedestrian. On or near the site will be commuter railroads, the Trans-Canada Highway, and terminals of present and proposed subway lines. Place Bonaventure will be connected with the extensive complex of enclosed pedestrian walkways linking Place Ville Marie, Queen Elizabeth Hotel, CN headquarters, and Central Station. These ways will eventually extend south to Windsor Station, and, possibly, Place Victoria.

The trade center will encompass an exhibition and convention area of 315,000 sq ft, 200,000 of it on one level. The merchandising space of 1,000,000 sq ft would include a number of permanent wholesale showrooms. Related facilities would be an auditorium and associated meeting rooms. On the lower pedestrian level will be a shopping mall including retail specialty shops and a department store. The structure will be crowned by a hotel to be reached from street level via express elevators. Hotel rooms will look inward over two great winter-gardens. These spaces, partially glass covered, will have a swimming pool, cabanas, restaurants, and cocktail lounges.
The Bronfman family, owners of the Seagram Distilleries and New York's Seagram building, will build a major commercial complex in Toronto. Hopefully, Canadian officials will afford them under treatment for sponsoring architectural excellence than they enjoyed in New York, where courts ruled that the Seagram Building must pay additional taxes for enhancing the face of the city (rulings are being appealed).

The Toronto-Dominion Bank Centre will be built and owned jointly by the bank—major tenant of the largest structure—and Tempo Investments Ltd., a private trust company owned by the sons and daughters of Samuel Bronfman, president of Distillers Corp.-Seagrams Ltd. (Montreal). Architects for the project are John B. Parkin Associates and Regman & Hamann of Toronto, with Mies van der Rohe acting as the design consultant.

First element of the complex to rise will be the 55-story, 750-ft-high Toronto-Dominion Bank Building. When completed, it will be the tallest building in the world outside of New York. Next phase will see the construction of a 40-ft-high, one-story banking hall, with a main floor area of 23,000 sq ft. Eventually, a 44-story rental office building will be built. The buildings will occupy three acres of the site, leaving almost four acres free for a landscaped pedestrian plaza. Three underground levels will contain shopping facilities and parking areas, and an observation deck and restaurant will top the Toronto-Dominion Bank Building. Exterior will be black steel with stainless-steel sash and bronze-tinted glare-proof glazing. Extensive use of granite and marble in the glass-walled lobby of the bank building will relate to the plaza.
NEW YORK, N.Y. Nassau County is a "dormitory" county near New York City on Long Island. Its current population of approximately 1.5 million is expected to grow to about 1.7 million by 1980. Currently, this community must depend for its major dramatic, musical, literary, educational, and sports activities on Manhattan. To give Nassau County a cultural, sports, and educational center of its own, a mammoth seven-building complex has been proposed for a 186-acre tract of Mitchel Field at the geographic center of the island. To be called the John F. Kennedy Educational, Civic, and Cultural Center, it far surpasses in size and scope the John F. Kennedy National Center for the Performing Arts designed by Edward D. Stone for Washington, D.C.

The imposing design by Welton Becket & Associates (Carroll C. Rudd, Director of Design, New York office) integrates into a straightforward plan: a Coliseum, Concert Hall, Library, Social Center, Forum Theater, Fine Arts Gallery, and a Museum of Science, Industry, History, and Transportation. The six cultural buildings will sit upon a 900-ft-sq podium, counterbalanced by the massive Coliseum located across a sunken garden. The architect has attempted to achieve a design that will permit each building to have an individuality, while at the same time being obviously a part of the center as a whole. This was accomplished through: (1) use of two basic exterior materials, granite and light-colored, precast, textured concrete; (2) over-all emphasis of vertical lines; and (3) use of rounded corners and sculptured forms on all the buildings. The Library and Social Center will seem to grow from the podium through the continuation of the plaza’s granite up their exterior columns (a motif repeated in the columnar supports of the podium). The more massive Concert Hall and Coliseum, on the other hand, will be made to "float" by use of light concrete on the upper structures and dark granite on the indented bases. The Coliseum, which will rise from a service moat, will be entered from all four sides over ramps. It will have a capacity of 10,000, expandable to 14,000 by the addition of temporary seating. The 2100-seat Concert Hall, to be approached over a tree-lined mall, will have a restaurant on its upper floor. The Theater

1 Podium; 2 Coliseum; 3 Social Center; 4 Library; 5 Concert Hall; 6 Theater; 7 Fine Arts Gallery; 8 Museum of Science, History, Industry, and Transportation.
for in-the-round perform-
drama and intimate music
will have a capacity of 800.

granite form, seeming to
om the surrounding plaza,
e it the most interesting
visually, of the whole center.

Center, in addition to hous-
ing rooms and facilities for
y activities, will be the
ative center for the whole
The Library, a facility sore-
in Nassau County, will con-
00 volumes for use not only
children and their parents,
by students in two neigh-
leges—Hofstra and Com-
college (the latter is on
one's drawing boards)—and
ets in neighboring indus-
ine Arts Gallery and Mu-
Science, Industry, History,
portation will be somewhat
king exhibit buildings rising
reflecting pool. The entire
will become a Nassau
Acropolis” at night through
well-placed, low-level, seclud-
lighting. The plan provides
ng for 7500 cars, most of
the Coliseum, 1000 of them

itious program will be real-
ree stages, with construction
ium to progress as needed:
um and Library; (2) Con-
and Social Center; (3) Fine
ery, Museum, and Theater.
al garden across the way
posed. The project is ex-
be completed by 1969-70.
In the unusual "boom" for a rare building type, three major Southern cities—St. Louis, Atlanta, and Memphis—have announced plans for municipal stadia.

In St. Louis, the Civic Center Busch Memorial Stadium (photos, this page) is the product of six years of work by Sverdrup & Parcel & Associates, Inc., Engineers-Architects, and Schwarz & Van Hoefen, its architectural associate, to design a stadium and related facilities (parking amenities, particularly) that will contribute to St. Louis's civic center redevelopment. Edward D. Stone was brought in at the latter stages to act as collaborator on the "final architectural definition of the exterior of the stadium."

Busch Stadium will be an oval with a major axis of 772 ft. Ninety-six columns will rise 73 ft above plaza level to a perforated overhang encircling the stadium. Ninety-six elliptical arches will actually form the outer edge of a cantilevered roof canopy extending about 50 ft over the upper deck. These canopies, as well as the main girders of the upper structure will be precast and pretensioned; the remainder of the structure will be poured concrete with lightweight aggregate. Since the playing field will be about 27 ft below the pedestrian level, approximately half the patrons will walk straight ahead or down to their seats, and the other half will ascend ramps rising between the two outer column rings of the stadium.
The exterior will be smooth white concrete embellished with gold-colored steel railings, railing mesh, support rods, and a vertical strip on the outer edge of the exterior columns.

The Atlanta Stadium (top), designed by Heery & Heery and Finch, Alexander, Barnes, Rothschild & Paschal, will have a structure of box-section steel frames and precast concrete. The future cable-hung roof will consist of foamed plastic material laminated to translucent glass fiber.

The Memphis Municipal Stadium (bottom) by Yeates & Gaskill will occupy a 10-acre site adjoining that city's Fairgrounds and will utilize parking facilities there. Initial phase will provide seating for 50,000, to be increased to 70,000 on the addition of a cantilevered deck (dotted line in drawing) over the visitors' area. End-zone seats have been kept to a minimum of 6500 each, with initial seating 25,000 for home fans and 14,000 for visitors. Earth on the playing level will be excavated to form a bowl, using the entrances to the stadium be 25 rows above the field. Given the appealing rim lines of the stadium and its eventual addition, the architects feel the structure will appear a "complete and graceful form at other stages of construction."
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The whole matter of civil defense—most particularly the construction of fall-out and bomb shelters—evidently has become a minor affair in Washington's eyes. There'll be some lip-service (and some money) paid to it this year, mostly as a matter of election politics.

That's the real meaning of the transfer of control of civil defense matters to the Department of the Army, hard on the heels of the resignation of Steuart L. Pittman as Assistant Secretary of Defense for Civil Defense. All hands denied any "downgrading"—but it is significant that Pittman was an Assistant Secretary, while his organization now reports to the Army Secretary.

Reasoning behind the move is not difficult to follow: economics and practicality have won out, in Washington's thinking, over possibilities.

To translate further: Immediately after World War II, there was real concern lest an enemy mount a nuclear-attack on specific cities or installations, and there was great agitation to provide shelters and to disperse industrial complexes.

But development of American-based missile-launched nuclear weapons could open up the entire U.S. homeland to possible attack. Moreover, the military thinking goes, any deliberate attack would have to be all-out; it would have to be aimed at doing as much damage, in one blow, as possible, in order to cut down or eliminate counterattack possibilities.

Thus it would not be a matter of providing shelter for a few seacoast cities, or dispersing industries to the interior of the country; What would face planners would be protection for every city, every industry, every citizen, thus presenting an economic enormity, beyond the capacity of private industry or even the Federal Government.

So the military thinking has settled on deterrent of attack (by making it enormously expensive for the attacker) as the best means of providing "civil defense."

You won't find any public figure willing to spell out policy this way; but it is clear that such a decision has been made, and plans for widespread shelter construction are being quietly shelved.

Measures Slowed by Civil Rights Slowdown

Opening of the formal debate on civil rights in the Senate (after weeks of skirishing) predictably put the brakes on the speed with which Congress was acting on the annual appropriation and authorization bills.

Before the Senate talkathon got under way, committees in both houses had started hearings on almost all of the money bills; and the House, in fact, had approved several of them (the $5.2 billion fund for National Aeronautics and Space Administration; $1.6 billion for military construction, and some others).

Just how much of a slowdown will result isn't yet clear. But remember that the money measures can be used as weapons by both sides in the civil rights debate: Most of them contain funds for long wanted (and vote-producing) projects in home districts.

So a threat to block consideration can give real pause to many a would-be orator.

In any case, the lawmakers seemed inclined to go their own way on appropriations. Example was the House Public Works Committee action on the biennial "ABC" (urban, primary, secondary) roads program. President Johnson had warned legislators to hold annual appropriations to $975 million, but the committee approved a bill calling for $1 billion, anyhow.

Maltreatment by SBA

Downgrading of architects and engineers from their professional status by Government agency action was the real center of controversy in Washington early in April.

Occasion was a sudden move by the Small Business Administration to investigate what it called "the Architect-Engineer Industry." SBA wanted to know whether the present size minimums ($1 million annual gross) for designation as "small business concerns" shouldn't be raised to $5 million for A-E's; whether "small" firms are getting a fair share of business in competition with larger ones; and whether it should "set aside" certain Government contracts for such "small" A-E firms.

The professional societies, including AI&A and several engineering groups, argued that: (1) A-E's are not an "industry"; their work is a profession, and should be recognized as such by SBA, as it is by other Government agencies; (2) since it is a profession and depends on skill, knowledge, experience, size or gross business is not a proper consideration.

Through the testimony, you could read the real background: SBA move—coupled with actions of other Government agencies (see April 68 P/A)—could lead to downgrading the professions to the point where Government "buyers" would be required to take bids for A-E services just as they do for clothing or machine parts. And further loss of status as professionals would be inevitable.

The hearings made it clear that (1) SBA has very little idea—and doesn't really care to know about—distinctions between architectural and consulting engineering practice and the services offered by industrial companies which may also do engineering work in connection with their products; (2) the agency simply wants to put all "engineering" services under one broad, ill-defined tent of regulation, may only concede that a $1 million criteria is too small; (3) most of the professional societies, including the AIA, seem to have been taken by surprise, and offered no meaningful comment at all.

FINANCIAL

With the advance of spring and opening of the construction season, more financial signs continued to point to a continuing high level of work around.

There was still, however, a note of caution: Cost indexes continued to indicate a slight but steady upward trend. The Public Health Service Sewage Treatment Plant cost index, for example, edged upward again in February, to reach 109.45 (with 1957-59 taken as 100).

But other signs were good. The Investment Bankers Association, for instance, said that, in January, U.S. voters approved 81 per cent of all construction bond issues presented to them (for a total of $115.7 million) and added that already scheduled bond issue elections in 1964 will provide an additional $1.8 billion of constructive funds.

In February, too, the Census Bureau reported that housing starts were running at an annual rate of 1,643 million, up 19 per cent over the year ago (though down a little from January).
These are clocks designed by George Nelson for Howard Miller. For complete information, write Howard Miller Clock Co., Zeeland, Michigan... National Distributor: Richards Morgenthau, 225 Fifth Ave., New York; Merchandise Mart, Chicago, Illinois; Fehlbaum, Berne, Switzerland; Pelotas, Sao Paulo, Brazil; Excello, Mexico City, Mexico; Weston, Bogota, Colombia.
IT'S OPEN

Unless this is reaching you in a Tibetan lamasery, you know that the 1964—1965 New York World’s Fair opened last month. Realizing that architects, as part of the general public, have been and will be subject to tons of opening coverage in all media, P/A plans to wait until the tumult and shouting have died, then present a thoroughgoing professional critique of the international exposition.

When Oliver Cromwell had his portrait painted, he cautioned the artist: "Mr. Lely, I desire you would use all your skill to paint my picture truly like me, and not flatter me at all; but remark all these roughnesses, pimples, warts, and everything as you see me, otherwise I will never pay a farthing for it."

The reader is assured that P/A’s portrait of the Fair, when it appears, will follow Cromwell’s precept in order to present an incisive, lively, thought-provoking analysis.

Kahning for Corning

The continuing beneficial influence of Louis I. Kahn’s Alfred Newton Richards Medical Research Building at the University of Pennsylvania can be seen again in the proposed new research buildings at Corning’s Eugene C. Sullivan Science Park in Corning, New York. Complex will consist of two six-story research towers and a low-rise development building, including a ceramic research laboratory (already constructed) and extensive utilities areas. Corning Glass Works’ flat glass will sheathe the towers and the development building. Architect: Harrison & Abramovitz; Contractor: George A. Fuller Company.

Breger Wins Allegheny Competition

New York Architect William N. Breger, assisted by James Terjesen and Warren Winter, has been declared winner of the competition for the design of a public square in Pittsburgh’s Allegheny Center urban renewal project. The winning design was the only one selected from more than 300 entries, because the jury found the rest were inappropriate, inferior, or failed to meet the program requirements. Consequently, Breger will receive a $5000 award and the contract to complete the project (the competition was initially to be in two phases, with
Continued on page...
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Continued from page 70

winners from the first phase in a "run-off" for the contract in the second phase).

Breger's proposal features a sunken, paved plaza focused on a circular fountain area. The jury felt that the design was one of the few to respect the residential character of the neighborhood. Suggesting additional shaded areas, the jury proposed a row of trees to separate the square from the planetarium access road.

The jury report prepared by Chairman Hideo Sasaki (other members were Architects Gordon Bunshaft, John B. Parkin, Hector Mestre, and Dahlen K. Ritchey; and Pittsburgh leaders H. J. Heinz and Adolph W. Schmidt) commended the winning design as "one of the very few which was simple in its concept. The plaza is sunken slightly to make the square a receptive place where groups and individuals may gather for leisure or for social functions. Walls, steps, sitting areas, and a water feature are skillfully manipulated to provide visual interest and scale to the square. These elements are well related to the existing and proposed buildings. The presence of two public buildings, Buhl Planetarium with its symmetrical façade and the Carnegie Library with its tower, posed a difficult problem for nearly all competitors. A great number chose to ignore the Library, while others peculiarly tried to build new domineering towers to subdue the existing one!"

Reynolds Student Winner

A "dynamic clear span," design of a shallow dome fabricated of identical aluminum rings framing glass or translucent plastic, has won the 1964 Reynolds Prize for Architectural Students for John F. Torti, fourth-year student at the University of Notre Dame. Jury for the awards consisted of Architects Joseph D. Murphy (chairman), Sam T. Hurst, and W. G. Lyles. The $5000 prize check, to be divided equally between the winner and Notre Dame, will be presented to Torti at the St. Louis AIA convention.

Too High Too Soon

Without waiting for the discussion of Mario Ciampi's plan for downtown San Francisco to produce results (or another plan, should a better one be produced), blockbuster buildings are being announced for the Bay City with little evident regard for the splendid fabric of the city. Recently (p. 60, JANUARY 1964 P/A), it was a large development on the site of the old Fox Theater, and now it is the proposed new 43-story Wells Fargo Building, which would be the city's tallest if allowed to go ahead. Such a structure, which could be in Omaha, Memphis, or New York as well as San Francisco, seems singularly out of place in San Francisco. Architect is John Graham & Company.

All Not Brotherly Love

Here is visual proof that even Philadelphia, renowned for its farsighted and high-quality redevelopment program, can occasionally come a cropper. This five-level garage, euphemistically dubbed a "parking plaza," will be a 24-hour-a-day magnet for automobiles in downtown Philadelphia. Mayor Tate of that city—probably while City...
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Planning Commission Chairman G. Holmes Perkins's back was turned—praised two local stores for cooperating on providing this structure. Designers: Enco Engineering Company and National Garages, Inc.

**SOM Wins Reynolds Award**

The chapel at the U.S. Air Force Academy by Skidmore, Owings & Mer-
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utilities buildings, retail and service establishments, public and private institutions, and in special fields. Brochure can be obtained from Curtis H. Porterfield, Executive Vice-President, American Association of Nurserymen, 885 Southern Building, Washington 5, D.C. . . . Buildings completed since January 1, 1963, that utilize structural steel may be entered in the Fifth Annual AISC Architectural Awards of Excellence Program. Deadline is June 10, 1964. Information available from American Institute of Steel Construction, 101 Park Avenue, New York, N.Y.

Personalities

Speakers at the forum, "The City Visible and Invisible," to be held at the St. Louis AIA Convention, will be HARRISON WILLIAMS, U.S. Senator from New Jersey; JOHN ANDERSON, Governor of Kansas; DR. LUTHER L. TERRY, Surgeon General, U.S. Public Health Service; RAYMOND TUCKER, Mayor of St. Louis; THOMAS H. ELIOT, Chancellor of Washington University, St. Louis; DR. J. J. PELIKAN, JR., Director of Graduate Studies, Dept. of Religious Studies, Yale University; SAMUEL T. HUBST, Dean of the School of Architecture and Fine Arts, University of Southern California; ALBERT MAYZER, Architect, New York City; and FRANCES D. LETHBRIDGE, Architect, Washington, D.C. . . . RONALD ALLWORK has been elected 1964-65 President of The Architectural League of New York; PAUL F. DAMAZ will be Vice-President for Architecture . . . C. HERBERT WHEELER, Jr., has joined the staff of Pennsylvania State University as associate professor of architectural engineering. . . . Rome Prize Fellowships have been awarded to THEODORE LIEBMAN, Boston, Mass., ROBERT J. MITTELSTADT, New Haven, Conn., and CHARLES O. PERRY, San Francisco, Calif., for study of architecture; DEAN A. JOHNSON, Ann Arbor, Mich., and RAYMOND TERRY SCHNABEL, Cambridge, Mass., for study of landscape architecture. A newly established Chester Dale Fellowship was awarded to History of Art student C. DOUGLAS LEWIS, Jr., of New Haven, Conn., who will study 18th-Century architecture. All fellowships are for one year's study at the American Academy in Rome . . . DON M. HISAKA has been appointed consulting architect for campus planning at Kent State University . . . C. J. SHAUGHNESSY of Syracuse University has won the 1964 American Concrete Institute award for architectural students for his design for a reinforced concrete sports arena that features one small folded-plate dome resting on another . . . GYO OBATA received an alumni citation from Washington University, St. Louis, "for the beauty and life he has brought to our city through architecture" . . . WILHELM VON MOLITKE will become Professor of Urban Design at Harvard University . . . S. W. BROWN, Consulting Engineer, received the Distinguished Service Award of the American Society of Heating, Refrigerating and Air Conditioning Engineers at the Society's Annual Meeting . . . The Third Annual Thomas Jefferson Architectural Award was made to the PERKINS & WILL PARTNERSHIP for design of the United States Gypsum Building in Chicago; award is sponsored by the Monticello Life Insurance Co. . . . Administrator ROBERT C. WEAVER of the Housing and Home Finance Agency was honored May 5 at the annual banquet of the United Jewish Appeal's Architects and Engineers Division for his "consistent concern for the welfare of his fellow men" . . . Canadian Prime Minister LESTER B. PEARSON and British Archi-
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tect Sir Robert Matthew will become Honorary Fellows of The Royal Architectural Institute of Canada at that organization's annual meeting in June . . . The Iowa State Architecture Foundation, for awards to students at Iowa State University, has been founded in honor of the late Leonard Wolf, FAIA; this fund is an outgrowth of the Leonard Wolf Memorial Fund . . . Architectural writer-critics Esther McCoy and Wolf von Eckardt have received fellowships from the Ford Foundation for travel, observation, and study; this is the first year such awards were given.

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**Calendar**

First National Convention of the Consulting Engineers Council will be held in Denver May 25-29; theme will be "The Consulting Engineer—Today and Tomorrow" . . . First World Congress of Craftsmen will be held at Columbia University June 8 through June 19 . . . Annual meeting of The Royal Architectural Institute of Canada will be in St. Andrews, N.B., June 17-20; topic will be "The Architect in a Changing World" . . . "Design '64: Directions and Dilemmas," will be topic of the 1964 International Design Conference in Aspen, Colorado, June 21-27 . . . Annual meeting of the National Society of Professional Engineers will be held in Asheville, N.C., July 1-4 . . . Nineteenth Annual Meeting and Preservation Conference of the National Trust for Historic Preservation will be held in San Antonio, Texas, October 29—November 1 . . . The biennial Ceramic National Exhibition will open at the Everson Museum of Art, Syracuse, N.Y., on November 14, and will circulate throughout the U.S. for two years . . . Four-day annual Membership Conference of the National Electrical Manufacturers Association will open in New York City on November 9 . . . The 10th Annual Architectural & Gardens Tour of Japan will leave from California on October 7. Information on the 24-day tour, and post-tour extension to Hong Kong, can be obtained from Kenneth M. Nishimoto, 263 S. Los Robles Ave., Pasadena, Calif.

**Obituaries**

Edmund R. Purves, former Executive Director of the American Institute of Architects, died on April 8. In addition to his long dedication to the profession in general and to the AIA in particular, Purves was the much-decorated holder of notable records for service in both World Wars (he was chief of counterintelligence in the Pacific theater in World War II). A charming and gracious person gifted with a talented pen, Purves will be long remembered by his countless acquaintances in architecture. He is survived by his widow, Mary Carroll Spencer Purves, two sons—Edmund Spencer and Alan Carroll Purves—and three grandchildren. Request was made that, instead of flowers, contributions be made to the Stewardson and Roche Travelling Fellowships, Washington-Metropolitan Chapter AIA, 1710 M Street, N.W., Washington, D.C.

Alfred Bendiner, 64, Philadelphia architect noted for his witty drawings and writings on architecture, music, and other subjects, died March 19.

Harold Slaight Ellington, 78, a founder of the Detroit firm of Harley, Ellington, Cowin & Stirton, Inc., died March 14. He had retired just last June, on the thirtieth anniversary of the firm's founding.

Jack Cotton, 61, real estate developer who, with the late Erwin S. Wolfson, financed the building of New York's Pan Am Building, died March 22. He had widespread real estate ventures, including a controversial project for London's Piccadilly Circus.

Joseph M. Brandstetter, Associate and Chief Engineer of A. Epstein & Sons, Chicago, died at age 71.
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SCHOOL WITH CLASSROOM SKYLIGHTS. Flexicore Hi-Stress slabs with two 3/8" stress-relieved strands clear span the 29'-6" width of the rooms, are designed to carry 40 psf roof load. Four slabs, two on each side of skylight, have three 3/4" strands to carry the extra load of the skylight.

New 8" x 16" Hi-Stress units are fully prestressed slabs (f_p, 175,000 psi) cast in steel forms, with stress-relieved strands tensioned before concrete is poured. Appearance is similar to standard Flexicore slabs which use pretensioned intermediate grade steel bars.

For more information on these projects, ask for Hi-Stress Flexicore Facts 2, 4 & 5. Write The Flexicore Co., Inc., Dayton, Ohio, the Flexicore Manufacturers Assn., 297 S. High St., Columbus 15, Ohio or look under "Flexicore" in the white pages of your telephone book.
Why should the world's leading electric plant builder use an outside testing organization?

Onan's block-long testing wing can be geared to a check-out capacity of 9,000 units a month. That's a lot of testing, because every Onan electric plant is run-in under full load for from two to eight hours before it is okayed for shipping.

We rarely have to flunk an Onan generator set because it fails to deliver in the "under load" test bank. Stringent quality control procedures throughout production maintain strict standards for all components.

We doubt that there are more competent or more conscientious employees than Onan testing department personnel.

With all this going for us, we still use J. B. Calva & Associates to double-check our own tests and testing procedures.

As a manufacturer, we like the idea of an independent source periodically checking up on our product performance tests.

Gives us the confidence to say "We certify that when properly installed and operated, every Onan electric plant will deliver the full power and the voltage and frequency regulation promised by its nameplate and published specifications."

Gives you absolute assurance that you get every watt of power you pay for when you choose Onan.

**PERFORMANCE CERTIFIED**

We certify that when properly installed and operated this Onan electric plant will deliver the full power and the voltage and frequency regulation promised by its nameplate and published specifications. This plant has undergone several hours of run-in and testing under realistic load conditions, in accordance with procedures certified by an independent testing laboratory.

Onan

Division of Studebaker Industries, Inc.
2515 University Ave. S.E.
Minneapolis, Minnesota 55414

For more information, turn to Reader Service card, circle No. 419
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LOOK BETTER, LAST LONGER!

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CONCRETE DENSIFIER and HARDENER

CHOICE OF 9 RICH COLORS
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- TAN
- TERRA COTTA
- FRENCH GRAY
- GREEN
- GRASS GREEN
- BROWN
- BLACK
- WHITE and NATURAL

Hydroment improves hardness, density, wearability, corrosion resistance and appearance of concrete floors - institutional, commercial, industrial. Easily applied by the dust-coat method when concrete slabs are poured; requires no additives or mixing at the job site. Non-toxic, odorless, waterproof; ideal indoors and outdoors — new construction or remodeling. Non-dusting; non-rusting. Proved superior in over 20 years' use by architects and contractors everywhere. Write for catalog and color card.

Outdoor Gas Heater
Gas infrared comfort heaters have been introduced for outdoor applications. Model RHM-50-S is rated 50,000 Btu per hr output, while Model RHM-50-S has the identical Btu but has two burners in line. Heaters include direct spark ignition system, place of conventional standing pilot. Applications include use with theater marquees and other canopies, patio swimming pool decks, store front and entrance ways. C.A. Olsen Mfg. Co., Elyria, Ohio.

In the West...HYDROMENT, INC., 629 N. Coffman Drive, Montebello, Calif.

For more information, turn to Reader Service card, circle No. 399
you specify
the space.......

NORRIS PRE-FABRICATED
WALK-IN COOLERS, FREEZERS AND
COOLER-FREEZER COMBINATIONS
WILL FIT

Norriss pre-fabricated walk-in coolers, freezers, and cooler-freezer combinations meet any space requirements. Available with or without floors, these versatile walk-ins are supplied in two- and three-foot wall sections, four-foot door sections (7½' high), and can be set up quickly in virtually any space, any location. The only tool required for installation is a light hammer.

The modular panels of Norris walk-ins are all-metal, with no wood to absorb moisture, and extremely light weight. Standard exteriors are bonderized steel finished in grey baked enamel, interiors are 22-gauge galvanized metal, with custom exteriors or interiors optional at extra cost. Ideal for every institutional, commercial, or industrial refrigeration need, Norris walk-ins can be supplied with the proper self-contained or remote refrigeration equipment to meet any application.

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AS LOW AS 4½ LBS. PER SQ. FT.—REDUCES FREIGHT COSTS!

NORRIS—THE FIRST NAME IN MILK SERVING AND STORAGE EQUIPMENT!
AIR/TEMPERATURE

Cooling Towers

Cooling towers for both indoor and outdoor applications are presented in 20-page brochure. By locating fans in dry entering-air rather than in saturated discharge-air, corrosion of all moving parts is reduced. Brochure contains construction details, performance charts, installation procedures, and mechanical specs. Baltimore Aircoil Co., Inc., P.O. Box 7322, Baltimore, Md.

On Free Data Card, Circle 200

Air/Ceiling System

Air distribution through ceiling system is described in 24-page booklet. "Celo-Flow" system utilizes through-perforated acoustical tiles and lay-in panels to assure required air flow through incombustible and UL time-rated floor and ceiling assemblies complying with most code requirements. Ceiling system permits partition additions, removals, or relocations without modification of ventilating system. Work sheets, specs, charts, and layout details are given. Celotex Corp., 120 S. LaSalle St., Chicago, Ill.

On Free Data Card, Circle 201

Year-Round Conditioning

Manual, 32 pages, describes "Type Y" year-round commercial air-conditioning system. Included are design of system, applications of system in various combinations of heating and cooling, and specs of typical systems. Westinghouse Electric Corp., 300 Phillips Rd., Columbus, Ohio.

On Free Data Card, Circle 202

Flexible Duct

Brochure, 6 pages, describes flexible insulated duct for heating and air-conditioning systems. Duct consists of spiral-wound wire covered with glass fiber encased in vapor barrier. Interior surface has fire-resistant coating to prevent fiber erosion. Duct is available in standard 7' lengths weighing 4 lbs and in wide range of diameters from 4" to 16". It can be flexed 180° without being damaged. Pittsburgh Plate Glass Co., One Gateway Center, Pittsburgh, Pa.

On Free Data Card, Circle 203

"Hydronics Manual"

Manual, 306 pages, provides information on design and installation of hydronic systems for heating and air conditioning of buildings. Among topics discussed are principles of heat transfer; heating load and cooling load-heat loss and gain; classes and types of hydronic systems; panel heating and snow melting systems; boiler, converters, chillers, and auxiliaries; and heat and cooling system control. Manual is available at $10 per copy. Dunham-Bush Inc., Technical Service Manager, West Hartford, Conn.

On Free Data Card, Circle 204

CONSTRUCTION

Modular Components

"Unicom Manual No. 2" provides dimensional details for fabrication of all wood component parts based on 16"- or 24"-module for houses. Contents include "Modular Design"; "Nomenclature"; "Basic House Types"; "Floor Construction Standards" ; "Exterior Walls, Windows, and Doors"; "Interior or Partitions"; "Trussed Rafters"; and "Conventional Roof Framing Standards." Manual sets forth system of dimensional standards in which each component assembly is developed as a modular part of the total house. Manual, which is oversized (14"x18"), is available at $5 per copy to members of the structural designing and building professions. National Lumber Manufacturers Assn., 1619 Massachusetts Ave., N.W., Washington, D.C.

On Free Data Card, Circle 205

Working With Wood

Color catalog describes decorative hardwood paneling, overlaid surface fir plywood, siding, sheathing, hard boards, and composition boards. Also discussed are Fir Plywood, and Appalachian and Southern Pine Hardwoods. Georgia-Pacific, P.O. Box 311, Portland, Ore.

On Free Data Card, Circle 206

Musical Shells

Brochure discusses acoustical shells for musical performance. Included are facts about shell functions, types of shells, materials used, portability, reaction by performers to shells, evaluation in selecting a shell, costs, and limitations. Stagecraft, 25 Belvidere Ave., Norwalk, Conn.

On Free Data Card, Circle 207

High-Strength, Low-Alloy Steels

Booklet entitled "Introduction to High-Strength Low-Alloy Steel Sheets" states that they are 33 to 50 per ce


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Lone Star Masonry Cement helps masons do just that. With only sand and water to add, they easily mix mortar to exactly the right consistency for good workmanship. They get uniform color, strength and workability in every bag. Lone Star Masonry has been used to assure quality results in the buildings shown here and in thousands of other buildings from coast to coast. For better craftsmanship, greater economy, and durable, uniform joints, specify Lone Star Masonry Cement.

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stronger than regular carbon steels, thereby allowing for weight savings. Some of these steels offer atmospheric corrosion resistance six times that of carbon steel, some have good fatigue resistance, and many others have good ductility or weldability for fabrication. Booklet divides various trade-named high-strength, low-alloy steels into three major groups according to similarities of characteristics. American Iron and Steel Institute, Committee of Hot Rolled and Cold Rolled Sheet and Strip Producers, 833 Third Ave., New York, N.Y.

On Free Data Card, Circle 207

Glass Products
Catalog presents series of brochures on glass products, curtain wall systems, doorways, sliding doors, and hinges. Details, physical properties, charts, and photos are included. Pittsburgh Plate Glass Co., One Gateway Center, Pittsburgh, Pa.

On Free Data Card, Circle 268

Translucent Panels
Five patterns of "Futura Fibreclad" translucent panels are illustrated in series of color plates. Panels are full 13/16" thick. They are available in variety of modular sizes as well as in numerous patterns and colors. Panels can be employed inside and outside. Hess Mfg. Co., Quincy, Pa.

On Free Data Card, Circle 209

Glass Patterns
Catalog, 16 pages, covers complete line of glass patterns for installation in industrial, commercial, school, church, institutional, and residential structures. Typical details, photos, light distribution charts, and transmission data are included. Mississippi Plate Glass Co., 88 Angelica St., St. Louis, Mo.

On Free Data Card, Circle 210

Wood Trusses and Decks
Wood trusses and deck systems are described in 20-page booklet. Included are Tudor arch systems, radial arches, beam systems, bowstring truss systems, tied arches, and laminated decking. Weyerhaeuser Co., Rileco Engineered Wood Products Div., Tacoma, Wash.

On Free Data Card, Circle 211

Plastic Glass
Advantages of "Plexiglas" acrylic plastic as glazing material are discussed. Also included are physical and chemical properties, and installation and cleaning techniques for windows. Plexiglas withstands strong shock and vibration without breaking. In 3/16" thickness, it is about 10 times more resistant to impact than double-strength glass. Plastic reduces hazard of injury because it breaks into large, relatively dull-edged pieces that disperse at low velocity due to its light weight. It is available in clear or in tinted shades as well as in patterned and in textured surfaces. Rohm & Haas Co., Washington Square, Philadelphia, Pa.

On Free Data Card, Circle 212

Specify SILANEAL® to keep bricks clean
Silaneal treatment is applied to kiln clean brick at the plant. It stops water from leaching soluble salts out of brick to cause unsightly efflorescence. It also prevents water from conveying dirt into brick to cause ugly discoloration.

With Silaneal protection, you can choose any shade or color of brick without fear of eventual staining or discoloration.

Unlike masonry water repellents that are applied at the job site, Silaneal is applied at the brick plant under controlled conditions to assure a uniform suction rate and a watertight wall.

For a list of brick manufacturers that offer Silaneal-treated brick, plus suggested specifications, address Dept. 8705, Chemical Products Division, Dow Corning, Midland, Michigan.

Dow Corning

Continued on page 102
HILLYARD

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Flooring manufacturers, their associations and flooring contractors everywhere use, recommend, or approve Hillyard products. You know it's right when you specify Hillyard floor treatments that come in the trademarked blue and white checkerboard drum.

For quality, performance and true economy, specify Hillyard products. They not only safeguard against stains, damage and wear during final finishing and enhance acceptance-day appearance but enable the building owner to make substantial savings on maintenance labor—the biggest single item in overall cleaning costs.

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There are 27 buildings in the public housing project, Joseph A. Fowler Homes, Memphis, Tennessee. One is an administration building; the rest residential buildings containing 350 apartments. Walls are of brick veneer concrete block with Keywall in alternate courses, used to control thermal movement and to serve as a brick tie. Interior walls are of rock lath plaster utilizing Keycorner and Keystrip as reinforcement.

ARCHITECT:
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GENERAL CONTRACTOR:
McDonough Construction Co.
of Atlanta, Georgia

MASONRY CONTRACTOR:
Memphis Masonry Company, Memphis

PLASTERING CONTRACTOR:
F. M. Gravier Plastering Co., Atlanta
It's a coincidence you should ask about the advantages of Keywall. You can see from the tight pattern that it gives you more mortar locks with block (and/or brick).

Which in turn controls shrinkage and thermal movement better, resulting in greater crack resistance.

And because Keywall comes in rolls, masons lay Keywall in place more easily and quickly.

You might think that you would have to pay more for a masonry reinforcement with such advantages. Not so.

MORE LOCKS TO THE BLOCK with Keywall... because of the tight-woven pattern, it is impossible for any one strand of Keywall to be subject to the strain of more than two square inches of a block's thermal movement or shrinkage. By dividing the strain into such small segments, Keywall provides greater crack resistance.
Give your clients the ultimate in space flexibility with...

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Provide the floor and ceiling ... specify an adequate number of AIRWALL Partitions and from then on your client can...

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5. set up a checkroom or ticket booth and...
6. set up a series of panels in a curved arrangement to provide a dramatic backdrop or focal point.

As illustrated, AIRWALL Partitions can be used anywhere... no floor or ceiling tracks are required and they can be moved at will in a matter of minutes. Just set the panels in place, add air and for all practical purposes you have a rich, genuine appearing portable wall that looks and functions like a permanent wall.

AIRWALL Partitions are economical to purchase or lease and require no installation costs. Write for complete information.

HUPP CORPORATION

AIRWALL INC. SUBSIDIARY
8156 E. ROSECRANS AVENUE, PARAMOUNT, CALIF.

For more information, turn to Reader Service card, circle No. 312

Continued from page 98

Soil Survey


On Free Data Card, Circle 213

Elastomeric Roofing

Cold-applied, elastomeric roofing system is described in 16-page booklet. "F/A Roofing" resists deterioration, surface cracking, discoloration under exposure to all kinds of weather. It permanently adheres to roof decks. Roofing membrane expands and contracts with surface beneath. F/A material does not become brittle at low temperatures, nor will it soften or flow. Spec check list as well as guide specs for concrete and plywood roof decks are given. Color selection chart and typical elastic base sheet details are included. Armstrong Cork Co., Lancaster, Pa.

On Free Data Card, Circle 214

DOORS/WINDOWS

Operable Window

"Amelco" windows and curtain walls provide fully operable venetian blind between two panes of glass. They effectively control solar heat gain and reduce outside noise in excess of 50 per cent. According to manufacturer, Amelco windows are first operable windows in sizes up to 46 sq ft (horizontal pivoting). Brochure includes details, performance charts, cost factors, and specs. American Elumin Co., 1676 Commerce Drive, Stow, Ohio.

On Free Data Card, Circle 215

Seamless Metal Doors

Complete line of full flush seamless metal doors and frames is presented in 20-page catalog. Test data, door types and sizes, heat transmission chart, louver details, and specs are given. Also included are descriptions of transoms, sidelights, and borrowed lights. Dusing and Hunt Inc., 69 Lakes St., LeRoy, N.Y.

On Free Data Card, Circle 216
BFG FLEXIBLE VINYL FLASHING keeps water where it belongs ...outside

BFG Flashing is a specially compounded, extruded PVC sheet. It is tough, flexible over a wide temperature range and offers excellent weathering properties. By its very nature, it conforms easily to irregular shapes and surfaces—remains watertight where building movement is encountered. It's available in WHITE, too, for use on light colored roofs and other areas where aesthetically desirable.

The same qualities that make BFG Flashing ideal for ordinary, everyday applications become doubly important where the 'tough' jobs are concerned. Shown alongside: 1. A specific example of common flashing failure due to movement between deck and parapet. Frequent attempts to patch were unsuccessful. In this photo, coping has already been removed.

SOLUTION:
BFG field service engineers recommended the following procedure:

a. Remove existing coping, flashing and cant strip.

b. Place 4" O.D. flexible foam tubing in mastic at wall-roof juncture.

c. Mastic-adhere BFG flashing to parapet, lay dry over foam tubing, adhere to built-up roofing, and strip with felt.

d. Replace coping.

RESULT:
An installation that will remain trouble-free and water-tight because the unadhered loop of flexible flashing is sufficient to accommodate the indicated movement.
The "6300"
... newest of the P&S super devices

This is the new super "6300" by Pass & Seymour. Made without compromise... for the job where only the best will do.

The body and top are molded of high impact Melamine. All contacts are reinforced by plated spring steel clips... and each contact is individually recessed. May be side or back wired—with up to No. 10 wire. Assembly screws are threaded into the metal strap, not the plastic body.

The "6300" is for installations facing years of rough usage. It looks different because it is a truly different heavy duty outlet.

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**PROGRESSIVE ARCHITECTURE NEWS REPORT**

**WEATHERTIGHT WINDOW**

"Sealair" window line for commercial and monumental buildings is described in 36-page brochure. Window has triple weather guard that protects it from hurricane force winds and rains without leakage. Kawneer Co., Niles, Mich.

*On Free Data Card, Circle 217*

**ELECTRICAL EQUIPMENT**

**Colored Lighting**

Fluorescent lighting units are shown in 16-page booklet. Decorative surface diffuser inserts are of amber, blue, ...
GLULAM BEAMS FORM AIR TERMINAL ROOF STRUCTURE

Vaulted roof impression is gained both inside and out by glued laminated beams and curved laminated segments. 125' double cantilever Douglas fir beams provide 90' clear span inside and 17½' canopy front and back. Structure is 300' long with beams set 20' on center. Roof area: 37,500 sq. ft. The 11" wide, 55" deep laminated beams offer aesthetic value of natural wood, while performing as structural supports.

For more information, turn to Reader Service card, circle No. 383
green, or white vinyl. Wall, ceiling, and island units of "Colorescent" line are encased in wood or textured vinyl as well as in standard metal finish. Details, model listings, color illustrations, and specs are given. Prescolite Mfg. Co., 1251 Doolittle Drive, San Leandro, Cal.

On Free Data Card, Circle 218

Lighting Guide

"How to Make a Lighting Survey" is recently published 40-page guide. Survey provides accurate method for measuring quantity and quality of illumination in existing and new installations. Daylighting surveys, maintenance of lighting systems, and causes and remedies of some common problems are discussed. Copies are available for 75¢ each. Illuminating Engineering Society, 345 East 47 St., New York, N.Y.

FINISHERS/PROTECTORS

Paint Specs for Sanitation Projects

Specifications manual, 34 pages, describes painting and finishing of all interior and exterior surfaces for sewage disposal, water treatment, and engineering projects. Contents include "How to Use Manual"; "General Conditions," which contains "base bid" clause; "Paint Products," including primers, enamels, paints, stains, varnishes; "Specification Index," which includes protective and decorative painting; "Painting Schedules," giving protecting and decorative painting; and "Product Descriptions." Pratt & Lambert, Inc., 75 Tonawanda St., Buffalo, N.Y.

On Free Data Card, Circle 219

FURNITURE

Lounge Chair

Folder depicts several styles of "Pedal" lounge chair made of tempered steel. Chair is available in variety of metal finishes and upholstery covers from three grades of knit back supported vinyls in various patterns and colors. Pedestal comes in chrome or bronze plate with chip-resistant baked-coatings in several color choices. Walnut-veneered backs are available at a slight extra cost. Kuehne Mfg. Co., Mattoon, Ill.

On Free Data Card, Circle 220

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That's right! TERRAFINO is the first resilient tile to combine the traditional warmth and beauty of genuine marble with tough, flexible epoxy resins. The surface of each tile is 80% to 85% marble chips!

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TERRAFINO has already proven its mettle in some of New York City's busiest elevators, bank lobbies and school corridors.

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TERRAFINO is the perfect material to use where you want terrazzo but haven't the time, space or facilities.

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TERRAFINO's beauty is more than skin deep. Its lustrous surface resists dirt accumulation and scuffing. TERRAFINO can be washed with any type cleaner, on either side of the Ph scale. This tile has a "memory" which shakes out indentations.

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TERRAFINO's standard color range includes 10 beautiful patterns, in two sizes, 9" x 9" x ¾" and 12" x 12" x ½".

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For more information, turn to Reader Service card, circle No. 323

For more information, turn to Reader Service card, circle No. 347
Finnish Furniture

Catalog illustrates “Fennoform” line of Finnish furniture, which includes designs by Alvar Aalto. Among pieces covered are upholstered seating, sofas, lounge chairs; office stacking chairs; stools; coat trees; auditorium and theater seating; children’s furniture; desks, storage units, wall systems; and lamps. All furniture is available in a variety of materials. Catalog is available at $1 per copy. International Contract Furnishings, Inc., 145 East 57 St., New York, N.Y.

Modern Fireplaces

Eight-page file folder contains series of six types of modern fireplaces. Five sheets include illustrations and descriptive material. Remaining three sheets give dimensions and prices. Pace Planner Co., Inc., 151 S. Tucson Blvd., Tucson, Ariz.

Furniture Catalog

Steel furniture and accessories are presented in 22-page catalog. Included are ash receptacles, benches, chairs, dividers, hardware, metal sculpture, antlers, sofas, stools, tables, and wall

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Write for complete information... request Catalog No. 410.

When you want more than just a standard door or have a tough opening to fill, remember the design and construction of custom doors to meet your esthetic and functional requirements is a specialty with R-W. In addition, R-W can supply the necessary hardware and heavy-duty electric operators where required... all are "custom-fitted" to each other to assure trouble-free installation and service.

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For more information, turn to Reader Service card, circle No. 300
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**Matot lifts speed 400 requests daily**

Located in a new building on the campus of the Illinois Institute of Technology, Crerar Library averages 400 reader requests daily for technical research material.

**PROBLEM:** To locate and make requested material available to the checkout desk as quickly as possible.

**SOLUTION:** Two Matot truck-in book lifts and a pneumatic tube system. First—requests are sent by tube to one of three employee-stations located on the first floor. Second—an employee takes the request, locates the book and puts it on one of two centrally located lifts. Third—the material arrives on the lift under the counter-top of the main desk where the librarian verifies it and checks it out. The entire operation takes 5 minutes. Up to 30 requests can be handled at one time. Returned material is loaded onto carts and trucked into a dumbwaiter for return to shelves.

Matot designs lifts for many uses: money lifts, food lifts and record carriers. Write for free information on how Matot can make a building and its employees operate more efficiently.

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**SPECIAL EQUIPMENT**

**Metal Sculpture**

Brochure, 28 pages, illustrates already executed metal sculptures. Stylized plant forms could be useful in interiors where plants cannot be kept alive. Sculptures can be used in residences, lobbies, gardens, industries, and religious buildings. Price list is included. Designs are available from architects' impressions. Sculptsmith Inc., 138 West 10 St., New York, N.Y.

*On Free Data Card, Circle 223*

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Edwards "wall to wall" baseboard radiation is available up to 20 feet in length. Long length baseboard, introduced to the industry by Edwards, improves the appearance of the job, reduces expensive labor and eliminates the cost of splices. Available in five attractive finishes—chrome, woodgrain, coppertone, beige and white. Easy snap-on front cover. Made by the manufacturer of Edwards packaged hydronic boilers, motorized zone valves, chillers and cooling equipment.

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- Can be wall mounted, ceiling hung or floor to ceiling mounted
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No more than ten feet away from its back-door wall, Hahne & Company's new Westfield, New Jersey, store has the busy Jersey Central Railroad for a neighbor. Hardly conducive (Hahne & Company executives felt when the site was first considered) to the atmosphere of "quiet elegance" which draws appreciative shoppers to the company's other units in Montclair and Newark . . .

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An avalanche of press releases lands on my desk every day. I have to sift through them and decide which announcement seems to be important enough to warrant space in the magazine. Since space is always at a premium, most of them end up in my round file. Yet sometimes I wonder if what is thrown out is not more important than what is kept in.

Take, for instance, two items received recently. They are quite typical in that, on first reading, they do not seem portentous enough to be of too great interest to P/A's national audience.

The first one came from Downtown Idea Exchange, a newsletter "devoted to worldwide coverage of downtown developments." It describes a concept of its Editor and Publisher, Laurence Alexander, who is also President of National Downtown Services, Inc., a consulting firm "renowned for downtown redevelopments." The release says:

"City planning and architectural design aimed expressly at impermanence may be the answer to today's urban problems. . . . 'Ten years from now, or twenty,' Alexander inquires with forewarning, 'will we discover that the country has undergone further great changes which have obsoleted our new crop of roads and buildings, our new locations and facilities?' The sweeping changes in our life and technology over the past twenty years have made our urban layouts, streets, parking, and structures largely ineffectual. What will happen, in the unpredictable future, to the urban efforts we undertake today? Are they not similarly doomed? 'The answer may be the Impermanent Downtown, built for the present and the near-term future, not the future beyond the haze.' Alexander analyzes the possibilities of 'throw-away architecture' and deliberately temporary planning efforts . . . a downtown of 'carefully paced change,' one that is maximally functional now and 'simply chucked' when it ceases to be so."

The second announcement came from a Chicago public relations agency. This one says that:

"Johnson & Johnson, Engineers-Architects, Inc., has become a wholly-owned subsidiary of Capitol Food Industries, Inc., through the acquisition of the previously unowned 60 per cent interest . . . Capitol first acquired 40 per cent interest in Johnson & Johnson in April, 1961. The transaction was completed through an exchange of stock. With offices in Chicago and Los Angeles, Johnson & Johnson, Engineers-Architects, is a firm of consultants and specialists in the planning and construction of . . . institutional and industrial buildings."

There you are. Judge for yourself. Are these announcements important? Do they portend that what we are heading for is throw-away architecture designed by architectural firms that are wholly owned subsidiaries of various business enterprises? ■

Jan C. Rowan
HOUSES: the architect speaks to
The home of prehistoric man was the cave. He made his shelter with what he found in nature, shaping it to serve his needs to the extent that his limited knowledge, tools, and inclination would permit.

Even in relatively recent history, man often found it easier to use what the land already provided. Shown on these pages are conical towers in the Göreme valley of Turkey, formed eons ago by the erosion of volcanic residue. When the Early Christians sought to escape persecution, they found that the soft rock could be hollowed out, and here they made their homes and chapels. To this day, some of the fantastic towers of Cappadocia remain in use, now as homes for Turkish farmers.

Modern man is still seeking a protective shelter, but no longer merely against the gods and the elements; nor against the monsters who roamed the land in prehistoric times (and are still with us today, often inanimate, and usually of our own invention). Today more than ever, man wants protection against his own kind. His home is not his castle in the sense that he will do battle from it; but for some it is the last stronghold of individualism, and for many it is the ultimate fortification behind which the spirit can repair and nourish itself. Thus man needs shelter that will insure his basic survival, but shelter of such dimension (tangible and intangible, measurable and immeasurable) as will permit the fullest development of his potential as a human being. This is the problem central to all architecture, just as housing itself is universal in our world. From the Greek word, oikos, meaning house, comes our word ecumenic, meaning world-wide.

In world-wide terms, then, what is the significance of the single-family custom-designed house? Less than 12 per cent of the houses built each year in the U.S. are architect-designed for a specific client; and in most parts of the world, this figure is considerably lower. The significance seems to be that the custom-designed house can offer the widest latitude in interpreting and fulfilling all the needs of human shelter. We do not have here an architecture-by-committee—only those few who are most intimately involved, who will be living in the building, are involved in its planning. And so, since the house is not for just anyone, but for a specific someone, it can have all the individuality, even eccentricity, that is desirable or practical. And if some of the unique design features of such a house—and, hopefully, its spirit—find their way into the mass market, then the single house has an influence on far more people than those for whom it was originally intended.

But are custom-designed houses truly “personal” houses, tailored to the shape of an individual’s life? It is true that the client has a “program,” but it is often the architect who establishes it; by asking the right questions, he is at least more likely to obtain the right answers. The client may have a site in mind or in hand, and he brings a budget. Obviously, too, the client carries with him his prejudices and complexes, many of which might stay safely buried in the subconscious if not for the psychoanalytic practice conducted, on the side, by his architect. It is interesting, in this connection, that among the nine architects represented in this issue, some find this intense personal involvement a definite stimulus to their creative abilities; others find it tiresome, unreasonable, even immoral.

Granting the variety of personal considerations the client brings with him, when all is said and done and built, whose vision is it?

While any group of clients may stand out as distinct personalities, the work of the individual architect stands out more distinctly. The Moore house in this issue is more Moore than it is the “young lady” who vacations there; the two Esherick houses are more alike than their owners probably are; and the
50 “millionaires” who choose to live in a Couelle fantasy will surely be less alike than their physical environment might indicate.

Notwithstanding the remarkable or subtle differences that distinguish one person from another, the group of clients of any one architect tends to have the sharp edges of their idiosyncrasies worn smooth, in deference to the outline of their architect’s vision. It is the architect, after all, who is trained to transform people’s needs into a three-dimensional reality. When Winston Churchill said that “We mould our houses and then our houses mould us,” it is doubtful that he was looking at the question with the practicing architect in mind. We think, instead, that it is the architect who moulds houses.

If this is true, then the next question becomes who or what shapes the architect? In presenting the work of the nine architects, we have indicated some of the factors that contributed to their evolution as designers—where they studied, whose work has been especially influential, what views they hold about architecture in general and residential architecture in particular. They speak for themselves, in their own words, and with their own drawings. The resulting picture is, inevitably, a composite of diverse interpretations—each understandable in its own terms, each valid in its own terms.

The roots of their work go deep and in many different directions, tapping various well-springs of the past. The spirit of Maybeck, the Greenees, and Schindler has been reborn in the work of Joseph Esherick. Younger California architects are following other West Coast paths—Wojciechowski pays his respects to John Lautner; and Violeta Autumn (who also worked with Lautner) is evolving a vocabulary based strongly on Goff. Charles Moore’s work has a freshness that defies categorization, but he suggests that the forms and construction systems are based on old California barns, and he acknowledges a debt to Lou Kahn, among others. The influence of Neutra (along with the rationalism of Gropius) is noted by Marquis & Stoller. As we move eastward to the center of the country, there is a more “traditional” internationalism in the houses of Crites & McConnell, and Williams. On the East Coast, Urbanowicz’s house in New Jersey is directly descended from Corbu. And across the Atlantic is another emphatically European product by Jacques Couelle.

In all of these houses, there is the desire to provide shelter that serves all of man’s needs. There is also a desire, reasoned or instinctive (some architects have verbalized it, and all have shown it), to seek an expression that is connected to what has gone before. There is a singular lack of the gymnastics, the preciousness, that tries to proclaim man’s independence from his roots and that only shows how far he is separated from his inner being. Couelle’s work, which suggests the essence of this approach, is not form for its own sake, but form as a response to man’s instinctive needs. It has been suggested (by one American architect, Malcolm Wells, who is very much impressed by the work of this Frenchman) that Couelle’s work is “far more than just a blend of Le Corbusier, Gaudí, and mud; Couelle points to a way back from the mess we’ve made, toward a more appropriate encounter between man and Nature (not Man and nature).” Couelle himself has been quoted as saying that “the purpose of housing is to go back to the womb.” But perhaps his “cave” expresses more than a desire to return to Mother Earth. Perhaps it is not so much an echo of our primitive history (or our prenatal history) as it is a precursor of some future time—with modern integrated man in a new and satisfying relationship with Nature, reunited with his innermost longings and memories, and able to express them in a meaningful way that is immediately and intuitively understandable.—E. P.
Joseph Esherick doesn’t say much about the particulars of particular houses. When asked to comment on the two houses P/A is presenting on the following pages, he answered most questions (about structure, materials, program, site work) to the effect that there was nothing unusual, nothing unconventional, nothing tricky. But perhaps that is exactly why these houses are so good. Out of ordinary materials and methods he creates an architecture that is very “out of the ordinary.” Sites help, of course, and the two here are far above the average—in natural beauty and in the challenge they presented to the architect. But even in this regard, he knows when to leave well enough alone. About one site, high in the hills of Oakland, he says: “No more site work and landscaping was done than absolutely necessary. The only landscaping problem was to keep the natural growth as it is. What was there was good, and there is no need to change it.”

There are no gymnastics here, no high-wire histrionics. And this is his great strength. Again about the Oakland house (pages 134-141), he reports that the clients obviously wanted to take maximum advantage of their location, “to be part of all that takes place there, but they did not feel that this implied ‘becoming a part of the land’ or any other such nonsense.” There may be “nothing unusual” about the elements of this house, or the Mill Valley house (pages 142-147), but it is unusual to have them come out so right, at a time when many others are trying so hard and going so wrong. Not that Esherick doesn’t work hard—there is a thoughtful and well-studied quality to his houses, a complexity and sophistication; but if his vocabulary is a cultivated one, this does not prevent him from having an ear for the vernacular, too.

About architecture in general, he has made some strong and provocative statements (verbal, that is, as well as visual). He was labeled “an ideologist among architects” when this long statement of his appeared in the December 1961 issue of Western Architect and Engineer: “Beauty is a consequential thing, a by-product of solving problems correctly. It is unreal as the goal. Preoccupation with aesthetics leads to arbitrary design, to buildings which take a certain form because the designer ‘likes the way it looks.’ No successful architecture can be formulated on a generalized system of aesthetics; it must be based on a way of life. We must decide what is alive and vital in our culture and approach each problem with this in mind. By approaching things subjectively and in a materialistic way we will never learn what things are. We need to know what things are, and what they are for. We need to discover, in architecture, realities and meanings. Architecture is a process, a way of bringing together spoken and unspoken needs in relation to reality. I think we have been confusing the process with the end product. We have been thinking of the building instead of man living in a space and using space. We have been concerning ourselves with expressions instead of realities.”

His deceptively simple definition of one of the most elusive concepts of architecture: “Form,” he has said, “is what things are and what they do.”

When we asked Esherick whose work has made the strongest impression on him, he replied, “Perhaps the strongest impression today comes from the work of such people as Yamasaki and Stone, which I feel to be so much in the wrong direction that I think something definite has to be done about it. Fortunately there are lots of people who are trying to find a sensible way into the future. . . . I am inclined to think that Bay Area architecture has been oversold somewhat, although there are people doing strikingly good work such as Gerry McCue, Charles Moore, Richard Peters, Don Olsen, and a few others.”

Finding his own way into the future has led Esherick to readings in philosophy of science, mathematics, operation research, decision theory, sociology, psychology, and politics. He says that Stephen Spender’s The Struggle of the Modern is a more interesting and useful book to him “than anything any architect ever wrote. . . . I don’t think I’ve read anything about architecture that has been any use at all.”

“It’s in the realm of ideas that I think architecture is particularly weak. I would be inclined to contend that if you can’t think, you can’t do good work.”

Esherick graduated from the University of Pennsylvania in 1937. At that time, he says, “Penn was a pretty conservative Beaux-Arts school (which is a statement you can still make about practically every school in the world). Paul Cret was still there and his influence was quite strong. He was a first rate teacher, I think a better teacher than architect, even though the projects he did were big and complex. George Howe’s influence was just beginning to be felt at the University, and contact with him, of course, was very stimulating.” He worked for him briefly, but by the spring of 1938, Esherick was already out in California, where he worked for Walte Steiberg and Gardner Daily until 1942. When he got out of the Navy in 1946, he opened his own office.

In discussing the problems of residential design, Esherick made these comments: “The labor that goes into individual residential design is so great that it is virtually immoral. If had used the time developing one standard idea that has gone into my residential practice over the past years, everybody would be better off. People are not so unique, or sites so unique that it is impossible to design a standard set of components with very broad application. This hasn’t happened in the past because the approaches have been all too narrow and have looked at prefabrication as an architect’s problem instead of a consumer’s problem; that is, instead of the problem of the occupant of the house. If we ever get around to thinking in this direction, maybe something will happen.”

Continuing with his thoughts on residential design, Esherick says: “The principal quality a house ought to have is flexibility and changeability in the broadest sense. It should change with the day, and it should be such that it generally stays in the background. People, and the things they do, and the things they have, are far more important than any building. What you see of the building should be interpretable in as many different ways as possible. If we know one thing, it is that everybody is different and that there isn’t going to be any one single answer to anything. The assumption that one stylistic answer is going to solve all the problems of the world has, I think, been one of the things that has held back any mass-production process.”

“I think the future of the custom-designed house is that of any exclusively luxury item, and I think that’s all it is. I don’t think enough insight is gained by anybody in it to make it worthwhile and I think it has relatively little over-all importance. Most custom-designed residential work today is so much muscle-flexing on the part of the architects, aided and abetted either by status-seeking or luxury-seeking on the part of owner. This wasn’t the case with either of these two houses; certainly they were after things in a very simple straightforward way. My only point is that it is a great pity they cannot be accommodated by something pretty much off the shelf. . . . The building industry’s problems are a long way from custom-design problems. They are much more interesting and more difficult. Someday somebody will come along and start to solve them but I don’t see it happening now. And it will never happen the housing industry thinks that what it is doing is to produce a less expensive custom-designed house.”
Oakland

Architects: Joseph Esherick & Associates; Joseph Esherick, George Homsey, and Peter Dodge. Associates: Gilbert, Fosberg, Dishman & Schmidt, Structural Engineers. Site: Oakland, California. The lot is extremely steep, and there is a magnificent view over San Francisco Bay. Because the site is almost at the summit of a ridge, it is subject to unusual weather patterns—a mixture composed of varying parts of wind, sun, and fog. Program: The clients, a doctor and his wife, had no exceptional requirements. They wanted to enjoy their location to the utmost—"to be part of all that takes place there." Structural System: A combination of reinforced concrete, glue-laminated beams, and standard wood framing. Mechanical System: Forced warm air. Major Materials: Redwood plywood, with resawn face, for exterior surfacing; resawn plywood, fiberboard, or gypsumboard for interior surfacing; white oak for floors; fiberboard for ceilings; aluminum sash. Area: 1914 sq ft. Photography: Roy Flamm.
The clients are a doctor and his wife. According to Esherick, "I don't think there were any exceptional requirements." Nevertheless, he has said that "one of the biggest battles is to find out what a client really wants. Next to this, design is easy." In the early stages of conferring, he brings large sheets of paper to his meetings with the client, drawing as they talk. No drawings are prepared between these meetings. This site, in Oakland, has a superb view of San Francisco Bay. It is almost at the summit of a ridge, and is therefore subject to unique weather patterns. At times, the entire valley floor is covered with fog, and only a few of the taller buildings come up through it. At other times, the valley is clear but the fog is backed up against Grizzly Peak Ridge. The photographer Roy Flamm says that "one of the outstanding features of this job of Joe's is just about impossible to capture on film. It is a heavily wooded site and there was an amazing lack of site disturbance; it was almost as though they set the completed building down with a helicopter."
The wind is so strong at this location that "virtually nothing can be done about it except go indoors." The sun, however, has to be controlled. Much of the time, when fog cuts down the amount of sunlight, it is essential that a good balance of light be obtained in the interior; but to prevent the sun from becoming unbearable, it is necessary to protect the windows and balance the light by sources away from the sun. Sun-shading devices are "associated with the windows and are not just an extension of the roof. This gives us the opportunity," says Esherick, "of getting protection where we need it instead of arbitrarily putting it some place where we don't need it."
It is not permissible to build a fireplace on wood frame in the area due to very restrictive local ordinances (any fireplace has to be supported on masonry all the way to the ground). This requirement led to the idea of the large concrete bent that supports the house on the west. Materials are simple: redwood plywood, with resawn face, for exterior surfacing; resawn plywood, fiberboard, and gypsumboard for interiors. Colors are natural wood tones, with some accentuation by darker stains. Baths are brightly colored—the upper one in an international signal orange, and the lower one in a green “that would make a billiard table in the sun look like dry grass.”
Mill Valley

Architects: Joseph Escherich & Associates; Joseph Escherich, George Homsley, and Peter Dodge. Associates: Gilbert, Forsberg, Borkmann & Schmidt, Structural Engineers; Robert K. McNee, Interior Designer. Site: Mill Valley, California. A steep site with a fine view into the valley and up to Mt. Tamalpais. There are many fine oaks.

Program: A simple house in the country, to which the clients—a doctor and his wife—could retire. At the time the house was planned, accommodations for a teen-age son were required. Structural System: Standard wood platform framing; reinforced-concrete foundation. Mechanical System: Forced warm air. Major Materials: Red cedar shingles, for exterior siding; western redwood, T & G, glued to stripping, for interior wall surfacing of major areas; gypsum board or red oak stripping for walls of other areas; steel sash. Area: 1490 sq ft. Photography: Roy Flamm.
The owners wanted an informal environment where they could enjoy the pleasant aspects of the site and avoid the less pleasant aspects—mainly the extreme brightness and heat of the late-afternoon sun. Since the most exciting view is, unfortunately, to the west, openings on the west wall were restricted to a single slot (facing page, lower right). To get the most complete view of the landscape from this tall, narrow window, it is necessary to change one's position within the room, and to construct a total view out of the successive, remembered segments. The south wall, however, is handled in an entirely different manner: this wall has such a variety of openings punched into it (top, facing page and overpage) that it almost ceases to exist as a wall, and the entire panorama is thrown open to view. But even though the view is a rich one, the strong visual composition of this wall is equally arresting.
Aspects of Esherick's work are reminiscent of Maybeck, the Greenes, Schindler. The shingled exterior here, and the play of light through trellises, strike a particularly familiar chord. But perhaps the correspondence shouldn't be surprising. The basic elements are the same—same climate, same indigenous materials, same hillside sites (one of his rare successes in business was the purchase of four acres in the Berkeley hills, which he sold when his usual hard times became even harder). Like them, Esherick is carrying out his own investigation into the meaning of architecture; and, like them, he is doing so after many others have set down what they believe are the only rules.
"The Private World of an Individual"

Architect: Violeta Autumn. Site: Sausalito, California. On upslope side of a narrow, winding street. Program: Building to serve as residence for couple, and as architectural office and artist’s studio for Mrs. Autumn, owner-architect of this residence. Structural System: Three-sided reinforced concrete retaining wall against steep hill; 32-ft glued-laminated beam at street-side carries all vertical loads. Retaining walls designed as vertical slabs, spanning horizontal concrete beams, which in turn span between the side walls and a central vertical buttress. Beams and walls follow 60° angle, determined by meeting of side property lines and street. Intersecting wood beams are joined with bent steel plates and bolts. Mechanical System: Heat and air-circulation provided by forced-air furnace at ground level; air delivered through floor registers and through openings in core of stairwell; core also acts as cold-air return duct; electric heater in bathroom for quick heat. Major Materials: Reinforced concrete with exposed aggregate; woods with clear waxed or satin finishes; glass. Below grade, concrete walls are waterproofed with felt and asphalt. Ceilings of 2" x 8" clear heart redwood and 2" x 3" vertical grain Douglas Fir T&G, in alternating pattern. Two-sided ornamental spandrel panels of masonite, designed and executed in casein and silver leaf by architect. Cork floors throughout. Photography: Pirkle Jones.

Violeta Autumn, who was both client and architect of this house, received her architectural training at the University of Oklahoma under Bruce Goff. Since graduation in '53, she has worked with many architectural firms, acquired her California architectural license, has set up her own office, performed services as delineator for many architectural firms in the Bay Area, executed several murals, and has found time to paint, which has led to exhibitions in the U.S., as well as in Israel, Spain, and Peru.

Although the remarkably versatile Mrs. Autumn has participated in the design of many buildings in other architects’ offices, her own house was the first structure she executed entirely on her own and therefore saw herself at the outset of this design “as a bird must see his first solo flight—a little tense, a little cautious, yet vibrant with the excitement of self-awareness, freedom, and promise.” Since then, she has finished another house in Idaho and is presently occupied with the design of some apartment houses. As a field of practice, she believes that “residential design, by its very nature, has as its basis humanity in its purest form—the individual. The close personal relationship that comes from observing, listening, understanding, and interpreting a client is an exciting seed for creative effort.” While many architects find it a problem to cope with the “emotionality of clients,” she has found that “it
is an essential ingredient toward the real understanding of my clients and the essence of their needs, wants, and values.” She sums up the qualities she believes are important in a house in these words: “A dwelling is ideally the private world of an individual, and as such must be responsive to that individual. A dwelling must function smoothly in all its physical attributes and must exist as a continuous source of interest and delight.”

In her own house, a workable arrangement of the physical functions was not easily obtained because of singularly difficult site conditions. The site met the street with an almost vertical cliff. To make matters even more difficult, the property line was 10 ft back from the street, and parking had to be provided within the property. Problems of earth-moving and special bulwarking, however, were many times rewarded by the breathtaking views of San Francisco and Berkeley, linked by the spans of the Bay Bridge, and, most dramatically of all, the ever-changing sight, directly below, of “Hurricane Gulch,” so named because of the strong sea breezes, often accompanied by a heavy, low-lying fog that rushes toward the sea. By setting the building into the hill, it has become part of the site and is at the same time protected from direct wind. The building was kept narrow and space was instead created in a vertical direction. “This verticality,” writes Mrs. Autumn, “became a theme throughout the elements of the building, coming to a climax at the top of triangular columns, which soar upward and terminate in pointed forms against the sky.” The strongly vertical, narrow sash at the face of the building, also part of this governing theme, provided the desired sense of protection and seclusion, yet permitted full enjoyment of the view.

Inside, neither large floor areas nor isolated rooms were required. Instead, areas were to be provided for different activities, along with conveniently placed built-ins and storage places. Much more important to the occupants was the continuity of design, which was to carry from the free-flowing spaces of the structure to the very smallest details. Thus the copper hood of the fireplace, for example, ascends to a height of two floors, reinforcing, with its raised seams, the general verticality of the scheme. Elsewhere, glistening polished rocks, placed by hand in the holes left in the concrete walls by the form ties, surprise and delight the eye and reassert again that this house is “not only a shelter and convenience, but an everyday experience of color, richness, form, composition.”
The verticality of the scheme is further reinforced by containing the stairs within a six-sided tower. Walls are aggregate-surfaced concrete at the base of the tower; T & G redwood and Douglas fir in alternating pattern in its upper portions. Stairwell is skylighted and its central core carries airducts for heating and ventilation. Painting at base of stair (right) is by Violeta Autumn.
"A Special Place"

Architects: Moore, Lyndon/Turnbull/Whitzaker, Designers; Charles W. Moore, Architect. Site: Boulder Creek, Calif. A magnificent site in the Santa Cruz mountains, part of a larger site owned by the client's parents. The slope, fairly steep, is covered with ferns and buckeye, and is surrounded by oaks and madrones. There are two great circles of tall redwoods through which sunshine filters. The view is past other high redwood groves to hills across the valley. Program: A young lady's vacation house, small enough for a tiny budget, but spacious enough for large parties. As the house began to evolve, various specific considerations became important: to fit it into the vertical space between the redwoods; to make it a volume full of light in the dark forest; to give it maximum privacy in a tiny area without losing a sense of spaciousness; to reduce the need for furniture; and to require the least attention to upkeep. Structural System: Wood frame. Mechanical System: Electric heating: baseboard convection, plus unit heater in bathroom. Major Materials: 4 x 6 and 4 x 8 Douglas fir for structural framing; 2 x 6 studs 16" o.c.; for walls: "Texture 1-11" plywood, stained a soft gray-green, for exterior wall surfacing; A-D plywood, mostly painted white, for interior wall surfacing; industrial steel sash. Area: 657 sq ft, excluding screened porch. Cost: $7800, excluding furnishing. Photography: Morley Baer.

In 1962, the P/A Design Awards jury deliberated among three Charles Moore houses, finally selecting one for a citation. In the 1963 judgment, a Moore project for condominium apartments was premiated after a lengthy debate; and only several months ago, in the 1964 Design Awards program, a third jury selected a third work by this office. "Moorishness" is a force to be reckoned with, they thought they were saying; and quite apart from our belief in the Design Awards program (particularly in the balancing effect of totally different juries each year), we concur.

But Moore's is a controversial architecture—people are either pro or con, and indifference is rare. If there are some whose reaction will be close to apoplexy, there are others whose eyes will light up in wonderment at the unpretentious freshness, the down-to-earth fantasy, the uniqueness, the humor, of this work. To those few who think that this architecture is laughing at the whole profession and the whole meaning of architecture—that the work is either nonarchitectural or even antiarchitectural, and that this particular project looks very much like an outhouse—we can only suggest that they are missing the point. There is humor in these projects, yes, but it is one that derives from the joy of living, from the joyful affirmation of uniqueness. How appropriate that this house should be designed especially for fun, and—like the "fun house" of an amusement park—should be so full of unique experiences of delight and surprise.

When Moore talks of the firm's approach, he stresses this search for uniqueness. "We are concerned with discovering the specific and special requirements and possibilities of each problem, even a very small one like this cabin, and with letting the forms be a direct response to these specifics." He goes on: "We are also interested in manipulating the degree of enclosure, the passage from outside to inside to emphasize, even in a very small house, the establishment of a special Place around which the forms build. This cabin is one of a series of houses, most of them still unbuilt, which add subordinate spaces of varying sorts and sizes to a central major space."

In this case, the central space is a tower 14 ft square, so tiny that levels had to be carefully juggled in order to make them accessible to one another without long stairs (which would not have fit anyway). The architect's description: "Entrance is beside the kitchen, on a level which becomes window-seat height for the major living space (which opens through a large sliding door to a screened porch), which in turn becomes seat height for a sunken area round the fireplace. Just above this fireplace pit, reached by short stair from the entrance level, is a bedroom balcony, from which a stair and a bridge lead to a bathroom over the entrance."
Complicated? Yes. Brilliant, and remarkably spacious? Yes.

Moore explains that the firm enjoys doing houses because of “the opportunity to work out an idea well within our attention span. We are not seeking to be original in each work, but to try to learn for each job from the last, and on houses we can learn from the real thing very much sooner. . . . Though we have all traveled rather a lot, the shapes we produce are not based on anything very exotic; the forms and construction systems of old California barns figure, I think, more heavily than anything else.”

The firm of Moore/Lyndon/Turnbull/Whitaker, formed in 1962, is actually a new one to California. Donlyn Lyndon and William Turnbull Jr. received their M.F.A.’s from Princeton in 1959, where they studied with Enrico Peressutti, Jean Labatut, and Louis Kahn. Richard R. Whitaker Jr. received his B. Arch, from the University of California in 1961. The young man who did most of the work on this house, Warren C. Fuller, is also a recent graduate of the University of California. Moore himself came to Berkeley in 1959. He had received his B. Arch, from the University of Michigan in 1947, and is still proud of the strong influence Roger Bailey had on him there. Moore worked briefly in San Francisco, travelled for a year in Europe and the Near East, taught history and design for two years at the University of Utah, then, after serving in Korea, went to Princeton for an M.F.A. in 1956 and a Ph.D. in architecture and architectural history in 1957. He taught there until 1959. “I really don’t know whether Lyndon, Turnbull, and I owe the most to Peressutti or Kahn. We value highly our contact with both of them. In addition to their work, we are much impressed by the buildings Joseph Esherick and the people around him have been doing, and on the East Coast by Robert Venturi and Edward Larrabee Barnes.”

The firm is seriously involved in academic activities. Three of the partners teach at the University of California: Moore is Chairman of the Department of Architecture; Lyndon is an Assistant Professor (he and Moore teach a course in Oriental architectural history); and Whitaker is a Lecturer.

The major work of the firm thus far has been housing. Moore comments: “For houses to be really successful we have had to stick with them all the way, though I don’t know how much longer we will go on painting clients’ walls and building their furniture. . . . Fascinating as the design of individual houses is, it includes an appalling waste of time locating contractors, fighting down the bids (ours, so far, are mostly very low-cost houses), waiting, arguing with everyone, writing letters, and waiting some more. We are most concerned that the design should remain a specific response to specific problems, but this need not be lost in a more reasonable solution to the problems of getting things built; and the time wasted making baseless guesses about cost (everybody, including the contractor, makes them) is ridiculous. If we could reform all that, we would like very much to continue doing houses. As it is, we will probably continue anyway.”
Almost apologetically, the architects mention that the area of 567 sq ft, excluding the screened porch, exceeds the original suggestion of 550; the total cost (without furnishings) is an amazing $7800. If this is a lot of space for the money, it is even more true that it is a lot of space for the space—the spaciousness created by the different levels is truly remarkable. Looking at the entire wall of industrial steel sash, we are reminded of the factory sash that another Berkeley architect, Bernard Maybeck, used in his Christian Science Church in 1910. It was daring but superbly confident. Maybeck in his earliest houses, like Moore today, relied on indigenous California forms and materials, modifying them by his own very personal inventiveness to give them freshness and immediacy, and what Esther McCoy has called “simplicity without pikestaff plainness.” Many of Maybeck’s early houses were cottages of utmost economy.
“Solid Against Transparent”

Designers: Bohdan Urbanowicz; Barry Benepe. Site: Five-acre wooded hillside with brook at Bernardson, New Jersey. Program: Living quarters for a couple; separate guest quarters required. Structure: Poured concrete foundations; 12" concrete block bearing walls with stucco; steel beams; wood joists; roof and upper floor; concrete slab at ground level. Mechanical System: Radiant air circulation embedded in concrete slab; warm air through ducts and registers on upper floor; separate furnaces for each level. Materials: Walls, originally planned stone, were made concrete block for economic reasons; similarly, originally planned aluminum window frames now mostly of wood. Uneven, troweled stucco surface on exterior and interior walls. Gray vinyl tile floor on upper level. Photography: David Hirsch.

This strongly homogeneous design is actually the work of an unusual team, comprising: (1) its chief design innovator, Bohdan Urbanowicz, who is a painter, color specialist, and professor of Visual Arts at the Department of Architecture, Academy of Fine Arts, Warsaw, Poland; (2) American architect Barry Benepe, who worked out many of the details with the owners, prepared working drawings, and supervised construction; and (3) the owners, Mr. and Mrs. W. D. Sylwestrocz, a Polish scientist and his wife, two unusually perceptive men who served as translators and mediators between the two designers, and who have furnished the house and placed their fine collection of Polish art with rare sensitivity to the architecture. In spite of the difficulties of communicating with each other over such a vast distance, Urbanowicz has achieved many of the seemingly contradictory goals he had set for himself in the design of this house. As an environment for his sister and brother-in-law, he wanted a home which would become part of the "real life on American soil," yet would at the same time capture the calm of the native Polish houses. Structurally, he wanted to emphasize the contrast between solid masonry walls and transparent window walls, between bearing and non-bearing walls. Stylistically, the design reflects the personal contacts Urbanowicz has had with Le Corbusier, Rietveld, Oud, Arkelias, Rogers, Zevi, Mies van de Rohe.

Two heavy masonry walls form the spine of the design. These are placed parallel to each other and to the ridge line of the hill and, while they serve not only to block the north winds, but, in a sculptural way, provide a continuously changing scene of living walls (photos right) as the house is approached along the rising, circling driveway. Toward the north, where the driveway terminates in a parking court, the two-story masonry walls present an almost fortress-like appearance. But, as indeed, the main interior spaces are bright, friendly, and warm. Light floods into the main living area through the glazed south wall. Interior surfaces are for the most part white or neutral, set off the many colorful works of art—the gobelin by Płosowski in the dining area (left), Urbanowicz's own paintings and those of other contemporary Polish painters, as well as many traditional Polish furnishings and decorations.
Interchange of design ideas between Poland and the U.S. was carried on through the medium of postcards (left). While these necessarily limited the designer in Warsaw to transmission of only the most basic architectural information, it is perhaps because of this limitation that the main idea has survived with so little compromise. As in the first design sketches, the heavy masonry walls (below) contrast sharply with the non-bearing window wall (right) in the finished interior.

The owners' wish to live "high up" is reflected both in the siting of the house near the top of the hill, and in the two-story scheme which places the main living quarters on the upper level; the entry hall, two guest rooms with bath, heater room and garage are at ground level.
The upper floor, which houses all of the main living functions, is an open-plan arrangement in which the fireplace acts as pivot and focus (photos this page). Masonry walls have been stuccoed inside and out in a soft, uneven finish, recalling the wall textures of Polish houses. These white walls, as well as other neutral surfaces, provide the ideal background for the owners’ art collection.
"Architecture as an Art Form"

Architect: Christopher R. Wojciechowski. Associates: Hans G. Steinmann, Structural Engineer. Site: Agoura, California; small, growing community, 35 miles north of Los Angeles. House occupies knoll, bare of vegetation except for a few existing oak trees. Climate dry: hot in summer, cold in winter; Santa Ana winds in late fall and early winter. Programs: Client, a real estate broker and her teen-age daughter, desired rugged mountaintop house. Emphasis on low maintenance and exploitation of 360° view of valleys and mountains. Structural System: Buttresses and columns of poured concrete; 3" x 8" wood roof ties follow equilateral triangle module, with 14'-6" sides; 2" x 8" rafters on 24" centers; rock-wool insulation batts; 1" x 6" sheathing; composition roofing; concrete floor slabs. Plaster or wood partitions are non-bearing. Aluminum sliding windows or fixed plate glass. Mechanical System: Electric unit heaters in partitions. Major Materials: Wood and poured concrete with aggregate exposed in parts. Area: 1500 sq ft. Photography: J. Barry O'Rourke.

"Residential design," says Wojciechowski, "will always be my favorite. To me, the pleasures of designing a house for a family or individual stem from the opportunity of providing an inspirational environment for the client. This environment is of utmost importance, because it moulds the life and every-day attitude of that individual. It is quite a challenge, and if successful, quite an accomplishment." For that reason, even though he is now busy with many other building types as associate in the firm of Robert E. Alexander and Associates, he hopes to be involved in residential design as much as possible.

Wojciechowski, who was born in 1934 in Warsaw, Poland, received his formal architectural training from the University of Southern California, Los Angeles. "However," he says, "as I became involved in the practice of architecture soon after my graduation, I realized that to complete and to augment this education, I needed to forget most of it." It was at this point of disillusionment that he went to work for John Lautner, whom he admires greatly as a man and as an architect with unusual insight into the philosophy of design, yet one who is completely free of any obsession or ostentation on the subject. So many architects today, Wojciechowski feels, "grope for an almost status-seeking involvement in design philosophy and leave no truth in the expression of their ideas." He believes that the profession is again "trying hard to become the darling of American society," an approach which, he feels, has never advanced architecture as an art form. "I realize that architecture as an art form can only exist in a limited capacity," he remarks. "But is it not here that we get and give the most satisfaction?"

"Architecture as an art form" was unquestionably a Wojciechowski's mind when he designed this house, which sits like a rugged crown on top of a bare knoll. It is a remarkably strong architectural statement, and yet, at the same time capable of subordinating itself to its larger setting. Seen from afar, its monumental concrete buttresses and piers appear to be rock formations. From within, they frame magnificent view of mountains and valleys. Structurally, they take the thrust of the triangular roof sections and make it possible to treat interior partitions as non-bearing screen walls, achieving in that way remarkable spaciousness within the comparatively small house.

Since the completion of this house in the summer of 1960, Wojciechowski has seen to it that his residential practice will not fall by the wayside. "I am fortunate," he says, "in that I own several residential lots on which I plan to build houses for sale to my friends." One of these is now in progress, other are to follow, and the search for "architecture as an art form is to continue."
The main room is oriented to the southwest for winter sun and view, and pond serves as coolant in the summer. Triangular module, which underlies the whole design, is particularly evident in the roof ties that criss-cross the interior spaces from pier to pier at a height of 7'-6" above the floor level.
Atrium, conceived as a year-round outdoor living space, is open to the views on all sides, yet is protected from the hot summer sun and the Santa Ana winds by the concrete buttresses and the low roof line. Voids in the roof are unglazed.
"Exploitation of Rational Structure"

Architects: Marquis & Stoller, Associates: Royston, Hanamoto, Mayes & Beck, Landscape Architects: Eric Elsesser & Associates, Structural Engineers: A steep, densely wooded hillside in Mill Valley, California, with bay view to the south-east. Program: The owners, two women artists, wanted large living room, large studio and garden areas for work and entertaining; they required privacy from the road, yet unobstructed distant views. Structural System: Concrete foundations; post-and-beam wood frame and bearing walls; wood joists; glue-laminated ridge beam; cedar shingle roof; redwood ship-lap exterior siding. Major Materials: Mahogany siding or gypsum board for interior partitions; wood sash or fixed \( \frac{3}{4} \) plate glass and heavy sheet glass. Mechanical System: Gas-fueled forced air system; sheet metal ducts. Photography: F. tra Stoller Associates.

Both clients and architect are pleased with this house (main house, site plan facing page): the clients because “it works extremely well,” the architects because “it reflects very well our design philosophy,” more specifically, “the effective use of interior spaces, and the exploitation of rational structure for its form and siting.” Most particularly, Marquis & Stoller are mindful that their work have a lasting quality. They speak strongly against “fadism, exhibitionism for its own sake, and architectural gymnastics in general,” and observe regretfully that “there is entirely too much concern with innovation, style, and new direction.” As Marquis says, “I don’t think you can put on a direction, like a suit of clothes, every January, when the P/A Design Awards issue comes out.” Instead, they insist, the only way to develop architecturally is to build on previous work.

Their own steady design development has fortunately been documented over the years by many U.S. and foreign publications, and numerous honors and awards have acknowledged the seriousness of their design approach.

Their deceptively simple design vocabulary is consistently recognizable and is carried forward in this most recently completed house, which, because of the unusual program requirements set by two artists and the demands of the extremely steep site, required a solution far from the ordinary. It was important, for example, that, to facilitate entertaining and working, a large living room and a large studio be provided. For the sake of minimum housekeeping, these spaces were to be held within a compactly efficient structure. The two-story scheme assured an economical arrangement and, at the same time, conserved the beautiful site. For the owners, who prefer gardening to housekeeping, several bridges connect with the abrupt natural grade, and provide ample, level outdoor decks. One deck, for example, serves as carport, another as entryway, a third extends as a terrace beyond the living room, and a fourth connects with the bedroom level.

Inside, an interlocking arrangement of large and small spaces made possible the desired high-ceilinged spaces within the surprisingly compact envelope. Since problems of privacy—ordinarily associated with planning for a family with children—were nonexistent, this interlocking space could be dramatized by leaving entry area, dining space, and living room open to each other.

Because of the many large trees on the site, the architects felt that the usual generous roof overhangs should be avoided in order to bring as much light and sky into the house as possible. It is perhaps this design departure which gives this house less of the Bay Region look that their earlier work has had. “For some time,” explain the architects, “we have been developing a slightly less regional approach and this house is..."
a further refinement of that idea." However, it would be difficult to disregard the charms of the Bay region and the architects fully acknowledge such influences as the anonymous California barns, Green & Green houses, the work of Gregory Ain and John Lautner (with whom Marquis worked for some time) and W. W. Wurster. They also acknowledge the great impact of Frank Lloyd Wright and Le Corbusier and the influences of their far-ranging school and work experiences. Claude Stoller studied at Black Mountain College and at Harvard Graduate School of Design under Gropius; Robert Marquis at the School of Architecture, University of Southern California, and at the Academia de Belle Arte in Florence. In addition, both have traveled extensively in France and England, and together spent one full year in Italy. At present, Claude Stoller is further expanding his architectural horizon while teaching at the Design Institute in Ahmedabad, India.

The partners' practice is not limited to residential design. Instead, they prefer their present wide range of jobs from a restaurant to churches to shopping center to university buildings, to a large redevelopment project. This kind of a practice, they believe, tends to be more stimulating and to result in fresher, better, and more inventive solutions. On the whole, Marquis feels, the residential client is well informed architecturally so that little time is required to "educate" the client. Nevertheless, he says, "there is the excessive introspection that borders on narcissism that the house client brings to the architect," which often forces the architect into the role of family psychiatrist and marriage counselor. But for this Marquis blames the architects. "They have fostered the myth of suiting the house to the client's personality to the point where it has become unreasonable."

It is, of course, exactly this very personal and intense exchange of ideas between architects and their house clients which often results in the most imaginative architectural solution—a fact particularly obvious when one studies the residential work of Marquis & Stoller.
Landscape architects Royston, Hanamoto, Mayes & Beck worked closely with the architects to unite the building with its setting. More than any other device, the various decks—in effect, bridges—provide the link between the house and the extremely steep site. The largest of these decks appears as an extension of the living room floor, which, on the downhill side of the house, terminates in a balcony.
"A Space, Not an Object"

Architect: A. Richard Williams. Site: Champaign, Illinois. Lot is 70' x 105', fairly flat, in a neighborhood offering no chance for a distant view. Local regulations called for a 10 ft setback at each side. Program: One-room house for the architect, a bachelor, designed for maximum privacy on what he calls an "urban" site, and attempting to create a unified indoor-outdoor environment that would be functionally and visually self-contained. Structural System: A combination of bearing wall and steel frame, with wood joists for floor and roof. Mechanical System: Gas-fired, horizontal-type, forced-air unit under floor. Major Materials: Chicago common brick, for walls; steel painted black, for columns; redwood and Philippine mahogany, stained horizontal-type, for interior; brick, for door and into a

bachelor, designed for maximum privacy on what he calls an "urban" site, and attempting to create a unified indoor-outdoor environment that would be functionally and visually self-contained. Structural System: A combination of bearing wall and steel frame, with wood joists for floor and roof. Mechanical System: Gas-fired, horizontal-type, forced-air unit under floor. Major Materials: Chicago common brick, for walls; steel painted black, for columns; redwood and Philippine mahogany, stained horizontal-type, for interior; brick, for door and into a

architect; exceptions noted.

It may seem a long way, in space and time, from the early court houses of Delos to this precise pavilion in Champaign, Illinois. The house that A. Richard Williams designed for himself in this Midwest university town is certainly not a verbatim translation from the Greek, white-washed and sculptured; but to the architect his home is Mediterranean nonetheless. In Williams' words, "This is a house as a space. Our Western tradition, from northwestern Europe, is more that of a house as an object. In the Orient, too, the house is an object in the landscape, a free-standing entity. People say this is a Japanese house. I say no. It is a Mediterranean concept, like the earliest court houses of Delos, like Pompeii. It is a party-wall situation (there is no edge, there is a feeling of projection into space); the floor changes at the edge of the dining area from a raised platform of teak to a lower pad of exposed-aggregate concrete; the result is that the inside and the outside are experienced as overlapping, since the dining area seems to be part of each.

The separate areas for living, dining, sleeping, and working are arranged in a single continuous space. The sense of spatial unity is so strong that one can stand in the middle and feel oriented to the whole space; some guests find the sense of motion so compelling that they "go into orbit" around the core. Nothing is allowed to interrupt the continuity of the envelope. The walls that define the space are kept free by putting all services within an island core (which has storage facing the areas where it is required). Traffic and circulation generally work better, Williams finds, when they are closer to the center of the plan.

Williams also employs what he calls "spatial calligraphy." A few examples: the teak strips of the floor overhang slightly ("there is no edge, there is a feeling of projection into space"); and, in the same way, the panels forming the core are held away from the floor ("you are more aware of space going through and surfaces going through"). He also uses color to describe in a linear way what the space is trying to describe; he sees black as the best color for expressing structural continuity, defining the edge of something. Thus the ceiling is held away from the wall by a black reveal, and there are black strips dividing the floor into structural bays. The plaster ceiling is plain and unpainted as a foil for all other textures and colors.

Everything works toward a single end, it would seem. Yet, speaking of his work as a whole, Williams finds that there is more meaning, for him, in the diversity exemplified by Saarinen than in an intensely unified approach to design. Perhaps this is because he teaches. He recalls that Paul Rudolph recently posed this dilemma: the architect, as an architect, may find his direction becoming more fixed and uncompromising, but as a teacher it is just the opposite—new directions are constantly opening up. Williams has been at the University of Illinois since 1946, and is now in charge of graduate design at the School of Architecture. His own formal education included undergraduate work at the University of Illinois and a Master's degree at MIT. His informal education is a continuing one, though: he is now on sabbatical from Illinois studying urban design education, with an itinerary that includes Tahiti, Australia, Thailand, Japan, India, Iran, Greece, and Italy.
The house was originally planned in two stages; Williams always intended making it larger. The first part dates from 1948, and coincides with the teak platform floor that now stands 12 in. above the gravel paving. When the house was enlarged, front and back walls were pushed outward, and the redwood side walls were enclosed in brick (the buried redwood has thus become insulation). The completed house won an AIA Honor Award from the Central Illinois chapter. Williams—owner and architect—was also interior designer; the coffee table, seating units, and other furniture, with few exceptions, are his own design.
"An Adequate Tool for Living"

Architects: Crites & McConnell. Associates: Richard G. Whitaker, Mechanical Engineer. Site: Cedar Rapids, Iowa. One of 17 heavily wooded sites in a 22-acre tract. The site lies high above its surroundings, and gives a long view across the valley. Despite its country landscape, the area is contiguous with the city limits. Program: A home for a young couple with three children. The family wanted an environment that would use the surrounding forest to advantage, and would provide privacy for family activities. In addition to the five members of the family to be housed, there is a sizable art collection, with its own special needs for unbroken expanses of wall area and for neutral backgrounds. Structural System: A combination of laminated wood beams and plywood box girders, with a plank and beam framing system. The house was first conceived as a concrete structure with precast exterior panels, but cost estimates at the preliminary stage were far in excess of the budget. Some of the form that developed with the concrete concept, however, was modified and adapted to the final wood structure. Mechanical System: Forced air, with two gas-fired boilers, one counter-flow and one up-flow. Major Materials: 2 x 8 and 2 x 10 joists 36" o.c. for roof and floor, with 1 x 4 cedar decking for finished ceiling, and 1/2" plywood underlayment for floors; plastic-faced plywood, painted to blend with surrounding tree trunks, for exterior skin of box beams; 1 x 4 Western red cedar, T & G, left to weather, for exterior siding; 1/2" sheetrock, painted white, for interior partitions. Area: 2550 sq ft. Photography: Julius Shulman.

Ray Crites has more than a professional interest in this house—it will be a neighbor of the home he is designing for himself nearby. Crites is thus in a position many an architect would envy; he will have extensive influence on his own physical environment, since the firm of Crites & McConnell will be custom-designing all 17 houses planned for these 22 acres of hilly woodland.

One of the main challenges of this job, Crites says, is to respect and preserve the natural beauty of the area. With considerable sensitivity, he has sited this house so that it makes the most of its forest environment—disturbing the woods as little as possible (the land around the residence has been allowed to return to its natural ground cover); enjoying the long view down the valley; and providing intimate outdoor areas that make for privacy from the neighbors.

Interior planning also shows careful regard for specifics. Adults and growing children require space for separate and joint pursuits, and need privacy—visual and acoustical—from each other. Starting from the assumption that a house, at the very least, must be "an adequate tool for living," Crites has separated parents' area from children's. The problem was well-studied. The living room, for instance, is above the playroom (adult gatherings will not bother sleeping children); and the playroom and study are as far apart as different levels and opposite orientations can place them. The main level belongs to the adults, so that, for the present, children do most of the stair-climbing; in later years, when they are away at school, the upper floor will become a compact and complete apartment for the parents.

But beyond clarity of organization, comfort, and "liveability," Crites wants a house to have "a reasonable excitement." The design idea in this house is a strong one: the exposed beams start from door height, scaling the interior down to within a foot above the average height of an adult. Originally, the house was envisioned as a concrete frame with exterior panels of granite aggregate, but budget estimates after first preliminaries were too high. It was hard for the architects to relinquish the concept, though, and the working drawings still indicated hope for the use of concrete—incredible as it may seem, full details for concrete appear as an alternate bid to the base bid for wood. The wood has been detailed, in effect, so as to attain the same dimensions that the concrete would require. Looking somewhat foolish, and out of their milieu, are a few remnants of the original design—the two concrete beams that fence off
the outdoor kitchen and dining terraces, and a third one that makes a barrier at the driveway. Near them are the exposed-aggregate slabs, now in the form of paving, that were to have been extensively used for exterior walls.

Understandably, the architects are disappointed and had “twinges of conscience because of the translation of the form from concrete into wood.” Crites hopes that if he does another house using this general concept, it will be possible to utilize concrete. But the client, like a good client should, reports that he is “highly pleased with the result.”

Straightforward rectangularity in concrete has been done extremely well by this firm: their McFarland Clinic in Ames, Iowa (see August 1963 P/A), was a strong architectural statement unhampered by ambiguity. Similarities between that project and this house are evident: the careful attention to regular repetitions, the drama of narrow windows, and the crisp detailing at junctures. The firm does mostly commercial and institutional buildings, and until now has averaged only several houses a year. They have been associated since 1958, and first came together when Crites was student and McConnell was teacher at Iowa State University.
The sloping site has encouraged a two-level plan, which works well for the needs of parents and growing children. Ample acreage has made it possible to extend the house in all directions, each room being connected to the adjacent room by one wall—or, at the most, two. A light well from the dining area admits natural light to the lower hall.
An Instinctive Home

Architect: Jacques Couelle. Site: Castellaras-le-Neuf, Alpes-Maritimes, France. A hilly site above the beaches of Cannes, with spectacular views of the sea, Grasse, and the surrounding mountains. The land is sparsely wooded, and covered with lavender, thyme, and gorse. Program: A development of 50 houses, in four basic types, each with three, four, or five bedrooms, and three, four, or five bathrooms. This is the first house to be completed, although three of the four other models are now under construction. Promoter is Pierre Beckhardt, banker from Paris. Owners of the houses will have the privilege of membership in the “Club du Chateau,” which provides such services as transportation to airport and station, housekeeping, gardening, home delivery by restaurants, and such facilities as swimming pool, tennis courts, putting green, branch bush, cinema. Structural System: Structural skeleton is concrete. The exterior walls are made of successive layers of concrete on ceramic or galvanized-iron gratings. A small plastic model was used as a guide for the most important reference points, with the mason thus working in a way similar to a sculptor’s assistant. The method is “exceedingly simple and avoids any misinterpretation,” writes the architect. He adds that the successive layers insure an excellent thermal insulation. Mechanical System: Radiant heating in floors or vaults. Major Materials: Reinforced concrete for exterior walls and interior partitions; slate, marble, or enamelled terra-cotta tile, for floors; lead, relief-shaped on moulds, for roof; grass, on two feet of earth, for roof insulation; metal for sliding exterior doors. Photography: Choura.

Although not custom-designed, in the sense of being planned or one particular client, this house is so unique—and so expensive—that it surely stands out from the usual “spec” house. It is one of 50 grand mansions (the smallest of which will sell for $125,000, the largest for $165,000) being added to an existing community of 90 houses just inland from Cannes and Nice. The earlier houses, also by Couelle, were in the anonymous style of the farmhouses of the country, but now (according to the brochure publicizing the new venture) this man of “extraordinary imagination and infallible taste” has been given free rein to create in his “specific ‘Couellique’ style.”

To give an idea of the “Couellique” Ideas: “What preoccupies me most is to achieve an architecture which contains what one might call ‘an instinctive home,’ the essential elements being a combination of site, orientation, climate, dominating winds, orientation to the sun. . . . The only thing that I am trying to recreate is what primitive living creatures were perhaps looking for: warren, nest, termite heap, or wasp nest—all this was for me the most thorough training in matters of construction. . . . I think it would be fascinating to make a museum for live animals in the Arizona desert, to wonder how animals would build homes for men! This sounds like a joke, but I think very seriously about this subject.”

The parallels between Couelle’s forms and those of Gaudi:
are striking—the same undulating surfaces and freely shaped openings, the same sense of the organic, the playful, the grotesque. Couelle, looking to nature for inspiration, has learned from the relation between form and function to be found in the simplest organisms and plants. He has said that “the best example of a collective habitation is the madrepore, where all the problems raised by man’s homes find their answers.” (A madrepore is any one of various stony reef-building corals of tropical seas that assume a variety of branching, encrusting, or massive forms, and that include the staghorn corals, the brain corals, and the mushroom corals.) Gaudi’s interest, too, was in the structural lessons of flora and fauna—in the organic and functional lessons—at a time when others of his day were content to look only for superficial decorative possibilities. It has been suggested, about Gaudi, that his vision of form was further conditioned by the brilliant Mediterranean light, which brings out the sculptural quality in everything it falls upon. The rocks, the intense light, and the shimmering sea were elements in Gaudi’s landscape, and their contribution to his sense of plasticity has perhaps had a similar effect on Couelle.

Couelle’s plasticity is definitely not “form for form’s sake.” One is reminded of Kiesler in this connection. Describing his Endless House (see JULY 1961 P/A), Kiesler has emphasized that it is no “free form” in the usual sense; it has strict dimensioned areas but is “the result of a different type of planning, based on our inner needs and processes rather than on the dictates of mechanics.” Kiesler, too, drew heavily on the instinctive behavior of animals.

Another of Couelle’s interests is the behavior of materials. Some years ago he founded a “Center of Research in Natural Structure,” and has taken out numerous patents for new materials. But ultimately, man is at the center of Couelle’s thinking. About stairs, for instance, he says: “Like plants, they curl. It is a law of nature. Stairs must curl and they must not be shaped regularly. They must have irregularities so you shift your weight. You can run up and down my staircases all day without tiring.” It wouldn’t seem improbable to us that Couelle—a vigorous man in his early sixties—is relying here, too, on his own researches.

There is a certain freshness to his more iconoclastic statements. For instance: “I believe in ignorance. You have to be able to read and write and count, but that’s all.” He has also been quoted as saying that the purpose of housing is “to go back to the womb.” In this house, he would seem to be giving back to modern man the chance to use his senses and instincts to the fullest. We wonder, though, whether anyone who can count at least to $125,000 is in any frame of mind to return to nature. And if the owner can’t make it all the way back to the cave, we wonder what it will be like for him, as lord of the manor, to survey his estate from behind the almost medievals ramparts of the upper walkway, and look across to one of his 49 neighbors, romping on the roof-lawn behind his battlements.
Interior of the house also carries out the cave theme; the one jarring note is the abrupt rectangularity of the glass and door detail.
The world of nature is the prime element that defines Couelle's thinking and his architectural approach. "The course of the sun is modified by the equinoxes. In building living quarters," he observes, "this should be taken into consideration to the greatest extent, and openings toward the open sky seem to me of the utmost importance in a happy dwelling, be they the size of a small interior courtyard, a sheltered pluvium, or simply openings in the entrance or in a room." Similarly, Couelle feels that color is of paramount importance, and remarks that it is "unthinkable" not to be "in harmony with the dominant colors caused by the geological aspect of the site."
BY WILLIAM J. McGUIINNESS
An environmental control design in which the lighting provides more than enough heat energy for an office building under critical outdoor winter temperatures is discussed by the Chairman, Department of Structural Design, School of Architecture, Pratt Institute.

As lighting intensities have increased, heat from the light sources has often been employed as part of the energy used for heating a building. Previous discussions in this column have been limited largely to instances of partial contribution by the lighting system. The recently completed Western Massachusetts Electric Company building, at West Springfield, Mass., includes an environmental control design in which the lighting provides more than enough heat energy to keep the building at proper temperature under critical outdoor winter conditions.

The new building, designed by Munson & Mallis, has a lighting load of 66 kw and a heating load at -10 F of 53 kw (181,000 Btu/h). It is evident that the lighting is more than adequate to heat the building and that a small amount of this energy must actually be discarded.

In most of the 8,000 sq ft of conditioned and lighted area, the lighting level is 150 to 200 ft-c. A small display area is illuminated to only 55 ft-c. Some specialists in this field have established the fact that a 150 ft-c intensity is the value above which the lighting system begins to qualify as an energy source for full heating under average circumstances. This appears to be substantiated by the figures quoted above. It is customary to evaluate the energy budget of lighting systems as watts per sq ft of lighted area. In this case, the value is 66,000 w ÷ 8000 sq ft—which equals about 8.3 w per sq ft.

In addition to providing for administrative functions, the building will also serve as a living-study for this new heating method, including the means of adjusting it to the changing climate conditions for both winter and summer. It is, of course, fully air conditioned for climate control in all seasons. The office space is separated from the lighting plenum above it by a luminous ceiling.

At the air handling units on the roof, refrigeration is available, as well as electric resistance heating elements for incidental use. The several air handling units have numerous functions. Air may be circulated to the occupied space with or without the admixture of outdoor air. This circulated air may be cooled or, for limited periods, heated by the resistance units. Outdoor air only may be passed untempered through the occupied space. Some air may be drawn from the occupied space, through the above ceiling-lighting plenum, to the conditioner. Finally, there are arrangements for separate ventilation of the lighting plenum by passing outdoor air through it and exhausting the air again to the outdoors.

To better understand the operation at various seasons, it is convenient to assume five different circumstances:

1. Balanced Operation, Daytime, Winter. When the outdoor conditions are such that the lighting output energy is just about right to carry the heat loss, including that caused by some ventilation, the following occurs: air from the offices is returned directly to the conditioner and also indirectly to that destination through the lighting plenum, where it picks up heat from the lights. The air is mixed with a minimum amount of fresh air and the mixture returned to the offices. This is heating with light.

2. Spring and Fall Heating, Daytime. When the heat given off by the lights is greater than the heat required by the office area, the excess heat must be removed from the lighting plenum to maintain the ideal ambient temperature for the most efficient fluorescent lighting. This is done by ventilating the lighting plenum directly with fresh outdoor air and "dumping" the excess heat into the outdoors.

3. When the Lights Are Off. At times, when the building is unoccupied and the lights are off, the temperature in the office area is automatically set back to 60 F. The heat required to maintain this temperature is provided by the resistance type electric duct heater in the air-conditioning unit. This condition usually occurs at night when the low, off-peak energy rate is in effect.

4. Cooling with Outdoor Air. As the outdoor temperature rises, and there is no longer a need for heat in the office area, the heat from the lights is removed from the lighting plenum by ventilating the plenum with outdoor air. Controlled ventilation is also used for cooling the office area by bringing in fresh air through the conditioner, using the fan only.

5. Cooling with Refrigeration. As additional cooling is required in hot weather, mechanical refrigeration is provided, fresh air supply is reduced to a minimum, and air from the office area is recirculated and cooled. Reheat is available for humidity control. Heat from the lights is removed from the lighting plenum by ventilating with outdoor air.

First results with this carefully balanced system show that the temperature of offices is being held to ±1 F. When the lights are off, and the outside temperature is about 15 F, the temperature in the building drops about 1° per hour. On weekdays, the building is occupied from 7 A.M. to 11 P.M., so there is seldom any need for resistance heating during setback. By means of a time clock, a small amount of resistance heating is provided for an hour or two to restore space conditions to about 72 F before the lights are turned on in the morning.
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Recommended practices for weather stripping at heads, jambbs, sills, and meeting stiles, as well as where they should be specified in the new CSI format for building construction, are discussed by the Chief Specifications Writer of Kelly & Gruetzl, Architects-Engineers.

It is usually within the province of the specifications writer to make the proper selection of weather stripping. His difficult task today is further compromised with designs that favor narrow sight-lines at doors, elimination of door rabbits, stops, and mullions, and the use of double-acting doors.

Weather stripping serves a useful purpose in providing personal comfort by excluding drafts, water, soot, and dust. With the proper equipment, it can increase the sound transmission loss at doors as well as provide light-proofing. Another aspect often overlooked is its possible use as a barrier to smoke and superheated air generated by fires. This particular use might be beneficial in multiple-dwelling buildings—such as hotels, motels, and apartment houses—to safeguard lives.

One of the most vulnerable elements of a building where old air and rain create a problem, is the exterior door. Good practice dictates weather stripping the complete perimeter of the door: head, jambs, sill, and meeting stiles. Several factors must be considered in selecting the proper weather stripping: cost, location of doors, amount of traffic, and the door/frame construction details.

For heads and jambs, the most effective weather stripping for general purposes is the interlocking type using either 11-gage zinc or 25-gage bronze. Where weather stripping is subject to abuse from rolling carts or hand trucks, as in hospitals or industrial buildings, or where it must be able to resist malicious mischief, as in schools, the extruded interlock is recommended, utilizing bronze or aluminum as illustrated (1).

For proper seals at sills of exterior doors, interlocking saddles are recommended. There are many types on the market to suit almost any condition. A surface-applied angle strip of extruded bronze or aluminum is quite satisfactory; a flexible sill hook of aluminum, bronze, or zinc is also available. Where it is not practical to use interlocking saddles, an automatic door bottom provides satisfactory protection. These are available as mortised, semirecessed, and surface-mounted types in aluminum, bronze, and stainless steel with a waterproofed felt or closed-cell sponge neoprene plunger. This mechanism drops automatically when the door is closed to create a tight seal, and retracts when the door is opened as illustrated (2).

For meeting stiles of double doors, many different types of equipment are available. The adjustable astragal is perhaps the best choice. One member has a plunger and the other has a wool pile insert. When the doors are closed, a seal is created. Here, the adjustable astragals have been designed for surface, mortised, and semimortised installation. The choice of adjustable astragal must be considered in conjunction with the hardware, specifically the door lock and panic hardware as shown (3).

With the development of closed-cell neoprene, it is no longer necessary to weather strip, soundproof, and lightproof, all in one operation. Extruded shapes of aluminum or bronze, which act as a housing for the neoprene, can accommodate almost any type of installation required as illustrated (4).

With the advent of the new CSI format for building construction, weather stripping can now find a permanent place.

Continued on page 25.
Situated between San Francisco's financial district and Chinatown, the new 22-story International Building looks unmistakably at home on its hillside location. This is so not only because the terracing at its base is intimately related to San Francisco's contours, but because many of the building's details suggest a faintly oriental character. The diamond-shaped patterns along its white roof fascia, the prominent "lid" formed by the roof—these and other details give the International Building a skillful blend of the old and the new.

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BY JUDGE BERNARD TOMSON AND NORMAN COPLAN

In the second of two articles, P/A's legal team discusses the ethical standards that the individual architect and the professional society must consider in assessing the problem of what constitutes a breach of contract.

In last month's column, we discussed the general legal rules of liability applicable to an architect who, in order to secure a commission, induces an owner to breach his contract with another architect. How these rules apply to the activities of professional societies is not, however, as easily determined. While the acts of such an organization that might induce the breach of an existing contract would be dangerous (and particularly hazardous to those members participating in such acts who might gain from the breach), it is possible that certain acts, if intended to serve a public or social purpose, might more readily be deemed to have legal "justification" than if performed by an individual architect. In any event, there is certainly no legal reason why a professional society cannot take strong and positive stands in areas where no specific existing contracts will be affected. The question remains, however, of the extent to which a professional society may take action to prevent a prospective contract with a particular architect from being made.

As we have pointed out, an individual who "maliciously" induces a person not to enter into a contract with a third person may be liable for damages sustained by that third person, if it is established that, in the absence of interference, the contract with such third person would, in fact, have been made. The term "malicious," however, is defined to exclude activity that is generally recognized as permissible in a competitive economic system. Undoubtedly, the activity or program of a professional society that is aimed at improving the manner in which public architectural contracts are let, or that is aimed at improving the quality and aesthetic value of public construction, and which, if successful, might theoretically deprive some architects of contracts they might otherwise have secured, would not be deemed "malicious" so as to subject that society to a possible suit for damages. Thus, for example, if a municipality were considering certain architects for a particular public project, and the local chapter of the AIA urged a competition, thereby influencing the municipality to follow that procedure, no claim for damages would apparently lie against the society by those architects who were under initial consideration. Criticism of an existing contract, as distinguished from an inducement to breach the same, would also not be actionable.

The ethical standards formulated by the AIA in this area will perhaps be more significant to the individual architect, as well as to the architectural professional society, than the legal rules of liability. As of the writing of this column, the proposed revisions to the Standards of Professional Practice have not as yet been adopted by the Institute, and the existing ethical guidelines on the subject under discussion are reflected in Mandatory Standards 8 through 10, which provide as follows:

8. An Architect shall not knowingly injure falsely or maliciously, the professional reputation, prospects or practice of another Architect.

9. An Architect shall not attempt to supplant another Architect after definite steps have been taken by a client toward the latter's employment.

10. An Architect shall not undertake a commission for which he knows another Architect has been employed until he has notified such other Architect of the fact in writing and has conclusively determined that the original employment has been terminated.

The AIA's Standards of Practice are directed to the activities of individual architects. If they are intended to apply to the activities of a professional society, it would seem that the Standards require amplification and clarification. For example, the prohibition in Mandatory Standard No. 9 that an architect shall not attempt to supplant another architect after definite steps have been taken toward the latter's employment does not necessarily involve the same ethical considerations when related to the activities of a professional society as distinguished from an individual architect. The activity of a professional organization that would result in supplanting an architect after definite steps have been taken by the client toward his employment might have a useful and significant social purpose. Just as the legal rules of liability might provide for a broader scope of activity for an organization serving a social purpose, as contrasted to an individual seeking to promote his own economic position, so it would seem that the activities of a professional organization should be afforded more freedom of action under applicable ethical standards.

Although Mandatory Standard No. 10 does not apply to the activity of a professional society, its proscription that an architect shall not undertake a commission for which he knows another architect has been employed, unless the original employment has been terminated, is often a source of uncertainty and confusion with respect to the activities of individual architects. The application of this Standard to cases where ownership changes, or where the original employment has been unilaterally terminated, perhaps without justification, is unclear, and the proposed revised Standard, although an improvement, leaves many possible questions unanswered.

The generality of some of the Standards of Professional Practice will doubtless continue to raise questions in the minds of individual architects. Perhaps more significant, however, is the possible stultification of important activity on the part of the architect's professional society, arising from doubt as to how these standards apply to the organization's activities.
What happened to curtain wall costs on this building when the architect designed it with Stainless Steel? They were lower than competitive materials.

The dramatic, diamond-shaped facade of Pittsburgh's IBM Building represents a radical departure in building design. Its structural steel framework is on the outside, and called for sheathing with extraordinary properties. It had to have high strength, good dimensional stability in varying temperatures, lasting corrosion-resistance in an industrial atmosphere—and harmonize with other buildings in the Gateway Center. And, naturally, cost was a factor.

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Nostalgia for the Rural Past

BY HERBERT J. GANS


The mystique of the life-generating force of open space, and the belief that a properly designed open space will somehow transform adjacent residents into kind and community-minded neighbors, has long had an obsessive hold on American architects and physical planners. Over and over again they have come up with schemes for coaxing urban man to live as if he were in a 19th-century American small town or a medieval European city—or, more correctly, in highly romanticized versions of such places. This time, the solution is a Commons, combining the European piazza with the American park-and-playground. The plan, by Charles Goodman, features pavilion-type buildings designed by him for mass production, and one purpose of the book is to create sufficient demand for the Commons, thus making it possible to manufacture the pavilions inexpensively enough for widespread use.

Unfortunately, the method by which the Lavanburg Foundation has chosen to advertise the scheme is poor. The proposal is presented in great architectural detail, but with little attention to planning concerns of function and feasibility. Instead, it is preceded by a 60-page essay by Wolf Von Eckardt on anti-urbanism in city planning, and all of this is packaged in a book so expensive—albeit attractive—that it will surely limit the diffusion of the proposal.

The Commons was initially suggested to the Foundation by the late Francis Scott Bradford, a mural painter, in a moment of nostalgia for “the vanishing stoop life” on the American frontier of his youth. Actually, Bradford received his inspiration on a European trip, where he noted that the homes of rich and poor, and the shops are “mixed in extricable confusion.” This convinced him that “in this way, men of all means and persuasions share a common interest and meet daily in their simplest pursuits.”

Goodman did interview 106 residents of the housing project to find out what they would like to locate in the Commons, and, as a sociologist, I can only applaud the pioneering spirit behind this research effort. Just a couple of pages of the text are devoted to the results of the study, however, presumably because the interviewees, unable to visualize a Commons they had never seen, could not supply the answers. A trained sociologist would have anticipated this result, and might have carried out a couple of weeks of observation in the project to see how people were living there, where and when they came together in groups, and what outside facilities and social spaces might aid their coming together. He could also have asked the Puerto Rican residents if, when, and how they had used the

housing project on New York’s Upper West Side, and many variations of the same idea for corner lots, blocks of all sizes, and even an expressway overpass. These plans are all well done but they add little not already shown in the prototype.

The wealth of architectural presentation is offset by minimal concern with the function of the Commons. There is little discussion of what ought to go into it, and the list of facilities and areas is by and large the standard array proposed by architects when the program calls for “community space.” The trouble is that the social functions of the Commons are taken for granted, and no one has given much thought to who would use it, and for what purposes.

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Continued from page 212
actually achieved the difficult feat of taking a fascinating subject, urban politics, and making it appear dull. Perhaps Wood is justified in his strictures on the relatively unsophisticated political science of the muckrakers such as Lincoln Steffens, but Steffens at least had the quality of excitement. As the reader plows his way through the tedious professional jargon of Wood, the brilliant, if frequently wrong-headed, analyses of Jane Jacobs may well come to mind.

In sum, these books are an embarrassing commentary on the current American habit of holding conferences on almost any occasion, and the absurd belief that such conferences will automatically have productive results. Jacques Barzun, the erudite provost of Columbia University, has pointed out that in some academic circles conference-going has become a major industry. It is looked upon with favor by foundations, which subsidize these events heavily, and social status may actually depend upon the number of high-level (by invitation only) conferences which one has attended. With the increasing national interest in city problems and the likelihood of a cabinet-level department of urban affairs in the next few years, it is probable that more conferences and seminars of the type sponsored by Goucher College and Washington University will be held. If I thought is given to the publication of the papers that will inevitably be presented, two questions should be asked of every participant: (1) Has he said anything new? and (2) Will he take the trouble to translate what he has said into decent English?

Precious Heritage

BY AGNES ADDISON GILCHRIST
A GUIDE TO OLD AMERICAN HOUSES (1700–1900) by Henry Lionel Williams and Ottilie K. Williams. Published by A. S. Barnes & Co., Inc., 11 E. 36 St., New York 16, N.Y. (1962, 168 pp., illus. $10). Reviewer is past president of the Society of Architectural Historians.

As the bulldozer levels more and more miles of suburbia and exurbs, and the concrete trails of superhighways cut through the country, the old American houses disappear. As they become rare, they also become more precious; thus the timeliness of this book. The authors have had much experience with old houses, having restored seventeen houses for clients and four for themselves. They know from first-hand experience the pi...
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falls of dating on stylistic grounds—that houses have to be repaired and usually altered every fifteen to twenty years and that some building practices were continued for generations, so that visual appearances are often deceiving. This book attempts to help the interested spectator of the American architectural scene identify what he sees about him in the country or smaller cities. All the houses illustrated are free-standing; no attempt has been made to illustrate the city row house.

The introduction discusses “Our Architectural Heritage” and divides it into Beginnings, the Georgian Era, and Victorian Variety, concluding with a table that gives the basic styles of old American houses and the periods in which they flourished:

Colonial
(a) Late Colonial 1700–1720
(b) Early Georgian 1720–1760
(c) Late Georgian 1760–1780

Post-Colonial
(a) Federal 1780–1820
(b) Greek Revival 1820–1840
(c) Early Victorian 1830–1850
(d) Late Victorian 1850–1900

“These dates are of course only approximations; during the period dealt with in these pages the various styles overlapped considerably.” That qualification is only too true. On page 159 in the Glossary, for example, the Federal Style is defined as “a refined, severely classical form of the late Georgian (1810–1830) architectural style.” This divergence in dating the Federal Style, and covering the subject in four brief paragraphs, shows how much more research is needed in the architectural history of the late-18th and early-19th Centuries.

It is most excellent that the Williamses have brought their survey of “old” houses to 1900, because there are many more unrestored houses from the 19th Century than from earlier times. Also, since much of the United States was opened up after 1800, the entire architectural heritage of many areas is 19th Century and must be cherished quickly if it is to survive in any form. Another commendable feature of this book is that so many of the illustrations were taken from the files of the Historic American Buildings Survey, which has so much material (not yet adequately used) in the Library of Congress. A third excellence is the Glossary of terms (every self-respecting volume on architecture used to have one). There are good pencil drawings here; the page on roofs with eight
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WELDED
This type of all weather connection can be quickly erected. It is useful where moment carry-over to adjacent spans and stress reversals are to be avoided. If heavy dead loads are to be placed on the beam, make tack welds during erection and provide full fillet welds after all dead loads are in place, thus reducing stresses in the welds. Consideration may be given to a welded connection at the top of the beam, with a flexible bearing pad where the beam bears on the girder, resulting in partial restraint. Prestressed beams tend to shorten slightly over a period of time, and if frame is inflexible one end of each beam should be left free to slide.

POST-TENSIONED
Post-tensioned connections are good for the resistance of high moments. All post-tensioning anchorages and devices should be installed in accordance with manufacturer’s recommendations. The conduits containing the tendons should be grouted except where deterioration is prevented by other means. A small chamfer at the outer edge of the concrete haunches will reduce spalling. Also, bearing pads will help prevent cracking of haunch corners.

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Teristics, and program of rehabilitation facilities in each of 12 countries. Each section, covering a different country, concludes with an analysis of the relationship of the national program for rehabilitation to the location and design of facilities. Report was prepared under fellowship grants from The Vocational Rehabilitation Administration and the Fellowship Fund of the Langley Awards of AIA.


To be reviewed.


Informative essays from RRI 1962 Spring Conference explore technical, aesthetic, and practical aspects of solar radiation and building design. Use of glass and shading devices and design of windows, skylights, and electric illumination are evaluated, and recent European research on window design is reviewed.


To be reviewed.


To be reviewed.


Second edition of this introductory survey of city development has added emphasis on planning as a government function, urban renewal, and new towns.


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To be reviewed.

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GREENLEAF-TELESCA, Engineers, Architects, 1393 S.W. First St., Miami, Fla.


MURTON H. WILSON and ASSOCIATES, Architects, Planners, 3939 E. Coast Highway, Corona Del Mar, Calif.

YOUNG & STEINBEIGLE, Architects, 50 S. Udall St., Mesa, Ariz.

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BURNS & MCDONNELL ENGINEERING COMPANY has announced the admission of RAYMOND B. LUHNOW, JR., to partnership in the firm.

CAUBILL, ROWLETT & SCOTT, Architects, Planners, Engineers, have named the following associate partners: JAMES B. GATTON, WILLIAM W. HARPER, FRANKLIN D. LAWYER, JOE B. THOMAS, and ROBERT WALTERS.

JEPPSEN AND MILLER, ARCHITECTS has appointed PATRICK E. LOUKES an associate in their firm.

ARTHUR LAWRENCE ASSOCIATES, Architects, has made JAMES F. HAWVER a partner.

SMITH, SMITH, HAINES, LUNDBERG & WAHLER, Architects, New York City, announce as their new Associates: GREGORY E. BROOKS, LEE ROGERS KIRK, and WILLIAM NORTH.

JOHN CARL WARNECKE & ASSOCIATES, Architects of San Francisco, has made ROBERT LAMB HART and MICHAEL PAINTER Vice-Presidents and Partners.

Elections, Appointments

THE AUSTIN COMPANY announces the following organizational changes: JOHN C. BENNETT has been elected director; ALLAN S. AUSTIN has been elected chairman of the board; PAUL GILMORE and A. T. WADELICH are now executive vice-presidents; C. B. UTLEY, B. R. SAYER, and C. F. PRIDEXE are now vice-presidents; and A. A. WILHEIM is the new secretary.
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Continued from page 196

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