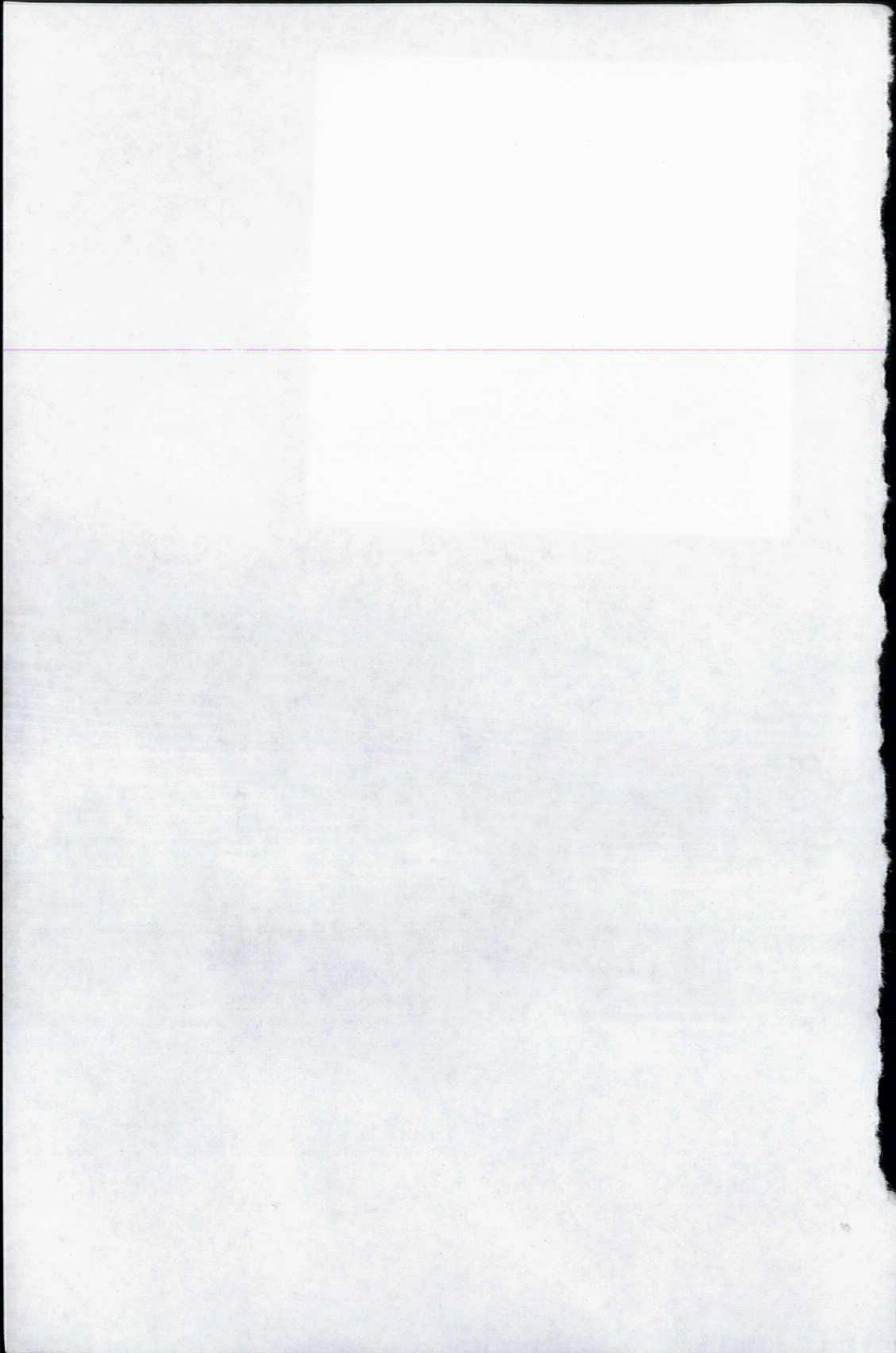


PA-1964-05





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[®]**

For samples, write to Azrock Floor Products, 543A Frost Building, San Antonio, Texas 78205.

*Also known as Vina-Lux

It's new! It's nylon-quiet!

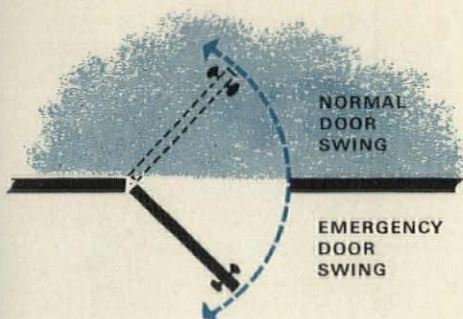
Hager 400S

EMERGENCY DOOR STOP/RELEASE

for center-hung doors

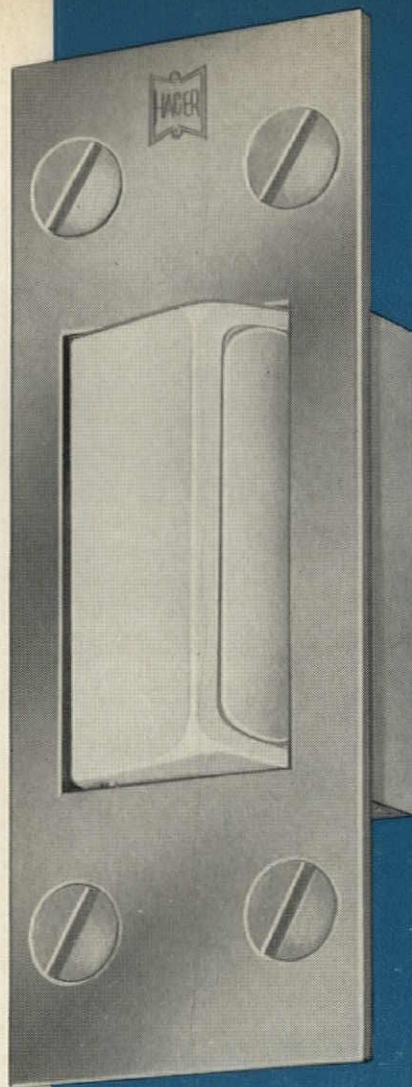
Attractive nylon "latch" with off-white rubber bumper insert gives double cushion for quieter closing.

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

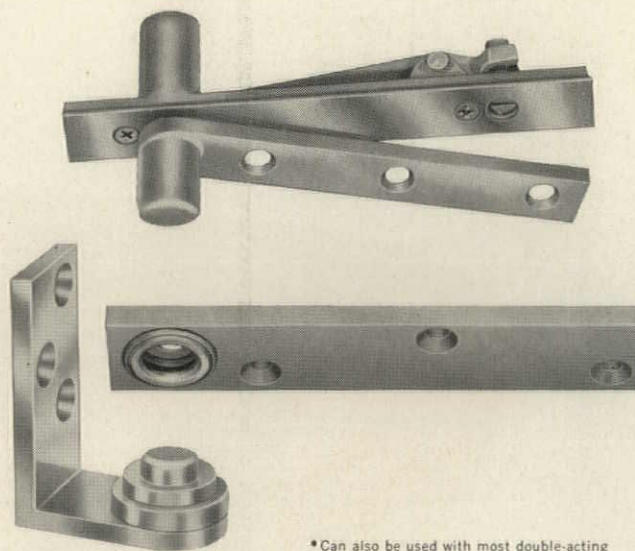


Safety factor for

- 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.



* Can also be used with most double-acting door pivots.

*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.

HAGER HINGE COMPANY • 139 Victor Street

For more information, circle No. 337



St. Louis, Mo. 63104

Everything Hinges on Hager



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.

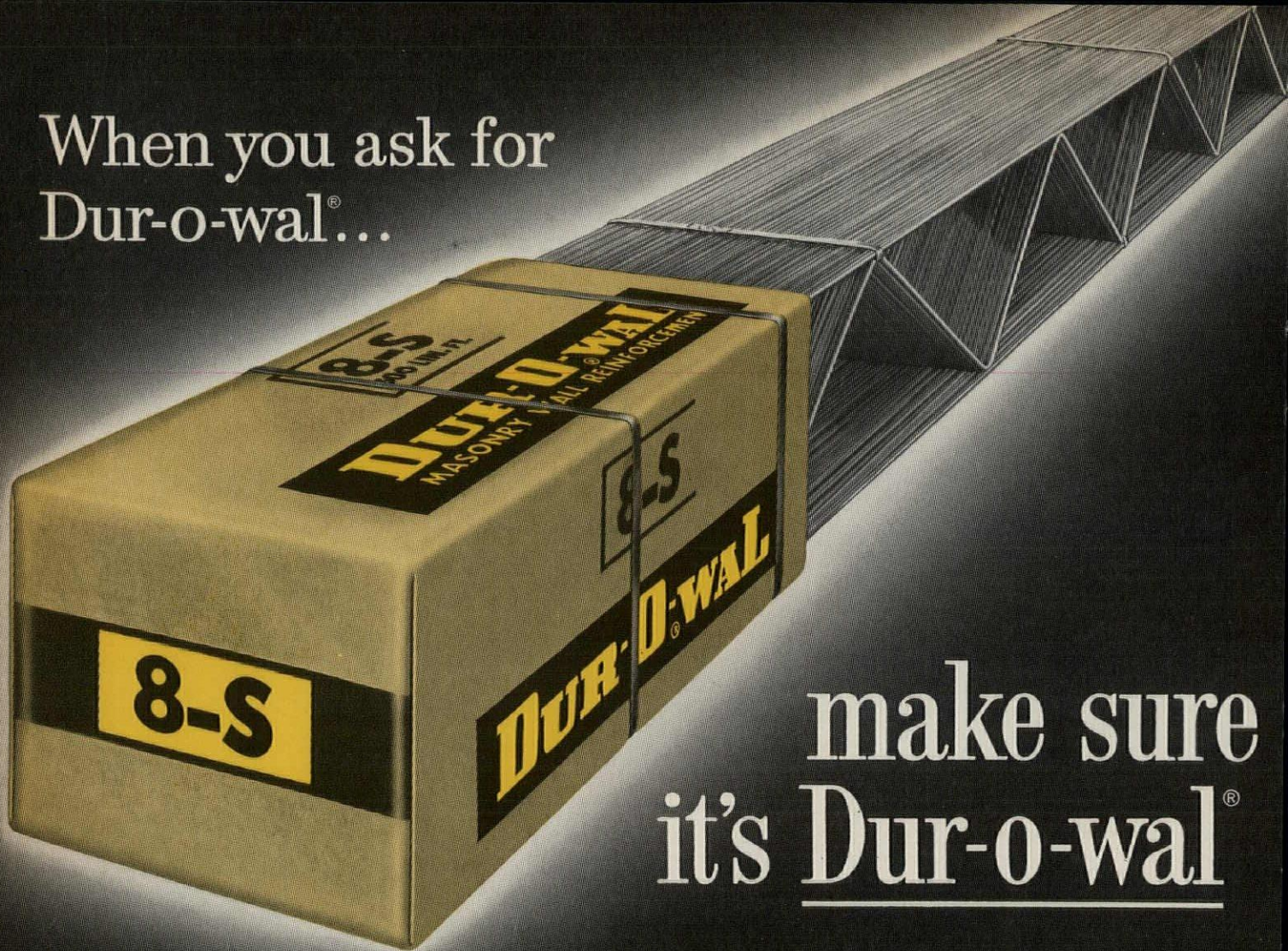
Because Armstrong makes every kind of resilient floor, your Armstrong Architect-Builder Consultant can make an objective recommendation of the floor best suited to your design. For more information, call him, or write Armstrong, 305 Watson Street, Lancaster, Pennsylvania. Credits: Research Hospital and 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.



Imperial and Corlon are registered trademarks of Armstrong Cork Co.

Armstrong FLOORS

When you ask for
Dur-o-wal®...



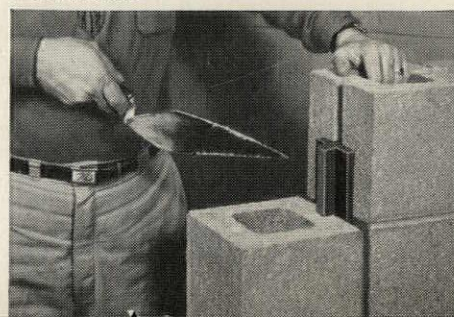
make sure
it's Dur-o-wal®

*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.



DUR-O-WAL®

The Original Masonry Wall Reinforcement with the Truss Design

DUR-O-WAL MANUFACTURING PLANTS

- Cedar Rapids, Iowa, P.O. Box 150
- Baltimore, Md., 4500 E. Lombard St.
- Birmingham, Ala., P.O. Box 5446
- Syracuse, N.Y., P.O. Box 628
- Toledo, Ohio, 1678 Norwood Ave.
- Pueblo, Colo., 29th and Court St.
- Phoenix, Ariz., P.O. Box 49
- Aurora, Ill., 260 S. Highland Ave.
- Seattle, Wash., 3310 Wallingford Ave.
- Minneapolis, Minn., 2653 37th Ave. So.
- Hamilton, Ont., Canada, 789 Woodward Ave.

THIS MONTH IN P/A

PROGRESSIVE ARCHITECTURE
is a member of
the Reinhold Group for
**BUILDING DESIGN,
ENGINEERING
AND CONTRACTING**
that also includes
**AMERICAN ARTISAN
AND HEATING, PIPING
& AIR CONDITIONING**

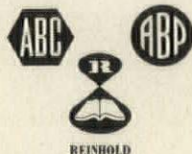
PROGRESSIVE ARCHITECTURE published monthly by REINHOLD PUBLISHING CORPORATION, 430 Park Avenue, New York, N.Y. 10022. Ralph W. Reinhold, Chairman of the Board; Philip H. Hubbard, President and Treasurer; Fred P. Peters, Executive Vice President; Kathleen Starke, Secretary and Assistant Treasurer; D. Bradford Wilkin, William P. Winsor, Vice-Presidents. Executive and Editorial offices, 430 Park Avenue, New York, N.Y. 10022. Subscriptions payable in advance. Publisher reserves the right to refuse nonqualified subscriptions. Subscription prices to those who, by title, are *architects, engineers, specifications writers, estimators, designers or draftsmen* and to Government departments, trade associations, above title groups on temporary military service, architectural schools and architectural students—\$5.00 for one year; \$8.00 for two years; \$10.00 for three years. All others—\$10.00 a year. Above prices are applicable in U.S., U.S. Possessions, and Canada. All *practicing architects and engineers* outside U.S., U.S. Possessions, and Canada—\$10.00 for one year; \$16.00 for two years; \$20.00 for three years. All others—\$20.00 a year. Single copy—\$2.00, payable in advance. Printed by Publishers Printing Company, New York, N.Y. Copyright 1964, Reinhold Publishing Corporation. Trade Mark Reg. All rights reserved. Indexed in Art Index, Architectural Index. Second-class postage paid at New York, N. Y.

VOLUME XLV, No. 5

Cover OKLAND HOUSE BY ESHERICK (page 134)
Photo: Roy Flamm

Frontispiece DETAIL OF HOUSE BY COUELLE (page 186)
Photo: Choura

8	VIEWS
55	NEWS REPORT
127	EDITORIAL
128	EDITORIAL FEATURES
128	HOUSES: THE ARCHITECT SPEAKS TO MAN'S NEEDS
128	Introduction
134	"FORM IS WHAT THINGS ARE": Residence, Oakland, California; Joseph Esherick & Associates, Architects
142	Residence, Mill Valley, California; Joseph Esherick & Associates, Architects
148	"THE PRIVATE WORLD OF AN INDIVIDUAL": Residence, Sausalito, California; Violeta Autumn, Architect
154	"A SPECIAL PLACE": Residence, Boulder Creek, California; Moore, Lyndon/Turnbull/Whitaker, Designers
160	"SOLID AGAINST TRANSPARENT": Residence, Bernardsville, New Jersey; Bohdan Urbanowicz, Designer
166	"ARCHITECTURE AS AN ART FORM": Residence, Agoura, California; Christopher R. Wojciechowski, Architect
172	"EXPLOITATION OF RATIONAL STRUCTURE": Residence, Mill Valley, California; Marquis & Stoller, Architects
178	"A SPACE, NOT AN OBJECT": Residence, Champaign, Illinois; A. Richard Williams, Architect
182	"AN ADEQUATE TOOL FOR LIVING": Residence, Cedar Rapids, Iowa; Crites & McConnell, Architects
186	"AN INSTINCTIVE HOME": Residence, Castellaras-le-Neuf, France; Jacques Coulle, Architect
194	MECHANICAL ENGINEERING CRITIQUE: Heating by Light By William J. McGuinness
196	SPECIFICATIONS CLINIC: Weather Stripping By Harold J. Rosen
198	IT'S THE LAW: Breach of Contract: Part 2 By Bernard Tomson and Norman Coplan
200	BOOK REVIEWS
234	JOBS AND MEN
238	DIRECTORY OF PRODUCT ADVERTISERS



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.

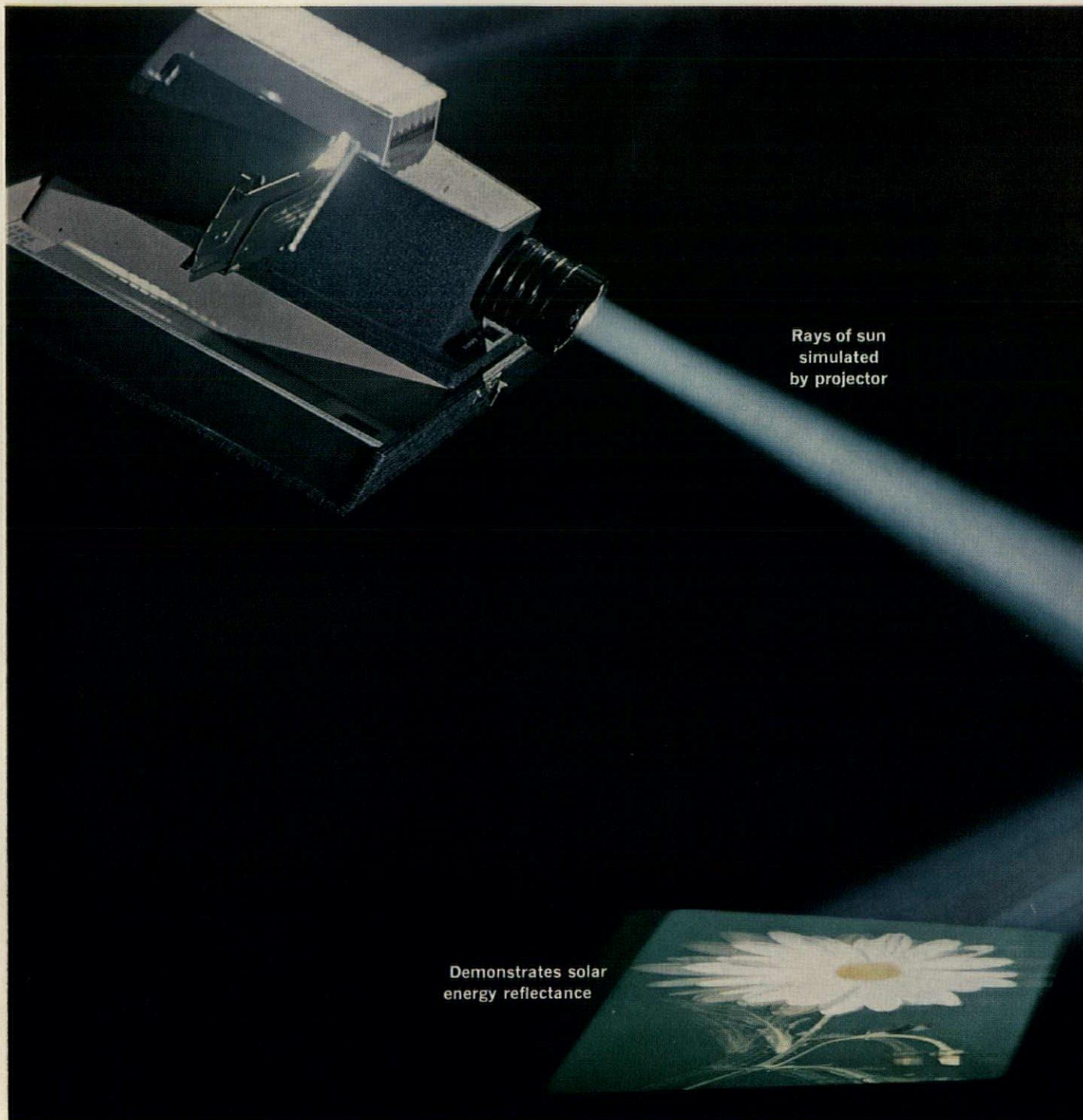
Glass Conditioning with LHR TWINDOW. Because it reflects considerable light and heat toward the outside, LHR coated glass substantially reduces the rate of solar heat flow to interiors. Thus, interior temperatures are easier to con-

trol. 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



Glass Conditioning[†]... a new idea from PPG

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



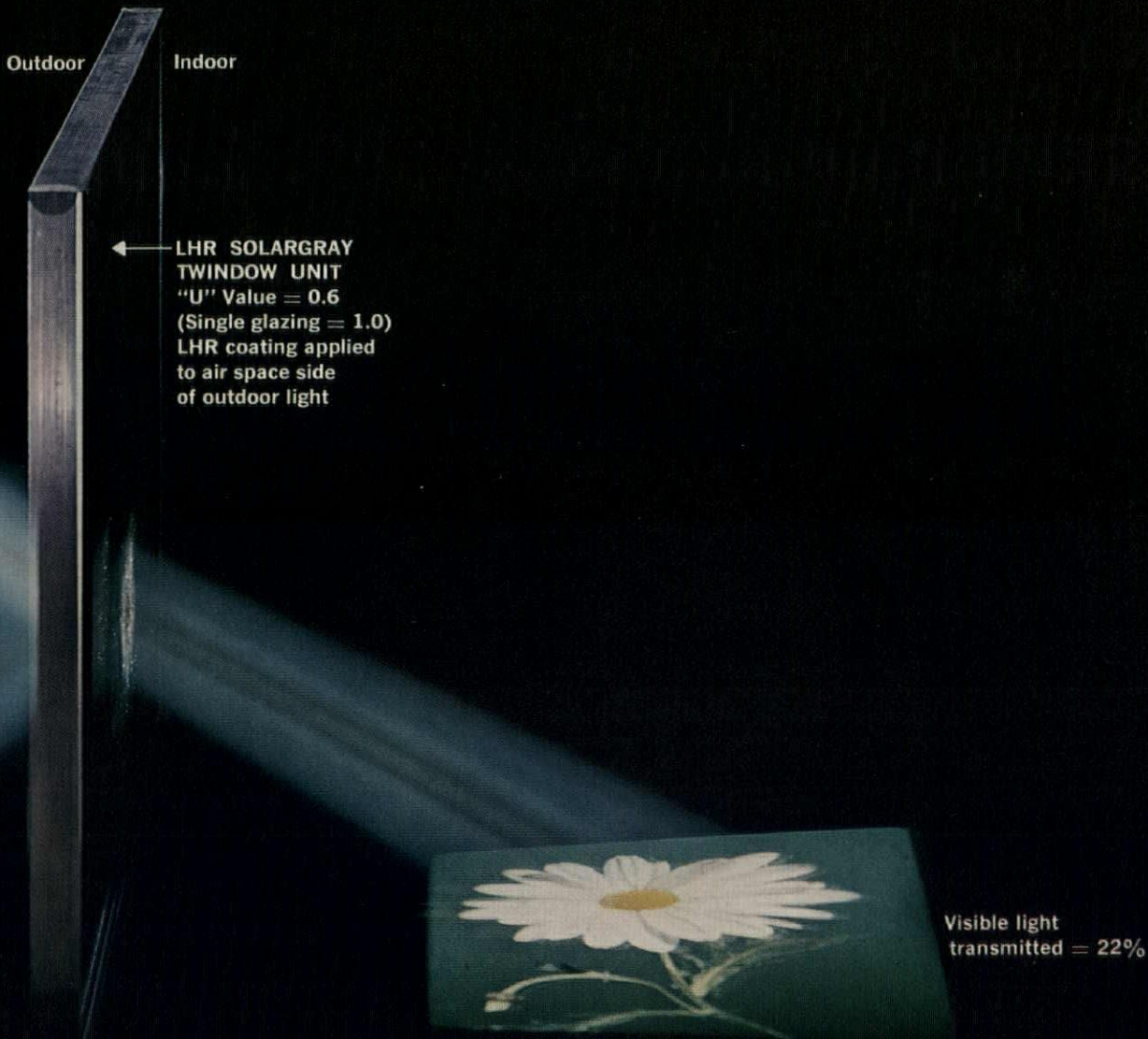
PPG makes the glass that makes the difference

COMPARATIVE PERFORMANCE DATA—LHR 140 TWINDOW INSULATING GLASS 1-inch, metal edge, ½-inch air space

	Visible Light Transmittance-%	Shading Coefficient ¹	Maximum Heat Gain BTU/hr/sq. ft. ²
¼" Clear Plate, both sides	77	0.80	170
With LHR, one side	43	0.55	120
With Solargray, one side	37	0.54	115
With LHR Solargray, one side	22	0.40	90
With Solarbronze, one side	45	0.54	115
With LHR Solarbronze, one side	25	0.40	90
With Solex, one side	65	0.54	115
With LHR Solex, one side	32	0.40	90

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

[†]Service Mark



PHOTOGRAPHED IN DARKENED STUDIO WITH TYPE B EKTACHROME FILM, 8" X 10" CENTURY VIEW CAMERA WITH 8 1/4" GOERZ DAGOR LENS AT CAMERA SET AT TIME EXPOSURE, LENS APERTURE F11

VIEWS

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, Cal.

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

Test sample—February, 1964.

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
Grosse 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
Cascade, Col.

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. SCHMIEDEKE
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.

BEN E. GRAVES
Chicago, Ill.

Dear Editor: I should like to express my commendations to you for drawing on the influence of the sensitive nonprofessional to the values of great architectural spaces, which you did so gracefully and so much to the point in your Editorial on the destruction of Penn Station (MARCH 1964 P/A).

Regular readers of the professional architectural and lay press usually hear only other professionals stating the case for preservation of monuments. I think it adds much depth, and, in this case, greater poignancy, to hear the statements of architectural regard and inspiration expressed by writers 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, Mann, Johnson, & Mendenhall
Los Angeles, Cal.

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 RAST
San Antonio, Tex.

The Kahn-Noguchi Playground— One Reader's Protest

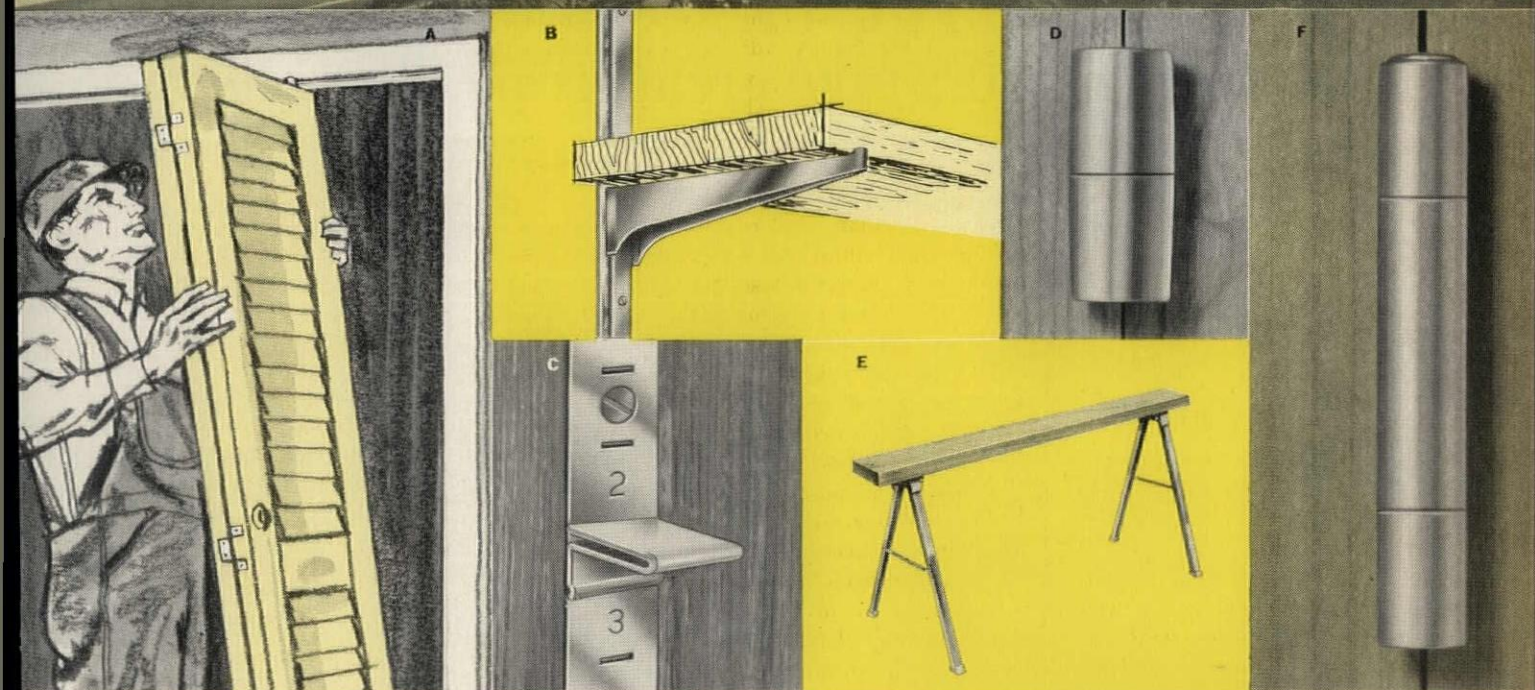
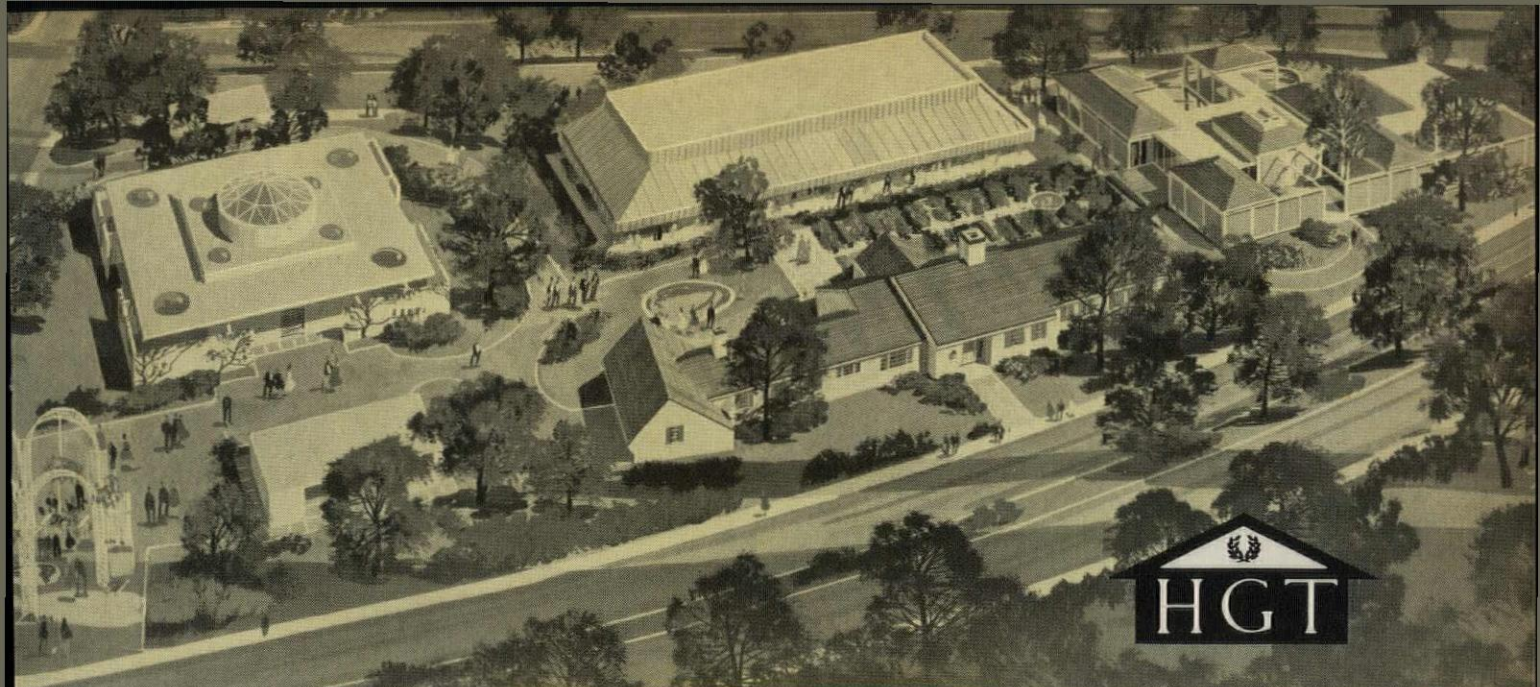
Dear Editor: Concerning the Kahn-Noguchi "playground" for Riverside Park, N.Y. (p. 67, MARCH 1964 P/A), it is only fair that criticism, lightly mentioned in your article, be heard.

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.

THE
STANLEY
WORKS®

STANLEY HARDWARE

Division of The Stanley Works

Lake Street, New Britain, Connecticut

For more information turn to Reader Service card circle No. 390

INTRODUCING
THE MAGNIFICENT
MILANO LINE...

FRESH
FROM THE
ROYALMETAL
DESIGN INSTITUTE

Leading designers note great scope of application.

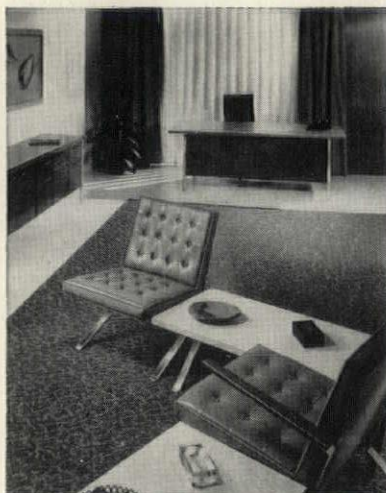


STRIKING:

"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.



"The warm sense of materials lets you live with it, day in—day out. Tufted Naugahyde, good walnut arms, mirror chrome. It's good company right *in* your office." W.P.
 "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®

LET'S GET RID OF "OR EQUAL"

**Honeywell speaks out
on a specification phrase
that does a disservice
to clients and suppliers alike.**

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

built to enclose space below. This effectively bounds the site—east, north, and west—with buildings and/or concrete walls. These buildings you describe as playrooms, which is not entirely true. Mr. Kahn presented these as meeting rooms for senior citizens and teen-agers, which would include kitchen facilities, etc. In short, these buildings, taken together, form what is commonly called a community center. This is *not* a legitimate park use. And though Mr. Kahn may say euphemistically, "There is nothing here that doesn't say 'park'," he is quite wrong. There is much about this design that doesn't say "park" at all. In fact, the project, with its high, steep artificial banks and concrete turrets, ignores the park. These banks and walls are blinders that destroy the space of the park, whose nature presently is to embrace that which is beyond the park confines: the Hudson River and New Jersey Palisades.

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;

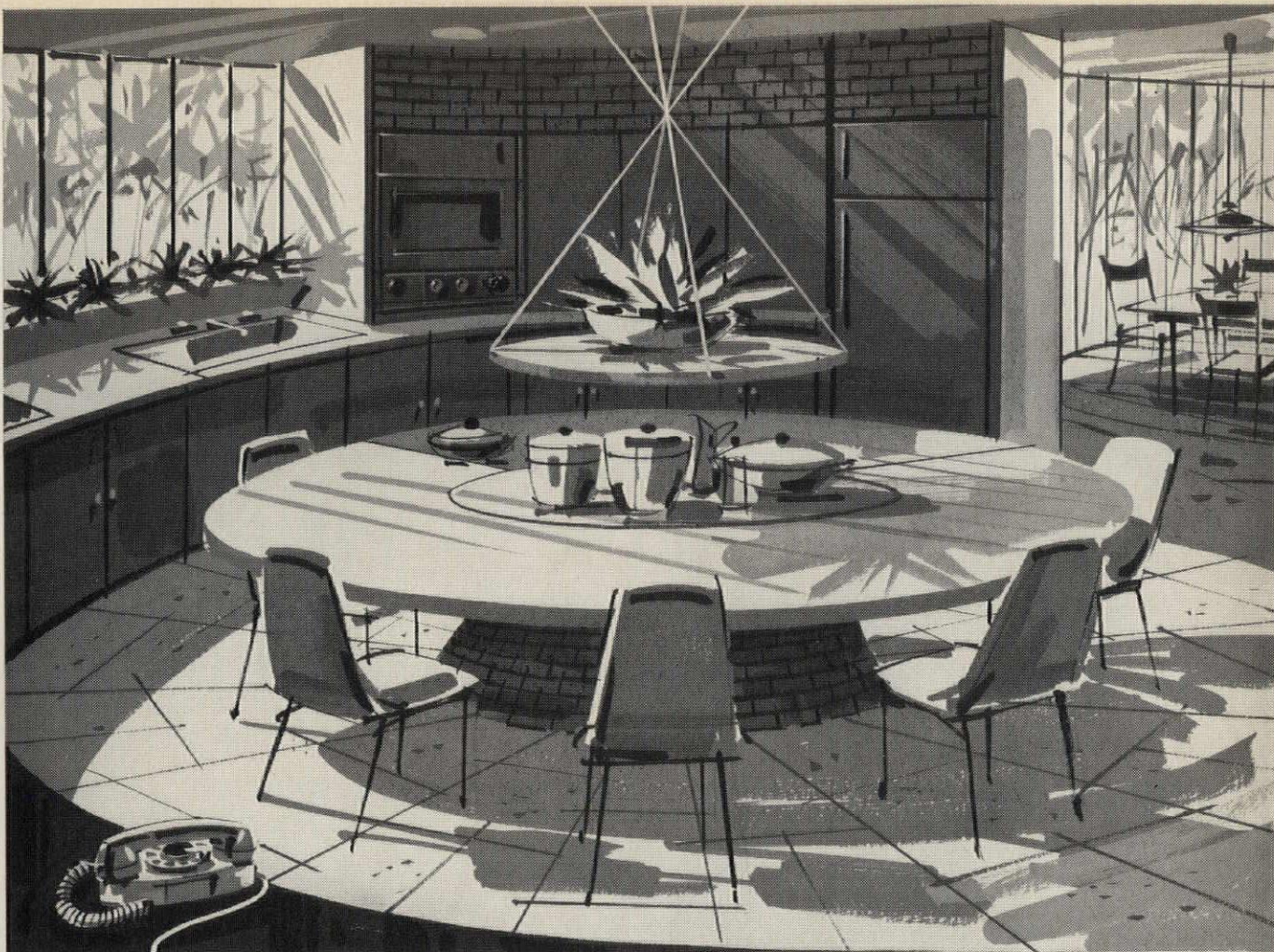
A large wading pool lined with trees and benches, which renders the 20 ft round proposal minute;

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 "shrubby covered slope," implying that if it is shrubby covered it is not used and

Continued on page 16



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.



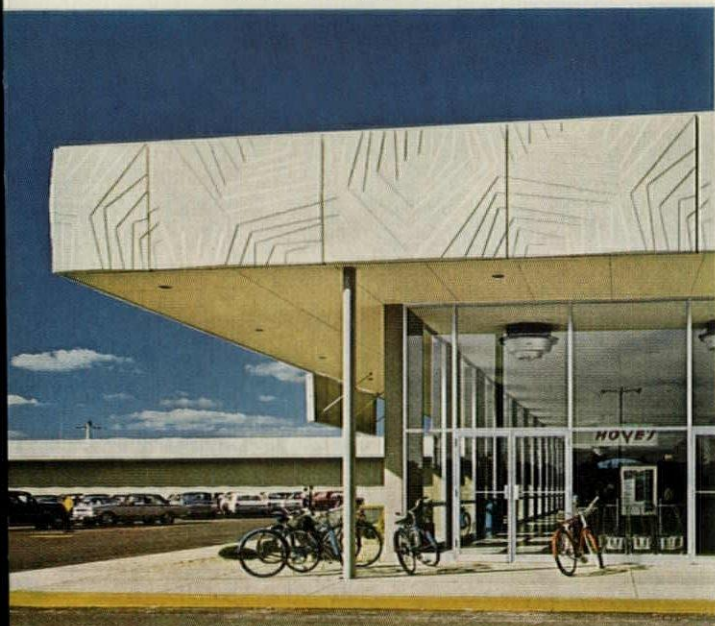
BELL TELEPHONE SYSTEM
Serving you

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



Har-Mar Mall Regional Shopping Center, Roseville, Minn.
Architects: Thorsen & Thorshov, Inc., Minneapolis, Minn.



Montgomery Ward store, Apache Plaza Shopping Center, St. Anthony Village, Minn.
Architects: Thorsen & Thorshov, Inc., Minneapolis, Minn.



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.



Parke-Davis & Company building, Cherry Hill, N.J.
Architects: Alexander Ewing & Associates, Philadelphia, Pa.

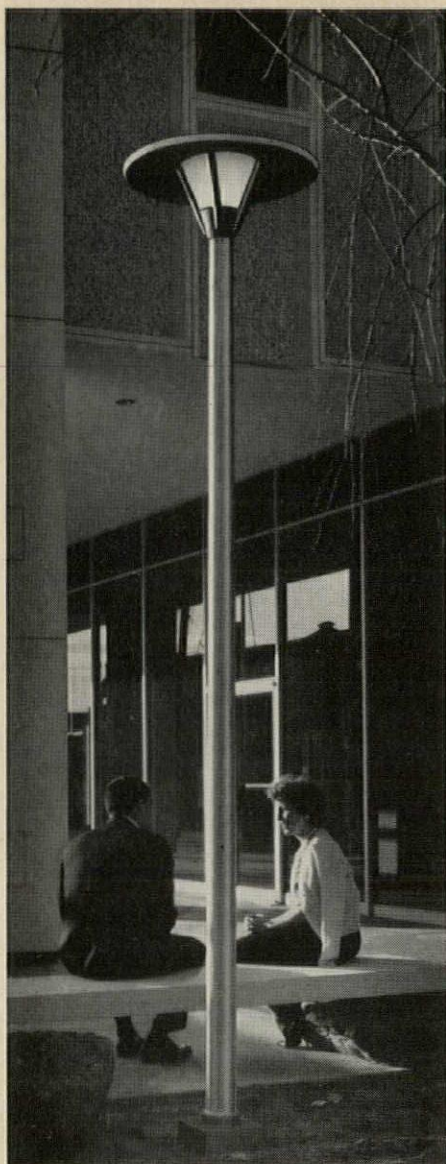
Yet because of its light weight, panels of PLEXIGLAS can be installed using simple supports and installation methods, resulting in significant cost savings in building construction.

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.

**ROHM
HAAS**
PHILADELPHIA 5, PA.

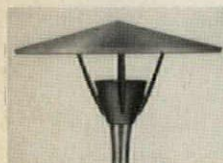


For more information, turn to Reader Service card, circle No. 381

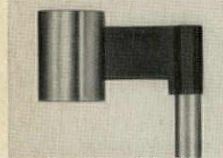


POST LIGHTS

incandescent and mercury vapor



4-300 Series Smooth Dome



New 3-Line Cylinder



4-200 Series Faceted Dome

ALL CAST ALUMINUM anodized for permanence. A complete line of quality post lights for direct and indirect illumination of school grounds, parking areas, shopping centers, plazas, swimming pools, and landscaped public buildings. Write for 50th Anniversary Catalog.



mcPhilben

1329 WILLOUGHBY AVENUE, BROOKLYN 37, NEW YORK

For more information circle No. 361

16 Views

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 heady 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—be 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.

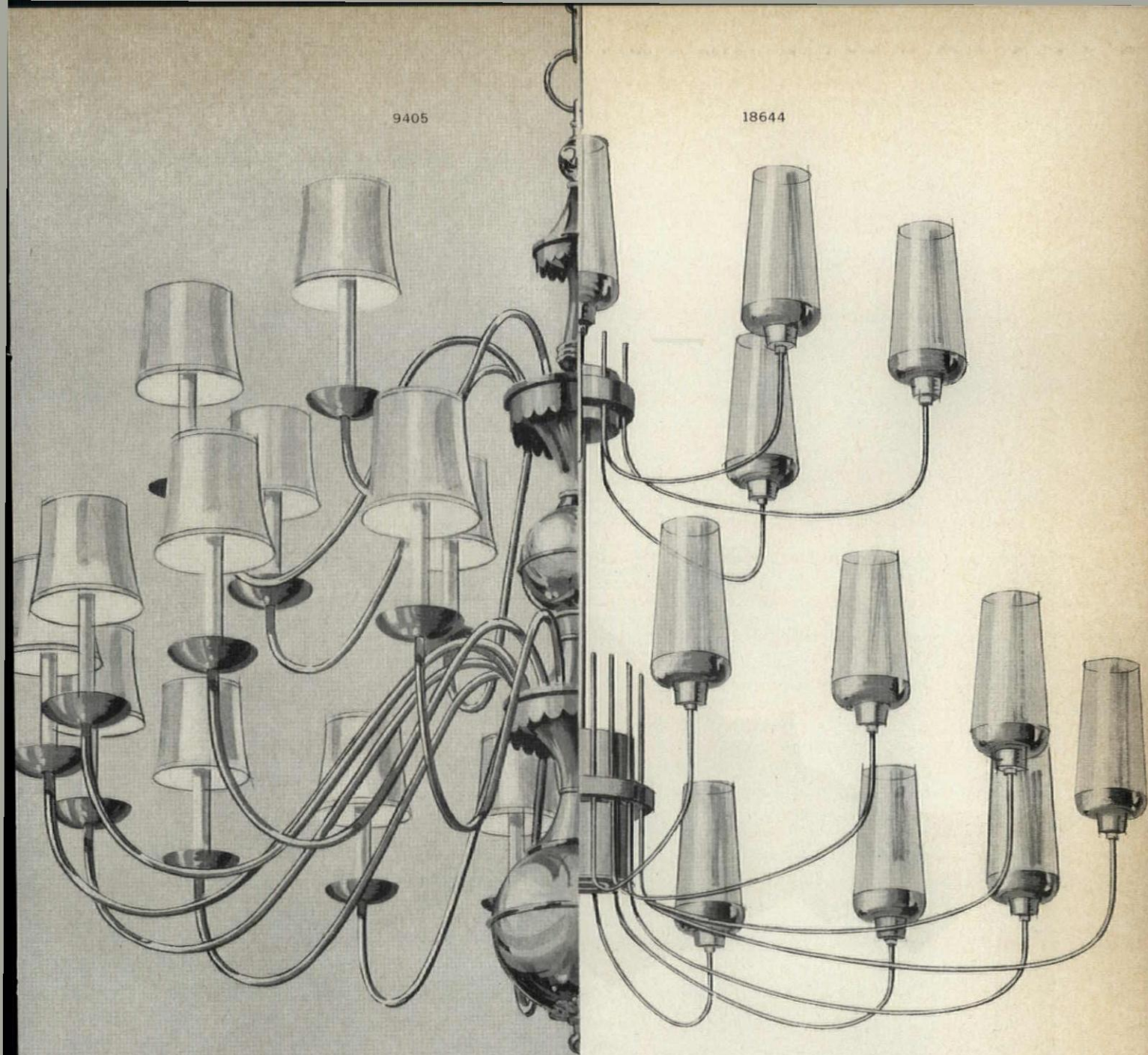
The situation causes me to remind architects of Satchel Page's general advice, "Don't look over your shoulder. Something may be gaining on you."

CHARLES D. BONSTED
Syracuse, N. Y.

MAY 1964 P/A

9405

18644



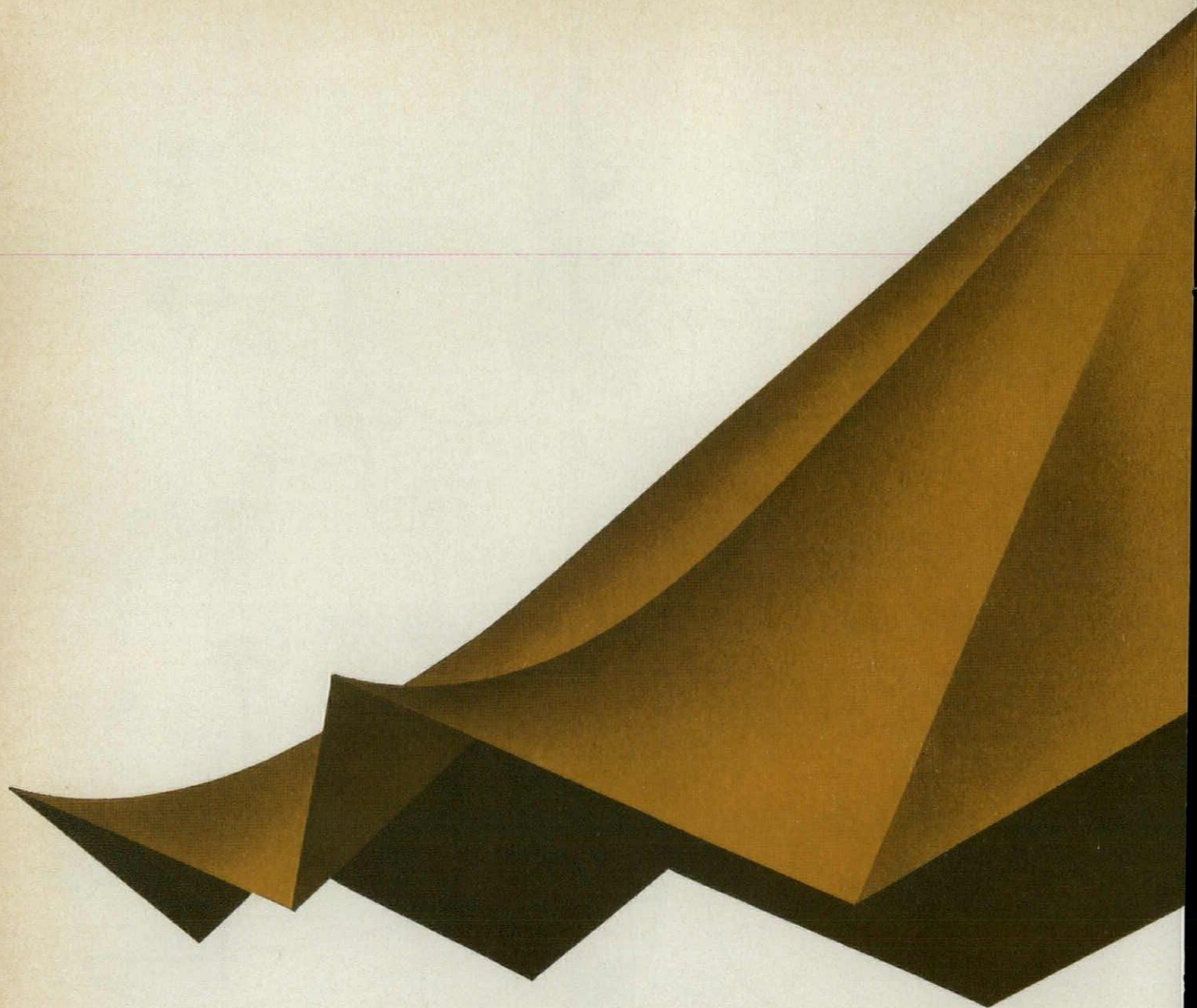
custom crafted light fixtures for
"way back" or "way out" architecture
(and all styles in between)

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.

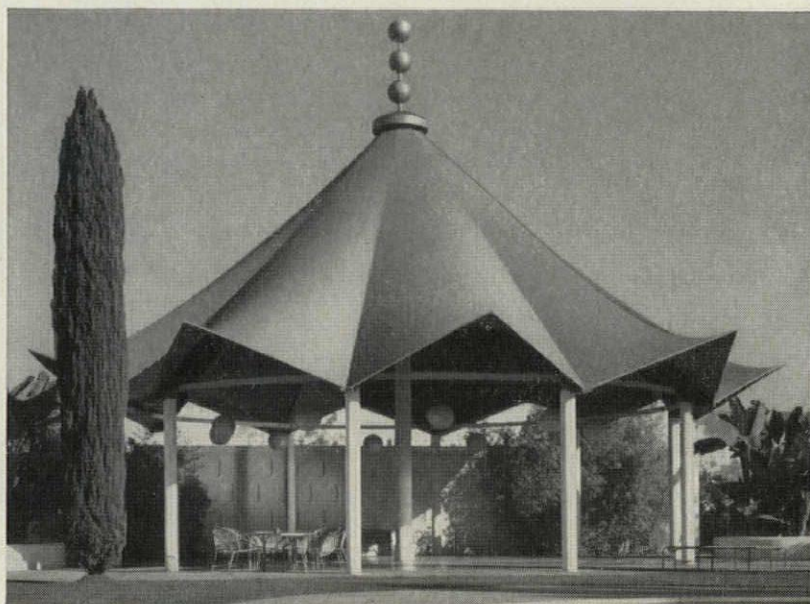
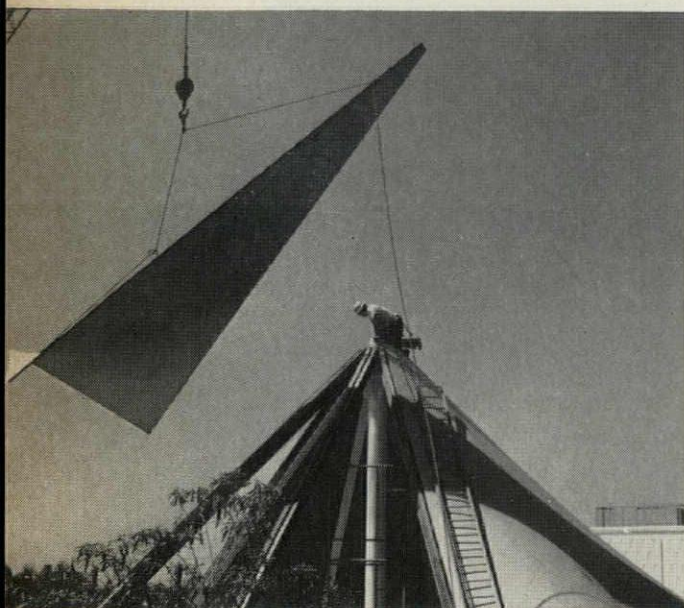


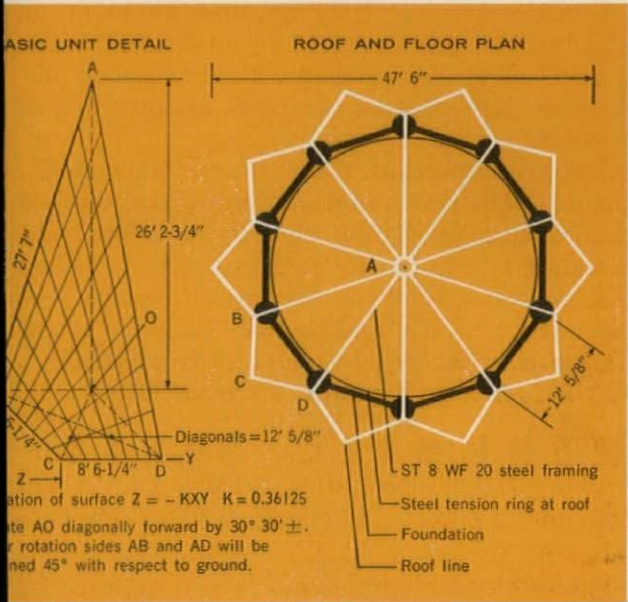
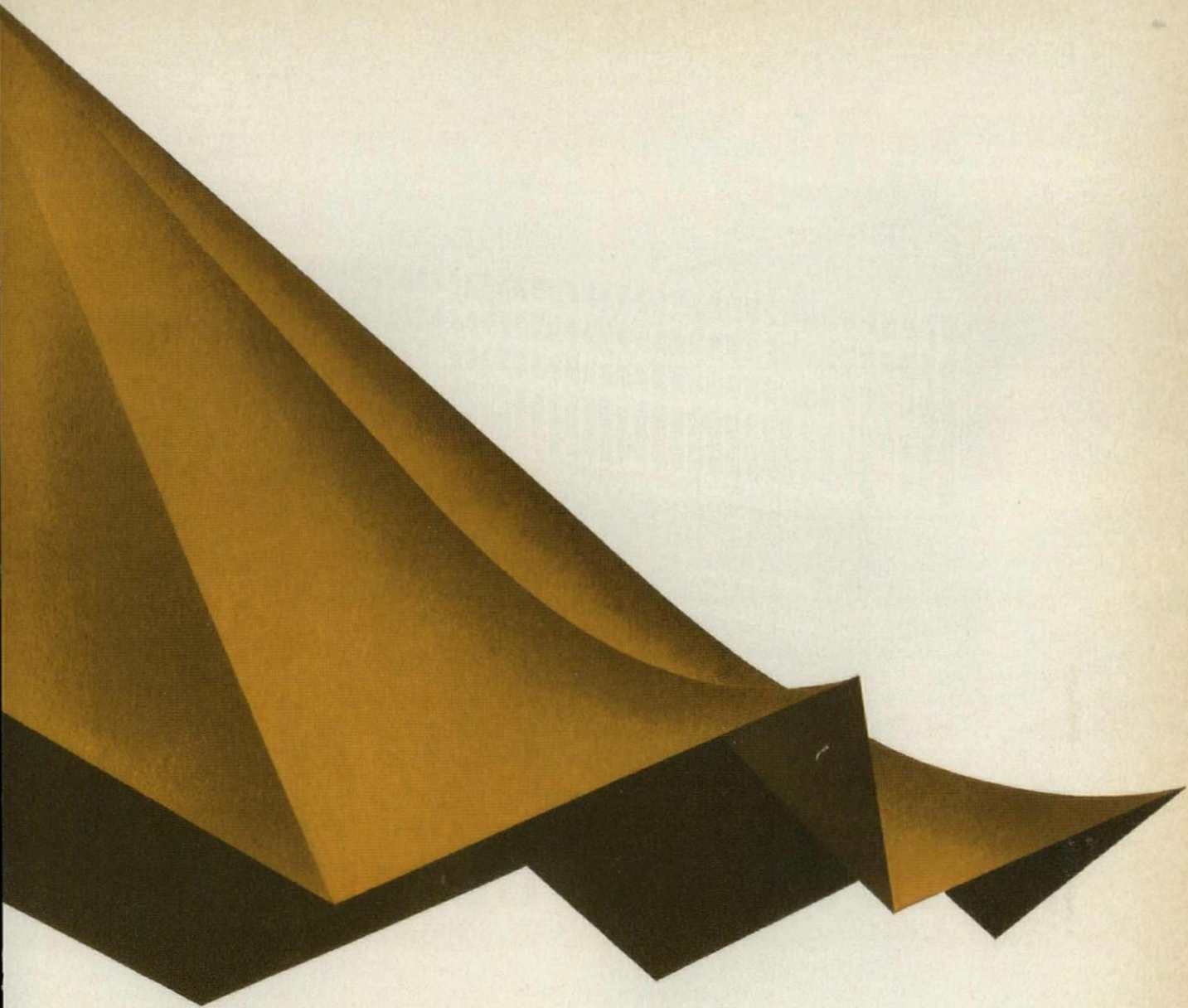
(formerly Novelty Lighting)
 14901 Broadway Cleveland 37, Ohio

For more information, circle No. 407



the most exciting ideas take shape in plywood

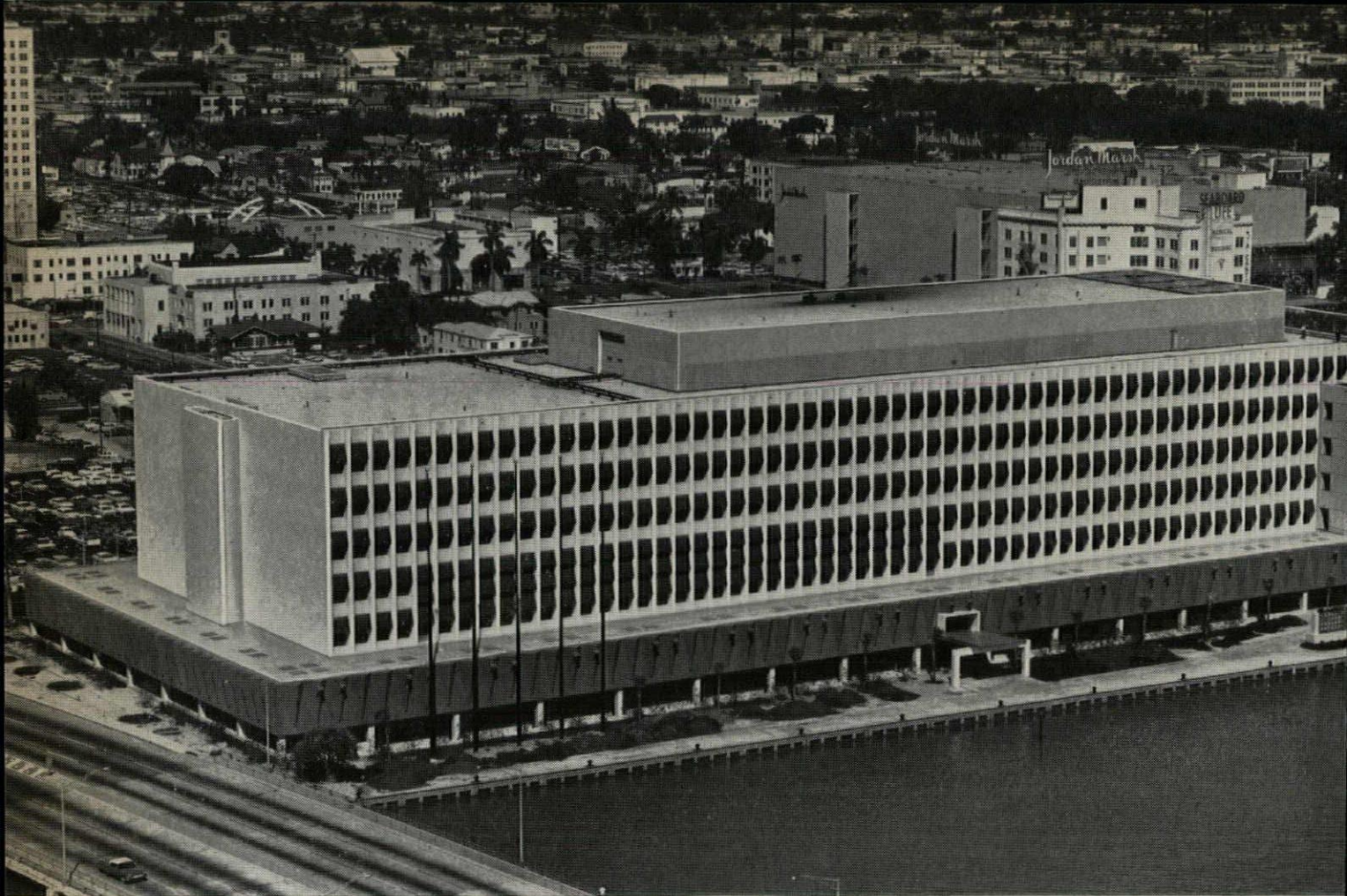




The sculptured curves of this pavilion look as though they could have been shaped only with a plastic material. Instead they were achieved with flat panels of plywood. ■ Each roof unit is a hyperbolic paraboloid, laminated from four layers of 1/4" plywood and bolted to steel "T" sections rising to 28' 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

AMERICAN PLYWOOD ASSOCIATION

The new name for Douglas Fir Plywood Association.
Quality-tested by the Division For Product Approval.



How Republic Stainless Steel gives Florida's new Miami Herald Building. **FUNCTIONAL BEAUTY WITH**

Look for no premature loss of value or beauty in this new landmark on Miami's Biscayne Bay. Hundreds of thousands of pounds of Republic Type 316 ENDURO® Stainless Steel give this building functional beauty inside and outside, with the promise of maximum life expectancy and maintenance economy over the years.

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 escalator and elevator 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.

Leading producer of stainless and alloy steels, Republic will help you select and apply the stainless steel best suited to requirements. Republic produces 45 standard types of ENDURO Stainless Steel, tailors others to meet special customer requirements. For information, contact your nearest Republic representative or write: *Republic Steel Corporation, Dept. PA-7389, 1441 Republic Bldg., Cleveland, Ohio 44101.*

REPUBLIC STEEL
Cleveland, Ohio 44101

You Can Take the Pulse of Progress at Republic Steel





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 $\frac{1}{2}$ -inch-thick glass. Doors are stainless, too.



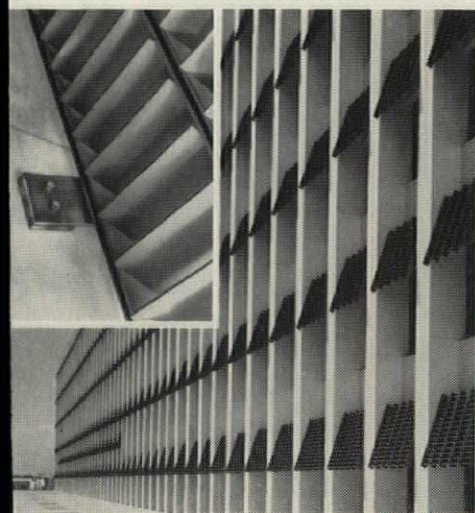
Strong, Modern, Dependable



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.



GREATER LIFE EXPECTANCY



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.



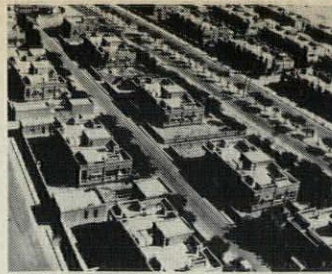
Worm's-eye view of a stainless expansion joint employed to seal the open space between The Herald's offices and press structure. Joint eliminates vibration caused when the giant presses roll.



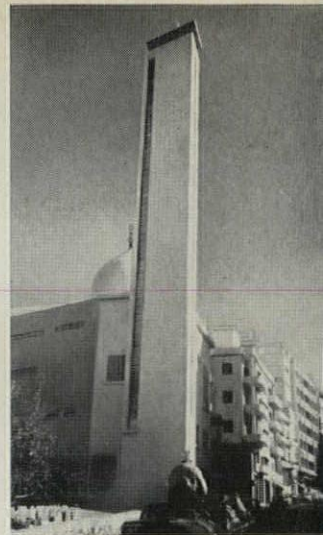
Stainless in kitchen and backbar equipment helps keep The Herald's beautiful cafeteria sparkling clean at all times. Railing in foreground is fabricated from Republic Type 316 ENDURO Stainless Steel Flat Bar Stock.



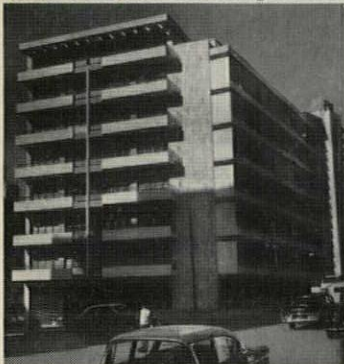
Ministry of Information & Guidance Bldg., Kuwait; Painting Contractor: Kuwaiti Palestinian Contracting and Trading Co., Kuwait.



Private housing development, Kuwait; Painting Contractor: Kuwaiti Palestinian Contracting and Trading Co., Kuwait.



Ras Beirut Mosque, Beirut; Architect: Said Hijail.



Abdel Hafiz Itani Bldg., Beirut; Architect: Ahmad Tanir.

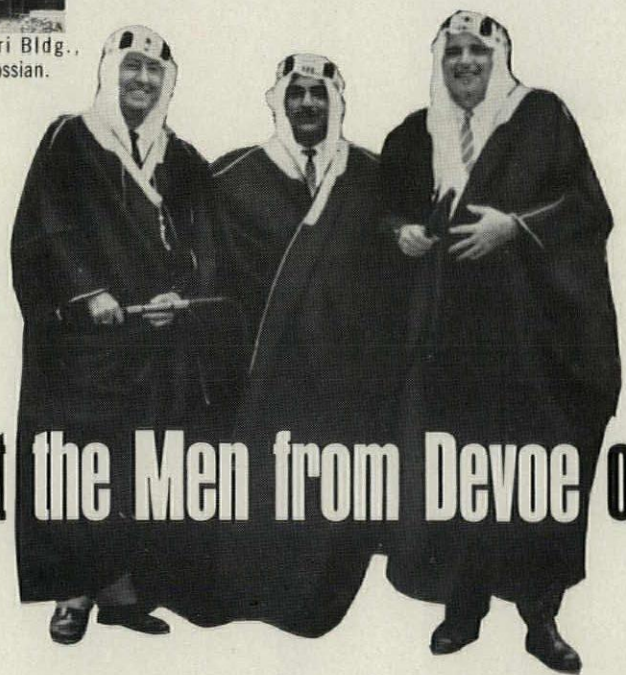


Mohammad Amin Khodari Bldg., Beirut; Architect: Berg Bedrossian.



Abdel Hamid Chehab Bldg., Beirut; Architect: Jos. Karam.

The Man from Devoe gives service in depth on the spot—wherever it is. Here, two of them—J. L. Hobart, general sales manager (right), and J. L. Lloyd (left), export manager—visit Ratib Al Kurd, local Devoe distributor in Beirut, Lebanon.

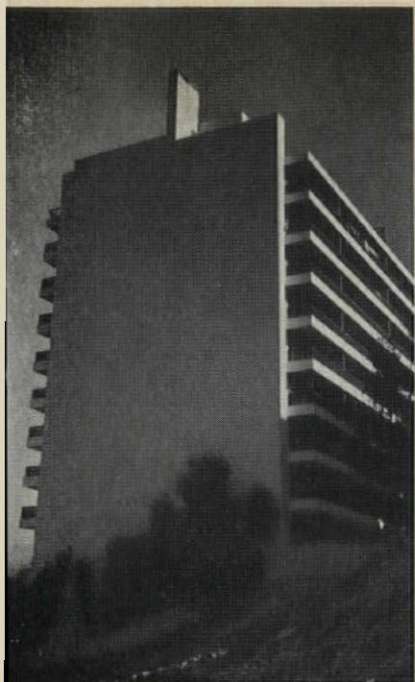


Even in the Middle East the Men from Devoe offer

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.



Hamzeh Malass Bldg., Beirut; Architect: Hogo Atachian.



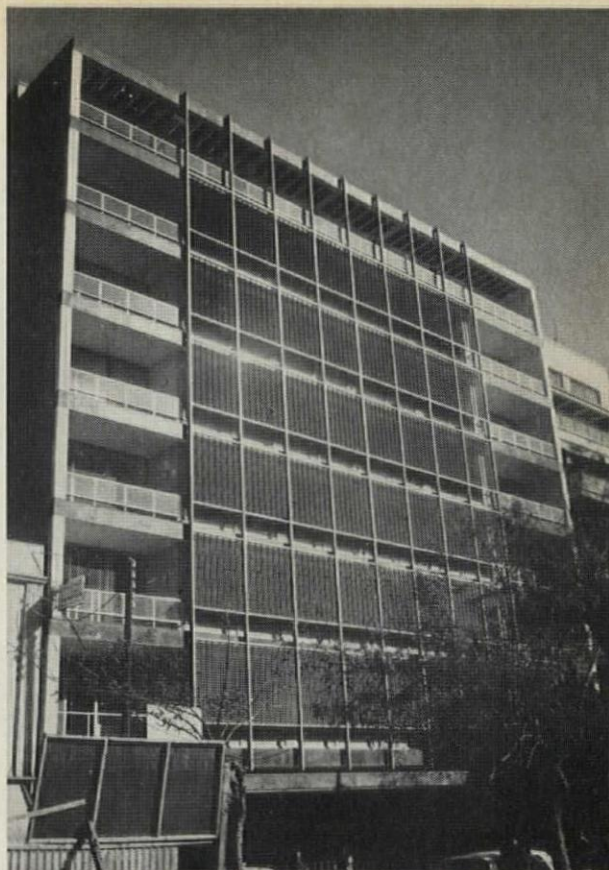
Fouad el Lababidi Bldg., Beirut; Architect: Samir Khairallah.



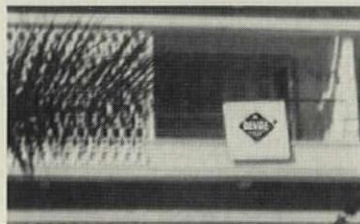
Kuwait Bldg., Beirut; Painting Contractor: Kuwaiti Palestinian Contracting and Trading Co., Kuwait.



Soheil Bechara Bldg., Beirut; Architect: Jos. Karam.



Hassan Hamrad Bldg., Beirut; Architect: Bahij Makdissi.



service in depth—with paint known for quality

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

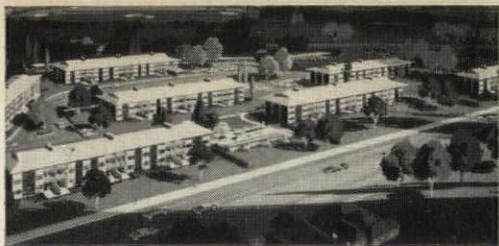
to paint formulae. Just write or phone the nearest Devoe office to contact him. Naturally, there's no charge for his services.



DEVOE
DEVOE & RAYNOLDS COMPANY, INC.

Atlanta • Boston • Charlotte, N.C. • Chicago • Cincinnati • Cleveland • Cos Cob, Conn. • Dallas • Denver • Detroit • Honolulu • Houston • Los Angeles • Louisville • Moonachie, N.J. • New Orleans • New York • Philadelphia • Pittsburgh • Portland, Ore. • Richmond, Va. • Sacramento, Calif. • St. Louis • Salt Lake City • Warehouses in all principal cities, coast to coast.





Trenridge Apartments, Lincoln, Nebraska.
Architects: Sidney W. Campbell and Reginald E. Davies.

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

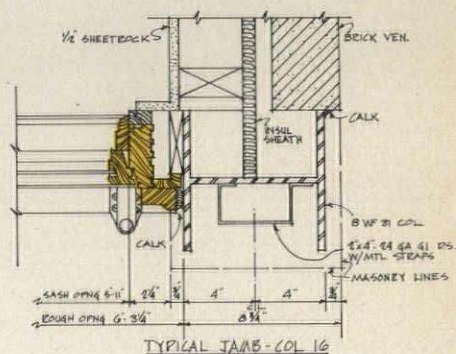
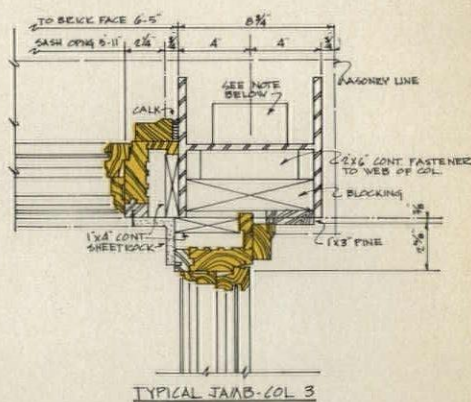
In the new Trenridge Apartments, Lincoln, Nebraska, combination Andersen casement and picture windows are used to complement distinctive styling while adding extra value for owner and occupants.

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 Windowalls
TRADEMARK OF ANDERSEN CORPORATION
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

Repeated successes in space vehicles, computers, and countless other equipment have proved the superiority of solid state electronics over older conventional electric and electronic devices. Transistors, solid state relays, and other semiconductors require relatively little power... they are far more reliable... and the systems in which they are used are less expensive.



SOLID STATE ACTUATOR

Has just one moving part—only the shaft moves in response to the thermostat!

Johnson uses solid state devices exclusively throughout its electronic control systems. Cybertronic thermostats and other controllers have no tubes, mechanical relays, potentiometers, springs, or levers. There are *no* moving parts between the thermostat and the valve or damper actuator. There are *no* gear train operators or other obsolete mechanical gadgets. Result: the failure rate is negligible. And the need for costly replacements, adjustments, and maintenance of control components is substantially reduced.

EXCLUSIVE BRIDGE DESIGN PROVIDES UNEQUALLED STABILITY

The sensing bridge used to measure temperature, humidity, and other air conditioning variables has been a major trouble-spot in all previous electronic control systems. It requires constant checking, adjusting, and maintenance. Johnson engineers solved this problem by developing a new simplified sensing bridge that vastly improves control stability and eliminates the need for manual adjustments and shielded cable. Another expensive headache you avoid with Johnson solid state electronic controls!



CYBERTRONIC THERMOSTAT

New bridge circuit design assures stability unequalled by other systems.

COMPARE THE ADVANTAGES OF CYBERTRONICS

Only Johnson solid state electronic control systems provide all these outstanding features:

- Fail-safe valve and damper actuators as standard equipment.
- Continuous monitoring and amplification with no mechanical components.
- Instantaneous response to temperature and humidity changes.
- Utmost simplicity: no moving parts between controller and valve or damper actuators; actuators with as few as one moving part.
- Unprecedented control stability because valve and damper actuators are capable of an infinite number of positions, with response always perfectly proportional to the slightest demand from the thermostat or humidostat.
- Strategically located indicators to give the engineer a visual check of controller response and of valve and damper positions.

TRANSDUCER INCREASES DESIGN FLEXIBILITY

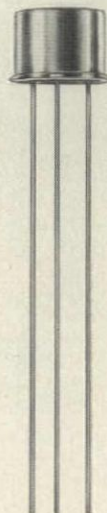
The Cybertronic line includes all components required for the individual system—controllers, actuators, sensing elements, complete control centers, auxiliary devices and system accessories, plus Johnson valves of all types and body styles. Where pneumatic operation of valves and dampers is desired, a new Johnson transducer converts electronic signals to a proportional pneumatic output. The entire Cybertronic line is made in Johnson's own electronics factory.

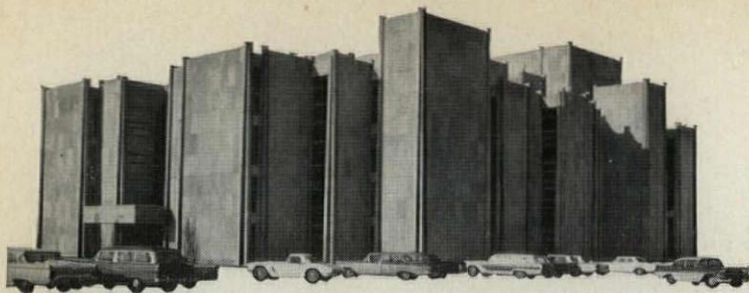
JOHNSON OFFERS "ONE SOURCE" RESPONSIBILITY

Thanks to Cybertronics, you can now specify an electronic control system that is comparable in performance and flexibility to a pneumatic system! Equally important, you can count on Johnson to assume complete responsibility for coordinated planning, expert installation, system start-up, operating guarantee, and low-cost lifetime service.

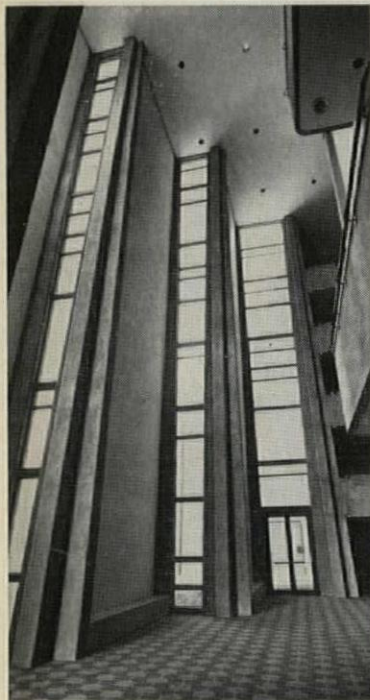
A Cybertronic System offers outstanding advantages for all types of buildings. And you get all of these "big system" features whether you are building a small commercial structure or a skyscraper. Ask your local Johnson representative for complete details about the electronic control system you can rely on!

Johnson Service Company, Milwaukee, Wisconsin 53201. Direct Branch Offices in 110 Cities.

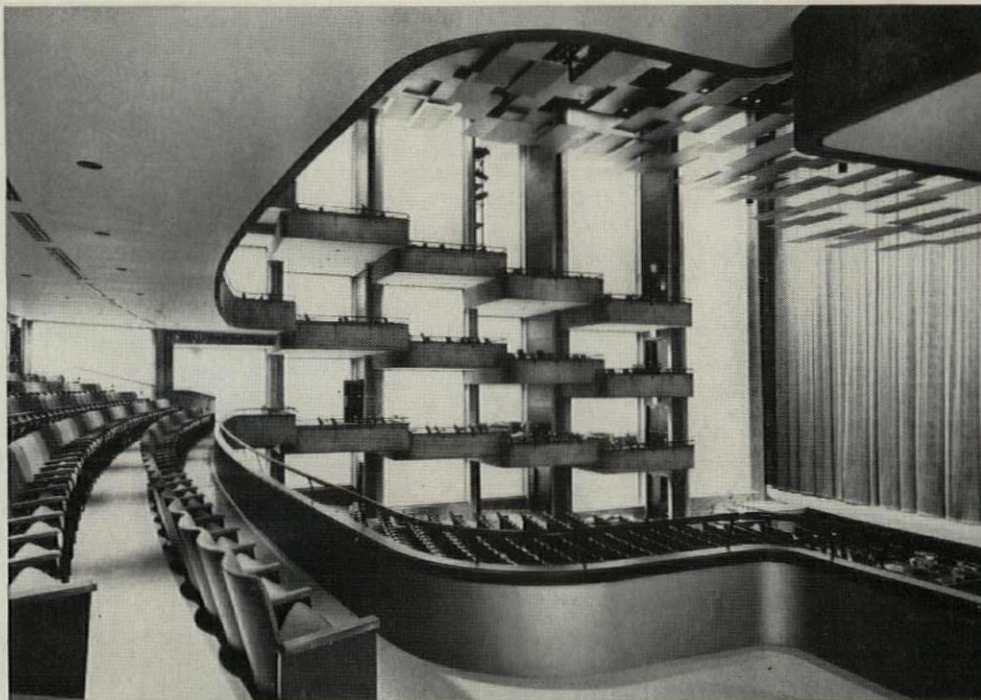




The exterior design of Clowes Memorial Hall features soaring concrete pylons and limestone walls which blend well with the Neo-Gothic campus of Butler University. The exterior dimensions are 168' wide by 225' deep.



(at left) The Grand Foyer and side lobbies show the extension of the concrete pylon effect to the interior. These areas are six stories high.



(at right) The main hall shows a further extension of the exposed unpainted concrete and its importance in the overall architectural effect. Note pylons in the background and the balcony sides. This main hall seats 2,200 people.

CONCRETE PERFORMS for the Performing Arts

Clowes Memorial Hall was designed to satisfy the exacting requirements of each of the performing arts. Since its recent completion, it has been acclaimed as one of America's finest cultural and entertainment centers under one roof.

Concrete plays a major role in this new hall, both structurally and architecturally. Here, as in many new trend setting designs, the fine quality concrete was made with Lehigh Cement. Lehigh Portland Cement Company, Allentown, Pa.

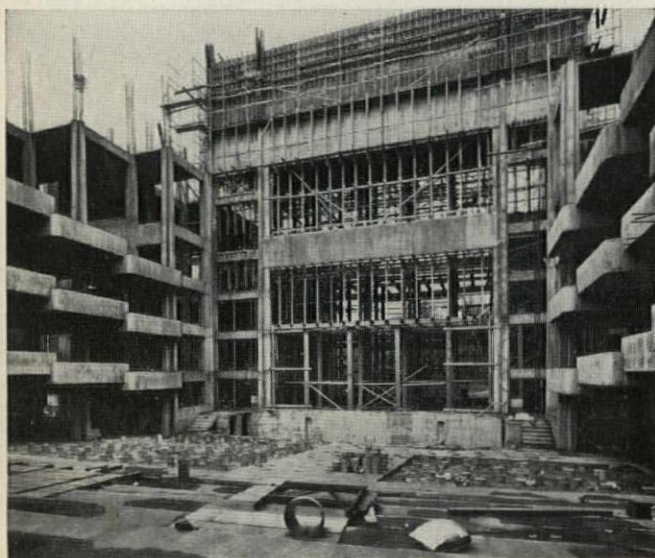
Owner: Butler University, Indianapolis, Ind.

Associated Architects: John M. Johansen, New Canaan, Conn. and Evans Woollen, Indianapolis, Ind.

Structural Engineers: Fink, Roberts & Petrie, Inc., Indianapolis, Ind.

Contractor: George Bahre Company, Indianapolis, Ind.

Ready Mix Concrete: Heston Concrete Company, Indianapolis, Ind.

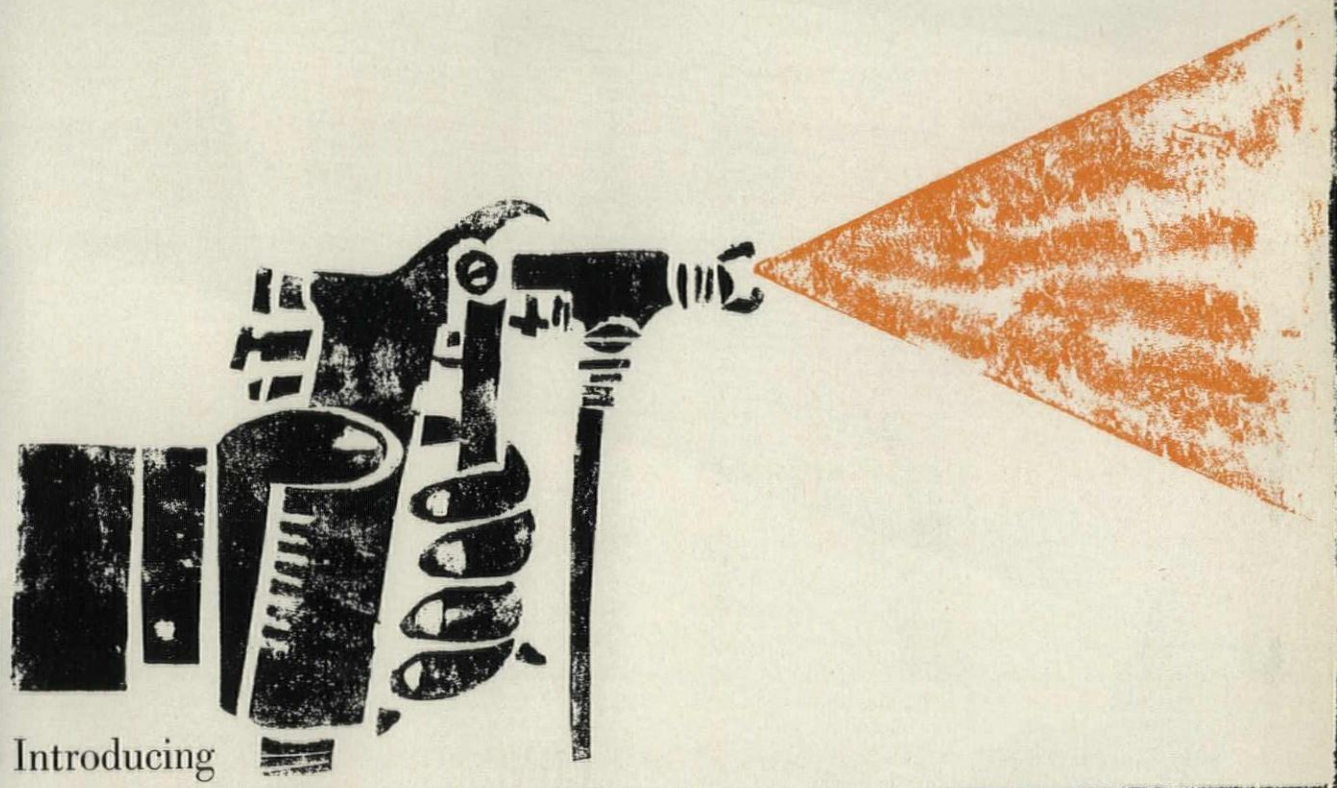


The basic structure of this hall is reinforced concrete. The stage house is nine stories high. The stage itself is 51' wide at the proscenium and has a depth of 62'.

**LEHIGH
CEMENTS**

*We wanted to make sure we'd
make them better than the best*

*... then out we came with 3
great new products*



Introducing

RYNO-WAL

a new complete
water-base system
for interiors.

Who else but R. M. Hollingshead, the people who pioneered COCOON — today's most versatile spray coating — would go to such lengths to develop an interior wall surfacing that's so obviously superior. Ryno-Wal is completely water-based: no odors, no flammability. Ryno-Wal is non-cementitious and 90% inorganic. A wide variety of colors is available, and optional splattering or veiling makes many smart decorator effects possible.

And for exteriors...
new

RYNO-KRETE


This is Hollingshead's companion product to Ryno-Wal. Also non-cementitious, highly inorganic, non-toxic and incombustible. Available in flat or semi-lustre finishes.

New, too!

TRAFFIC DEK

Developed through extensive research, Traffic Dek offers an elastomeric system, coupled with a durable traffic surface. Resists spike heels, deck chairs and light vehicular traffic — can be applied beautifully to promenade decks, swimming pool terraces, industrial traffic areas, hospitals, hotels and commercial buildings. Wide range of pastel colors!

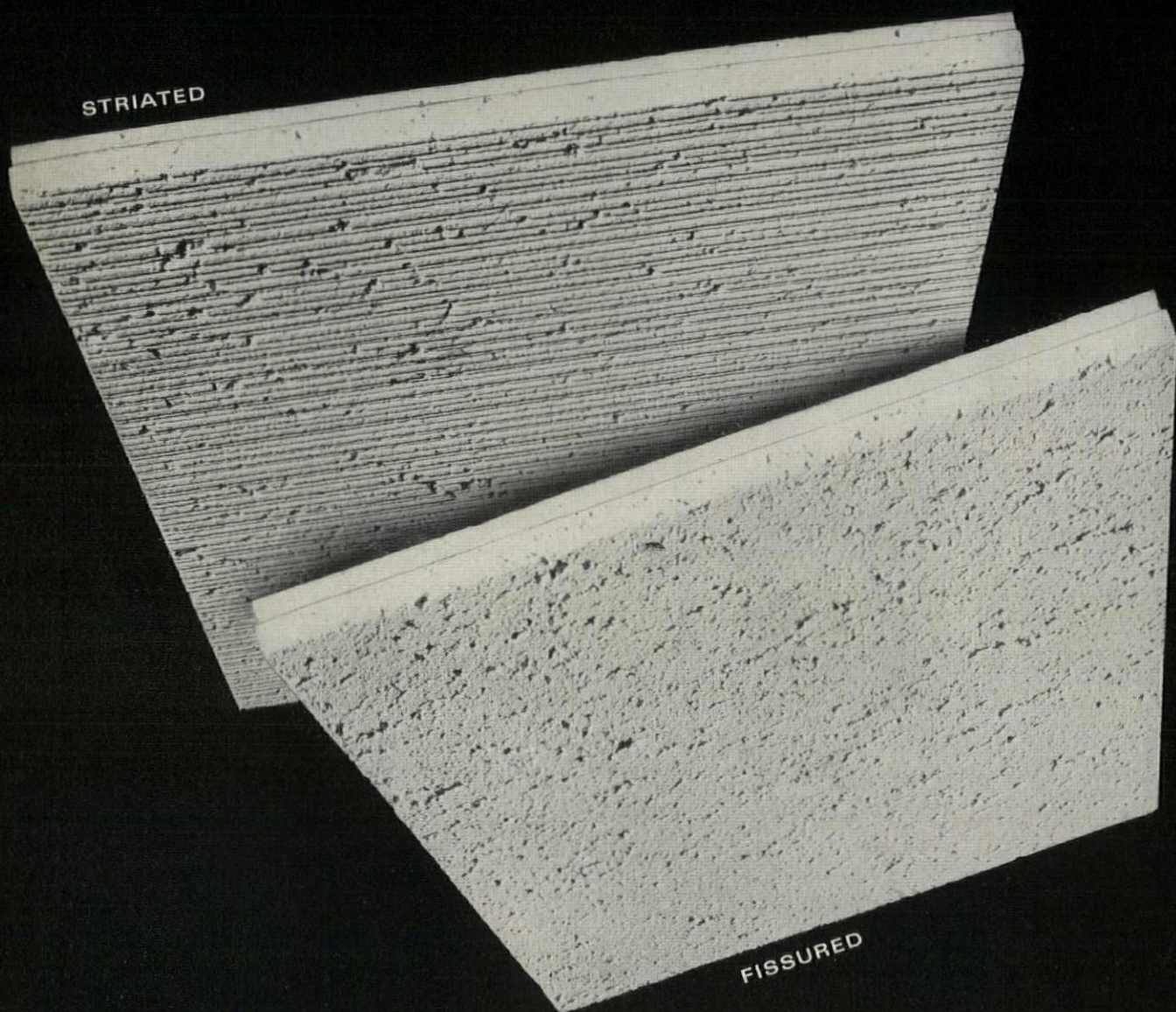
New specification sheets available for RYNO-WAL, RYNO-KRETE and TRAFFIC DEK.

SEE SWEET'S 

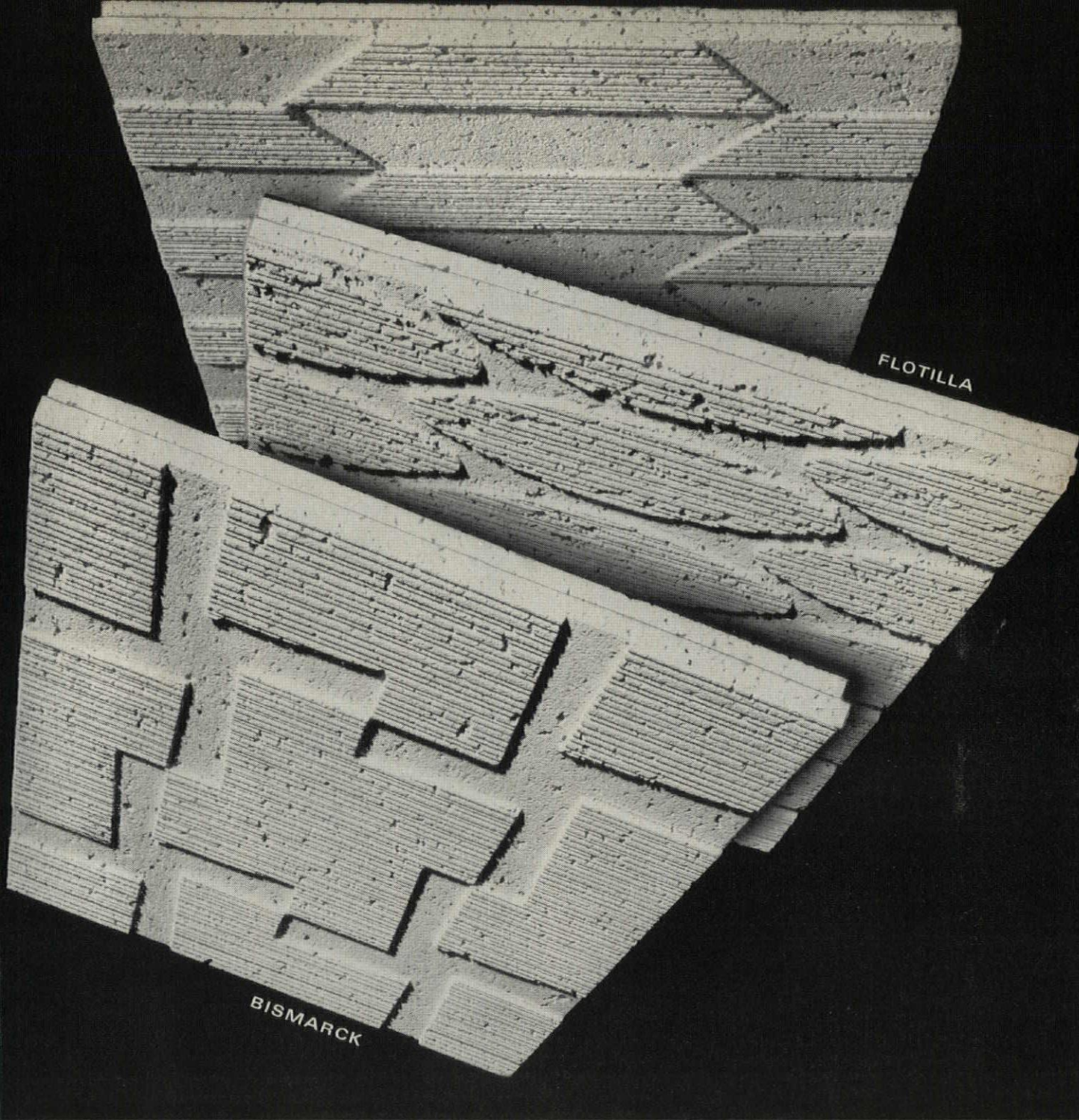
Write, phone or wire... Department D.R.
R. M. HOLLINGSHEAD CORP.
Architectural Coatings Division



Camden, N.J. | Sunnyvale, Calif. | Toronto, Canada



**The Gold Bond difference: Improved Travacoustic
ceiling tiles combine the natural beauty
of travertine stone with high
dimensional stability**



Now the natural fissured beauty of travertine stone has been captured in a lightweight acoustical ceiling tile. To avoid monotonous repetition, no two tiles are fissured exactly alike. And, because of an exclusive manufacturing process, Travacoustic now has exceptional resistance to high humidity — can be installed before plaster is dry, cutting days off building completion and occupancy time. Travacoustic tiles have a base made with long mineral wool fibers that are uniformly interlocked, to give greater

resistance to sag than ordinary acoustical tiles. Rated Class A-noncombustible, Travacoustic has noise-reduction coefficients which range up to 80%. And Travacoustic is available in Fissured, Striated, Aztec, Flotilla and Bismarck patterns. Ask your Gold Bond® Representative, or write to Department PA-54, National Gypsum Company, Buffalo, New York 14225.



Gold Bond materials and methods make the difference in modern building

For more information, turn to Reader Service card, circle No. 368



Kent-Lincolnia Apartments, Alexandria, Va.
Builder: Builders and Developers of Md., Inc., Owner: Kent-Washington, Inc.

Handsome Protection: **ANCHOR PICKET RAILING** made of **REYNOLDS ALUMINUM**

Strength, appearance and freedom from rust make aluminum the architect's natural choice for apartment railings. And the new Anchor Picket Railing adds an attractive simplicity of design to these basic advantages. Pickets, posts and handrail are all Reynolds Aluminum.

Another important advantage is the quick and efficient installation by Anchor's national network of skilled erectors. For detailed information, call your local Anchor office or write to ANCHOR POST PRODUCTS INC., 6902 Eastern Avenue, Baltimore, Md.



REYNOLDS
where new ideas take shape in
ALUMINUM

Watch "The Richard Boone REYNOLDS ALUMINUM SHOW" Tuesdays NBC-TV
For more information, turn to Reader Service card, circle No. 379

MARBLE: economy material for cost-conscious clients!

MARBLE? they'll say, an *economy* material? Yes, indeed! If they'll take a square look at *all* the *facts*.

Too many people make the mistake of assuming that anything as beautiful as marble—with its incomparable look of luxury—must simply be too costly. That simply is not true.

Actually, marble offers the best of *both* beauty and economy.

Marble, of course, is permanent and durable, more than good for the life of any building. Its economy begins the minute it's installed. It never needs painting or waxing or buffing. Year after year, its minimum cost of maintenance is like money in the bank.

Even marble's long-lasting look of luxury has a tangible value, increasing pride of ownership and pleasure in use, and helping to sustain property values by creating individual distinction for any structure.

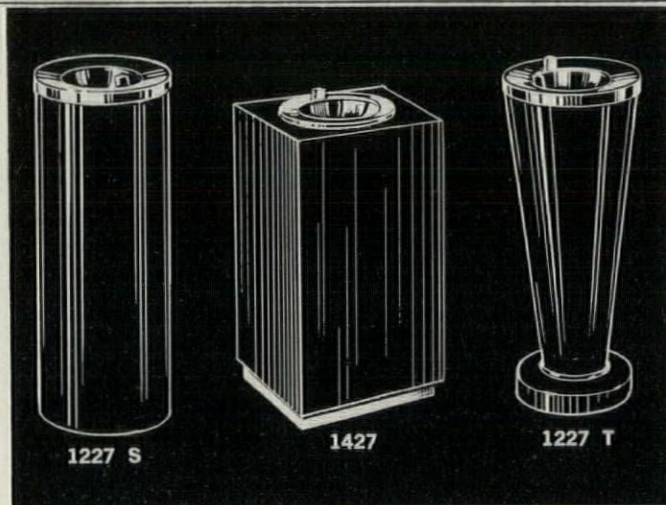
Members of the Marble Institute of America offer skilled and experienced counsel in the proper use of marble; they offer the world's finest marble workmanship in their plants throughout the U.S.; and they offer as well more than 250 foreign and domestic marbles for you and your cost-conscious clients to choose from.

For further information, write:



MARBLE INSTITUTE OF AMERICA, INC.
32 Fifth Avenue, Mt. Vernon, N. Y. 10550

For more information, turn to Reader Service card, circle No. 357



FLOOR URNS

Convenience for Smokers
— for Maintenance

Jumbo® urns with tip action top and large capacity bucket. Also available with water or sand tops. Finishes in bronze, chrome, aluminum, gray or black.

Write for catalog of matching desk accessories, waste baskets, planters and floor stands.



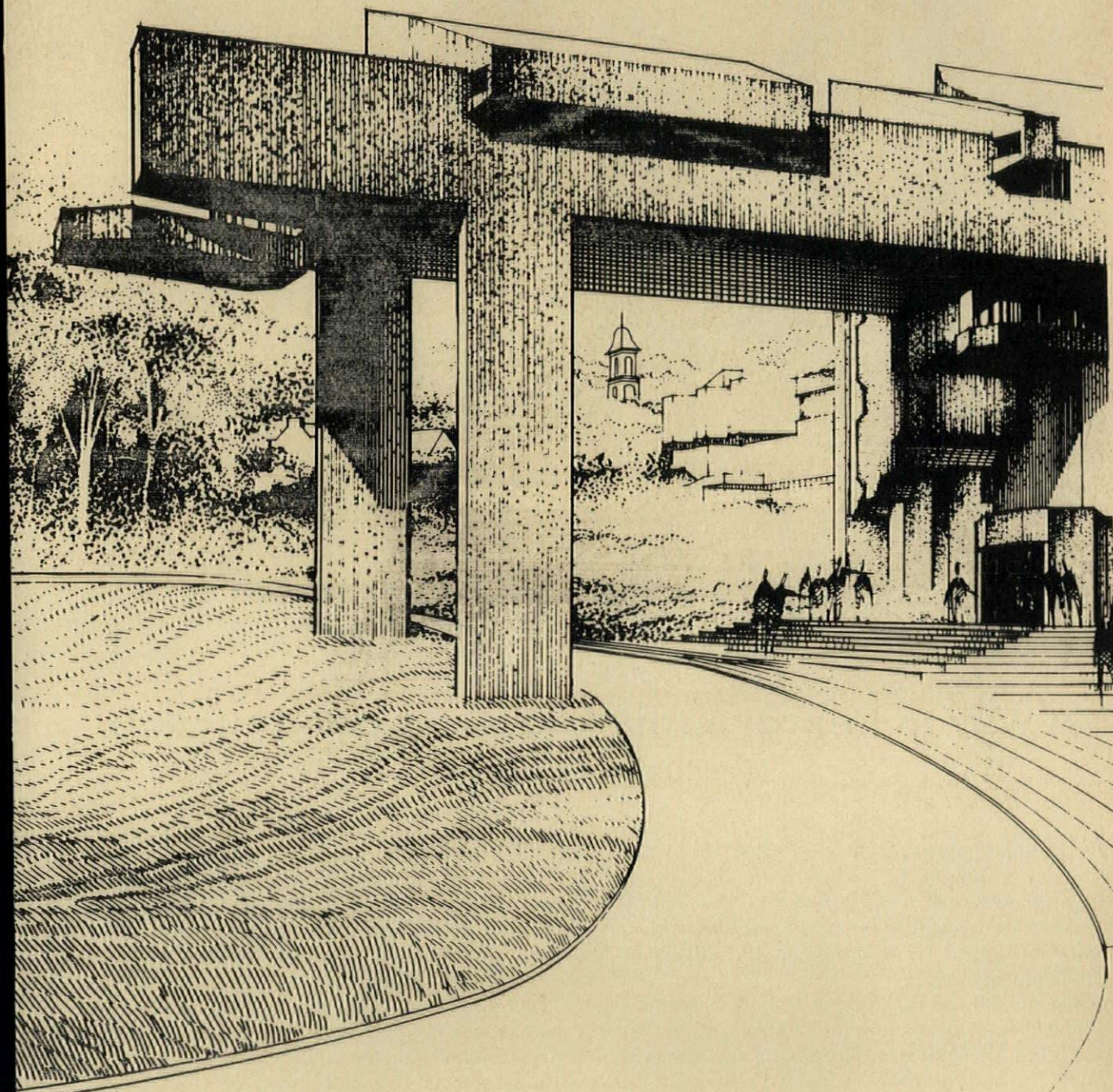
DUK-IT McDONALD PRODUCTS CORPORATION
252 Duk-It Building • Buffalo, New York 14210

For more information, turn to Reader Service card, circle No. 360

PROGRESSIVE ARCHITECTURE MAY 1964

NEWS REPORT

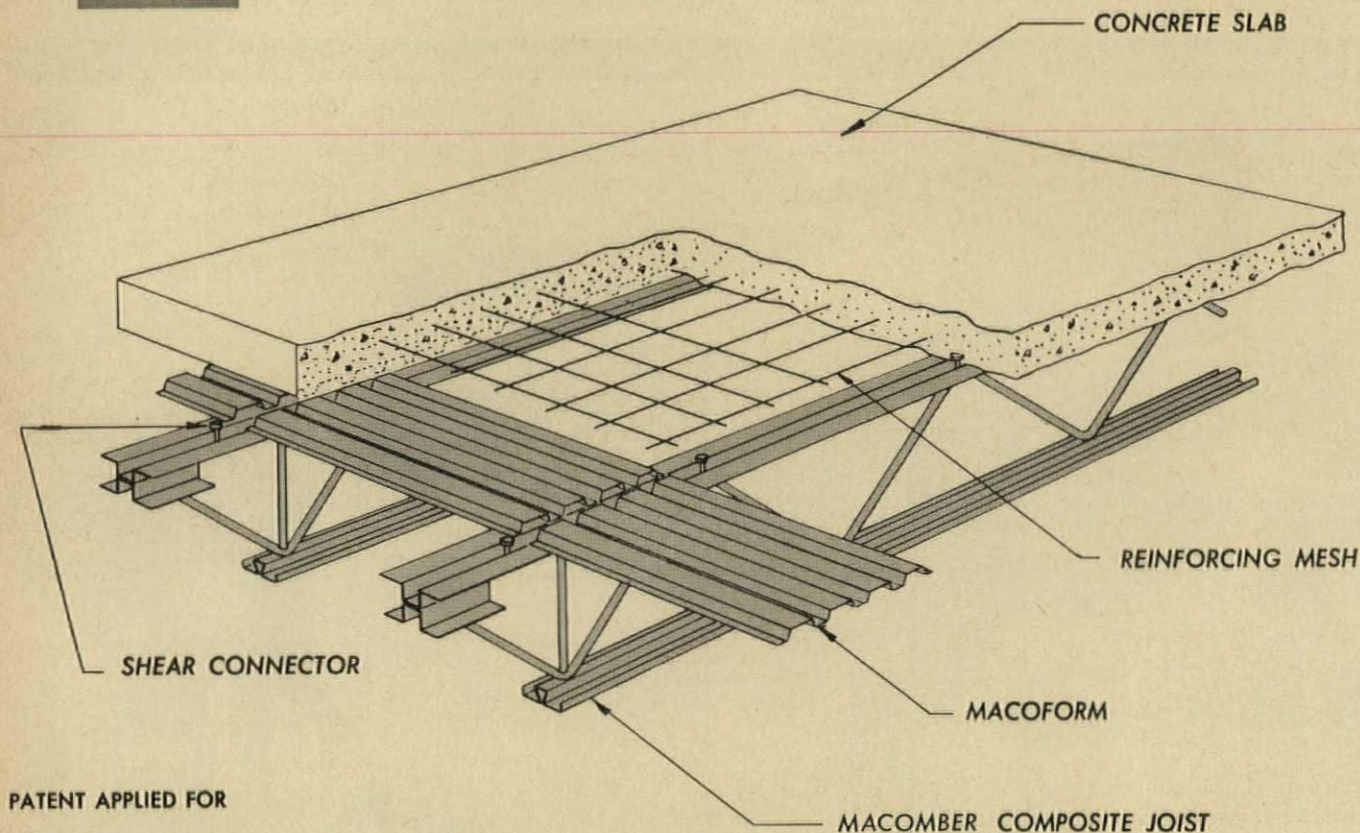
Architecture's Monthly News Digest of Buildings and Projects, Personalities, New Products



Lofty porte cochère of Rudolph's Colgate Creative Arts Center will frame older campus buildings.

- 57 ANOTHER RUDOLPH ARTS BUILDING
- 58 CRITIQUE ON JOHNSON'S THEATER
- 60 TRADE MART FOR MONTREAL
- 61 SEAGRAM TO BUILD IN TORONTO
- 62 HUGE JFK CENTER FOR LONG ISLAND

- 64 THREE STADIA IN THE SOUTH
- 68 WASHINGTON/FINANCIAL NEWS
- 70 BREGER WINS PITTSBURGH PRIZE
- 87 PRODUCTS: STURDY DRAFTING PEN
- 96 MANUFACTURERS' DATA

NEW

A way to improve multiple story construction (and reduce its costs)

Build a tall building, or a single-story, with less wasted space, more economically. It can be done with an exciting new system developed, tested and proved by one of America's best known structural steel fabricators — Macomber Incorporated, a Subsidiary of Sharon Steel Corporation.

It's called the Macomber Composite System, because it combines steel and concrete into a structural member which functions integrally, utilizing the strength of open-web joists with the capacity of a concrete slab. The inter-action of the joists and slab provides a more

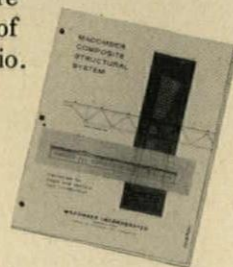
rigid unit than steel and concrete acting independently. Developed around a special open-web joist, the system permits longer spans with shallower depths, reducing height per floor. More efficient use of materials with a reduction in total dead weight and labor costs, result in decreased building costs.

The Macomber Composite System is another new custom steel product from the expanding world of Sharon Steel. For technical brochure write Macomber Inc., Subsidiary of Sharon Steel Corp., Canton 1, Ohio.

MACOMBER INCORPORATED

CANTON 1, OHIO

SUBSIDIARY OF SHARON STEEL CORPORATION

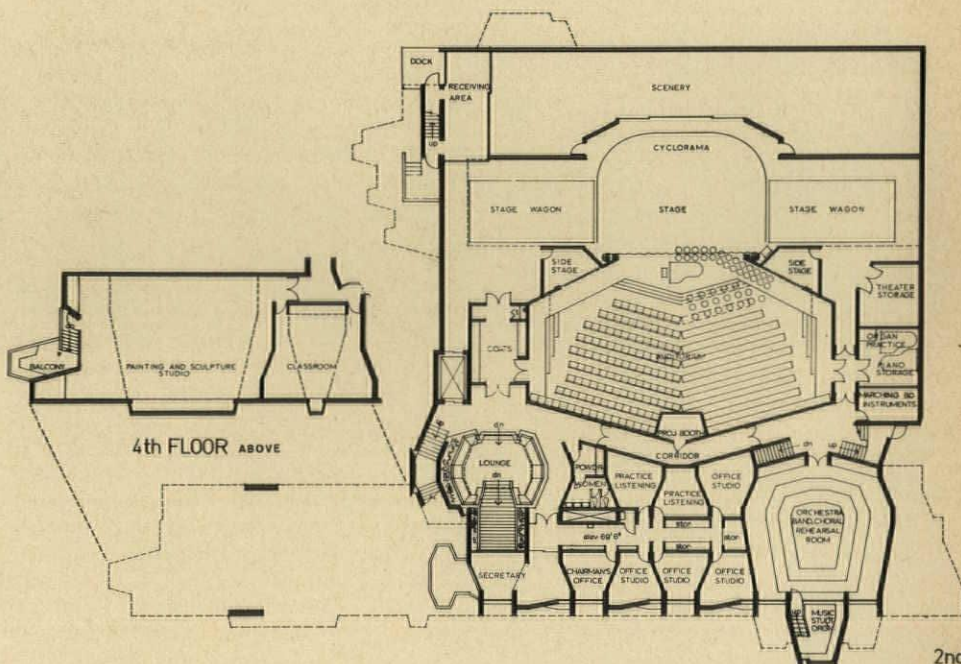
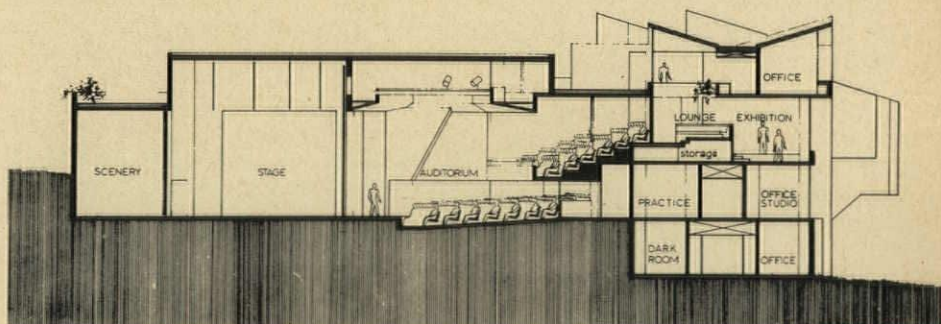
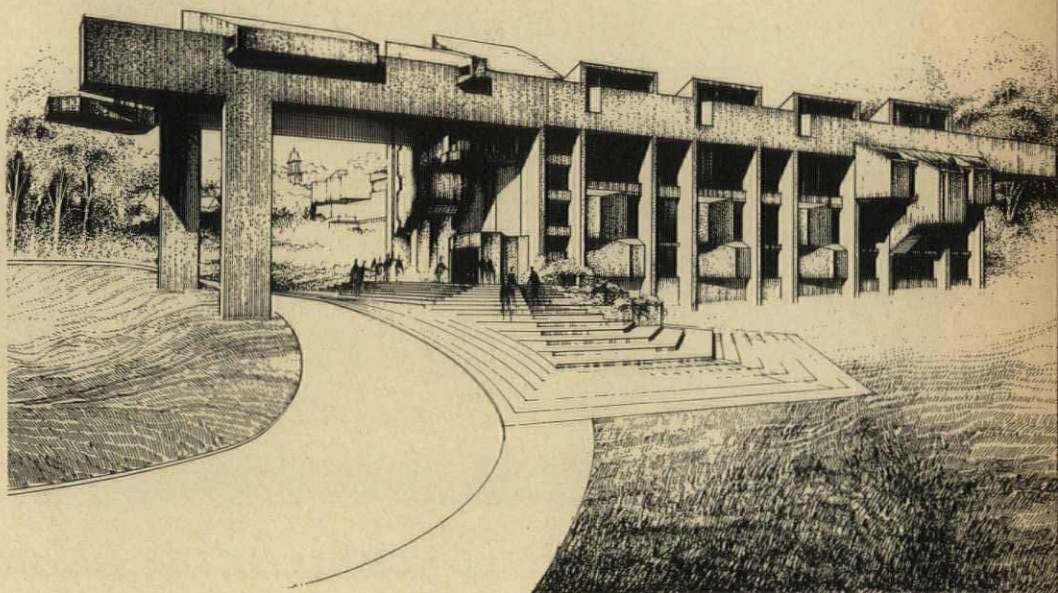


Another Art Center by Rudolph Unveiled

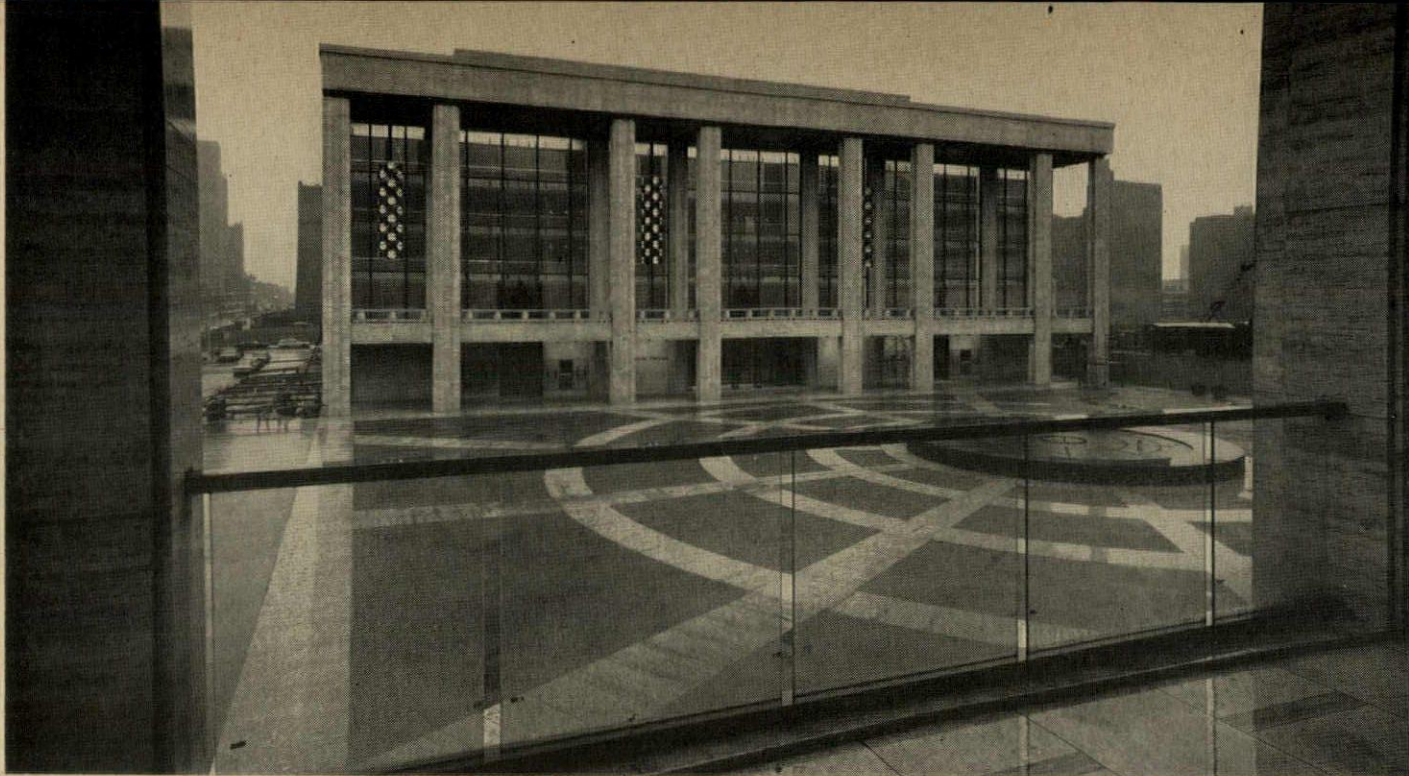
Last month saw one of the strangest press conferences within memory when a select group of editors was invited to New York's University Club to view Paul Rudolph's design for the proposed Creative Arts Center at Colgate University at the same time the major honor for the center was seeing it for the first time. The donor, 83-year-old industrialist and philanthropist Charles Dana (Columbia College, '02), seemed somewhat startled by Rudolph's concept, which invites comparison in many ways with his Art & Architecture Building at Yale University. Dana was not loathe to question the architect on many facets of the project, however: on siting ("Never mind theaternities, they'll disappear in 10 years or so. As long as you've considered the dormitories"); on shape of practice rooms ("Don't they have square ones in Carnegie Hall that work well?"); on the economics of design ("You can save money on theseaternities," pointing to the porte cochère); and on physical fitness ("Why have that bridge? Walking is good for the students"). Colgate's Vincent M. Barnett called the design "a 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 will be a 400-seat auditorium for music and dramatic performances. Surrounding this space on varying levels will be practice rooms, rehearsal rooms, offices, backstage facilities, lounge, classrooms, exhibition spaces, and studios. The balconied 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 provide additional facilities for art and sculpture over the auditorium.

The building is sited on a hill in a manner respecting the right-angled plan of the old quadrangle above it. A bridge will connect the hillside and roof terrace of the building. The center, which will function as a sort of "entrance to the campus," according to Rudolph, will feature a three-story-high porte cochère 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 at Yale.



2nd FLOOR



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 banisters 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 stro 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 so wrong in some cases as to appear deliberate. The circular lighting fixtures, designed in collaboration with the lighting consultant, Richard Kelly, 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 refractive effect associated with glitter, having 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 the traditional opera house: specifically the old Metropolitan Opera House. But is this homage or parody?

JTB: This is going to leave poor 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

werful sculpture of welded steel, roxy, and stretched canvas must com- te with gold bead curtains, and the rong travertine stair balustrades ust stand against the scalloped bal- nies upstairs.

EB: I feel that the two great spaces the auditorium and the promenade almost succeed as spaces, but are arred too frequently by finicky and sted-on touches that give volumes at should be (indeed really *are*) solid d enduring a feeling of ephemeral- ss.

ID: No matter what one may think the visible surfaces of the interior, the fault can be found with the atial organization of the building. l of the spaces promise to serve their mplex functions very well, and all of em—considered solely as spaces— e handsome. Only the intrusion of e cylindrical auditorium form into e promenade is disconcerting— inly because the enveloping bal- nies turn the potentially strong indrical form into a mere shallow lge (just as they obscure the strong es of the colonnade across the m). The interrelationship of these ajor spaces—lobby to promenade, omenade to balconies (both inside d outside the auditorium)—is in- nuous and highly effective. We have re, then, a series of useful cere- nial spaces to rejoice about, decked t (above the promenade floor) in tel materials that are, after all, as nessential as they look. Maybe this what Johnson is telling us, but he sn't made it a pretty story.

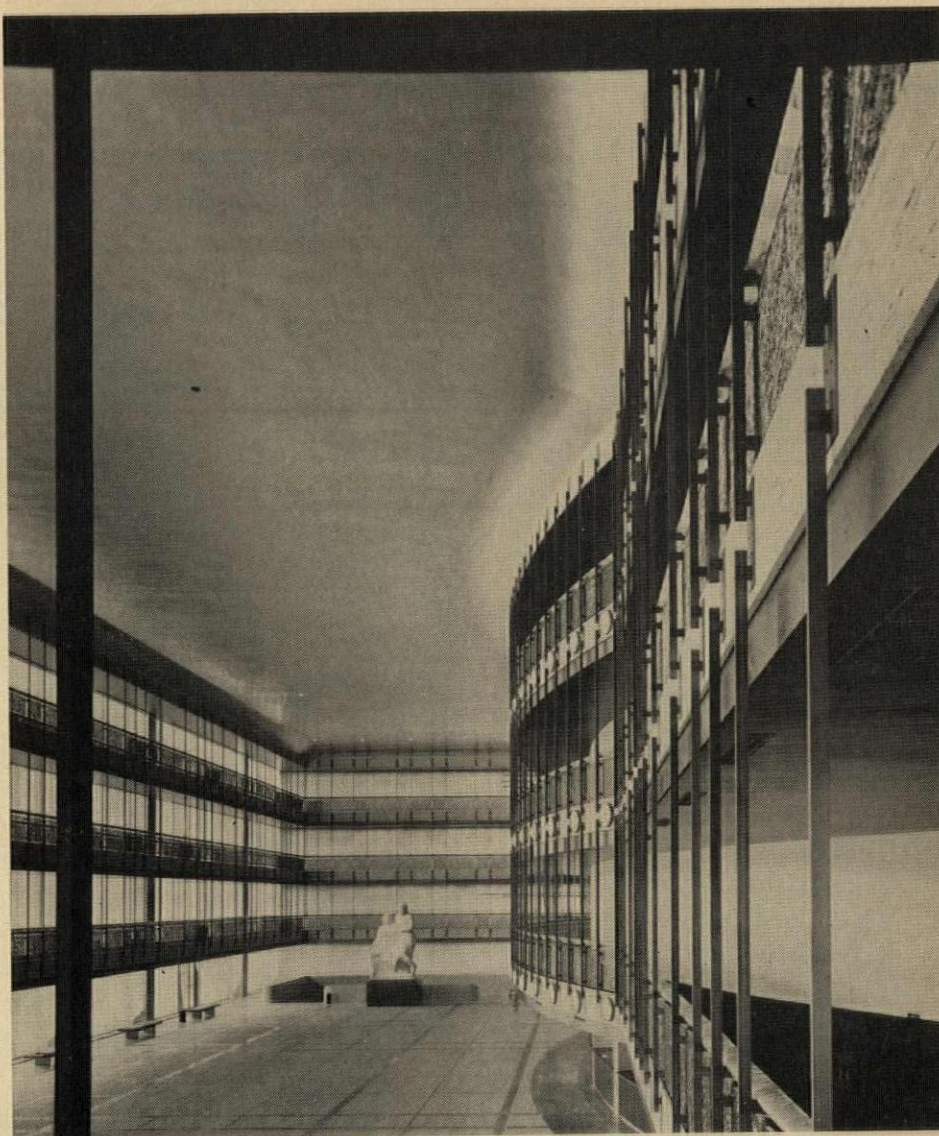
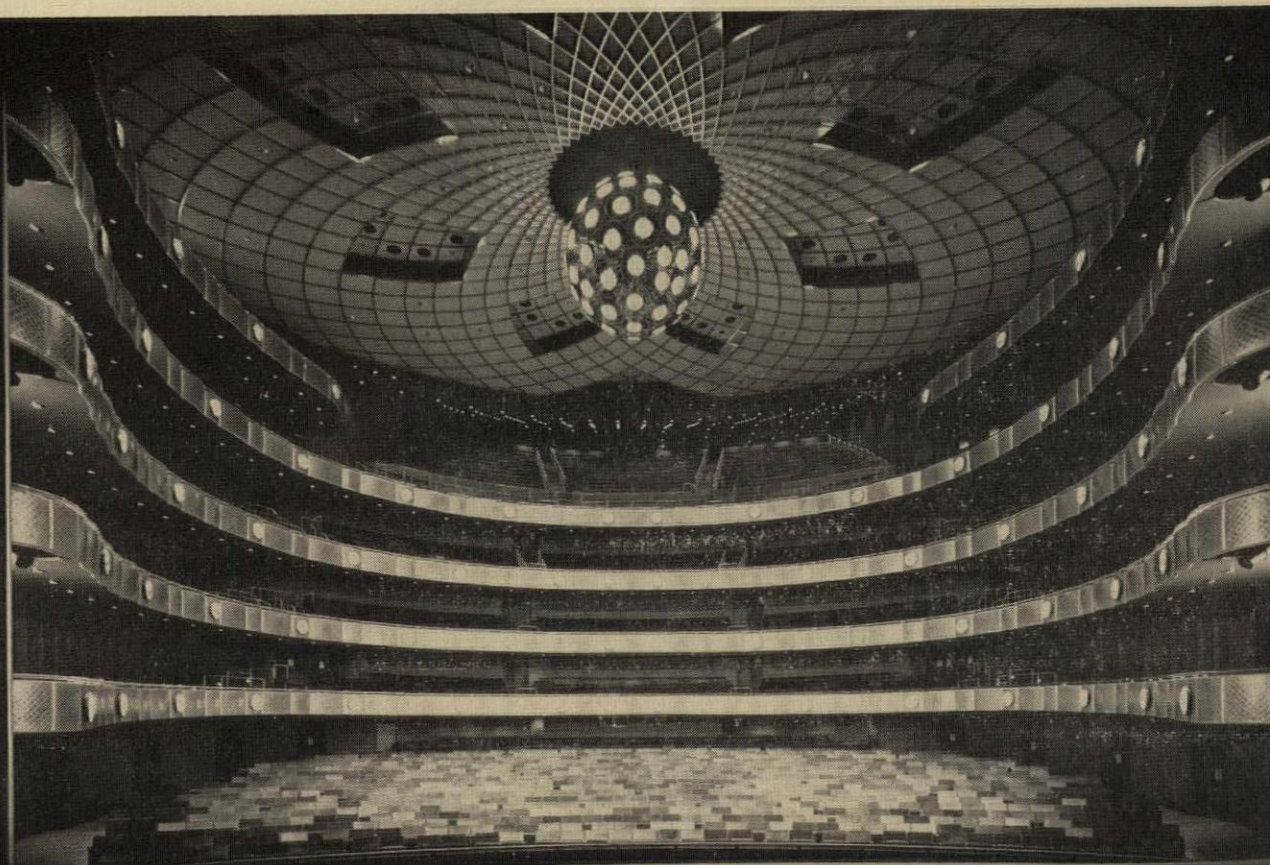


Photo: Louis Reens



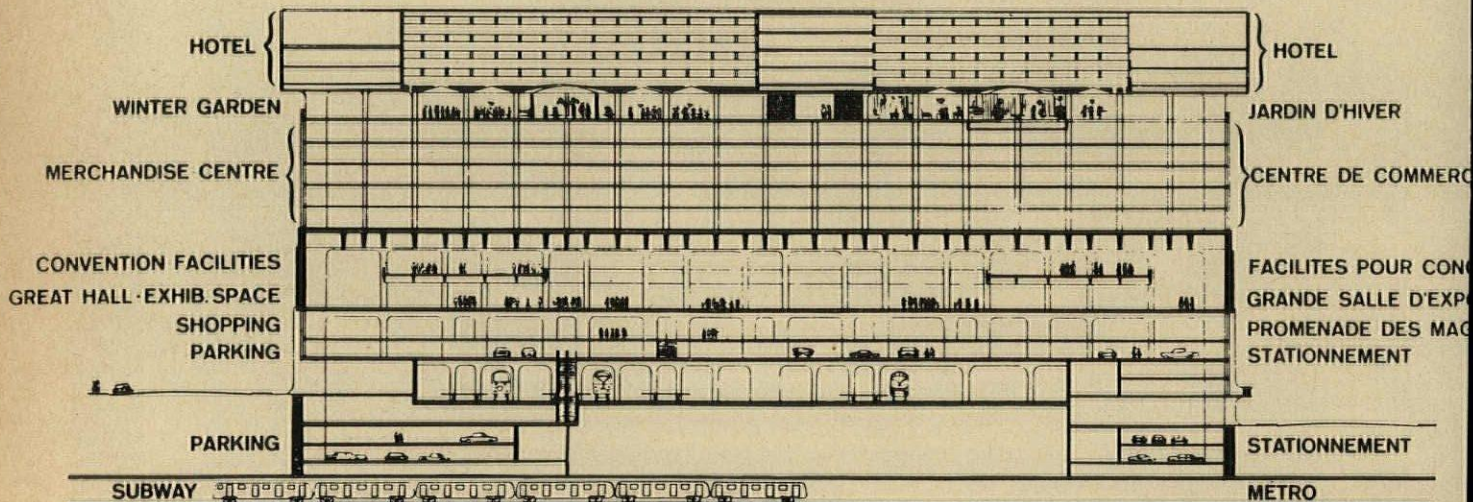
Trade Center to Advance Montreal Downtown

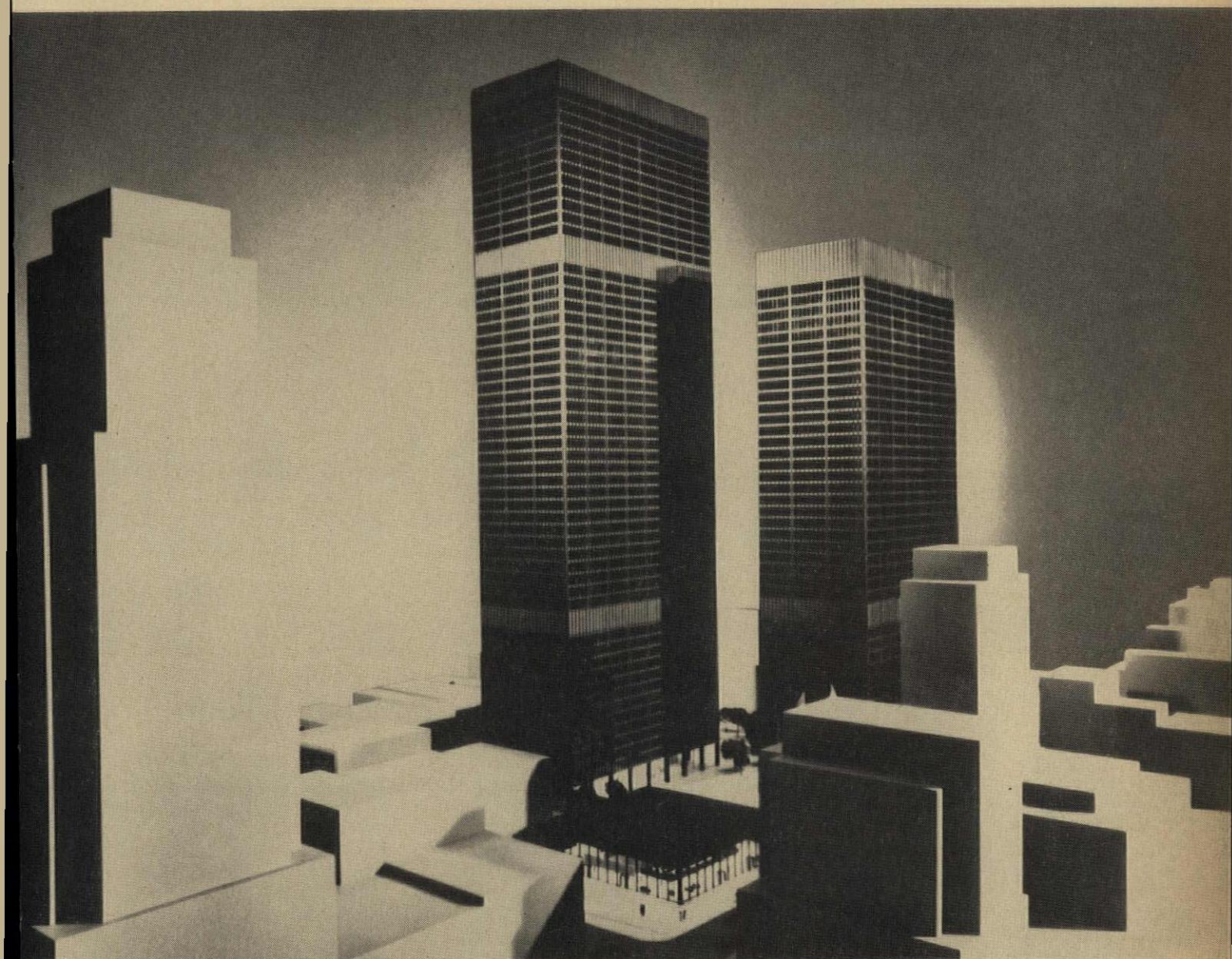
MONTREAL, CANADA Place Bonaventure is a trade center proposed for Montreal's burgeoning downtown business district that would provide, for the first time in Canada, a permanent facility for manufacturers and wholesalers of all kinds to maintain permanent showrooms. Designed by Affleck, Desbarats, Dimakopoulos, 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 wintergardens. These spaces, partially glass covered, will have a swimming pool, cabanas, restaurants, and cocktail lounges.



PLACE BONAVENTURE



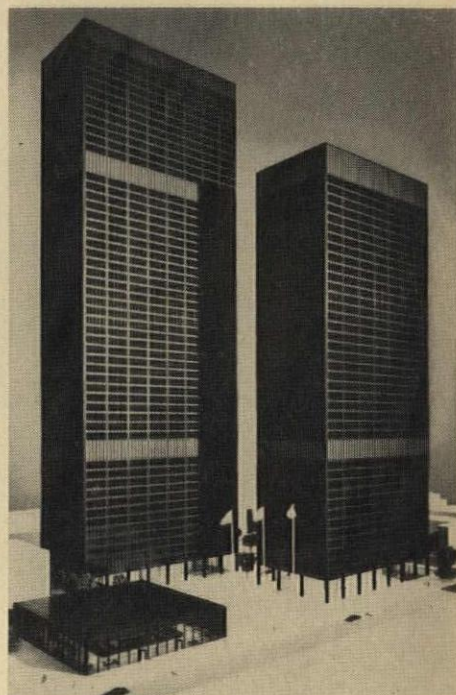


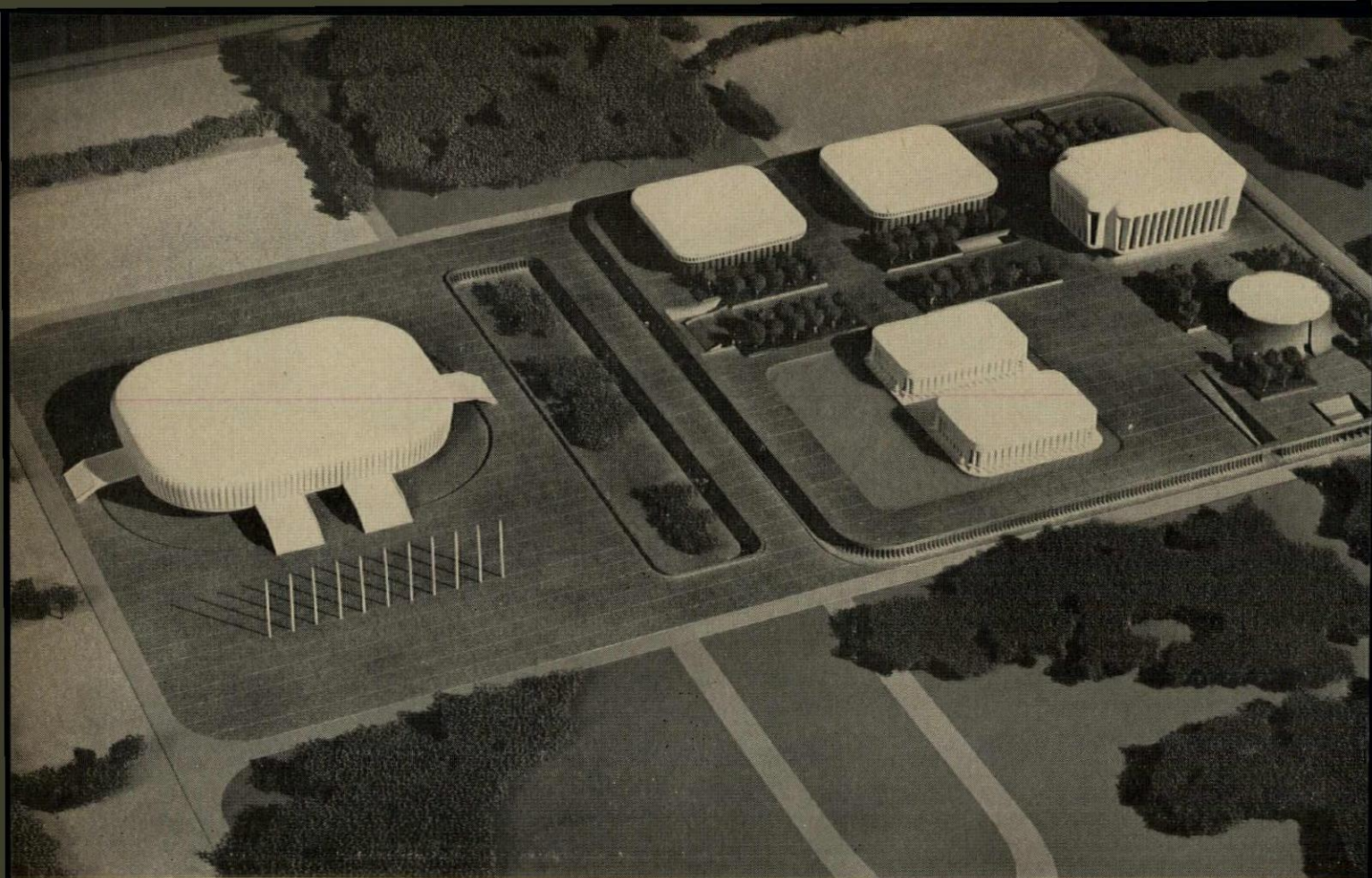
"SEAGRAM BUILDINGS" FOR TORONTO

TORONTO, CANADA 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 Toronto-Dominion Bank—major tenant of the largest structure—and Temp 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 Gregman & Hamann of Toronto, with Louis van der Rohe acting as the de-

sign 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.





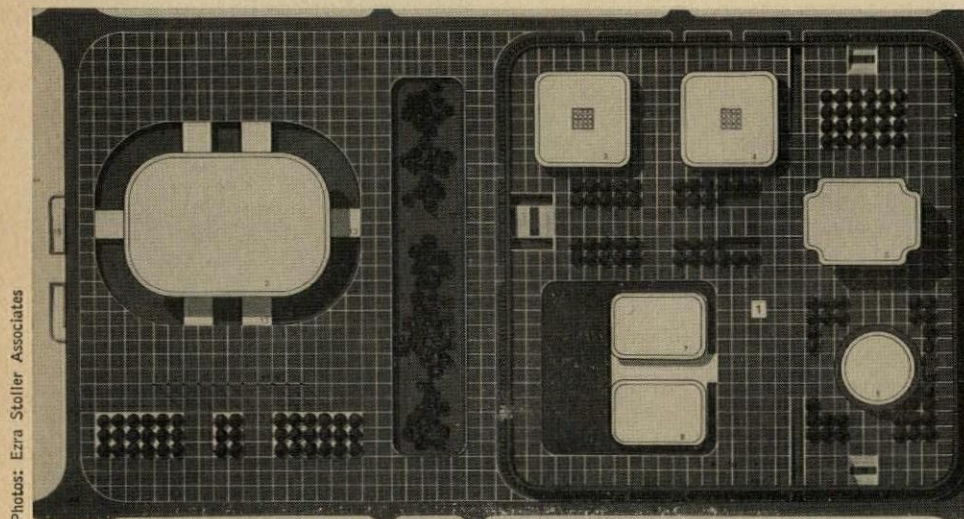
Center Dedicated to JFK Proposed for Long Island

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

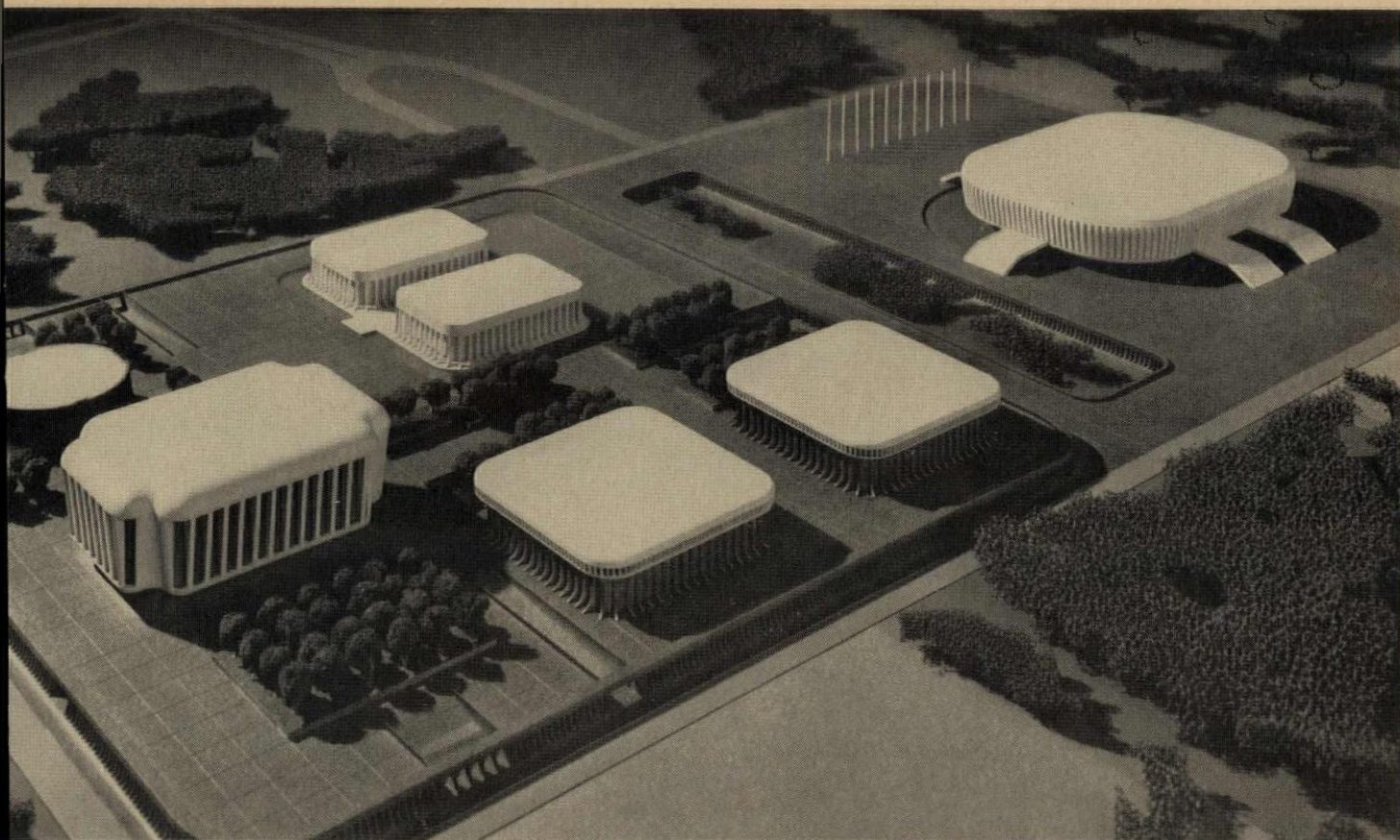
Mitchel Field at the geographic center of the island. To be called the John F. Kennedy Educational, Civic, and Cultural Center, it far surpasses in size and scope the John F. Kennedy National Center for the Performing Arts designed by Edward D. Stone for Washington, D.C.

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.

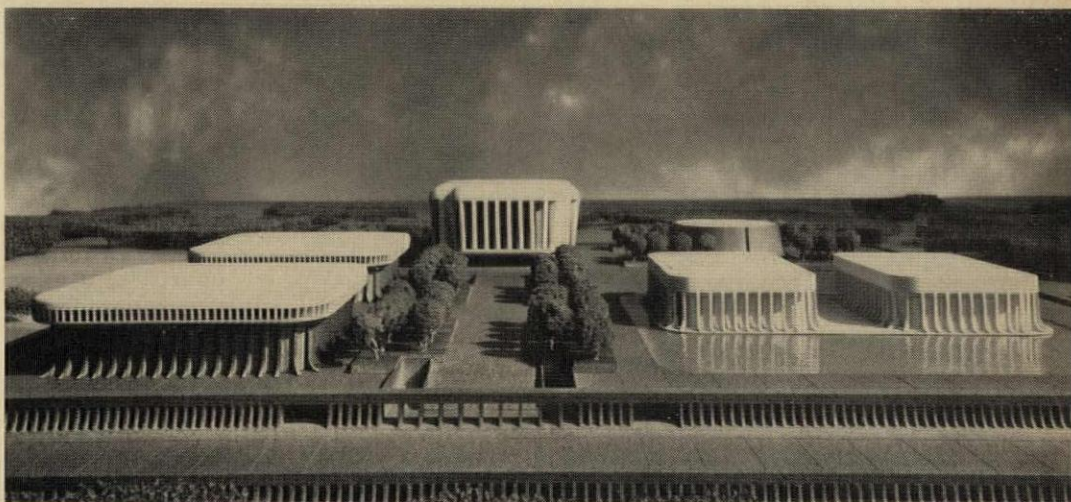


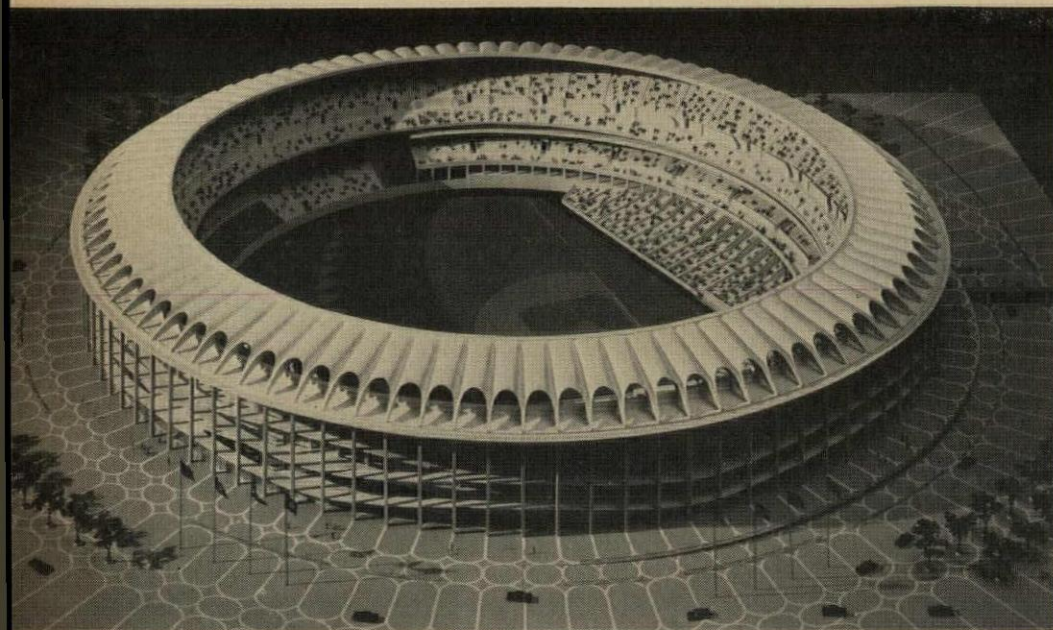
for in-the-round perform-
drama and intimate music
will have a capacity of 800.

granite form, seeming to
om the surrounding plaza,
e it the most interesting
visually, of the whole center.
l Center, in addition to hous-
ng 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-
colleges—Hofstra and Com-
College (the latter is on
stone's drawing boards)—and
sts in neighboring indus-

Fine Arts Gallery and Mu-
Science, Industry, History,
sportation will be somewhat
king exhibit buildings rising
reflecting pool. The entire
on 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
podium.

opitious program will be real-
ree stages, with construction
ium to progress as needed:
eum and Library; (2) Con-
and Social Center; (3) Fine
ery, Museum, and Theater.
eal garden across the way
proposed. The project is ex-
be completed by 1969-70.





SEVERAL SIGNIFICANT SOUTHERN STADIA

In the unusual "boom" for a rare building type, three major Southern cities—St. Louis, Atlanta, and Memphis—have announced plans for municipal stadia.

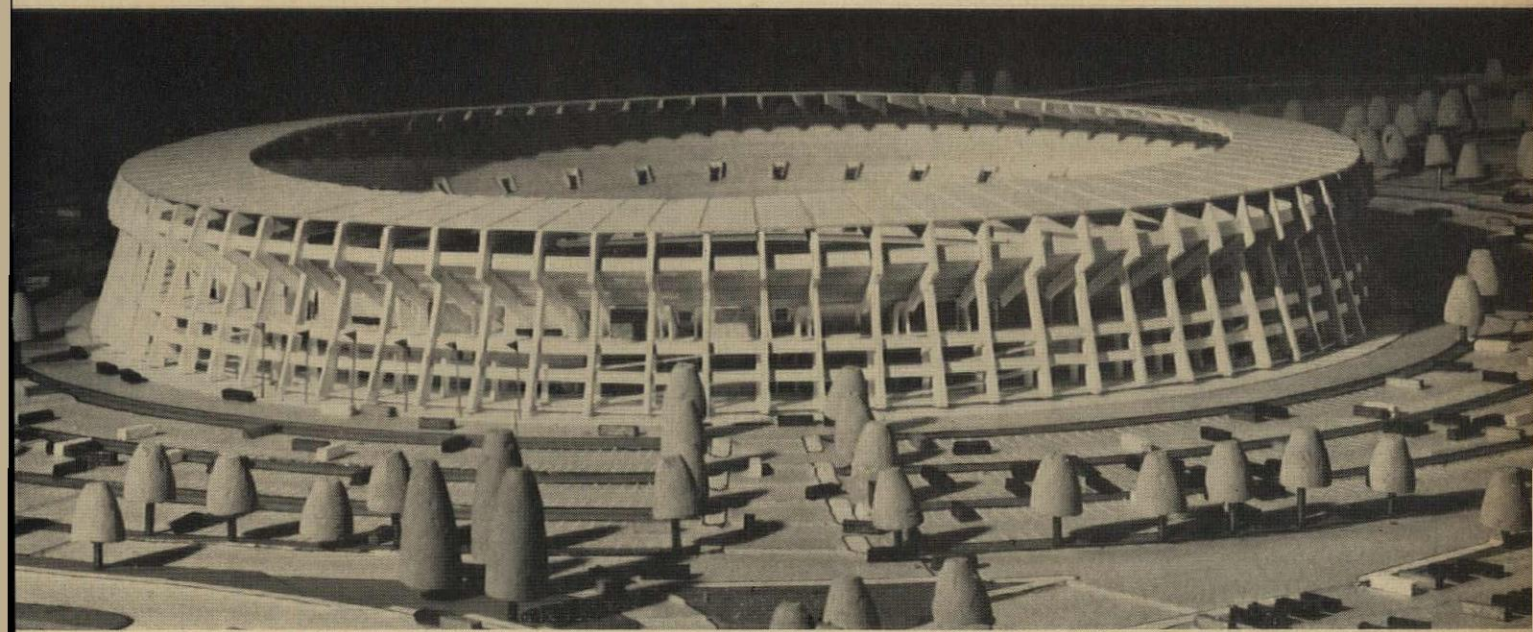
In St. Louis, the Civic Center Busch Memorial Stadium (*photos, this page*) is the product of six years of work by Sverdrup & Parcel & Associates, Inc., Engineers-Architects, and Schwarz & Van Hoefen, its architectural associate, to design a stadium and related facilities (parking amenities, most

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.

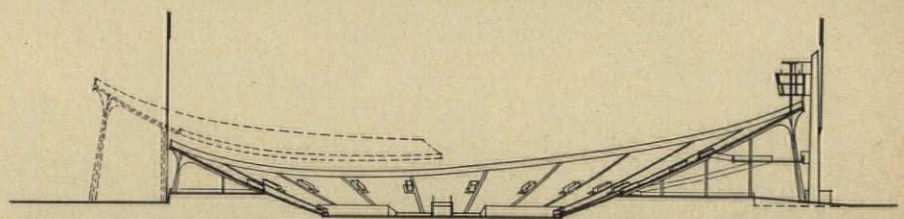




The exterior will be smooth white concrete embellished with gold-colored steel railings, railing mesh, support rods, and a vertical strip on the outer face of the exterior columns.

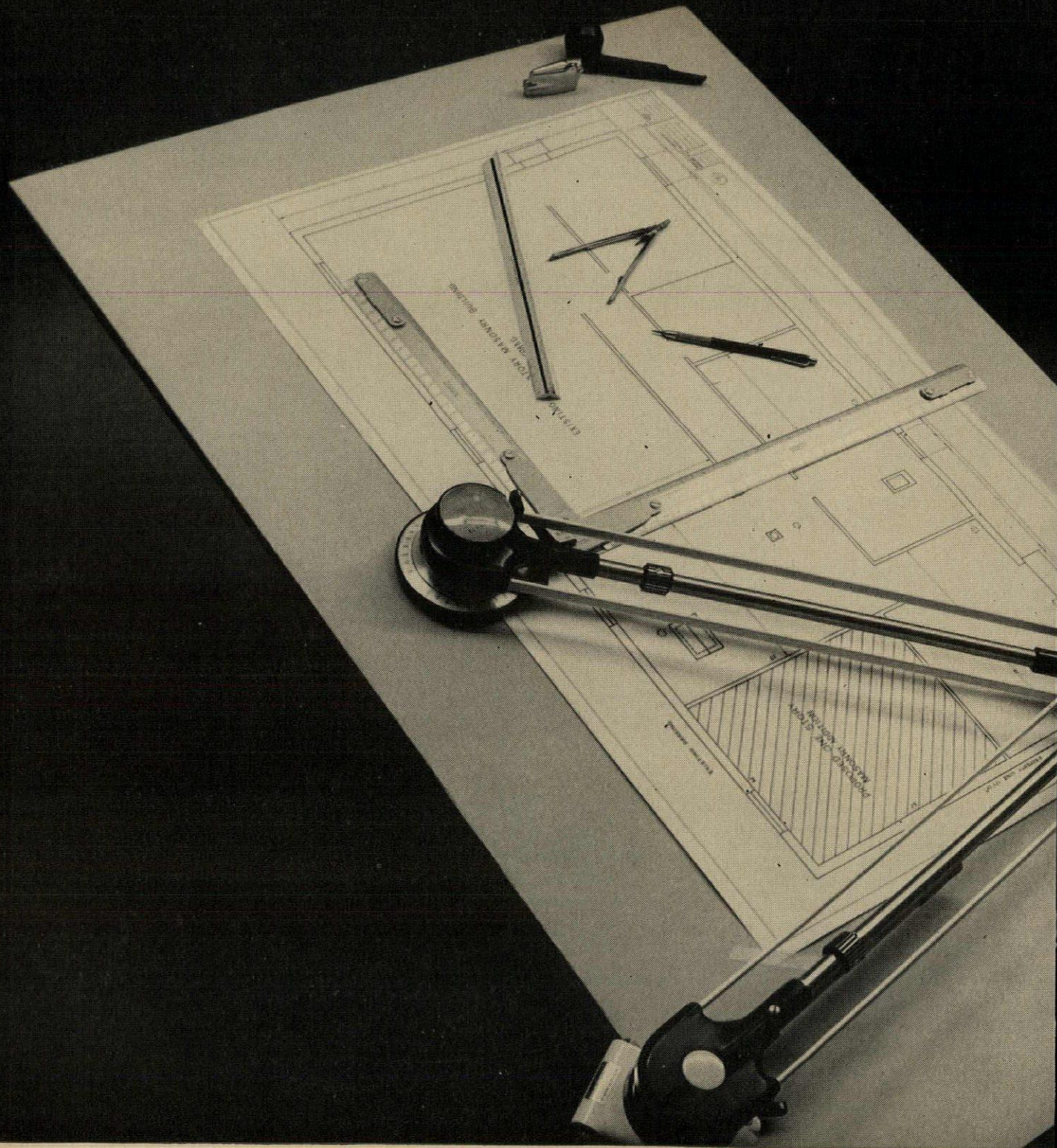
The Atlanta Stadium (*top*), designed, as was the St. Louis Stadium, for both baseball and football, will eventually be roofed by a column-free, cable-suspended dome, which will extend its use to a year-round convention, exhibition, and sports facility. The stadium, which will also be part of a downtown urban renewal area, will seat 45,000 for baseball and 55,000 (with added seating) for football events on three levels. Adjacent and subsidiary parking areas will accommodate 10,000 cars. The stadium, 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 section*) over the visitors' area. End-zone seats have been kept to a minimum of 6500 each, with initial seating of 23,000 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 as 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 every stage of construction."



TRANSVERSE SECTION





Remember Styrofoam.



OK. Now forget it.

When a roof is insulated with Styrofoam® brand roof insulation, you won't have to worry about that insulation again. Forget it.

Be sure to remember Styrofoam RM the time you specify roof insulation. Remember that it's economical. Styrofoam costs no more than fiberboard insulation. Remember that its closed-cell struc-

ture won't absorb water. No more roof blistering and cracking caused by water-soaked insulation. Remember its low "k" factor. Remember that roofers find it light in weight, easy to handle, fast and easy to install. And most important, remember that with Styrofoam RM roof insulation, heating and cooling costs remain constant for the life of the roof. And clients remain

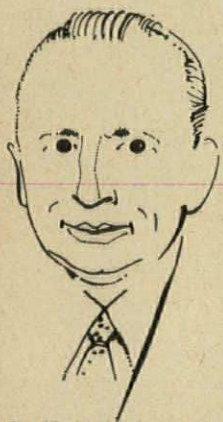
satisfied for at least that long.

Any questions? We'd be happy to send you all the data and specifications you need. Or see Sweet's Architectural File 8a/Dow. The Dow Chemical Company, Plastics Sales Department 1313EB5, Midland, Michigan.

Styrofoam is Dow's registered trademark for expanded polystyrene produced by an exclusive manufacturing process. Accept no substitutes... look for this trademark on all Styrofoam brand insulation board.



Fall-out Falls out



by E. E. Halmos, Jr.

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 Stuart 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 skirmishing) 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 AIA 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, and experience, size or gross business should not be a proper consideration.

Through the testimony, you could read the real background: SBA move—coupled with actions of some other Government agencies (see APRIL 1964 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—although it 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.

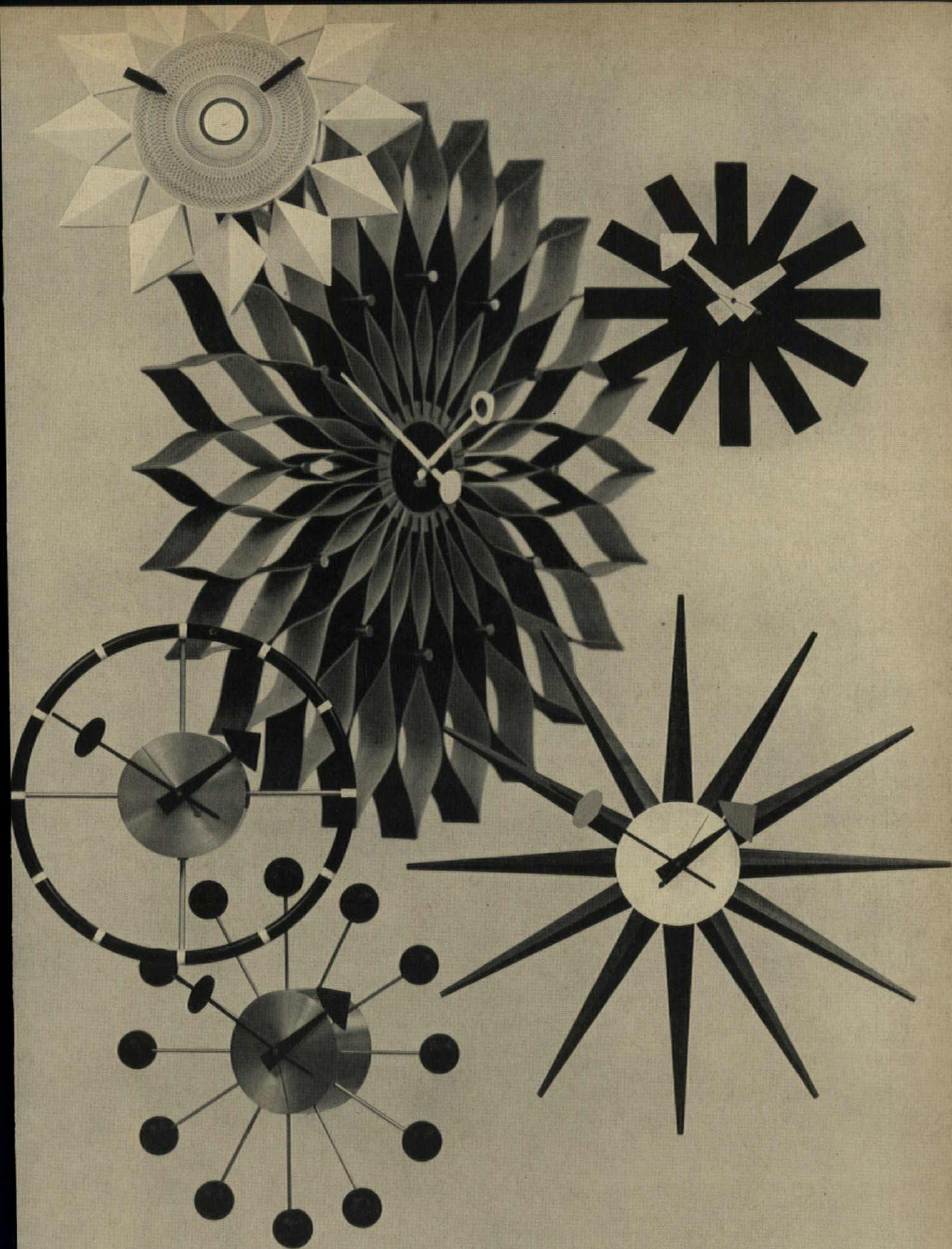
FINANCIAL

With the advance of spring and opening of the construction season, most 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 one 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, 1964, 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 construction 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 a year ago (though down a little from January).



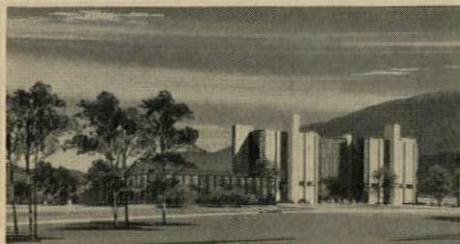
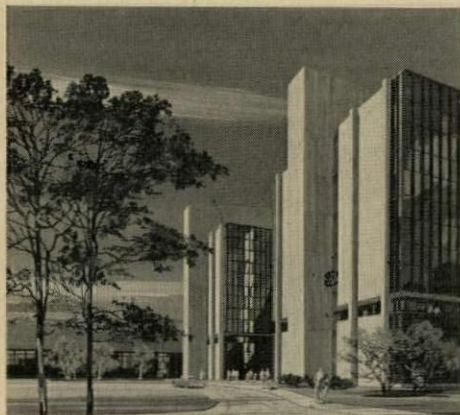
These are clocks designed by George Nelson for Howard Miller. For complete information, write Howard Miller Clock Co., Zeeland, Michigan... National Distributor: Richards Morgenthau, 225 Fifth Ave., New York; Merchandise Mart, Chicago, Illinois; Fehlbaum, Berne, Switzerland; Pelotas, Sao Paulo, Brazil; 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.

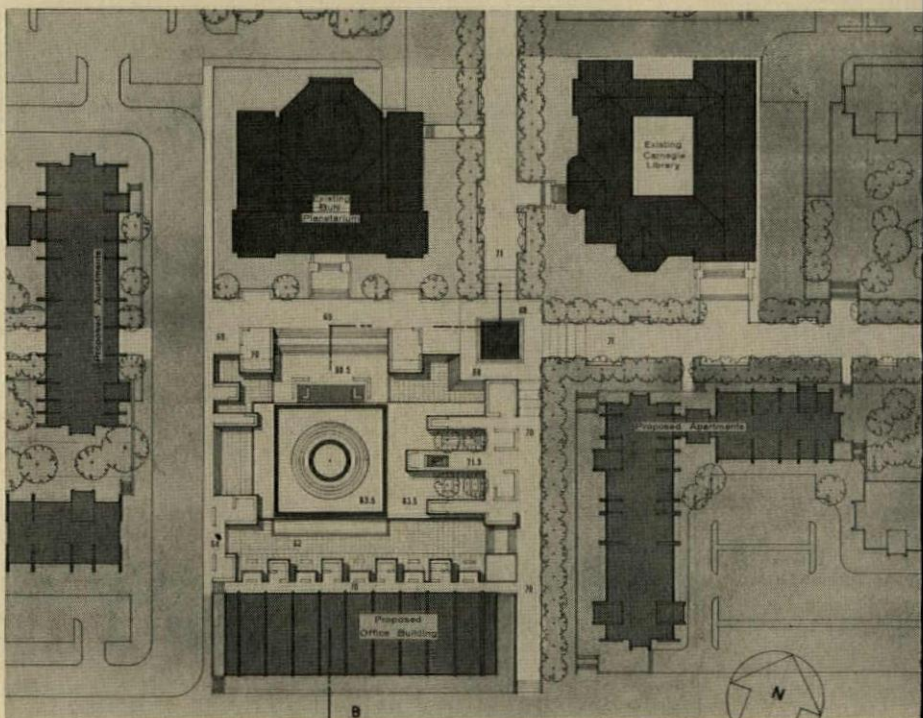
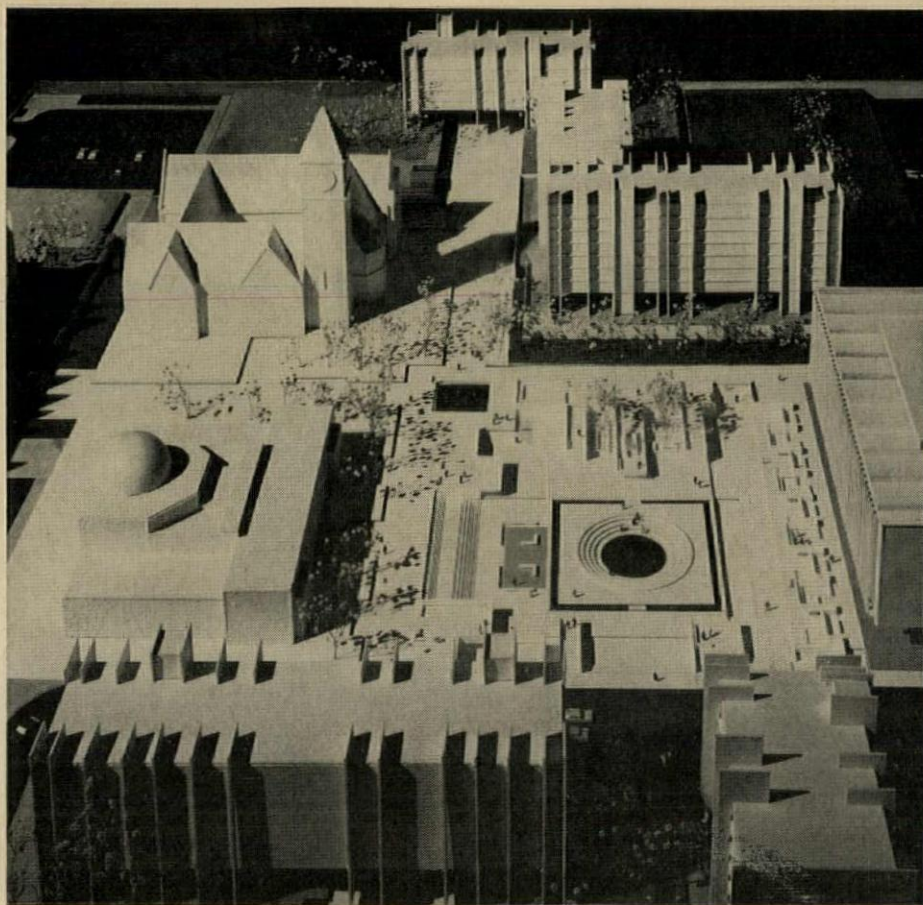
When Oliver Cromwell had his portrait painted, he cautioned the artist: "Mr. Lely, I desire you would use all your skill to paint my picture truly like me, and not flatter me at all; but remark all these roughnesses, pimples, warts, and everything as you see me, otherwise I will never pay a farthing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

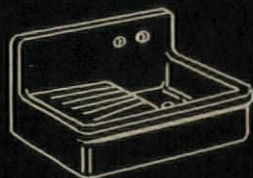
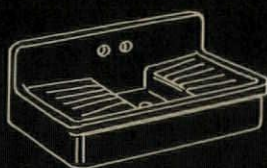
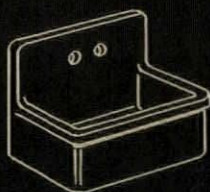
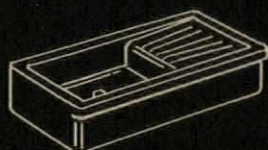
tries, because the jury found the re- were inappropriate, inferior, or fail- to meet the program requiremen- Consequently, Breger will receive \$5000 award and the contract to complete the project (the competition was initially to be in two phases, with

Continued on page

ONLY "U.S."



CHEMICAL PORCELAIN Laboratory Sinks



offer all these advantages:

- a record of durability and performance extending back two generations;
- corrosion-resistance throughout the entire body of the sink, to handle safely all acids, alkalies, caustics and solvents — hot or cold, weak or strong;
- a wide flange plus a caulking groove to insure a leakproof seal between the sink and the tabletop;
- attractive, non-staining colors to complement any decor;
- **a service life longer than that of the building in which they're installed!**

Industry's longest and strongest guarantee backs "U.S." Chemical Porcelain Laboratory Sinks. A full copy of this guarantee is included in Bulletin L-10, which also contains complete information on the "U.S." line of sinks, fittings and neutralizing sump tanks. Write for your free copy.

CHEMICAL CERAMICS DIVISION



U. S. STONEWARE

AKRON, OHIO 44309



Near Eastern Bronze Bull, VI century B.C., Metropolitan Museum of Art, New York City, N.Y.

BEAUTY THAT ENDURES

... in Fire-Rated Acoustical Ceilings that outperform far costlier fire protection systems.

In many installations, Lo-Tone FR acoustical ceilings provide the most economical, effective fire protection.

There's the obvious efficiency of a single ceiling performing 3 or 4 vital functions — e.g. beautifying, sound conditioning, air-distribution (with the new ventilating ceilings) and fire protection.

Lo-Tone FR acoustical ceilings cut new construction costs — eliminate the need for installing costly intermediate fire protection above the acoustical ceiling. They speed remodeling jobs which require fire protection. Application is *completely dry*. Off-hour work doesn't upset stores and offices; there's no moisture to slow other trades on the project.

Because Lo-Tone FR acoustical ceilings often provide more fire protection than local codes require, they may also trim insurance rates.

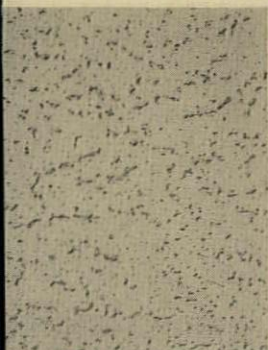
Just how effective are Lo-Tone FR ceilings?

Here's what Underwriter's Laboratories, Inc. tests show. In 1850° F. fire-box-temperature tests, Lo-Tone FR mineral ceiling tile and board limited transmission of temperature to the allowable 250° F. rise above ambient for ratings up to two hours. By varying the ceiling-floor design and tile thickness, the precise protection against passage of flame and transmission of heat you require can be achieved.

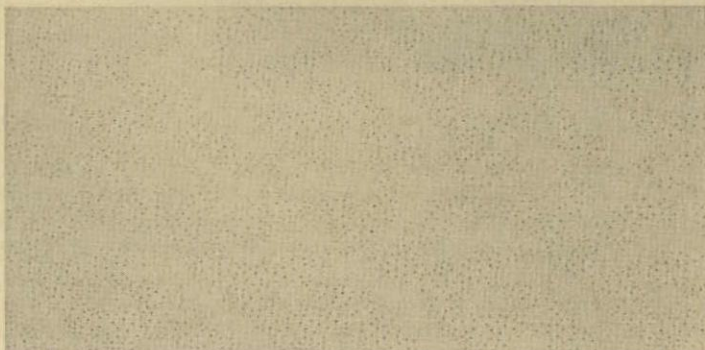
All Lo-Tone FR ceiling products are fabricated under Underwriter's Laboratories, Inc. inspection and carry the U.L. label. All offer superior fire protection, plus the ultimate in sound conditioning and enduring beauty.

For complete information about Lo-Tone FR acoustical ceilings, see AIA File No. 39-B in Sweet's Catalog or write Wood Conversion Company, St. Paul, Minnesota.

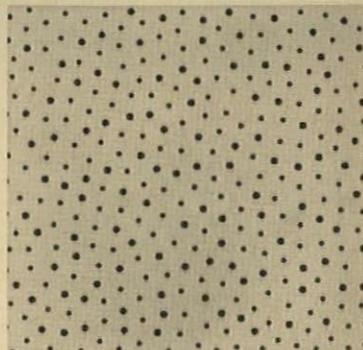
LO-TONE®
FIRE-RATED ACOUSTICAL CEILINGS



Fissura FR tile or board
(Standard or Ventilating)



Constellation FR tile or board (Standard or Ventilating)



Random FR tile

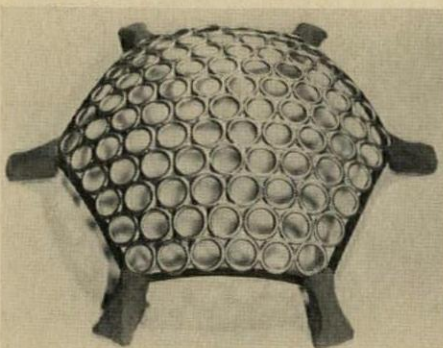
Continued from page 70

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!"

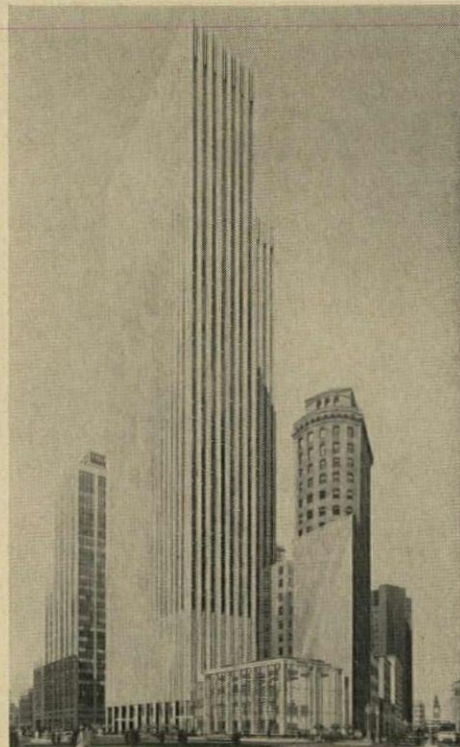
The jury felt that too many entrants added a confusion of elements to the square in the form of kiosks, booths, pavilions, pylons, and "other self-conscious architectural and sculptural elements." Noting that "too few sought the qualities of a pleasantly shaded area and the quiet dignity of the traditional English squares," the report stated that only one design was selected from 305 entries, "perhaps because of the unrestrictive nature of the program requirements, or perhaps because architects and designers are not yet able to formulate clear design goals necessary in achieving good urban design."



Reynolds Student Winner

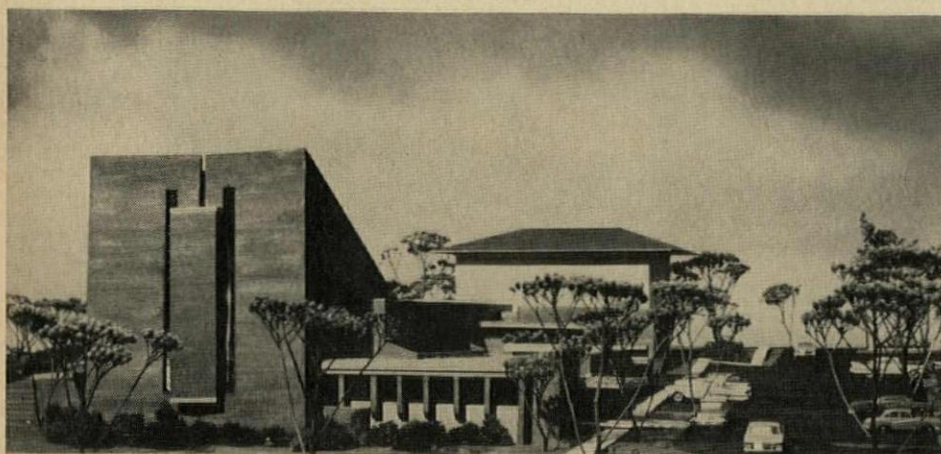
A "dynamic clear span," design of a shallow dome fabricated of identical aluminum rings framing glass or translucent plastic, has won the 1964 Reynolds Prize for Architectural Students for John F. Torti, fourth-year student at the University of Notre

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.



Synagogue in New Jersey

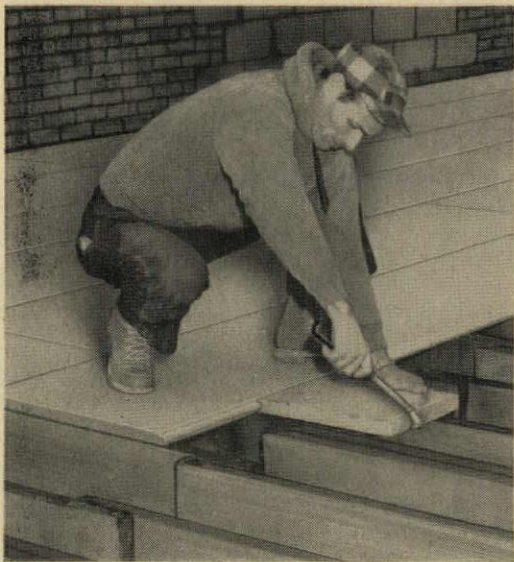
Oversized red-face brick and limited amounts of exposed concrete will effect a highly textured exterior for Barnert Temple, Paterson, N.J., by Percival Goodman. The severe form of mono-pitched-roofed sanctuary (left in photo) will be relieved only by the ark extending beyond the end wall. Stained glass will be used in lancet

windows flanking the ark, in slits on the side walls, and in 13 triangular windows at the roof.

Adjacent to sanctuary will be a social hall for 700 people, separated from a reception lounge by folding partitions. Existing school (rear in photo) will be demolished within five to ten years.

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



**WHEN
THIS
FLOOR
DECKING
GOES DOWN
SAVINGS
GO UP
4 WAYS!**

homasote

**4-WAY
FLOOR DECKING**

**Sub-flooring, Sound Deadening, Underlayment
and Weatherproof Protection ALL IN ONE APPLICATION!**

For garden and low-rise apartments—for the better quality home

SAVE ON SUB-FLOORING—These 1 11/32" panels are installed right on floor joists, even over crawl space (they're termite and fungus-protected). All edges are tongue and grooved—precision cut for uniform load bearing.

SAVE ON SOUND DEADENING—Each 2' x 8' panel materially reduces floor-to-floor noise transmission . . . rooms are quieter.

SAVE ON UNDERLAYMENT—No additional material to fit and install! "4-Way" Decking is the underlay-

ment for wall-to-wall carpeting. Composition flooring or resilient and ceramic tile can be layed sooner!

SAVE ON WEATHERPROOF COSTS—"4-Way" has famous Homasote weatherproof construction that provides constant resistance to cold and dampness. Precision tongue and grooving - draft-free floors.

Approved by B.O.C.A. (#54-15), S.B.C.C. (6330) and I.C.B.O.

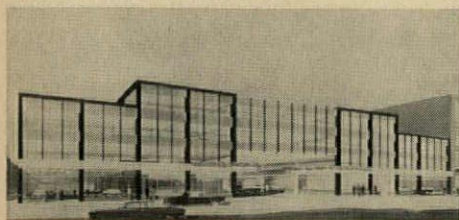
HOMASOTE COMPANY
TRENTON 3, NEW JERSEY

HOMASOTE COMPANY, Dept. E-1
Trenton 3, N.J.

I want complete information on your new 4-Way Floor Decking as checked:

☐ Send bulletins ☐ Send samples ☐ Have representative call

Name
Company
Address
City State



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.

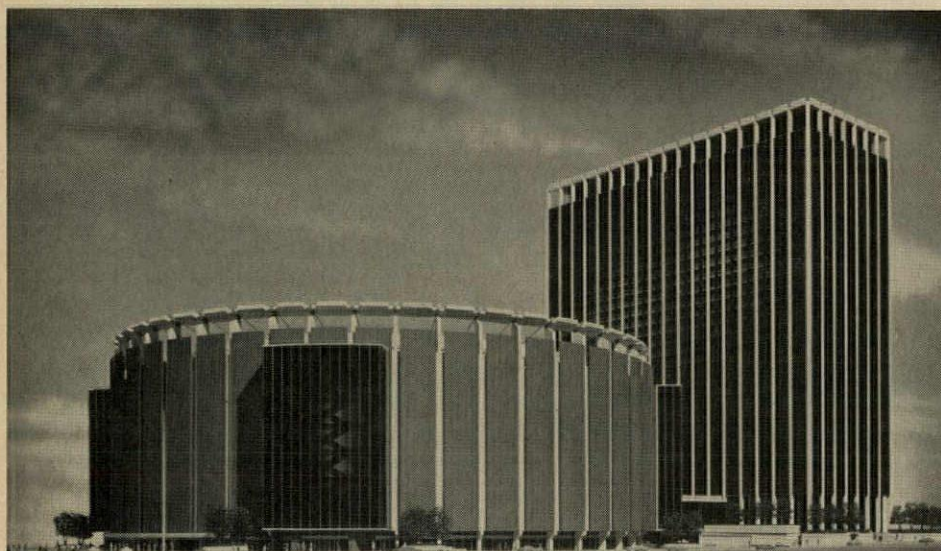
SOM Wins Reynolds Award

The chapel at the U.S. Air Force Academy by Skidmore, Owings & Mer-

rill has won the 1964 R. S. Reynolds Memorial Award. Prize consists of \$25,000 plus the aluminum sculpture



"Standing Birdman" (shown) by Leonard Baskin. Coincidence of sculpture and prize winner was absolutely unplanned.



New Garden in New York "Development" Show

Since the Madison Square Garden-Pennsylvania Railroad combine that conspired to destroy New York's Pennsylvania Station lost its two major commercial tenants (American Machine & Foundry and J. C. Penney) for a proposed office building-sports arena complex on the station site, there has been considerable speculation about what would take the place of the original plan. Officials were never in doubt over the fate of the station, despite protestations of horror and disgust in many circles over its imminent destruction. No matter what, they assured inquirers from AGBANY the station would come down. The latest version of the Garden-commercial design was revealed recently at a Municipal Arts Society exhibition folksily entitled "Our Town 1970," which opened at the Union Carbide Building on Park Avenue and included a potpourri of projects scheduled for Manhattan, ranging from such dubi-

ous planning ventures as the one illustrated here, and the Harrison & Abramovitz twin-tower duolith looming oppressively opposite the United Nations (see p. 84, NOVEMBER 1963 P/A), through political compromises such as the plan for the New York Civic Center (see p. 41, JANUARY 1964 P/A), to what is a rare example of imaginative, comprehensive city planning, the Kelly & Gruzen plan for the mid-West Side of Manhattan (see p. 53, DECEMBER 1963 P/A).

The Charles Luckman redesign for the Penn Station grave site substitutes a speculative slab office structure for the two towers intended for AMF and Penney. The Garden itself has been severely simplified into a circular, hung-roof structure whose exterior character is achieved mainly by glass-walled escalator towers. Main entrance to the warrens of the Pennsy and Long Island railroads will be down stairs and escalators on Seventh Avenue.



Backward Glance

*Backward, turn backward, O time, in your flight,
Make me neo-Georgian again just for tonight.*

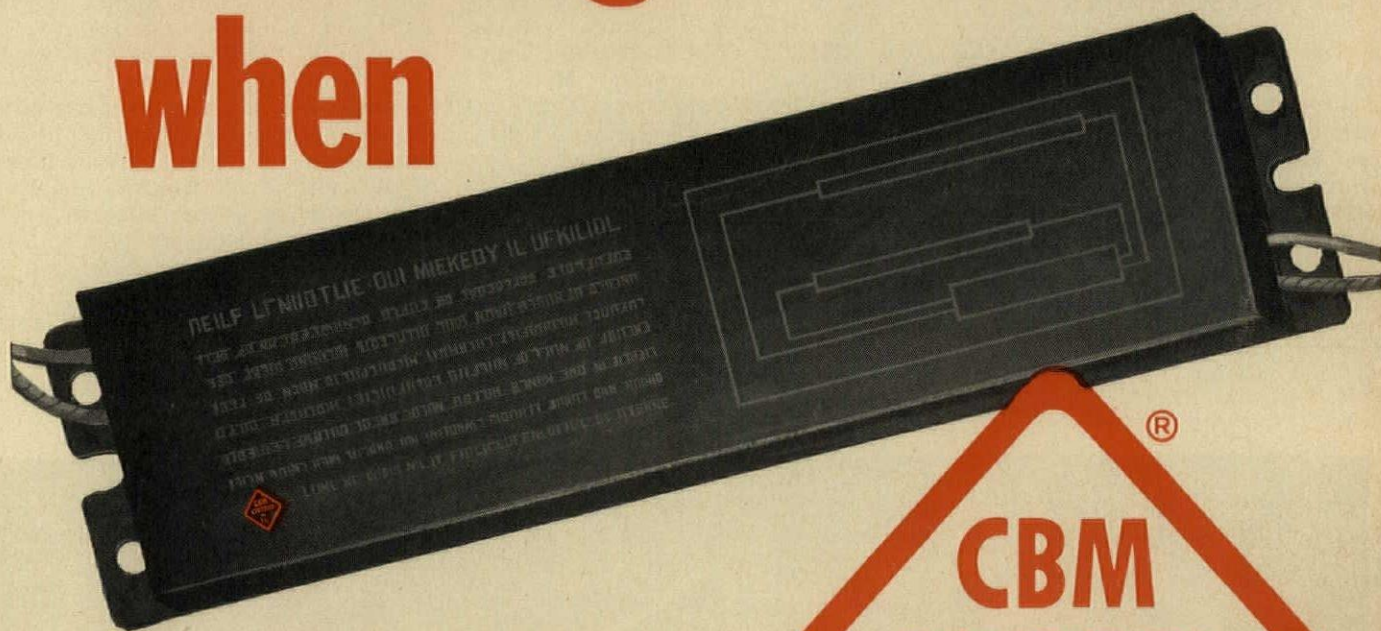
So might the poet write of the—er—new Franklin National Bank branch building on Madison Avenue and 48th Street in New York. This seven-story structure is the uptown version of a 13-story main office at Hanover Square in the downtown financial district. The press agent for Diesel Construction Company, Inc., the builder, contends that "a harried Long Island commuter... might experience a wild sensation—he may feel he never left Manhasset." Architect: Eggers & Higgins. Decorating Consultant: Helen O'Connell (sic).

Competitions

Awards for design of a building, bridge, or other structure using arc welded steel will be given by The James F. Lincoln Arc Welding Foundation of Cleveland, Ohio. Structure must have been designed, fabricated, or erected between June 1, 1961 and June 1, 1964. Rules and information can be obtained from The Secretary, The James F. Lincoln Arc Welding Foundation, P.O. Box 3035, Cleveland, Ohio. Deadline for entries is June 1, 1964... Deadline for entries in the 12th Annual Industrial and Institutional Landscaping Awards Competition, sponsored by the American Association of Nurserymen, will be September 1, 1964. Awards will be made for landscaping of manufacturing and

Over and over maintenance records show:

**“fluorescent lamps
last longer (UP TO 2500
HOURS LONGER)
when**



**ballasts
are marked**



Say lighting maintenance contractors: "With CBM ballasts in fixtures, we have learned to expect fewer lamp service calls . . . less lamp trouble".

And that's not all! Certified CBM Ballasts assure high light output, long ballast life, power factor correction and other money-saving advantages. You enjoy these benefits because CBM ballasts must meet exacting performance standards matched to fluorescent lamp needs . . . with compliance checked by a competent and unbiased testing laboratory. It pays to specify Certified CBM Ballasts in your lighting fixtures. And for answers to timely questions, special problems, ask us to send you CBM News.

CERTIFIED BALLAST MANUFACTURERS • 2116 Keith Building, Cleveland 15, Ohio
Participation in CBM is open to any manufacturer who wishes to qualify.

3-64

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, 835 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. HURST, Dean of the School of Architecture and Fine Arts, University of Southern California; ALBERT MAYER, Architect, New York City; and FRANCIS 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 SCHNADELBACH, 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. SHAUGH-

NESSY 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 cities through architecture" . . . WILHELM VON MOLTKE 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-

BAYLEY

Windows and Curtain-Wall Systems

84 Years of Reliability

PROVEN by thousands of well-known BAYLEY INSTALLATIONS from Coast to Coast.

CALL or WRITE when you start planning your project

The WILLIAM BAYLEY Company Springfield, Ohio

District Sales Offices

ATLANTA 5, GEORGIA CHICAGO 2, ILL. NEW YORK 16, N.Y. SPRINGFIELD, OHIO WASHINGTON 5, D.C.
 255 E. PACES FERRY RD. 105 W. MADISON ST. 280 MADISON AVE. 1200 WARDER ST. 1426 'G' ST., N.W.
 404-237-0339 312-726-5996 212-685-6180 513-325-7301 202-783-2320

Licensed Representatives In All Principal Cities Operating Through The Above District Offices.

McAuley High School Cincinnati, Ohio
 L. P. Cotter & Associates Cincinnati, Ohio; Archt.
 Knowlton Construction Company, Bellefontaine, Ohio; Contr.



To specify the
best flashing at
the lowest cost

Turn to Sweets
8h/Am Page 4

Copper for concealed flashings at only 12¢/sq. ft.! That's possible only with Copper Armored Sisalkraft®... a bond of pure electrosheet copper and reinforced Sisalkraft in 1, 2 and 3 oz. weights of copper per sq. ft. ■ This means — for just a few pennies difference — you can upgrade every flashing specification — providing **lifetime protection** against water and moisture penetration. Contractors like Copper Armored Sisalkraft, too, because it is extremely flexible, conforms easily to contours, cuts with shears, and bonds with mortar. ■ Send for your "Bookmark Sample" to put in Sweets 8h/Am — where you'll find all the concealed flashing and waterproofing specifications needed to give your clients the added value of **lifetime protection** for mere pennies. Write: American Sisalkraft, 56 Starkey Avenue, Attleboro, Massachusetts. Branches at Cary, Illinois and Tracy, California.

**COPPER ARMORED
SISALKRAFT**

AMERICAN SISALKRAFT
DIVISION
St. Regis
PAPER COMPANY

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 ECK-ARDT have received fellowships from the Ford Foundation for travel, observation, and study; this is the first year such awards were given.

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.

REDWOOD...

what material could be more appropriate for building your new church?

For planning materials or architectural data write, on your letterhead: Dept. 28-A, California Redwood Association, 617 Montgomery Street, San Francisco 11.



The panelling shown is FactriSawn® a trademarked, Certified Kiln Dried product of these mills . . . THE PACIFIC LUMBER CO. • ARCATA REDWOOD CO. • WILLITS REDWOOD PRODUCTS CO. • UNION LUMBER CO. • GEORGIA-PACIFIC CORP. SIMPSON TIMBER CO. . . . which form the CALIFORNIA REDWOOD ASSOCIATION

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.

For more information, turn to Reader Service card, circle No. 325

ADD BEAUTY TO OUTDOOR LIGHTING

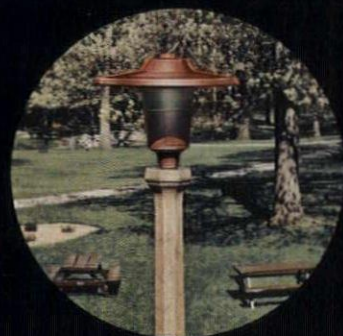
BETTER LOOKING, BETTER LIGHTING From Line Material's **Complete Line.** You can add an esthetic touch to your lighting design by choosing the L-M line. You get subtle beauty, styled by the noted industrial designer, Jean Reinecke. You add just the right touch to accent or contrast your architectural scheme. And you have the additional freedom of color choice, eight lively colors and natural aluminum.

Get the benefit of beauty from L-M's complete outdoor lighting. The beauty of styling and the beauty of color offer you more value in each fixture—an extra measure of value from L-M.



*An Extra
Measure of Value*

LINE MATERIAL INDUSTRIES, McGRAW-EDISON COMPANY, MILWAUKEE 1, WISCONSIN

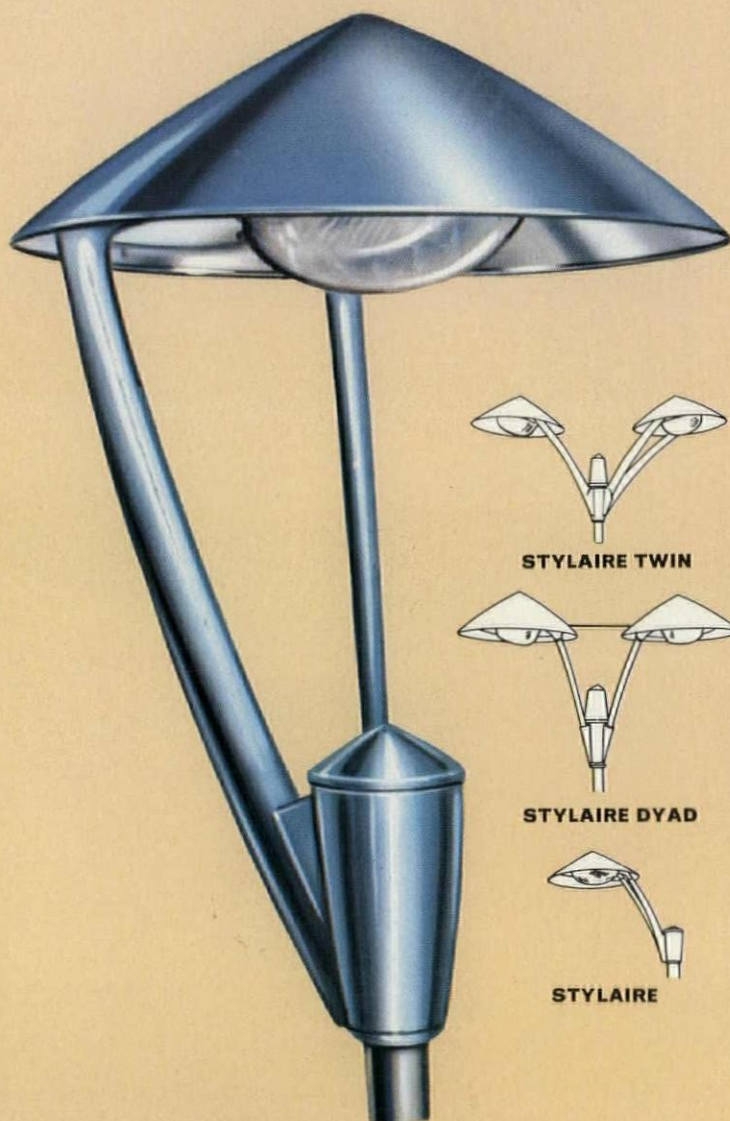


TURN
PAGE

GET BETTER LOOKING, BETT

**FOR SHOPPING CENTERS,
PARKING AREAS, STREETS,
HIGHWAYS, AIRPORTS,
AMUSEMENT PARKS, AND
LARGE OUTDOOR AREAS**

STYLED MERCURY™ (High Intensity Lighting)



STYLEVUE

You get graceful, elegant beauty for your lighting job from the styling of this distinctive line. And you get over-all economy because high intensity means fewer poles, less wiring, less space. You have the freedom of choice by selecting from four distinct styles and eight smart colors or natural aluminum.

SPECIFICATIONS: 400, 700 and 1000-watt clear or color improved mercury lamps; constant-wattage or reactor ballasts; IES types II, III and IV light patterns; photocontrol, mounts on all standard poles.

**FOR PARKING AREAS,
SHOPPING CENTERS,
RECREATIONAL AREAS,
PARKS, STREETS, HIGHWAYS**

STYLEKING™ (Medium Intensity Lighting)



Add just the right touch of beauty and have lighting for your next job. Also get ease of application from the amazing versatility of the wide-range sizes. Get just the right effect for your architectural decor by choosing from six distinct top refinishes. Also convert an old, inefficient, costly system and economically. Select just the right color; from eight dynamic tones and natural aluminum.

SPECIFICATIONS: through 400-watt mercury lamps; through incandescent lamps; constant-wattage or reactor ballasts; IES types IV, V, II-4-way and I-1-way light patterns; photocontrol; 3- or 4- inch mounts on all standard poles.

LIGHTING FROM LINE MATERIAL

The World's Most Copied Line of Outdoor Lighting

FOR POOLS, DRIVEWAYS, PORCHES, WALKWAYS, PARKS, RECREATIONAL AREAS, MOTELS, SCHOOLS, CHURCHES

STYLETTE™ (Medium, Low Intensity Lighting)



For economy, smart attractive styling and quality lighting from the luminaires. You get installation savings; units are shipped pre-assembled ready for mounting to pole without supports. Add a touch of elegance to complement your design by selecting from partially styled units. And choose from eight decorator colors of natural aluminum.

SPECIFICATIONS: through 405-watt incandescent lamps; IES types I, II, III, IV, V, II-4-way, I-1-way light patterns, photocontrol, mounts directly to 3-in. standard poles or available for wall mounting.

FOR WALKS, DRIVEWAYS, RESIDENCES, BUILDING ENTRANCES, MOTELS, CHURCHES, SCHOOLS, GARDENS, PATIOS

LAWN-GLO® (Low Intensity Lighting)



Contemporary Lawn-Glo adds just the traditional touch with this plastic whale-oil lamp reproduction. Get glare-free light from plastic side panels; in black or with roof and finial of gold. **SPECIFICATIONS:** through 150-watt incandescent or 100-watt mercury lamps; standard mounting.

Contemporary Lawn-Glo adds smart, modern styling and complements your architectural motif. Provides a modern touch to soft functional lighting. Choose from eight smart colors and natural aluminum.

SPECIFICATIONS: through 150-watt incandescent lamps; plastic no-glare globes; standard 2-in. or 3-in. mounting.

STYLE A



STYLE B

STYLE C

ADD THE BEAUTY OF COLOR

Stylized Mercury, StyleKing, Styletте and Contemporary Lawn-Glo luminaires are available in these colors.



EFFICIENCY, QUALITY, ECONOMY

Light vision-engineered, maximum efficiency lighting from L-M Luminaires. Light is directed to the area you want. There is no glare, no wasted light. We have years of trouble-free, low maintenance lighting from all L-M luminaires. Longer lasting beauty and protection from corrosion-resistant aluminum construction. No internal rusting, luminaires are gasketed against entrance of moisture and dirt. You realize savings and economy in the over-all cost

of your lighting. Low-cost installation from standard easy-mount bases and easy accessible wiring. Low-cost maintenance from easy access interiors; relamping and cleaning is simple, fast.

LINE MATERIAL®
Industries

MCGRAW EDISON COMPANY



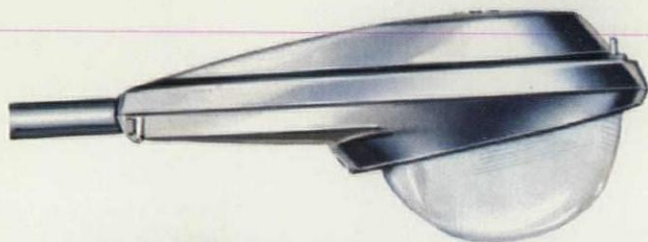
624

GET BEAUTY AND STYLING IN SUPPORT-MOUNTED LIGHTING



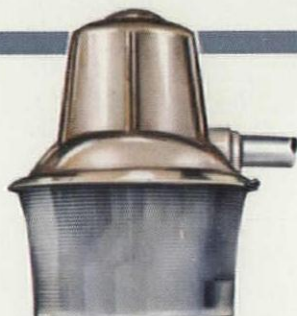
STYLESIELD™ (High Intensity Lighting) You can beauty and esthetic styling to your existing lighting by a simple conversion with L-M's horizontal Styleshield. You have the added element of grace for streets, highways, all outdoor areas with this fixture, the horizontal version of L-M's now famous Styled Mercury luminaires. You also have choice of eight colors and natural aluminum.

SPECIFICATIONS: 400, 700 and 1000-watt clear or color corrected mercury lamps; IES types II, III and IV light patterns; photocontrol; 2-in. slipfitter port clamp.



UNISTYLE™ (Medium Intensity Lighting) Add a modern touch to streets, highways, parking areas and other medium intensity outdoor lighting with L-M's modern Unistyle.

SPECIFICATIONS: 100, 175, 250 and 400-watt mercury lamps; internally mounted constant-wattage, high reactance, reactor or constant-current ballast; IES types II, II-4-way, and III light patterns; photocontrol; slipfitter clamps fit 1 1/4 or 2 in. supports.



STYLED SUBURBANAIRE™ (Medium Intensity Lighting) Get economy and attractive styling for residential streets, drives, parking areas and most commercial applications. Choose from eight colors or natural aluminum.

SPECIFICATIONS: 100, 175, 250 or 400-watt mercury through 620 watt incandescent lamps; internal reactance or high-reactance ballasts; IES types I-1-way, II, II-4-way, III, IV, and V light patterns; photocontrol; 1 1/4-in. support clamps.

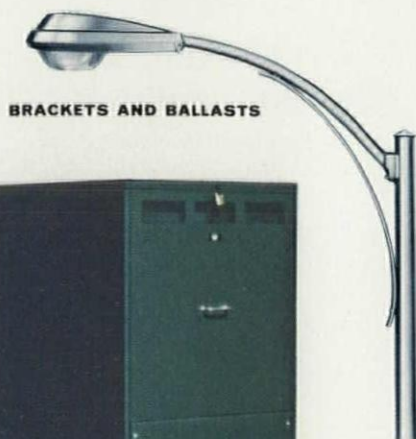
GET COMPLETE EQUIPMENT, SERVICE AND APPLICATION ASSISTANCE FROM ONE SOURCE

—your authorized L-M distributor

You have no problems of coordinating your lighting job when you select L-M equipment. You can get luminaires, ballasts, poles, brackets, lamps, wiring and complete equipment for power supplies from your Authorized L-M Distributor. Even Pow-R-Lite poles, with built-in transformers—Transclosure housing for transformers or control equipment—fibre conduit—electrical construction material—are all available. You also get service and application engineering. Your Authorized L-M Distributor is backed up by an L-M Field Engineer and an L-M Lighting Engineer. This lighting team is anxious to help you.



POW-R-LITE™ POLES



TRANSCLOSURE® HOUSING for transformers and other equipment

STEEL POLES

LINE MATERIAL INDUSTRIES OUTDOOR LIGHTING
700 W. MICHIGAN ST., MILWAUKEE 1, WISCONSIN
Please send us more information at no cost, no obligation

Name _____

Title _____

Company Name _____

Address _____

City _____ State _____

Send this coupon for more information

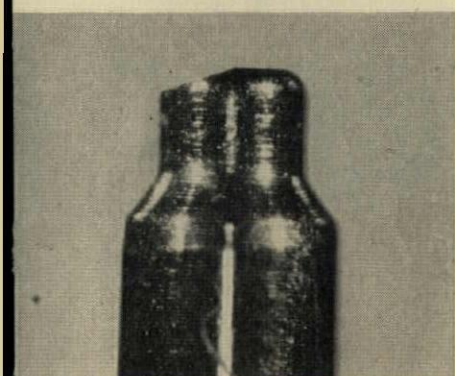
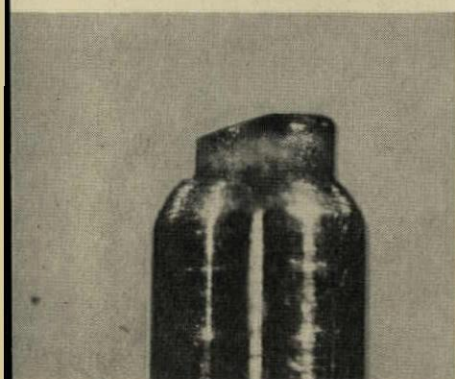


Another extra measure of value from Line Material

644

For more information, turn to Reader Service Card, circle No. 308

NEW PRODUCTS

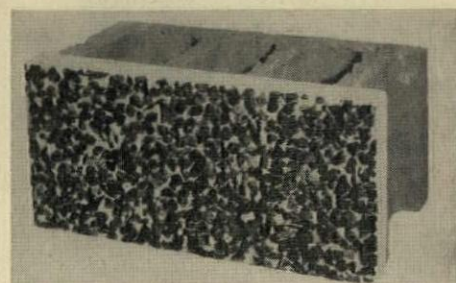


Jewel Tips for Technical Pens

Precision jewel tips are used in place of metal points of new "Rapidograph" technical fountain pens and point sections. Long usage on abrasive drafting film tends to buff the jewel so that it wears down smoothly, without developing a rough or sharp edge, as present metal tips do after extended use. On smallest size point, manufacturer states that jewel tip outlasts present metal points by more than 100 times on severely abrasive grades of drafting film. Jewel tip glides smoothly over drafting surface without scraping or skipping. Jewel tips are now available in sizes 0 and 1; while other sizes will be available at a later time. Photos show—top to bottom—new jewel assembly, jewel assembly after

test run on abrasive drafting surface for 5000 ft; and standard metal Rapidograph after running 150 ft on similar surface. (Wear tested to 180° in each case.) KOH-I-NOOR Inc., Bloomsbury, N.J.

On Free Data Card, Circle 100



Textured Concrete Block

"Jewel-Tex" concrete block with exposed aggregate facings has been introduced. It has greater resistance to effects of weathering and chemicals. Block is impervious and has high waterproofing characteristics. Jewel-Tex provides nonfading colors, fire safety, sound absorption, and insulating qualities. Exposed aggregate facings are available in variety of sizes, textures, and colors. Presco Chemical Corp., 589 Main St., Westbury, N.Y.

On Free Data Card, Circle 101

Stone Screen

Pierced stone screen of white cast concrete in three-dimensional contour is utilized to cover three related office buildings in Midland, Texas. Screen permits new building façade to be



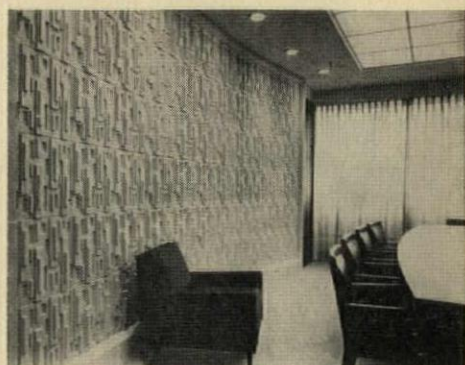
erected without need for demolishing old one. Architects Pierce, Norris, Pace & Associates of Midland, devised steel grid about 2' away from the building (1). Stone screen is designed on module of 12"x12"x5" deep, which



2

adapts flexibly to any type of exterior (2). They also join together to any height or width desired. Screen combines with mullions, fillers, and architectural breaks or variations as required. Wall may be prefabricated or made to custom specifications. Arts for Architecture, Inc., 50 Rose Place, Garden City Park, N.Y.

On Free Data Card, Circle 102



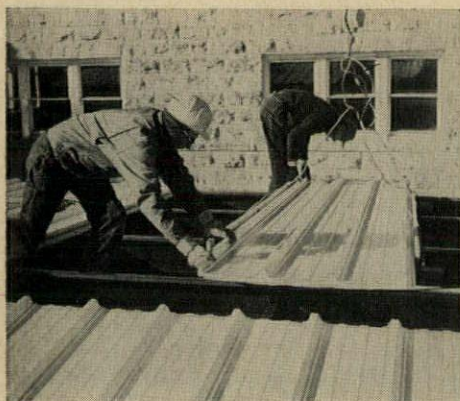
Sculptured Precast Concrete Panels

"Nicarete" precast modular sculptured panels have been introduced. Units are cast from 4000 psi air entrained concrete which is reinforced by galvanized mesh. Face dimensions are 15 3/4"x15 3/4", with basic thickness of 1 1/2". Panels are available in four finishes: paint grade in natural gray, smooth finish in white, etched surfaces in white, and textured exposed aggregate in buff. Nitterhouse Concrete Products, Inc., Box N, Chambersburg, Pa.

On Free Data Card, Circle 103

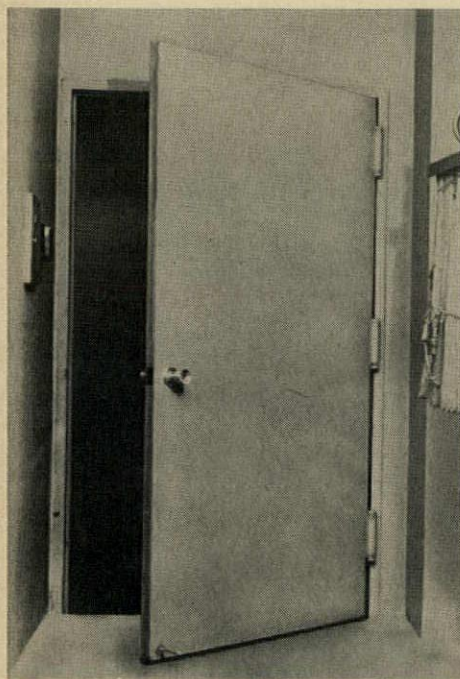
Urethane Core Panels

Recently developed is integrated wall and roof system consisting of foamed-in-place urethane core panels for pre-engineered buildings. Called "F-103,"



panel has minimum thickness of 1" and maximum thickness of 2½" through major corrugations. It has load-carrying capacity of up to 14' clear span without intermediate supports. Panel is available in units 3' wide and up to 32' long. It can be employed in combination with other types of pre-engineered or traditional walls, including masonry. Butler Mfg. Co., 7400 East 13 St., Kansas City, Mo.

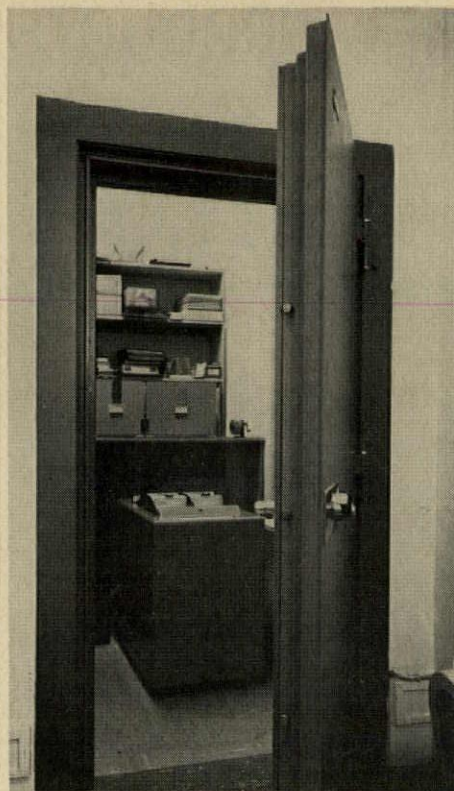
On Free Data Card, Circle 104



1

Fire and Vault Doors

Standard fire doors (1) act only as flame barriers and not as heat barriers. They do not provide adequate insulation and door fit necessary for protection against fire. Vault doors (2), which consist of insulated frame built into or clamped onto masonry of vault, can provide proper heat barrier for protection against fire. These doors are available in two types: (a) vault door supported from ground up and



2

structurally independent of building in which it is located; (b) vault door supported by framework of building and which may be supported individually on any floor. In specifying vault doors, one should consider type of building construction, quality of combustibles that are present in area where records are stored, and conflagration hazards in vicinity of building. Specs for vault doors consist of the following: (1) for severe fire hazards, specify vault doors bearing 6-hr or 4-hr rating; (2) for moderate fire hazards, specify doors with 2-hr rating; (3) for light fire hazards, specify doors with 1-hr fire-room rating. Safe Manufacturers National Assn., 366 Madison Ave., New York, N.Y.

On Free Data Card, Circle 105

Central Station Air Conditioning

Central station air-conditioning equipment is available in "Uni-Zone" models for single-zone air conditioning and in "multi-zone" models for cooling and heating as many as 16 separate zones. Both types are offered in 10 different sizes for low and medium pressure, with cfm ratings ranging from 2250 to 37,800. Each size is available in horizontal and vertical discharge styles, which permit installation on floor, roof, or ceiling. Uni-Zone models can be installed for heating only,

with cooling components added later. Units can be factory-painted with neutral color. Decorative aluminum paneling can be complementary colored either by anodizing or painting. Perfex Corp., Conair Div. A, Milwaukee, Wis.

On Free Data Card, Circle 106



Designed for Dux

Lounge Chair has a separation of seat and back within a teak or walnut frame. It is also available as a high chair for conferences; design can be adapted for loveseat and sofa. Upholstery fabric called "Atlas" has been thoroughly tested and reportedly proven by Dux to be fire-, stain-, stretch-, and fade-resistant. Made of 75 per cent nylon and 25 per cent wool. Available in seven colors. Dux, Inc., 1633 Adrian Rd., Burlingame, Calif.

On Free Data Card, Circle 107

Steel Studs Quickly Installed

"Grenadier System" of steel studs for drywall partitions reduces installation time by 50 per cent. System eliminates quantity of screws by 75 per cent. permits installation of one side of partition, which automatically establishes stud module. Exposed cavity allows for wiring, plumbing, and fire

ARCHITECT: Imagine a 2-week jet-vacation for two to San Juan, P.R., with all expenses paid. Does it sound like the kind of trip you would enjoy? If so, read on for details.



CONTEST SPECIFICATION

Purpose — Design a new trademark for the Indiana Limestone Company, Inc.

DESIGN REQUIREMENTS

- Design must be easily identified and remembered.
- Design must be legible when reduced in size photographically for use on stationery and advertisements.
- Design must not have been previously registered. The letters "ILCO" have been registered by others and cannot be used.

CONTEST RULES

- Eligibility. The winner must be a graduate of an architectural school and/or a registered architect. The winner must be actively engaged in the architectural profession.
- Employees of the Indiana Limestone Company, Inc., or employees of the advertising agency, or their immediate families are not eligible.
- Judging will be done by officials of the Indiana Limestone Company, Inc. Decision of the judges will be final.
- All entries become the property of the Indiana Limestone Company, Inc.
- Winners will be notified within 30 days of close of contest.
- Tax liability on the prize will be the sole responsibility of the prize winner.
- Contest offer is void in any state or municipality where prohibited, taxed or restricted by law.
- Entries must be postmarked not later than July 10, 1964.
- No limit to number of entries by each contestant.
- Mail entries to: Contest, Indiana Limestone Company, Inc., P.O. Box 72, Bedford, Indiana.

For helpful information about our Company and products write:

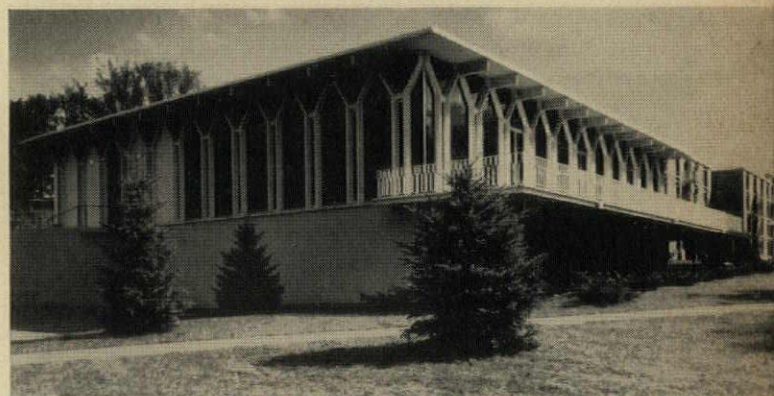
Indiana Limestone Company, Inc. • P. O. Box 72 • Bedford, Indiana

For more information, turn to Reader Service card, circle No. 345



RESIDENCE OF WILLIAM F. BERNBROCK, A.I.A., MOLINE, ILLINOIS

Indiana Limestone combines the ageless beauty of natural stone with modern methods and architecture. It is permanently maintenance free. Available in many different forms, it is equally at home when used for public, institutional, commercial, industrial or residential building.



CARLETON COLLEGE MEN'S DORMITORY, NORTHFIELD, MINNESOTA.
ARCHITECT: MINORU YAMASAKI & ASSOCIATES, BIRMINGHAM, MICHIGAN

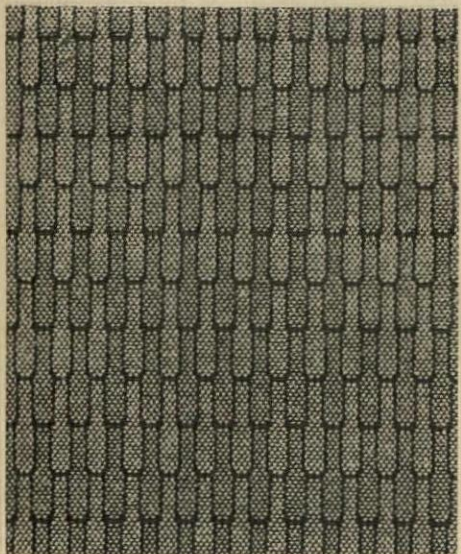
Gemset exposed aggregate concrete offers many opportunities for brilliant designs in wall panels, spandrels, column covers, copings and lacelike mullions or screens. Gemset units are available in virtually any size and shape. Ask for details.





tures prior to installation of second side. This system has a one hr fire rating with $\frac{5}{8}$ " labeled gypsum wall. Donn Products, Inc., 700 Bassett Rd., Westlake, Ohio.

On Free Data Card, Circle 108



Jacquard Woven Fabric

Illustrated is the first Jacquard design in Boris Kroll's "Designer Collection," which was designed expressly for contract use. A blend of rayon, nylon, and cotton with acrylic backing, this durable upholstery fabric comes in 12 color combinations, which coordinate with the solids, stripes, and striae in the collection. Boris Kroll, Inc., 220 E. 51 St., New York, N. Y.

On Free Data Card, Circle 109

Refrigerator-Freezer

Refrigerator-freezer is equipped with automatic ice maker that produces and stores about 15 lbs of ice per day. Refrigerator and freezer capacities are 4 cu ft and 3.3 cu ft respectively. Exterior panels of almost any

material up to $\frac{1}{4}$ " thick can be installed. Variety of colors and finishes such as oak, cherry, and mahogany woods can be used for front and end panels to match interior panelling of

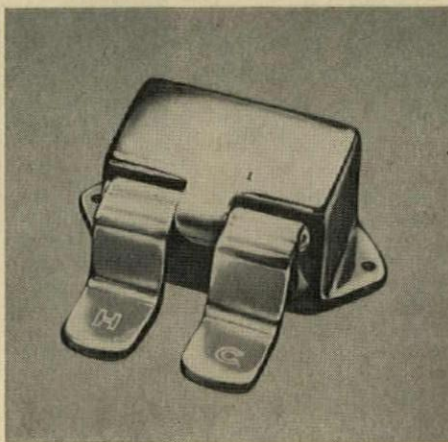


room. Dimensions are $34\frac{1}{2}$ " x 42" x 22". Sub Zero Freezer Co., Inc., P.O. Box 4130, Madison, Wis.

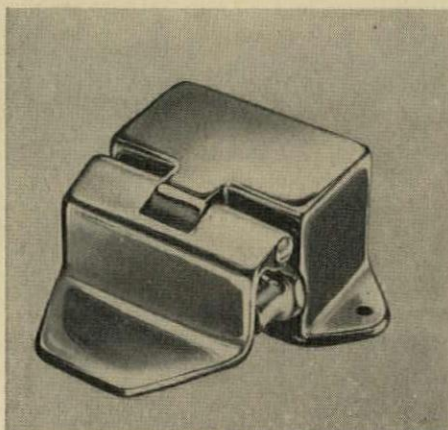
On Free Data Card, Circle 110

Pedal Valves

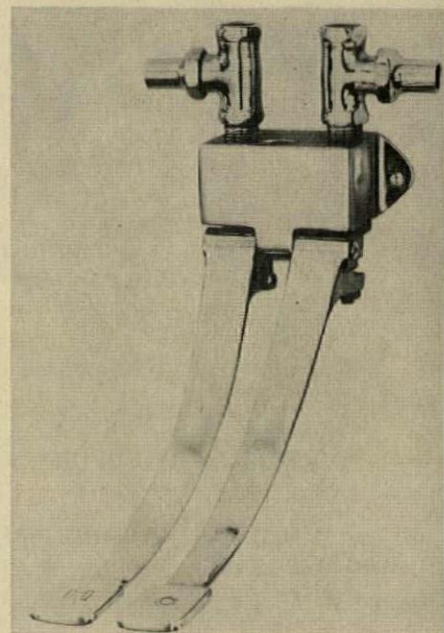
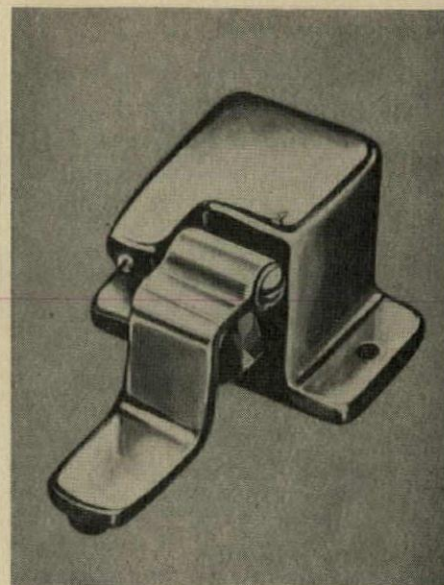
Foot control pedal valves are utilized for regulating water flow in faucets. Pedal valves are quicker, safer, and more sanitary than hand-operated valves. They allow user to wash quickly and easily without coming into con-



1



2



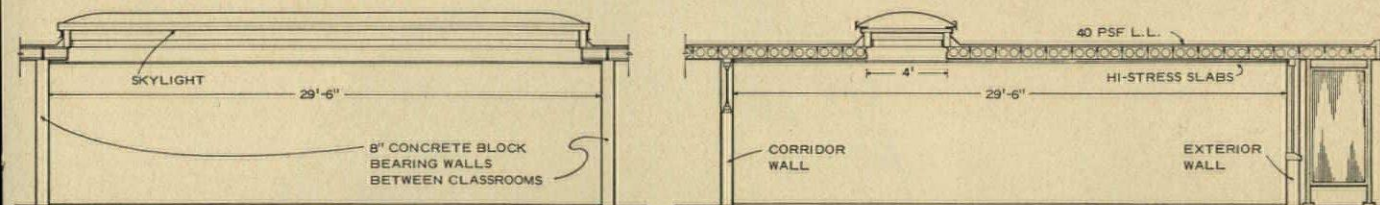
tact with hand-operated fittings. This alleviates cleaning of hand-operated valves and sink area. Valves shut off when one steps away from sink area. Floor-mounted pedal valves include twin hot and cold pedals (1), single pedal which mixes hot and cold water (2), and single flat pedal (3). Wall-mounted pedal valves include single double valves (4). T & S Brass Bronze Works, Inc., 128 Magnolia Ave., Westbury, N.Y.

On Free Data Card, Circle 111

Prefab Steel Column

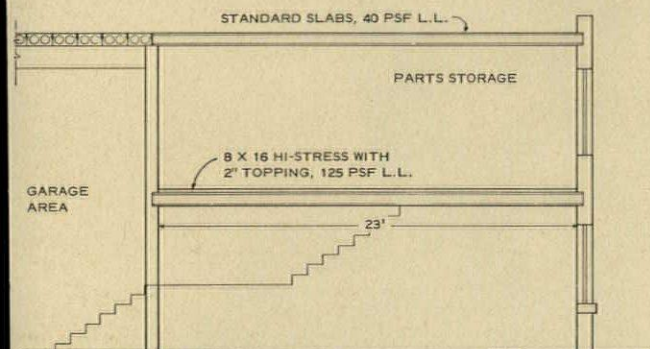
Recently introduced is prefabricated, fire-resistant steel column for single multistory concrete slab or conventional steel frame construction. C

Continued on page

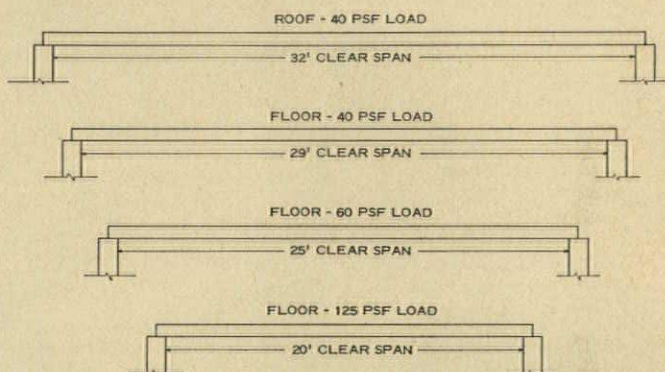


SCHOOL WITH CLASSROOM SKYLIGHTS. Flexicore Hi-Stress slabs with two $\frac{7}{16}$ " stress-relieved strands clear span the 29'-6" width of the rooms, are designed to carry 40 psf roof load. Four slabs, two on each side of skylight, have three $\frac{3}{8}$ " strands to carry the extra load of the skylight.

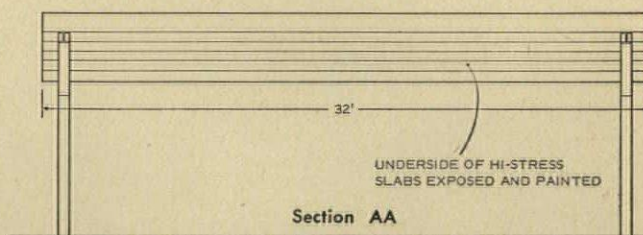
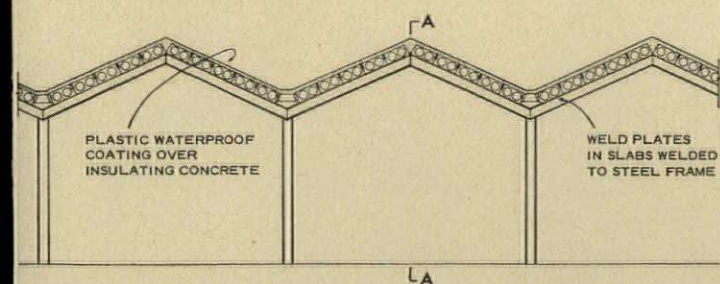
New Hi-Stress Flexicore Slabs Combine Longer Spans, Greater Loads, Improved Structural Performance



PARTS DEPARTMENT FLOOR in garage was designed for 125 psf superimposed load. Two inches of concrete topping on Hi-Stress floor gave a composite design to adequately handle this load on the 23' clear span. Standard Flexicore slabs were used on the roof.



TYPICAL LOAD AND SPAN combinations for 8 x 16 Hi-Stress Flexicore slabs. Superimposed loads shown may be increased with composite design.



ONE-STORY COMMERCIAL BUILDING ROOF DESIGN requires only a steel frame on each side of the building to carry 8-inch Hi-Stress units on long clear span. Design can be repeated in any direction for larger building. Underside of slabs was exposed for neat, maintenance-free ceiling.

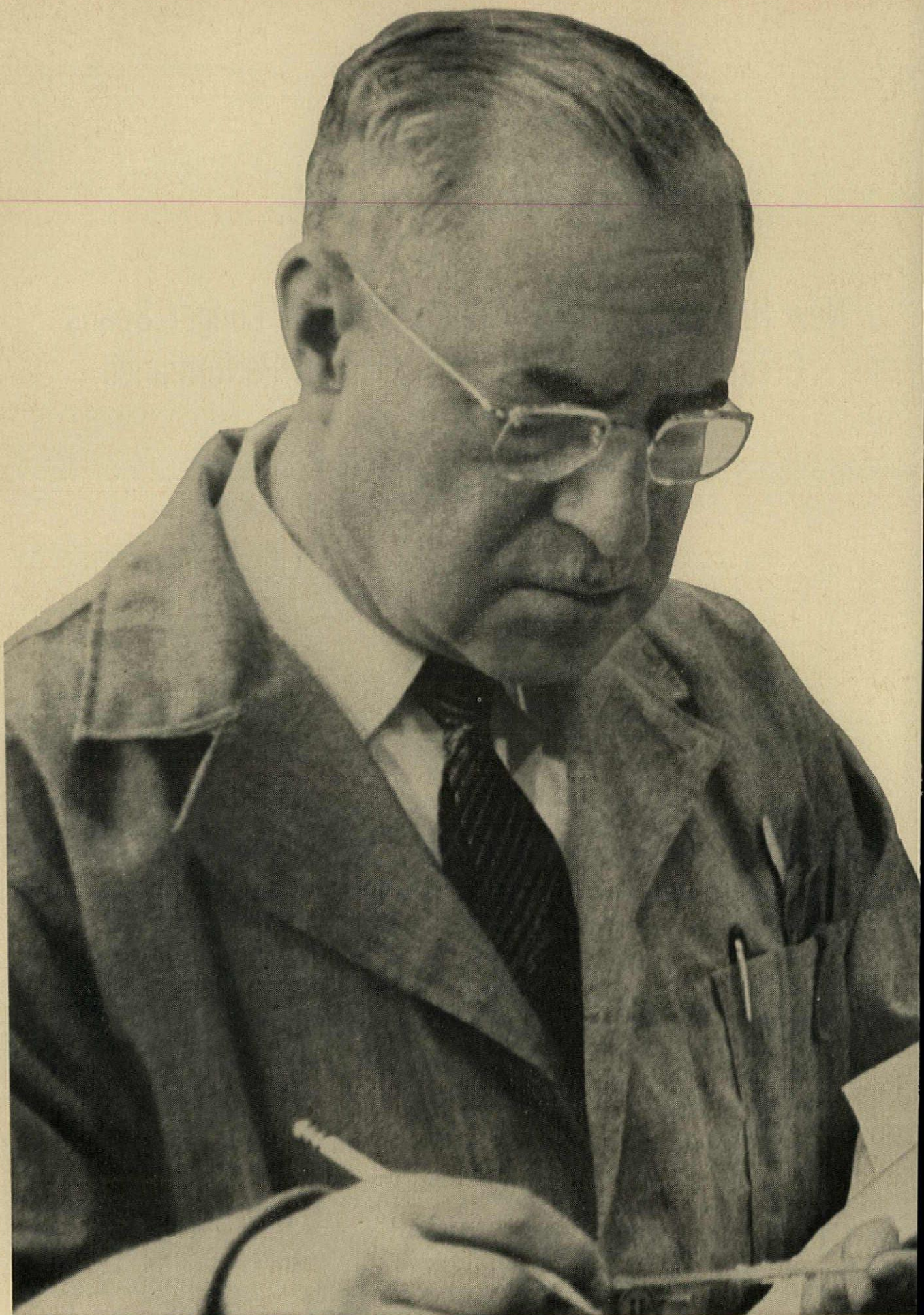
Floor or roof slabs erected quickly



New 8" x 16" Hi-Stress units are fully pre-stressed slabs (f_{si} 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.



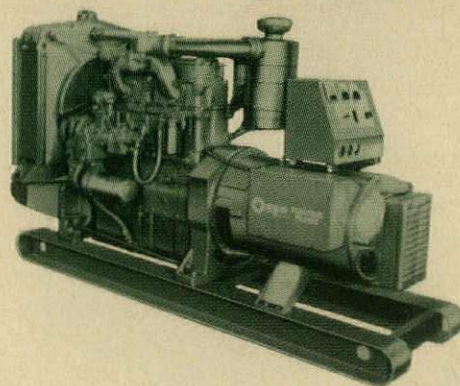


Why should the world's leading electric plant builder use an outside testing organization?

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 running-in and testing under realistic load conditions, in accordance with procedures certified by an independent testing laboratory.



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



...make your concrete floors

**LOOK BETTER,
LAST LONGER!**

Specify and Install
hydroment
REG. U. S. PATENT OFFICE

CONCRETE DENSIFIER and HARDENER

**CHOICE OF 9
RICH COLORS**

- TILE RED
- 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.



Pioneers in Industrial Research Since 1881

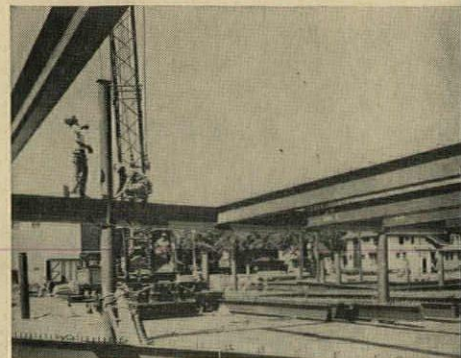
THE UPSCO COMPANY

4805 Lexington Ave. • Cleveland 3, Ohio

In the West...HYDROMENT, INC., 829 N. Coffman Drive, Montebello, Calif.

For more information, turn to Reader Service card, circle No. 399

Continued from page 90



umn consists of load-bearing steel structural member encased in insulation that is permanently protected by outer shell. Load-bearing member may be structural shape or concrete-filled pipe or tubing. Meets requirement of all codes governing fire-resistive construction and bears U.L. labels for fire ratings of 1,2,3,4, or 5 hrs. All or part of column can be exposed to weather without expensive protective measures. Modular effect outside and space conservation inside are achieved by projecting column from exterior walls. Fire-Trol Corp., 8001 S. Western, Chicago, Ill.

On Free Data Card, Circle 112



Outdoor Gas Heater

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

On Free Data Card, Circle 113

you specify
the space.....



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

Norris 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.

LIGHT
WEIGHT



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

WRITE FOR DESCRIPTIVE LITERATURE!

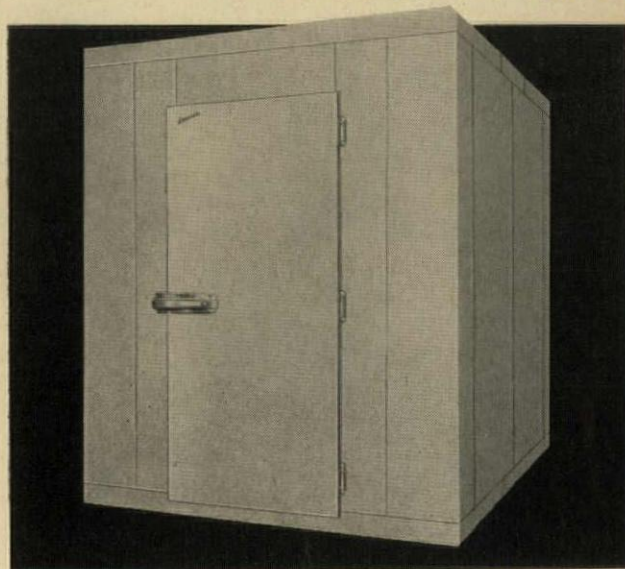
Norris

NORRIS

DISPENSERS, INC.

2720 LYNDALE AVENUE SOUTH
MINNEAPOLIS 8, MINNESOTA

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 Air-coil 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 Philippi 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, 305 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.

Air/Floor System

"Mahonaire" floor system provides air distribution capacity for year-round comfort conditioning in multistory buildings. Advantages are: (1) application adaptability for both high- and low-velocity air distribution in all-air and all-water systems; (2) suitability for modular utility layouts; (3) adequate floor cell depth; and (4) provision of flat bottom surface for installation of insulation or fireproofing. R. C. Mahon Co., Box 4666, Detroit, Mich.

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 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 build-

ing professions. National Lumber Manufacturers Assn., 1619 Massachusetts Ave., N.W., Washington, D.C.

Working With Wood

Color catalog describes decorative hardwood paneling, overlaid surfaced 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.

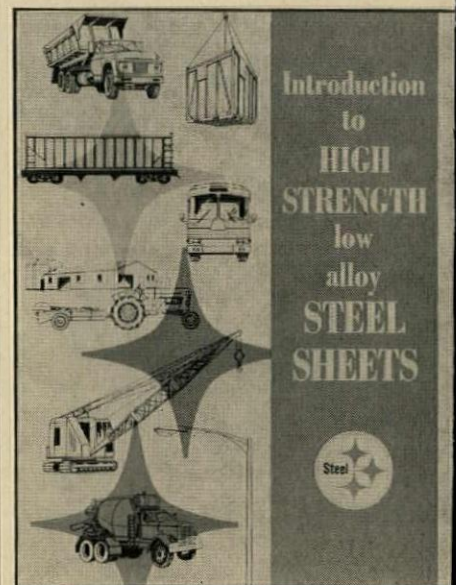
On Free Data Card, Circle 205



Musical Shells

Brochure discusses acoustical shell 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 Beldo Ave., Norwalk, Conn.

On Free Data Card, Circle 206



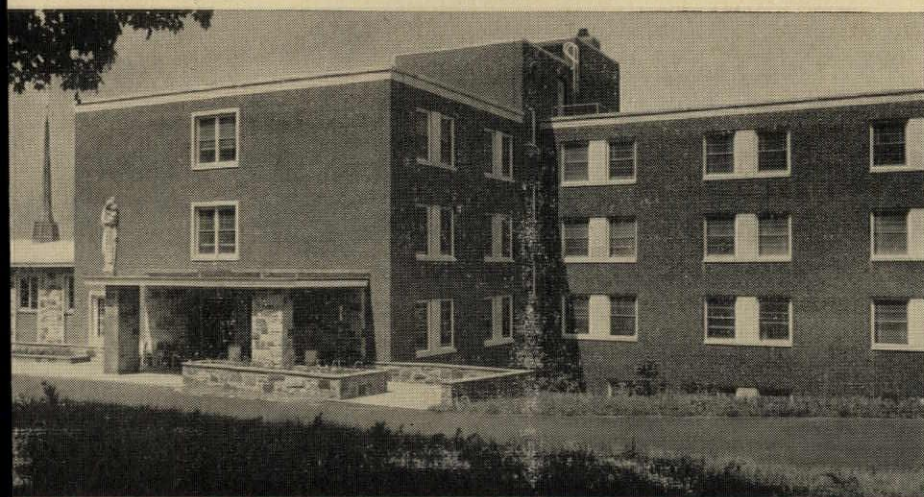
High-Strength, Low-Alloy Steels

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



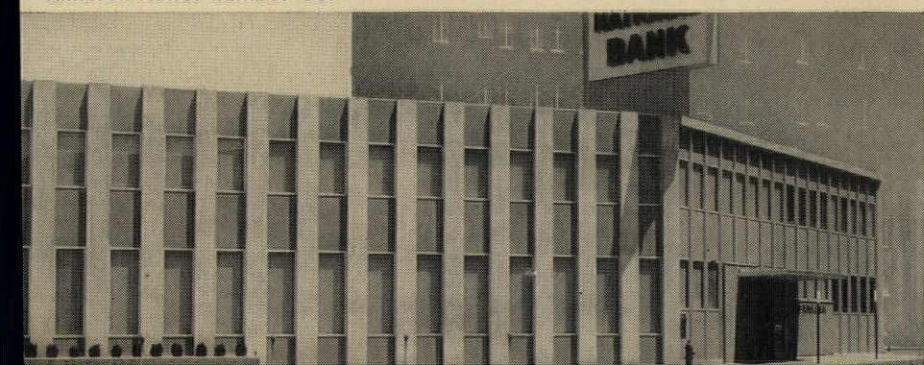
EFFICIENT PLANT, KANSAS—International Harvester, Wichita. *Architect:* Campbell Engineering Company. *Prime Contractor:* A. W. Soderberg Construction Company. *Masonry Contractor:* Kenneth D. King. *Masonry Cement:* United Cement Products Company. *Concrete:* Dolese Bros. Company.

QUIET CONVENT AND CHAPEL, NEW YORK—St. Theresa's, Ossining. *Architect:* Ferrenz & Taylor. *General Contractor:* Margotta Construction Company, Inc. *Lone Star Masonry Dealer:* Hudson River Yards Corporation. *"Incor" Concrete Block:* Castle Blocks, Inc.



AIR-CONDITIONED SCHOOL, ALABAMA—Central High School, Phenix City. *Architect:* Ted Sztowitz, A.I.A. *Prime Contractor:* Williams Construction Company. *Masonry Cement:* The Raiford Coal Company.

MODERN BANK, MISSISSIPPI—First National Bank of Meridian. *Architect:* Bank Building and Equipment Co. *General Contractor:* B. L. Knost. *Concrete:* Ready Mix Concrete Company. *Block:* Lyles Concrete Block Company. *Masonry Cement:* Kimbrell-Ruffer Lumber Co.



Take the guesswork out of masonry

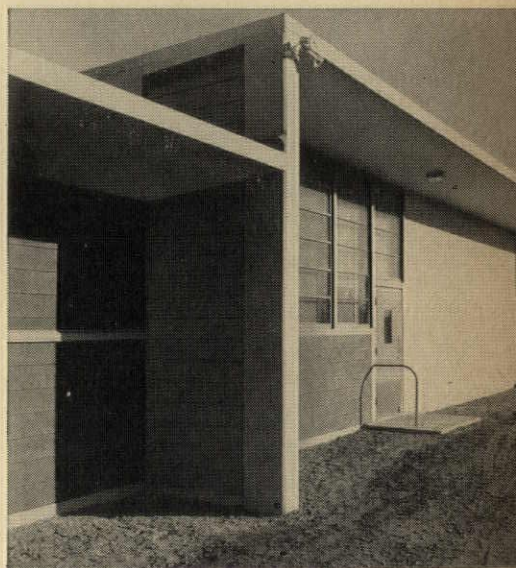
Lone Star Masonry Cement helps masons do just that. With only sand and water to add, they easily mix mortar to exactly the right consistency for good workmanship. They get uniform color, strength and workability in every bag. Lone Star Masonry has been used to assure quality results in the buildings 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.

LONE STAR CEMENT CORPORATION
New York 17, New York

LONE STAR MASONRY CEMENT



RETRAINING CENTER, WASHINGTON—Yakima County Juvenile Detention Home, Yakima. *Architect:* Cowan & Paddock, *General Contractor:* Hills Construction Company. *Masonry Contractor:* Burl Thomas.



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, 633 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 208

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



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



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., Rilco 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

Continued on page 102



HILLYARD



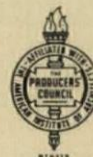
...the most widely recommended and APPROVED LINE of floor treatments and finishes

We are proud of this fact and feel that it will strengthen your confidence when specifying Hillyard protection for every floor surface.

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.

Write, wire or call collect for complete A.I.A. numbered specification files for every type of floor. A Hillyard "Maintainer" will serve "On Your Staff—Not Your Payroll." His service and knowledge of proper floor treatments are yours without obligation. He'll gladly act as a "job captain."



HILLYARD FLOOR TREATMENTS

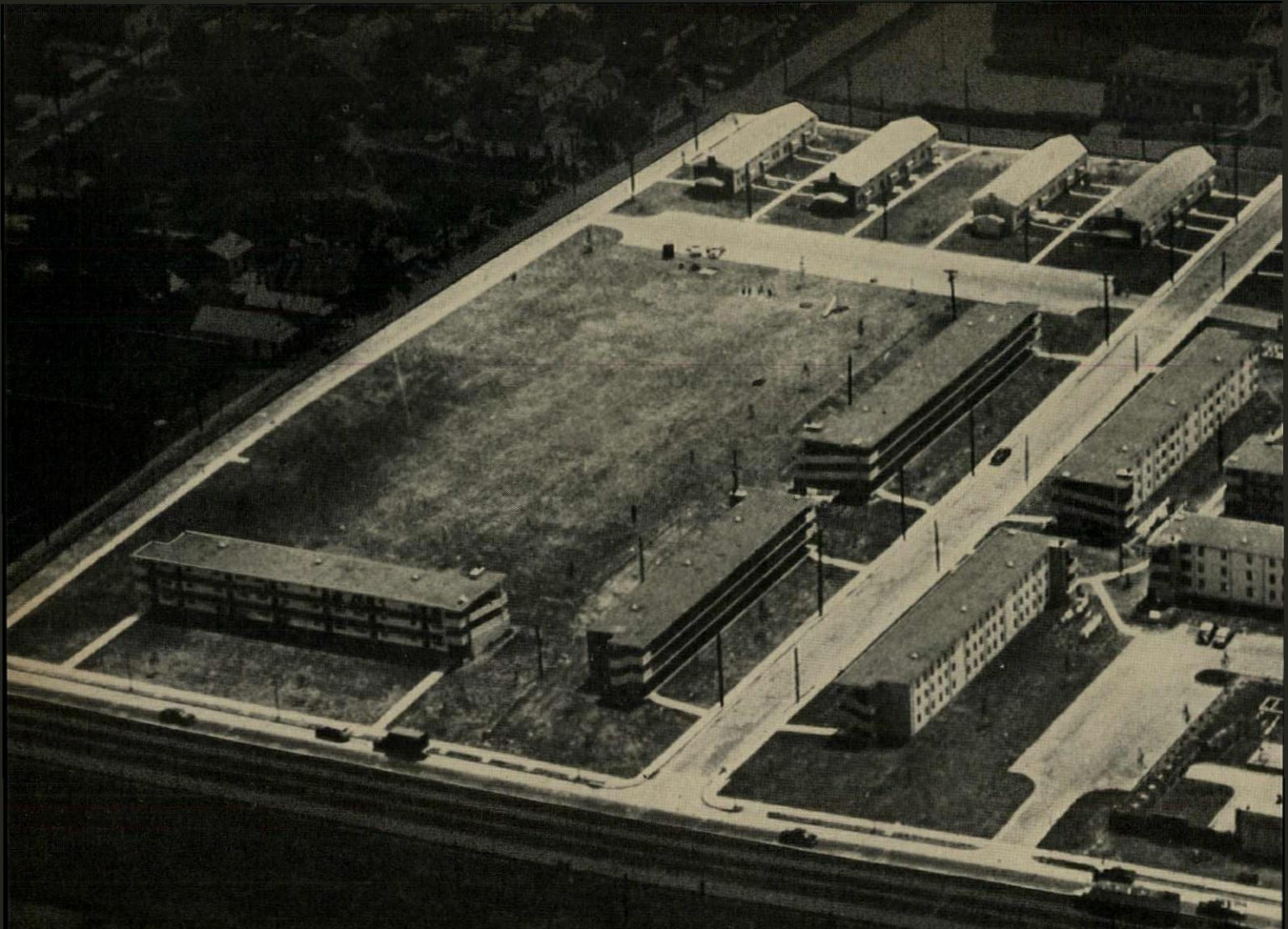
The Most Widely Recommended



Since 1907

St. Joseph, Missouri, U.S.A.
Passaic, New Jersey · San Jose, California

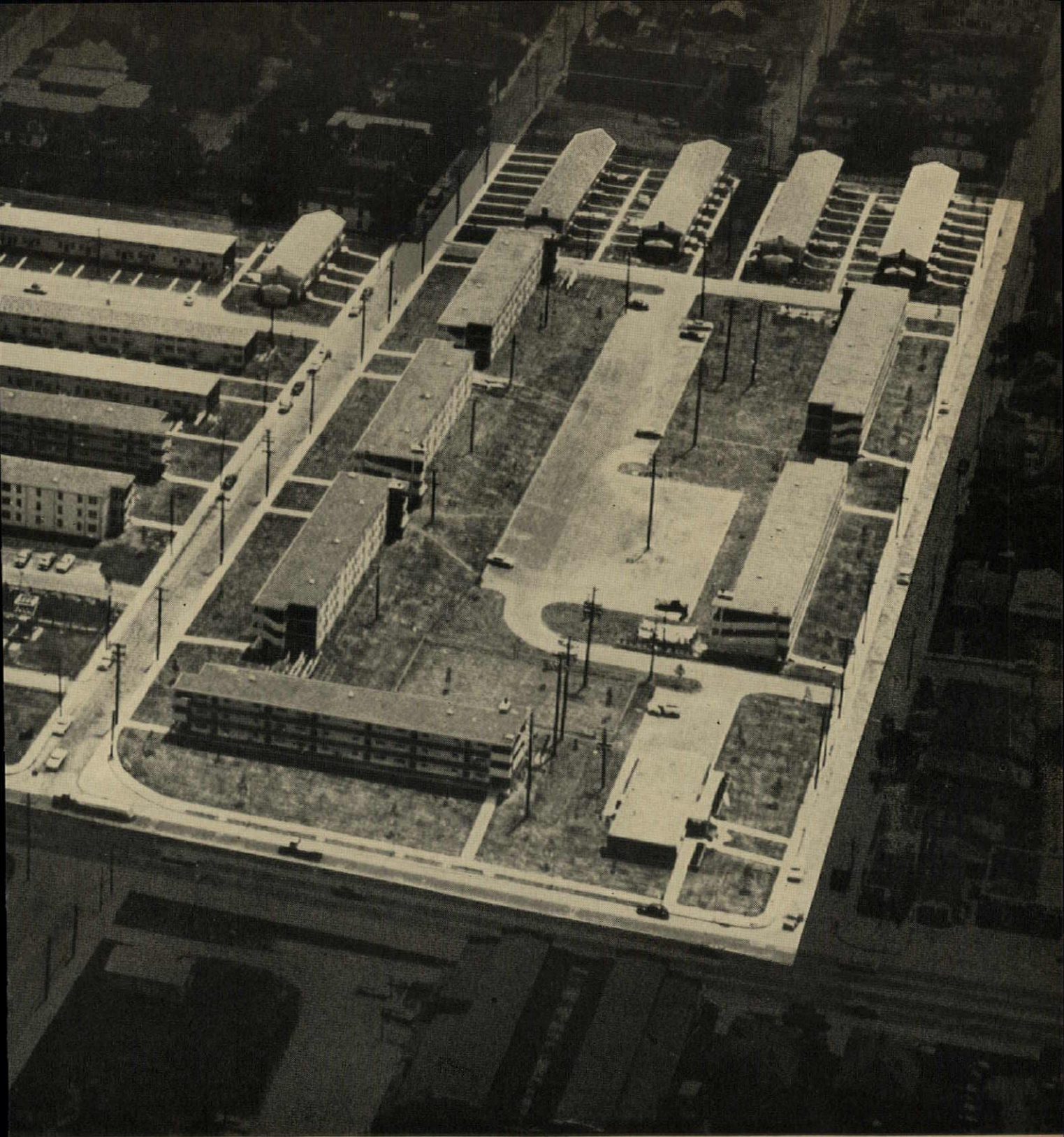
and Approved for Every Surface



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 320 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:
Charles S. Peete & Associates, Memphis
GENERAL CONTRACTOR:
McDonough Construction Co.,
of Atlanta, Georgia
MASONRY CONTRACTOR:
Memphis Masonry Company, Memphis
PLASTERING CONTRACTOR:
F. M. Gravier Plastering Co., Atlanta

WHAT HOLDS THE WALLS OF THE JOSEPH A. FOWLER HOMES TOGETHER?



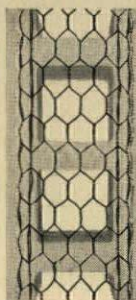
mortar and Keywall (what else?)

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).

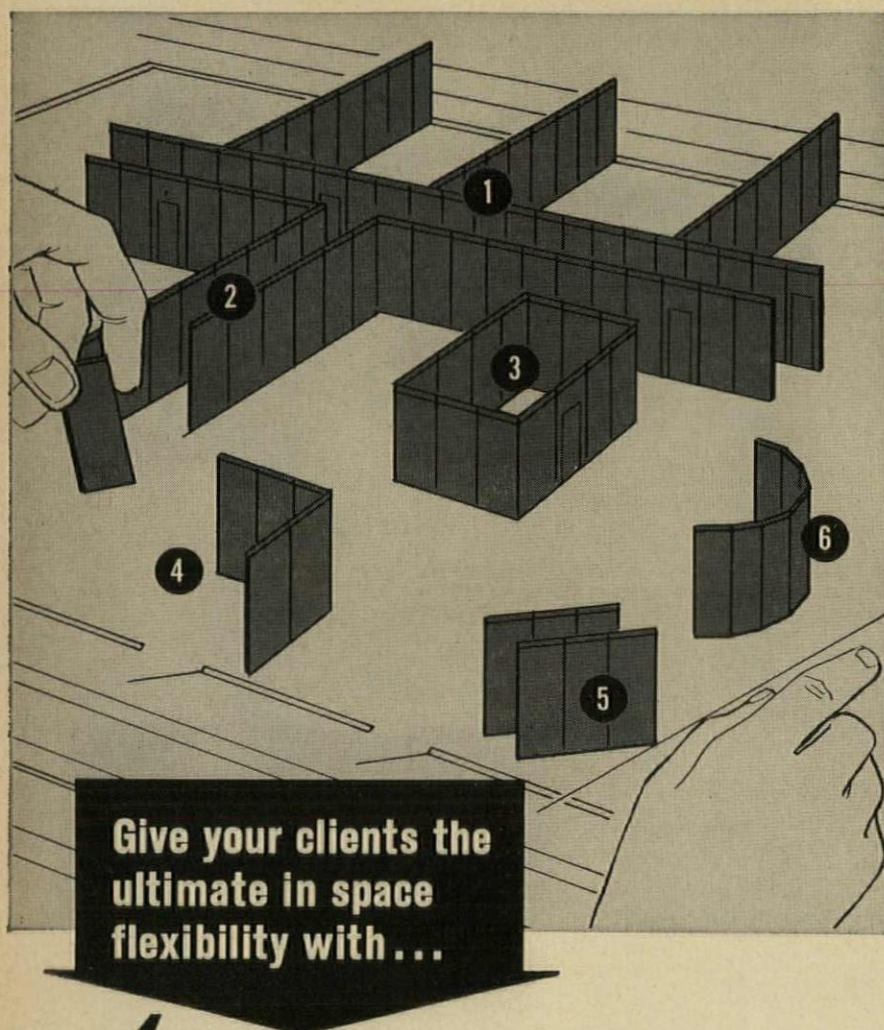
Which in turn controls shrinkage and thermal movement better, resulting in greater crack resistance.

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...

AirWall® PNEUMATIC PARTITIONS

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

(1) build temporary halls and rooms *where* he wants them, *when* he wants them . . . (2) use a double-run with an airspace between to separate "noisy" functions . . . (3) build a room within a room . . . ideal for dressing rooms, private caucus areas, etc. . . . (4) utilize panels as traffic guides near entrance doors or as privacy shields throughout the room . . . (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

"Evaluation of Soils and Uses of Soil Surveys for Engineering Purposes in Urban Development" (FHA No. 723) provides guidance for more specific use and interpretation of existing soil survey reports. Among topics are "Soil Character in Relation to Residential Sewage Disposal," and "Rating Soils Using Pedological Soil Survey Reports and Maps." Office of Public Information, Federal Housing Administration, 811 Vermont Ave., N.W., Washington, D.C.

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., 59 Lake St., LeRoy, N.Y.

On Free Data Card, Circle 216

BFG FLEXIBLE VINYL FLASHING

keeps water
where it belongs
...outside

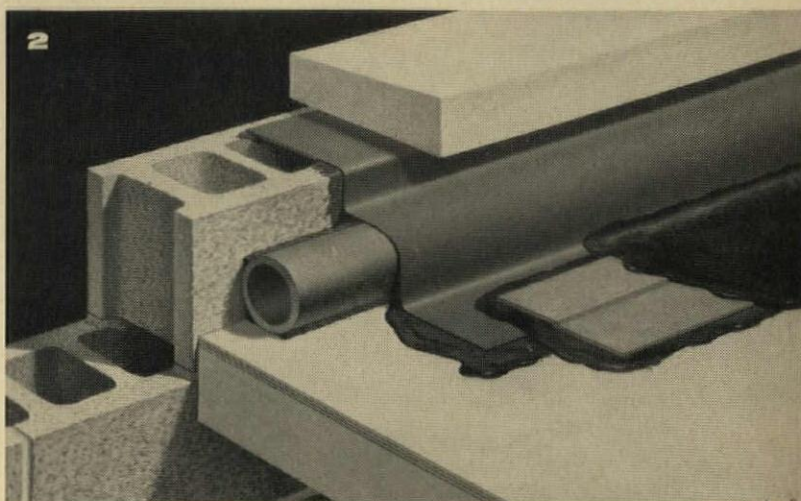
BFG Flashing is a specially compounded, extruded PVC sheet. It is tough, flexible over a wide temperature range and offers excellent weathering properties. By its very nature, it conforms easily to irregular shapes and surfaces—remains watertight where building movement is encountered. It's available 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. 2. BFG field service engineers' recommendations for solving the problem. 3. The finished installation.

Such technical service and assistance is available to help solve your flashing problems. Just write BFG Building Products Dept. PA-12, The B.F. Goodrich Company, Akron, Ohio 44318.

BFG
FLEXIBLE VINYL FLASHING

PROBLEM: Failure of composition flashing only three years old, due to movement between deck and parapet. Frequent attempts to patch were unsuccessful. In this photo, coping has already been removed.



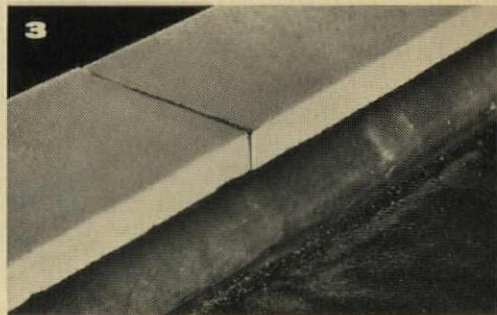
SOLUTION:

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.



BFGoodrich

BUILDING PRODUCTS DEPT. PA-12

The B.F. Goodrich Company
Akron, Ohio 44318

Please send technical data and samples:

- ☐ BFG FLEXIBLE VINYL FLASHING
☐ BFG VINYL WATER BARRIERS
☐ BFG VINYL WATERSTOPS

Name _____

Company _____

Street Address _____

City _____ State _____ Zip Code _____





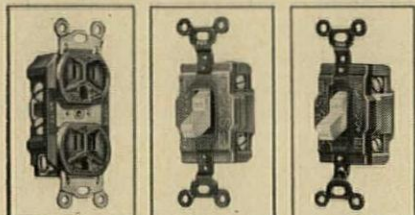
The "6300" ... newest of the P&S super devices

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.

MORE SUPER DEVICES FOR HEAVY DUTY SERVICE



6200 3-Wire Grounding Outlet Companion to the "6300" with 15 amp. rated Capacity.

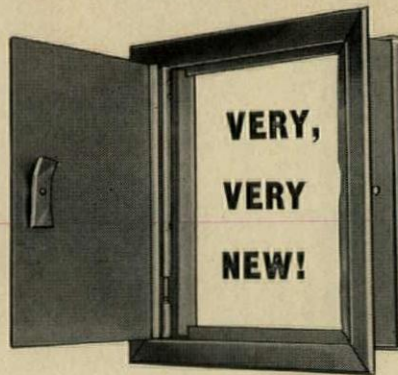
1001-I and 1021-I Switches Heavy duty, shallow body switches for installations requiring continuous, dependable service. 15 amp. switches are color coded blue; 20 amp., red.

FOR MORE INFORMATION WRITE DEPT. PA-564

P&S PASS & SEYMOUR, INC.
SYRACUSE 9, NEW YORK
BOSTON • CHICAGO • LOS ANGELES • SAN FRANCISCO

For more information, turn to Reader Service card, circle No. 373

NO MORE RUSTY ACCESS DOORS



NEWMAN ALUMINUM ACCESS DOORS

For electrical, plumbing, heating connections and all service points.

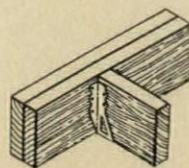
- precision fabricated
- rust and corrosion proof
- sturdy, extruded aluminum
- natural satin-lacquer finish or caustic etch for field painting
- snap-out hinge for door removal
- completely assembled ready for installation

WRITE TODAY FOR BULLETIN AND PRICES



5623 Center
Hill Ave.
Cincinnati,
Ohio 45216

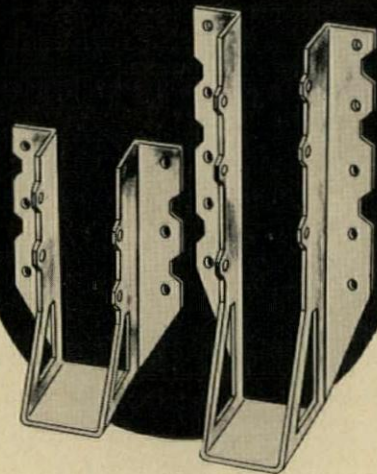
For more information, turn to Reader Service card, circle No. 370



NAILS INCLUDED

TECO

TECO U GRIP JOIST AND BEAM HANGERS



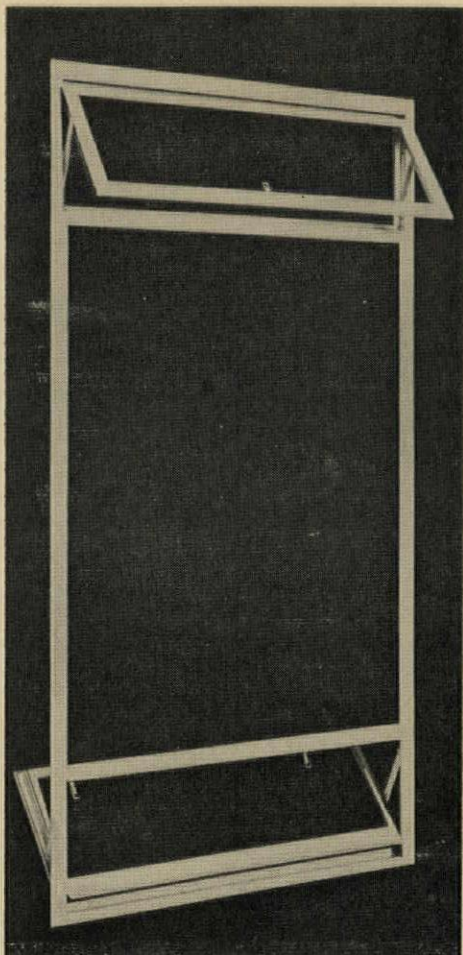
SAVE 50% OR MORE IN
MATERIAL AND LABOR



Send for FREE
DESIGN BOOKLET

TIMBER ENGINEERING COMPANY
1619 MASSACHUSETTS AVE., N.W.
WASHINGTON, D. C. 20036

For more information, turn to Reader Service card, circle No. 396

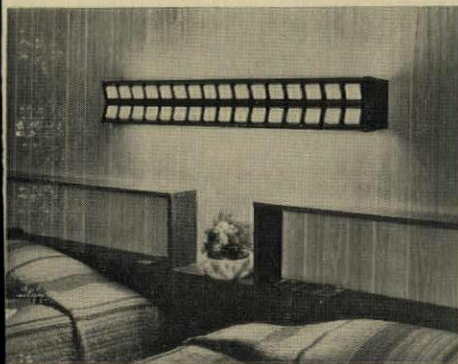


Weathertight Window

"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



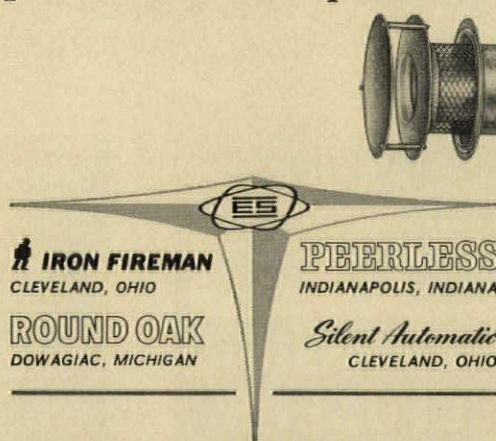
Colored Lighting

Fluorescent lighting units are shown in 16-page booklet. Decorative surface diffuser inserts are of amber, blue,

SEALED GAS COMBUSTION

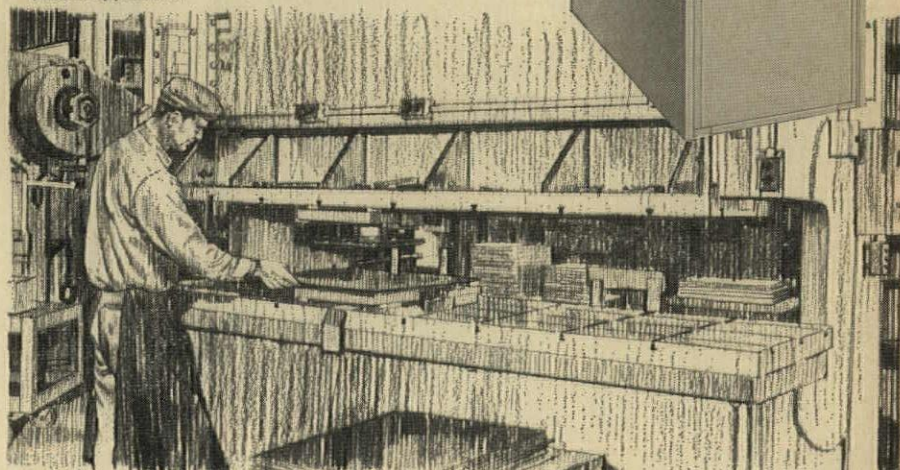
**COMPLETELY
NEW!!!!!!**

Here's the industry's only 55,000 BTU sealed gas combustion furnace capable of handling 2 tons of air conditioning ■ *Vents directly through any outside wall, eliminates costly flue or chimney, pilot ignites electronically, is A.G.A. approved for safety PLUS (fume-free), fits snugly in the darnedest places* ■ This *Safe-T-Sealed®* furnace* exemplifies the engineering know-how, the product design and development that have been the foundation of the PEERLESS CORPORATION for over 63 years ■ Write today for complete specifications and quotations.



SPACE CONDITIONING *Systems*

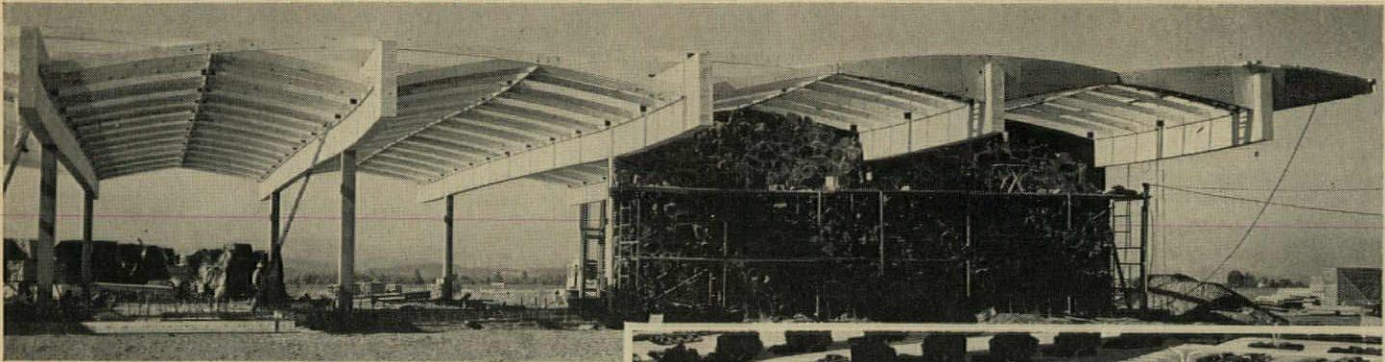
*patent applied for



RELY ON THE BOLD NEW LEADER IN A CLASS BY ITSELF... PEERLESS

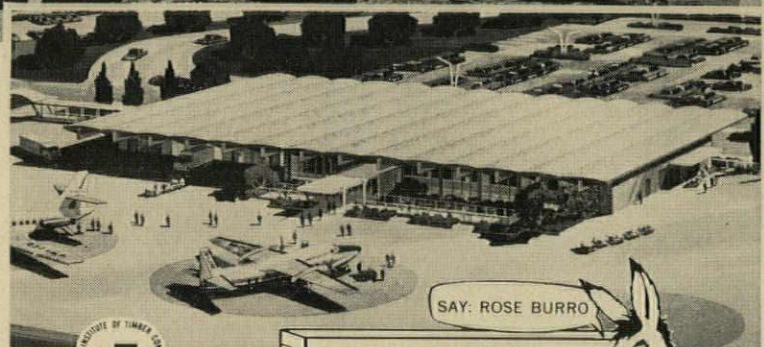
For more information, turn to Reader Service card, circle No. 413

GLULAM BEAMS FORM AIR TERMINAL ROOF STRUCTURE



Air terminal building, Eugene, Oregon.
Architect: Richard E. Clark, Eugene. Contractor: VIK Construction Co.

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 esthetic value of natural wood, while performing as structural supports.



Charter **AITC** Member
AMERICAN INSTITUTE
OF TIMBER CONSTRUCTION

SAY: ROSE BURRO
ROSBORO
LUMBER COMPANY
SPRINGFIELD, OREGON



Area Code 503 • Phone 746-8411

For more information, turn to Reader Service card, circle No. 383



RONAN & KUNZL

CONCEALED OVERHEAD DOOR CLOSERS

Ronan & Kunzl Closers are designed, tested and manufactured to precision standards for exceptionally trouble-free service. Compare these features • Fits neatly into 1¾" x 4" header (or larger) • Powerful hydraulic action with longest piston stroke and largest oil displacement • One model serves most needs • Labor-saving installation ease • 2-year warranty.

See Sweet's Architectural File ^{19e}/_{Ron} for all facts, or write.

"FINE DOOR CONTROLS SINCE 1947"



RONAN & KUNZL, Inc.

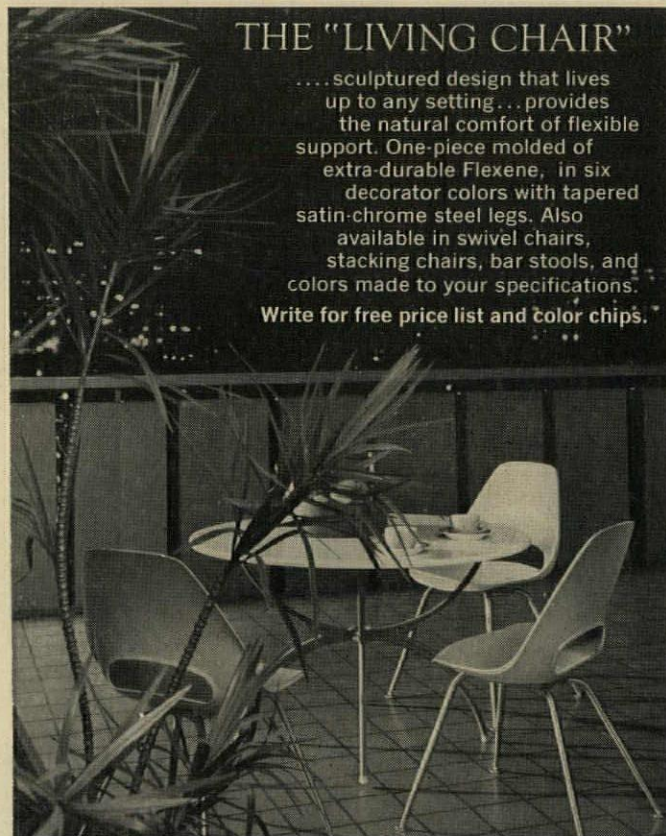
Marshall, Michigan

For more information, turn to Reader Service card, circle No. 382

THE "LIVING CHAIR"

....sculptured design that lives up to any setting... provides the natural comfort of flexible support. One-piece molded of extra-durable Flexene, in six decorator colors with tapered satin-chrome steel legs. Also available in swivel chairs, stacking chairs, bar stools, and colors made to your specifications.

Write for free price list and color chips.



BLISSCRAFT OF HOLLYWOOD
DEPT. A • 13007 S. WESTERN AVE. • GARDENA, CALIFORNIA 90249



For more information, turn to Reader Service card, circle No. 423

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.

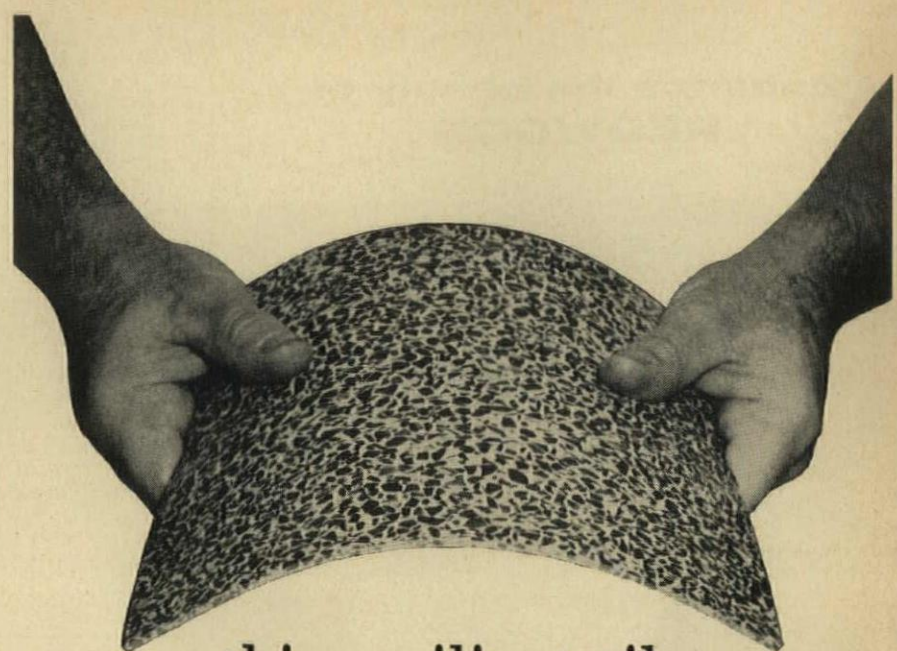
On Free Data Card, Circle 219

FURNITURE

Lounge Chair

Folder depicts several styles of "Pedati" 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



this resilient tile
has REAL MARBLE CHIPS!

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% #1 marble chips!

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

TIME AND SPACE SAVER
TERRAFINO is the perfect material to use where you want ter-razzo but haven't the time, space or facilities.

EASILY MAINTAINED
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.

QUICKLY INSTALLED
TERRAFINO is quickly installed with an ordinary emulsion type adhesive.

COLOR RANGE
TERRAFINO's standard color range includes 10 beautiful patterns, in two sizes, 9" x 9" x 1/8" and 12" x 12" x 1/8".

Fill in and mail coupon below for descriptive literature and samples.

Terrafino CORPORATION, P.O. BOX 52, CARLSTADT, NEW JERSEY

TERRAFINO COMPANY, P.O. BOX 52, CARLSTADT, N. J.
Gentlemen:
Please send samples and literature on TERRAFINO.

NAME _____
FIRM _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____



For more information, turn to Reader Service card, circle No. 395

specify  Cabot's

Enhance the beauty of REDWOOD

inside . . .



House in Los Altos, Calif.
Architect: Bolton, White and Jack Herman, San Francisco
Paneling and woodwork finished with Cabot's Stain Wax.

outside . . .



Redwood siding and trim stained with Cabot's Creosote Stain.

Specify Cabot's Finishes for REDWOOD

Architects and builders know that Cabot produces the ideal finishes for Redwood. • Easy to apply and economical • Accent the texture and grain

For exteriors:

Your choice of finishes — clear, natural, gloss, driftwood or stains in 35 distinctive colors.

For interiors:

Stain, wax and seal in one easy operation with Cabot's Stain Wax

SAMUEL CABOT INC. 628-S. Terminal Trust Bldg., Boston 10, Mass.

Please send your "Redwood Staining" Brochure

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

RARE BOOKS ON ARCHITECTURE

Reprinted by kind permission of the Royal Institute of British Architects from priceless originals in its possession

Entwurf einer Historischen Architektur

by FISCHER VON ERLACH

Leipzig, 1725

Fischer von Erlach's illustrations of the architectural "wonders of the world"—Egyptian pyramids, Greek temples, Turkish mosques, Chinese pagodas, etc.—constitute the first general and pictorial history of architecture. This work, accompanied by an English translation, was intended to furnish architects and artists with ideas and patterns.

2 volumes, 200 pages, folio, \$28 postpaid.

Also available, first book in English on Architecture . . . 401 years old, 10" x 14". The First and Chief Groundes of Architecture by John Shute. \$8.50.

The GREGG Press Inc.

171 E. RIDGEWOOD AVE., RIDGEWOOD, N. J.

Write for our catalogue of architectural books

GREGG PRESS INC.

171 E. RIDGEWOOD AVENUE, RIDGEWOOD, NEW JERSEY

☐ Please send Entwurf einer Historischen Architektur, Fischer von Erlach, \$28.00 postpaid.

☐ Please send "The First and Chief Groundes of Architecture", John Shute. \$8.50 postpaid.

NAME

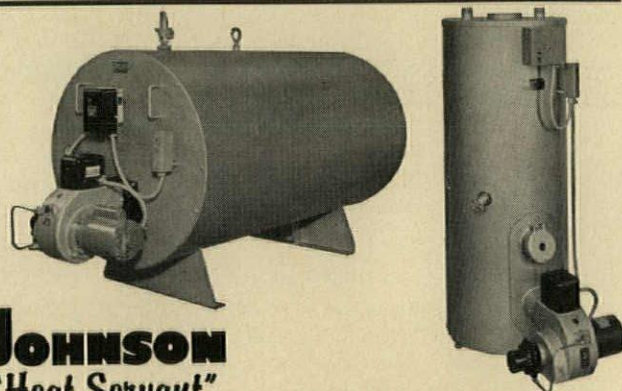
ADDRESS

CITY STATE

AMOUNT OF ORDER \$

☐ Check enclosed for amount of order

☐ Bill me for amount of order



JOHNSON
"Heat Servant"

Automatic Boiler-Burner Units for

**HOT-WATER SUPPLY... or for
STEAM or HOT-WATER HEATING!**

These handsome "packaged" units have been engineered to a new high point of operating efficiency to produce lower water-heating costs and more years of trouble free service. They are powered by Johnson's famous "Bankheat" Burners which can be fired on Oil, on Gas, or on Combination Oil-and-Gas.

There are 2 space saving Vertical "Heat Servant" Models built in a wide range of sizes from 99 to 1093 MBH . . . and 2 Horizontal Models (of 3-pass Scotch Boiler type) that range from 196 to 2000 MBH in size . . . making it possible to get exactly the size and type you need. All "Heat Servant" units are factory assembled, wired and tested.

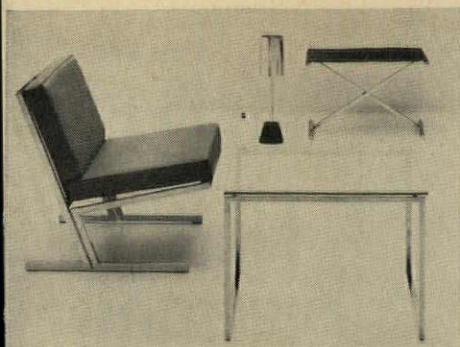
Whatever your need may be . . . domestic hot-water supply . . . or heating a building with hot water or with steam . . . there's a Johnson "Heat Servant" that will do the job better and more economically. May we send detailed descriptions and data?

Johnson
Burners

S. T. JOHNSON CO.

940 ARLINGTON AVE., OAKLAND 8, CALIF.
CHURCH ROAD, BRIDGEPORT, PENNSYLVANIA

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 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. Space Planner Co., Inc., 151 S. Tuscon Blvd., Tuscon, Ariz.

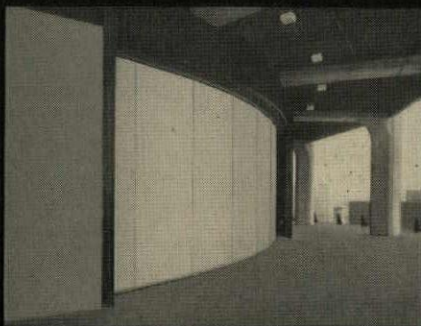
On Free Data Card, Circle 221

Furniture Catalog

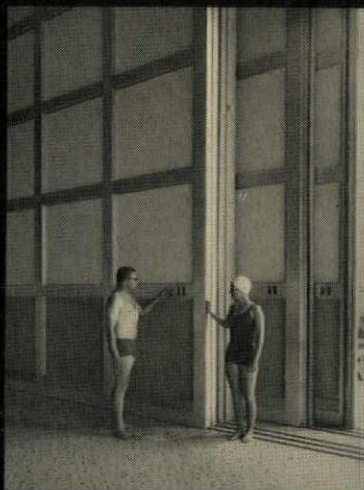
Steel furniture and accessories are presented in 22-page catalog. Included are ash receptacles, benches, chairs, dividers, hardware, metal sculpture, planters, sofas, stools, tables, and wall

Richards-Wilcox DOORS

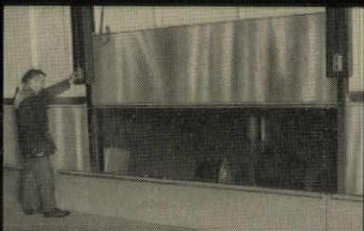
TO MEET YOUR DESIGN REQUIREMENTS



FILLING PROBLEM DOOR OPENINGS



IS A RICHARDS-WILCOX SPECIALTY!



YOU DESIGN THE
OPENING . . . R-W
WILL FILL IT!

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.

HUPP
CORPORATION

RICHARDS-WILCOX DIVISION

120 THIRD STREET

AURORA, ILLINOIS 60507

For more information, turn to Reader Service card, circle No. 380

At Crerar Library...

**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 check-out 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 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.

D. A. MATOT, INC.

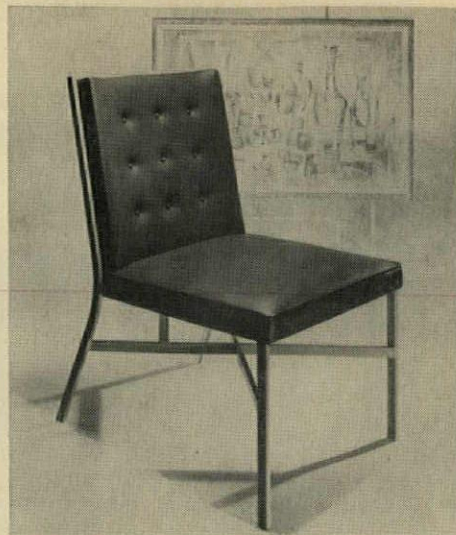
1533 W. Altgeld Avenue • Chicago, Illinois 60614
312 Lincoln 9-2177

Specializing in Dumbwaiters since 1888

See our catalog in Sweet's 23a Mat



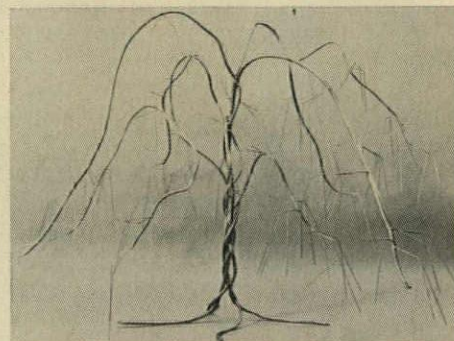
For more information, circle No. 358



murals. Color chart, color photo of each type of furniture, and separate list are included. Frederic Weinberg Co., 145 W. Columbia Avenue, Philadelphia, Pa.

On Free Data Card, Circle 222

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

PROGRESSIVE ARCHITECTURE NEWS REPORT

REINHOLD PUBLISHING CORPORATION
430 PARK AVENUE, NEW YORK, N. Y. 10022
News Editor James T. Burns, Jr.

Publisher..... D. B. Wilkin
Editorial Director T. H. Creighton
Editor Jan. C. Rowan
Advertising Sales Mgr. W. R. Evans, Jr.
Production Manager... Joseph M. Scanlon

20 FEET LONG... WITHOUT A SINGLE SPLICE!



THE MOST ATTRACTIVE HYDRONIC BASEBOARD ON THE MARKET!

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.

WRITE FOR CATALOG PA-5

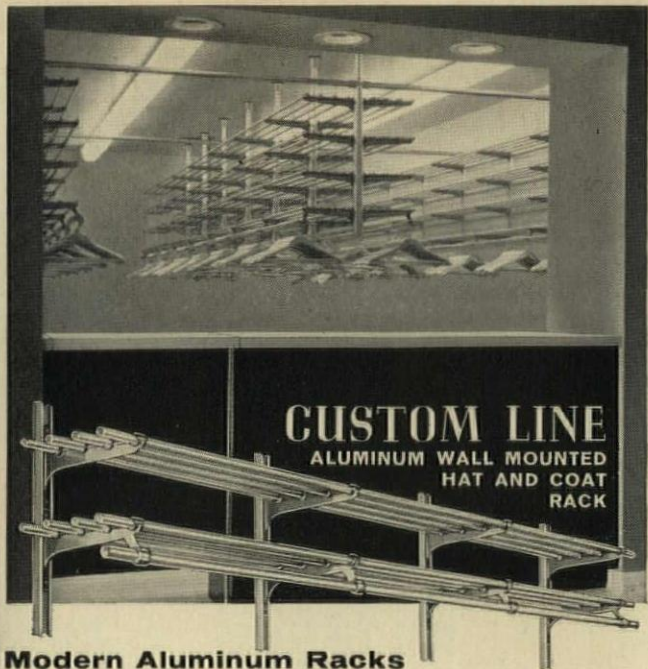
EDWARDS ENGINEERING CORPORATION



Pompton Plains, New Jersey
PHONE: (201) 835-2808

"Packaged Heating and Cooling"

For more information, circle No. 418



**Modern Aluminum Racks
Tailored to Fit Your Exact Specifications**

- ★ Built to your specified length
 - ★ Models to fill your multiple shelf requirement
 - ★ All racks are adjustable in height
 - ★ Can be wall mounted, ceiling hung or floor to ceiling mounted
 - ★ Continuous inside or outside corners
 - ★ Models with hanger bar or double pronged hooks
- For complete information and specifications write for catalog CL-510.

VOGEL-PETERSON CO. • ELMHURST, ILL.

For more information, turn to Reader Service card, circle No. 400

**A FRESH IDEA
TO COMPLEMENT YOUR DESIGNS**

If you think asphalt pavement has to be dull, drab and uninteresting... or that it restricts your design capabilities, you will like the new concept offered by "Vynatex 23." This is a new vinyl protective coating for blacktop that enhances overall appearance by providing pavement colors which blend into or contrast with building designs or decorative schemes.



"Vynatex 23," in grass green, brick red and concrete gray, offers release from blacktop color limitations. It provides a way for you to improve the decor and tone of almost every project you design.

In addition, "Vynatex 23" is remarkably practical. It protects asphalt pavements against premature old age... keeps them free of loose stones... makes them easy to clean.

See our catalog in Sweets. Or write for Bulletin 1828.

MAINTENANCE INC., Wooster, Ohio

For more information, turn to Reader Service card, circle No. 356

Lighting News ★ ★ ★ ★ ★
**at SANDOZ PHARMACEUTICAL
RESEARCH BUILDING** ★
HANOVER, NEW JERSEY

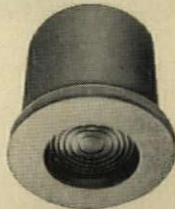


Epplé & Seaman, Architects

Irving Mencher, Consulting Electrical Engineer

*...another
installation
by Kliegl*

Lobby and reception area lighting that is aesthetically pleasing and warm... yet is compatible with high-intensity exterior overhang lighting has been achieved for Sandoz by Epplé & Seaman, architects, and Irving Mencher, consulting engineer, in collaboration with our representative, S. V. Keyian. Kliegl units were specially designed to meet both architectural and illumination requirements!



In more than 60 years, Kliegl has helped designers, architects and engineers with thousands of applications ranging from very small to the most spectacular. The sum total of this pioneer experience in the design of lighting equipment and controls to meet requirements of color, space, optics and peculiar area difficulties is yours for the asking. Call in your Kliegl representative today—no obligation.

As used in the Sandoz installation, new Kliegl Lens Downlights have no hinge and have a minimum of ceiling trim. They permit full service access and, at the same time, a flush ceiling effect.

Our lighting advisors will be pleased to assist in the planning of any installation, using standard or special units to meet your requirements. Full details on request.

lighting

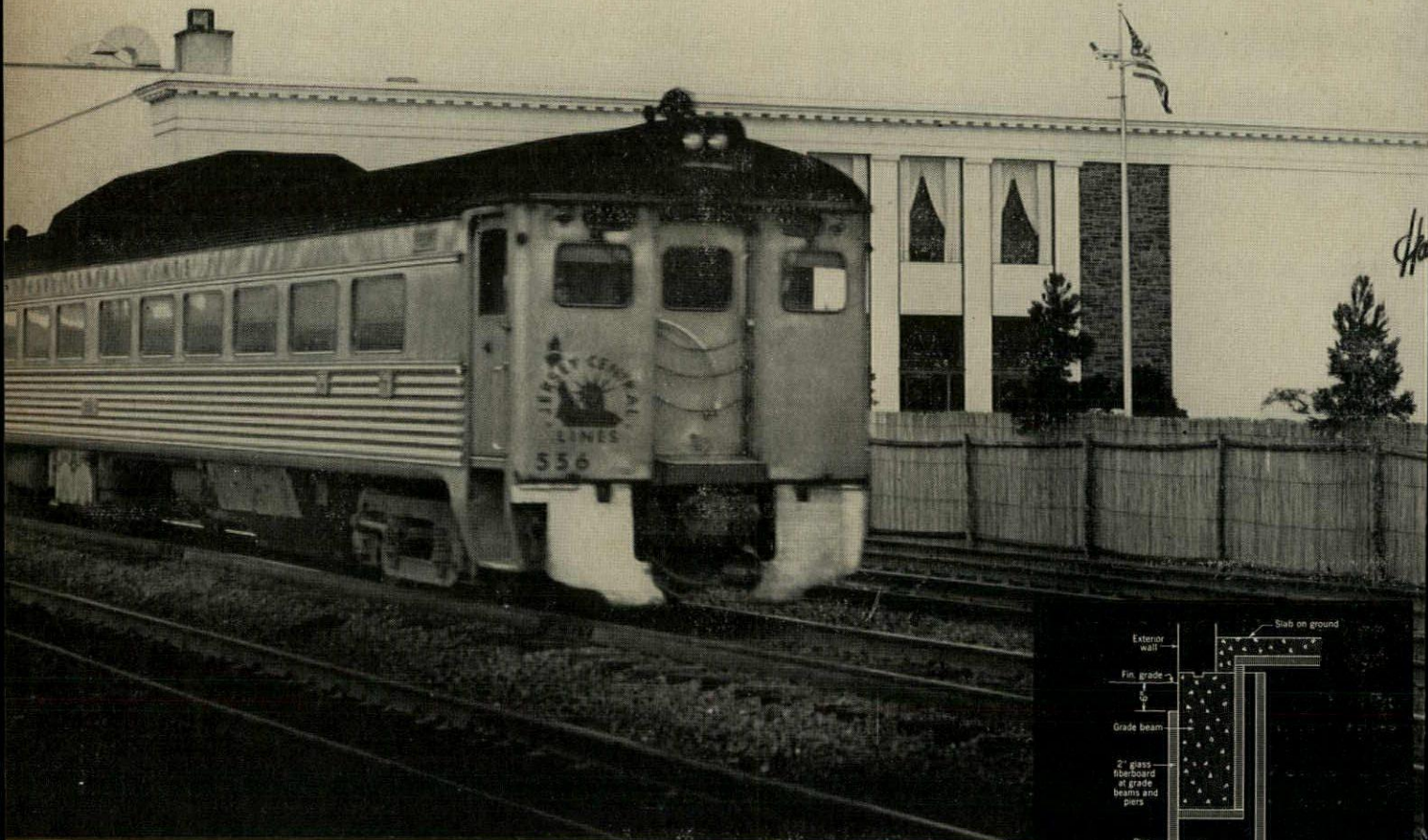
KLIEGL BROS.

Originators and Manufacturers of Klieglights
32-32 48TH AVE., LONG ISLAND CITY 1, N. Y.
Phone: Area Code 212, Stillwell 6-7474

For more information, turn to Reader Service card, circle No. 351

10 feet from train tracks to store...

yet "quiet elegance" prevails at new Hahne & Company unit

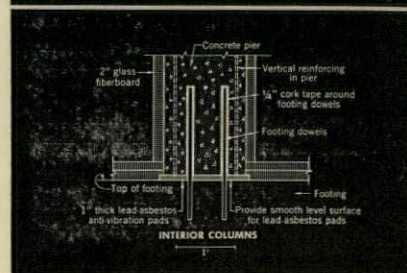
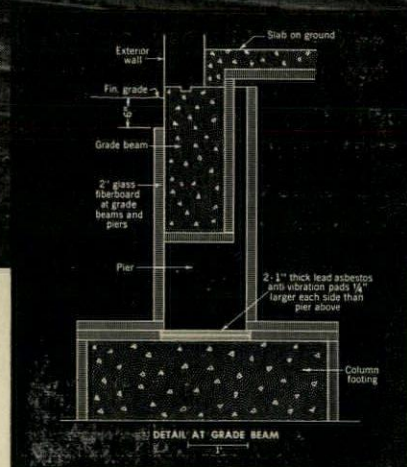


No more than ten feet away from its back-door wall, Hahne & Company's new Westfield, New Jersey, store has the busy Jersey Central Railroad for a neighbor. Hardly conducive (Hahne & Company executives felt when the site was first considered) to the atmosphere of "quiet elegance" which draws appreciative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

Would Hahne & Company have to by-pass an otherwise ideal location? Or could a way be found to "by-pass" noise and vibration from the trains? A way was found, of course. A way that's solved the same problem many times before: Rest supporting columns of the building on *lead-asbestos pads*.

Cross-section drawings show how the job was done. How well the pads have done it is expressed by Hahne & Company's president, J. C. Buck: "We have not experienced any vibration or noise problems from the railroad . . . which was a major concern."

If taming noise and vibration is a major concern of yours, remember that lead can help you in many, many ways. And we're here to tell you about them, in technical detail. Write, detailing your problem, to Lead Industries Association, Inc., Dept. N-5, 292 Madison Avenue, New York 17, New York.



Look Ahead with Lead

May 1964 **PROGRESSIVE ARCHITECTURE®**

D. B. WILKIN, PUBLISHING DIRECTOR
THOMAS H. CREIGHTON, FAIA, EDITORIAL DIRECTOR

JAN C. ROWAN, AIA, EDITOR

BURTON H. HOLMES, AIA, TECHNICAL EDITOR
JAMES T. BURNS, JR., NEWS EDITOR

ASSOCIATE EDITORS

JOHN MORRIS DIXON, AIA, ELLEN PERRY,
ILSE MEISSNER REESE, C. RAY SMITH

GEORGE LUBASZ, COPY EDITOR

JEAN HATTON DUFFY, ASSISTANT TO THE EDITOR
JOHN BENNETT SCHWARTZMAN, ASSISTANT EDITOR

CONTRIBUTING EDITORS

NORMAN COPLAN, E. E. HALMOS, JR.,
WILLIAM J. McGUINNESS, HAROLD J. ROSEN,
JUDGE BERNARD TOMSON

GRAPHICS

CAROL BOWEN, ART DIRECTOR
NICHOLAS LOSCALZO, CHIEF DRAFTSMAN
JOSEPH A. PAPP, DRAFTSMAN

PRODUCTION

JOSEPH M. SCANLON, PRODUCTION MANAGER
MARION FEIGL, EDITORIAL PRODUCTION

EDITORIAL ASSISTANTS

CONSTANCE EISEMAN, JUNE WETHERELL FRAME,
D. JEANNE GRAHAM

REINHOLD PUBLISHING CORPORATION
430 PARK AVENUE, NEW YORK 22, NEW YORK



EDITORIAL

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."

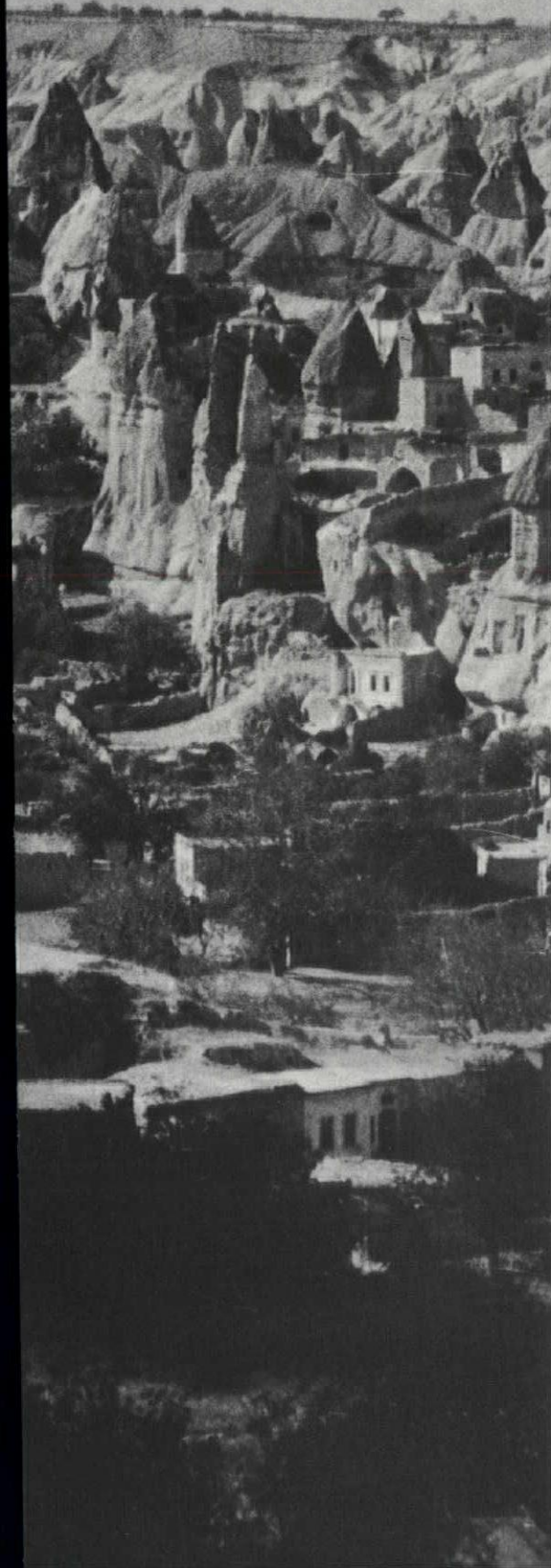
There you are. Judge for yourself. Are these announcements important? Do they portend that what we are heading for is throw-away architecture designed by architectural firms that are wholly owned subsidiaries of various business enterprises? ■

Jan C Rowan

HOUSES: the architect speaks to



man's needs



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.

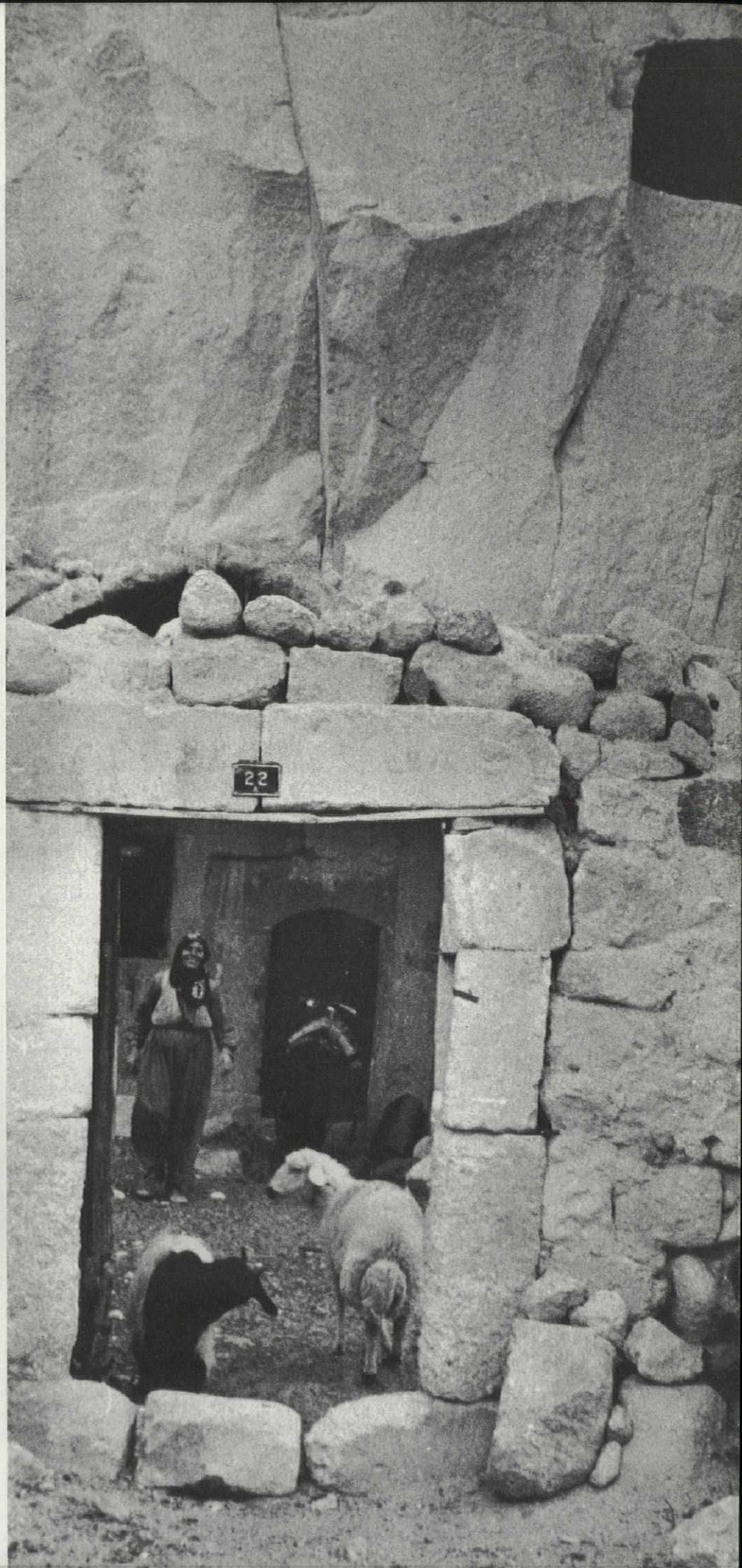
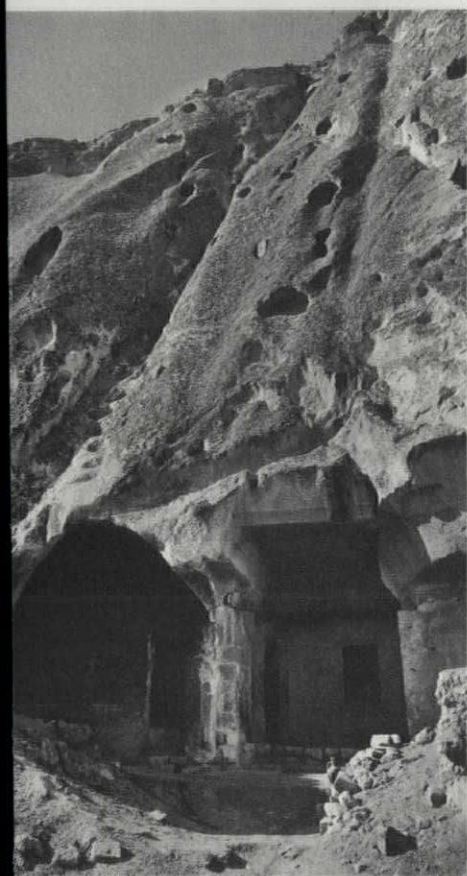
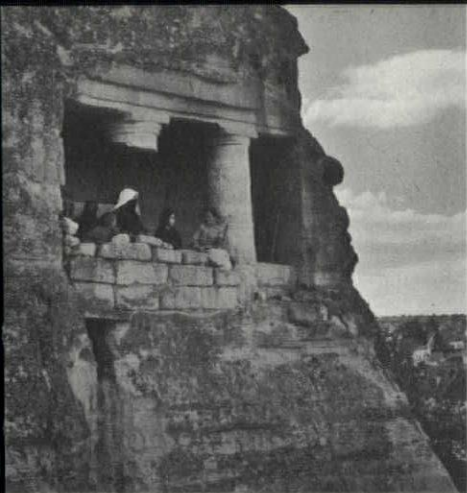
In world-wide terms, then, what is the significance of the single-family custom-designed house? Less than 12 per cent of the houses built each year in the U.S. are architect-designed for a specific client; and in most parts of the world, this figure is considerably lower. The significance seems to be 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.

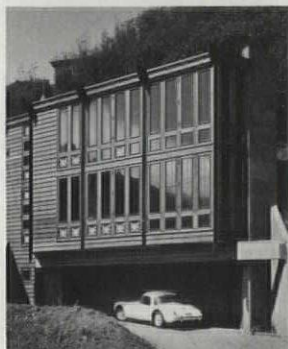
If this is true, then the next question becomes who or what shapes the architect? In presenting the work of the nine architects, we have indicated some of the factors that contributed to their evolution as designers—where they studied, whose work has been especially influential, what views they hold 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 Greenes, 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 preciosity, 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.



Esherick



Autumn



Moore



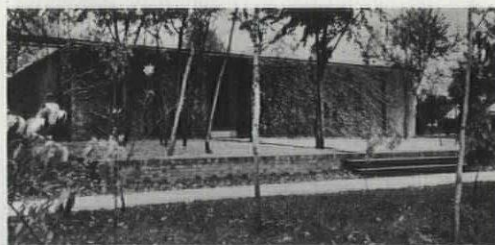
Urbanowicz



ojciechowski



Marquis & Stoller



Williams



Crites & McConnell



Couelle

"Form Is What Things Are"

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 Walter Steilberg 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 I 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."

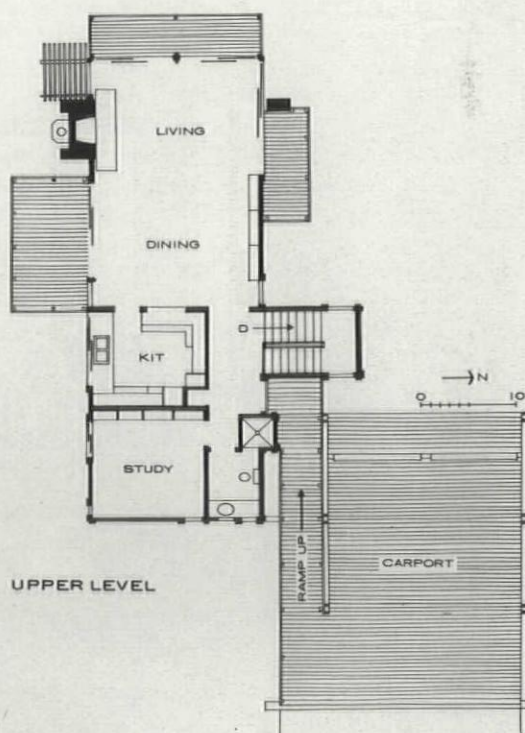
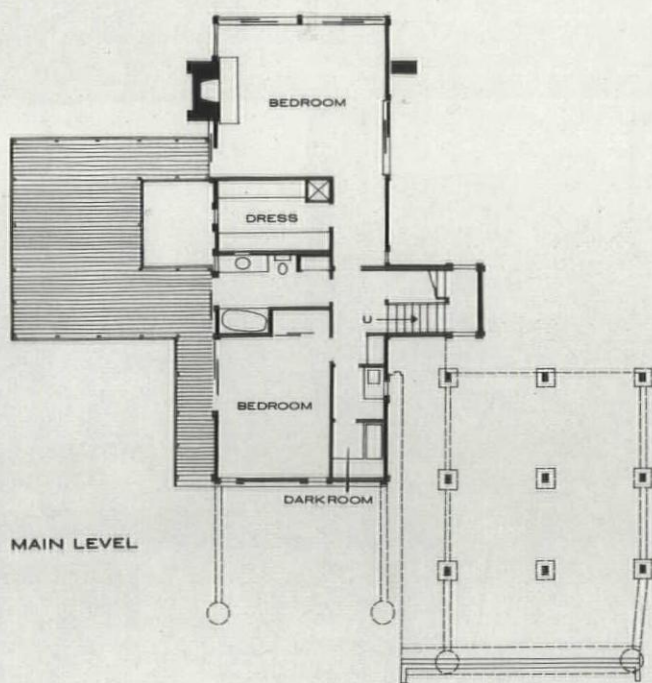
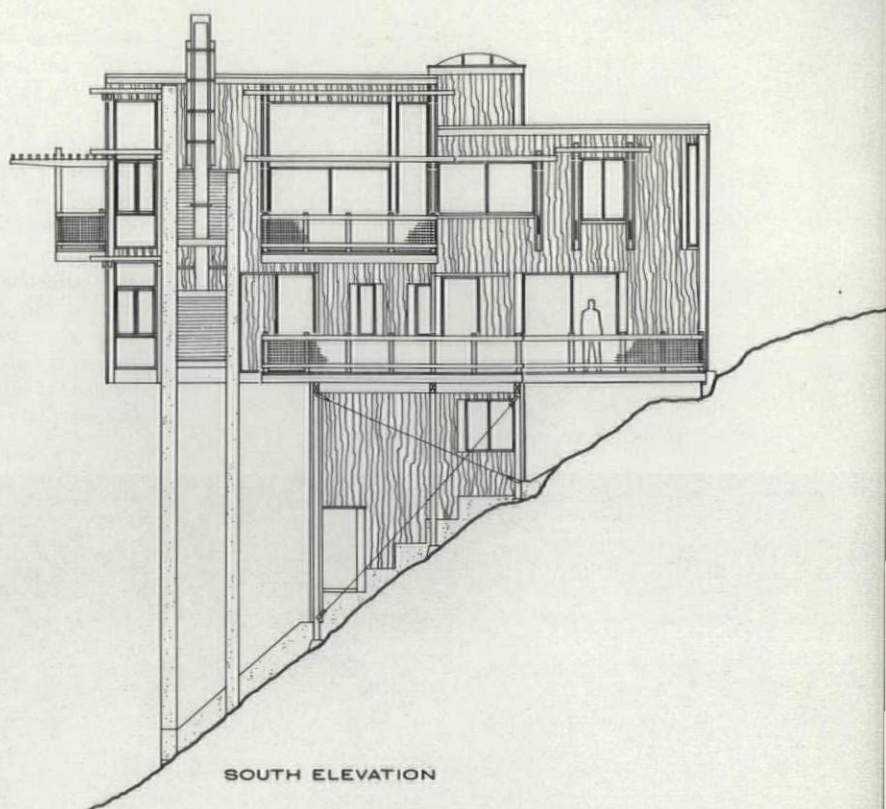


Oakland

Architects: Joseph Esherick & Associates: Joseph Esherick, George Homsey, and Peter Dodge. **Associates:** Gilbert, Forsberg, Diekmann & 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.

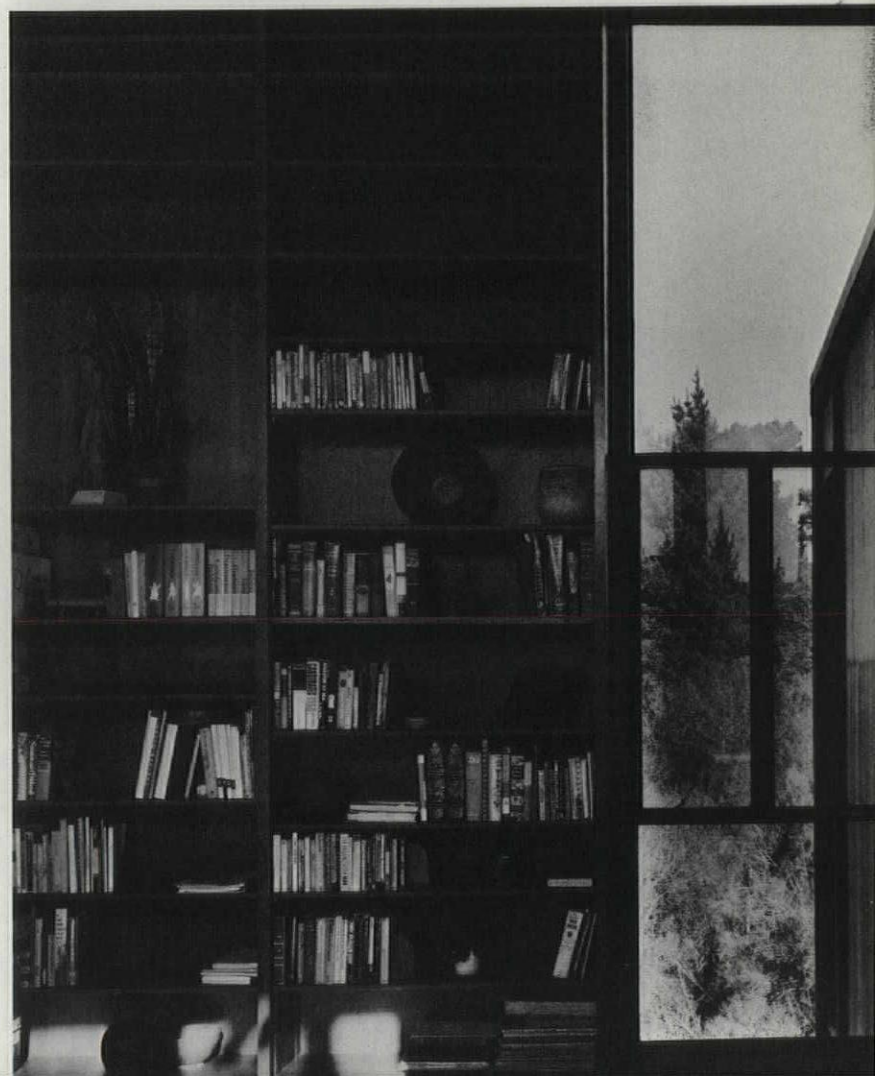
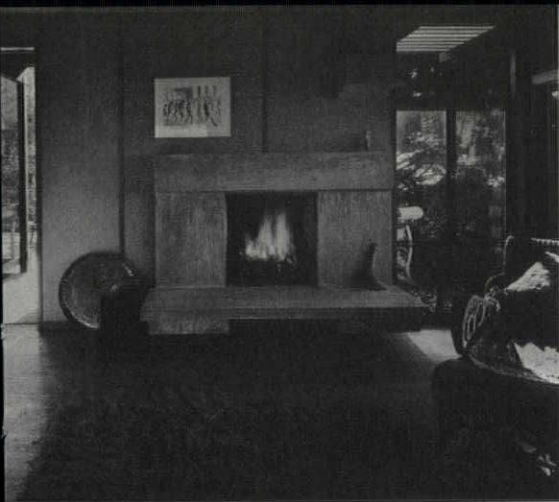


The clients are a doctor and his wife. According to Esherick, "I don't think there were any exceptional requirements." Nevertheless, he has said that "one of the biggest battles is to find out what a client really wants. Next to this, design is easy." In the early stages of conferring, he brings large 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."



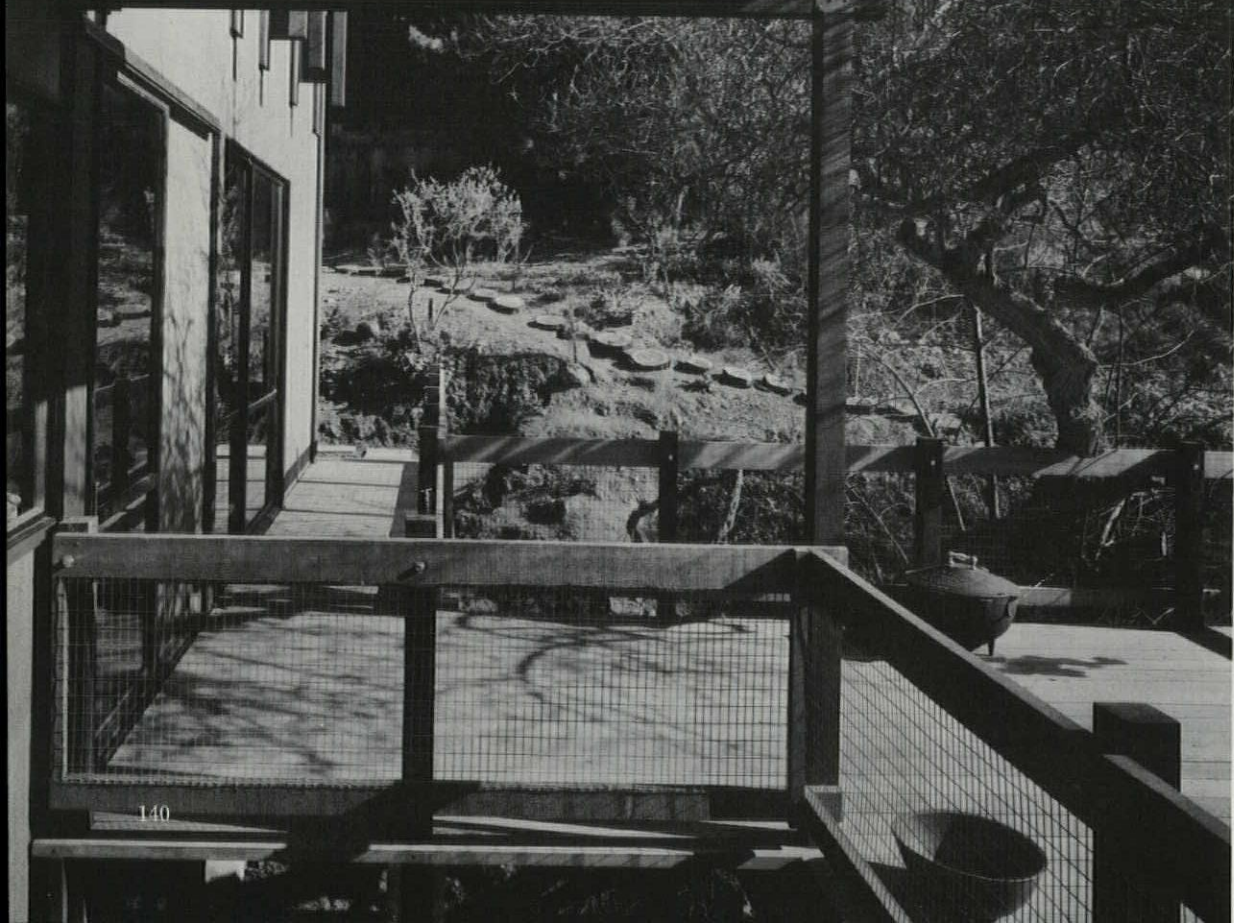
The wind is so strong at this location that "virtually nothing can be done about it except go indoors." The sun, however, has to be controlled. Much of the time, when fog cuts down the amount of sunlight, it is essential that a good balance of light be obtained in the interior; but to prevent the sun 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."







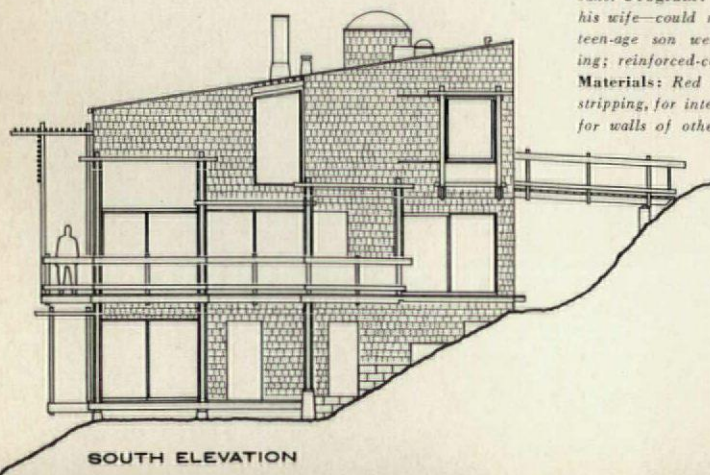
It is not permissible to build a fireplace on wood frame in the area due to very restrictive local ordinances (any fireplace has to be supported on masonry all the way to the ground). This requirement led to the idea of the large concrete bent that supports the house on the west. Materials are simple: redwood plywood, with resawn faces 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.”



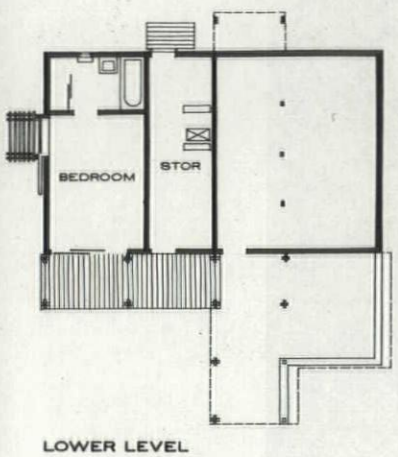
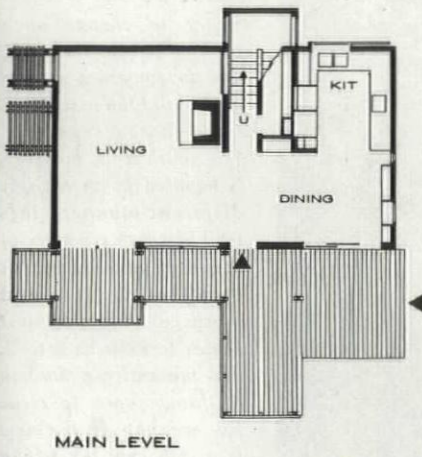
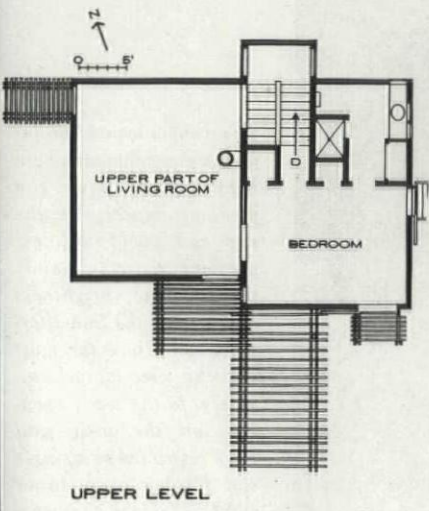





Mill Valley

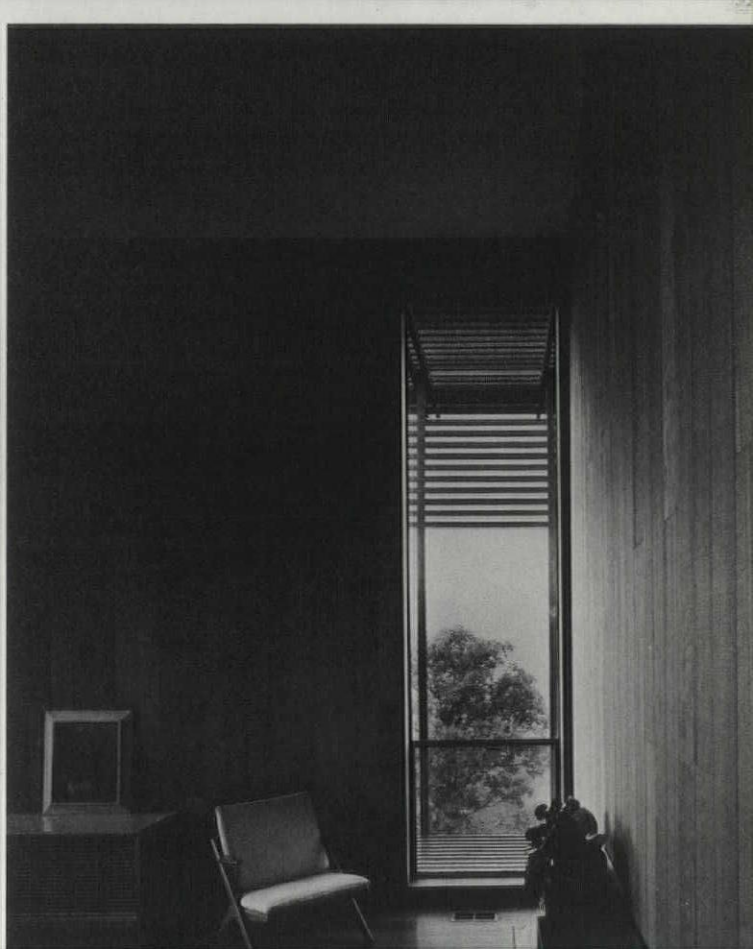


Architects: Joseph Esherick & Associates: Joseph Esherick, George Homsey, and Peter Dodge. **Associates:** Gilbert, Forsberg, Diekmann & Schmidt, Structural Engineers; Robert K. McNie, Interior Designer. **Site:** Mill Valley, California. A steep site with a fine view into the valley and up to Mt. Tamalpais. 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; resawn 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

Maybeck's 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.



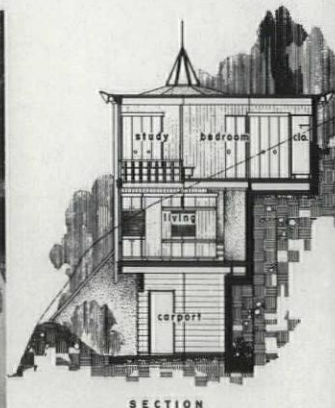


"The Private World of an Individual"

Architect: Violeta Autumn. **Site:** Sausalito, California. On up-slope 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 glue-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

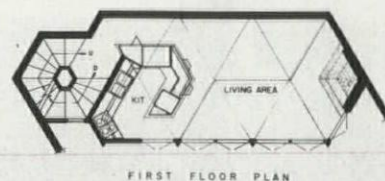
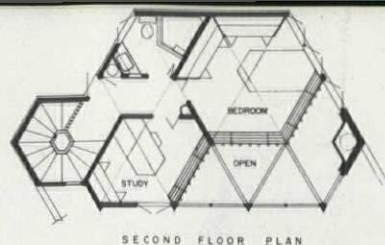


Retaining walls, necessitated by the off-street parking requirement, double as exterior walls of the three-story house. To unify the structure with the site, it has been recessed into the hill. Its native growth of acacia, scrub oak, and laurel were left untouched, and, where disturbed, encouraged to grow back.



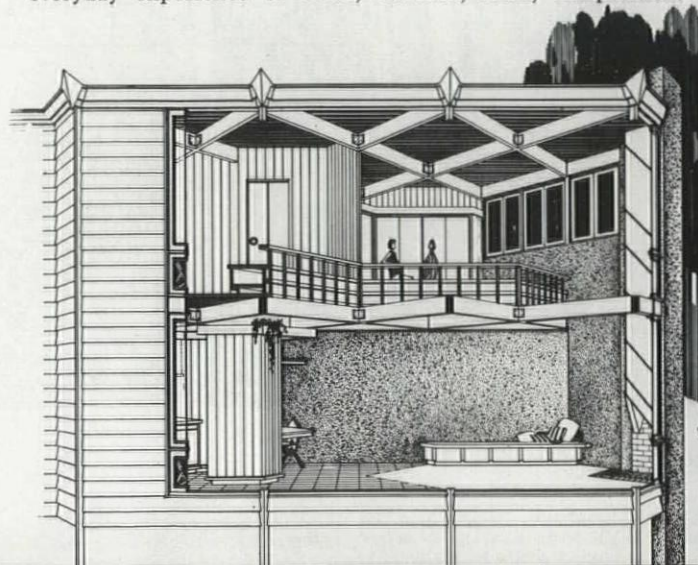


is an essential ingredient toward the real understanding of my clients and the essence of their needs, wants, and values." She sums up the qualities she believes are important in a house in these words: "A dwelling is ideally the private world of an individual, and as such must be responsive to that 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.

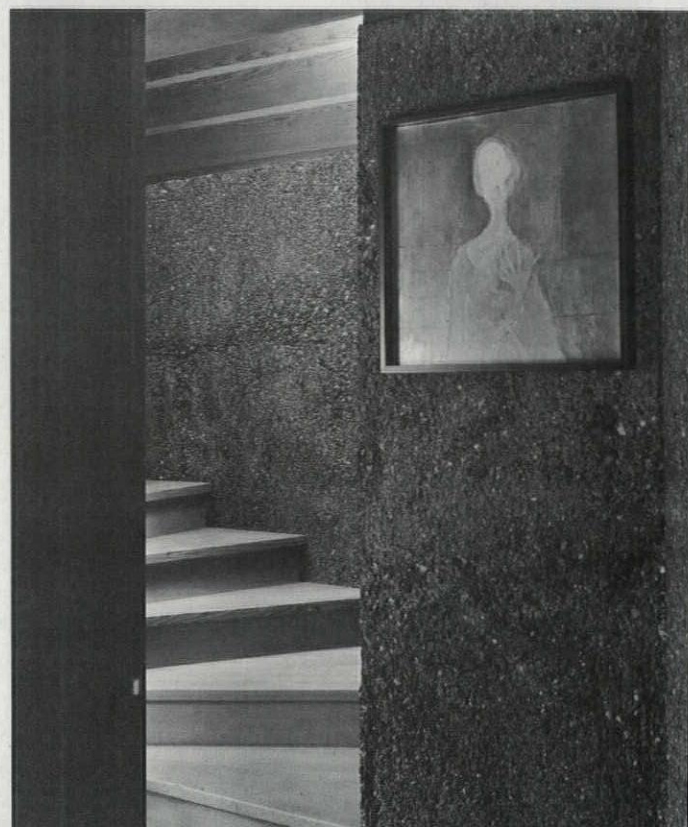
Inside, neither large floor areas nor isolated rooms were required. Instead, areas were to be provided for different activities, along with conveniently placed built-ins and storage places. Much more important to the occupants was the continuity of design, which was to carry from the free-flowing spaces 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 air-ducts for heating and ventilation. Painting at base of stair (right) is by Violeta Autumn.







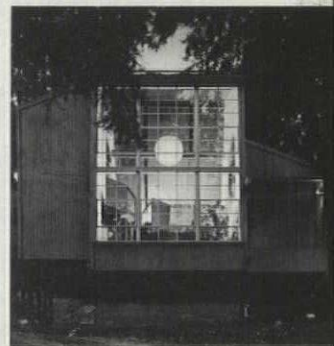
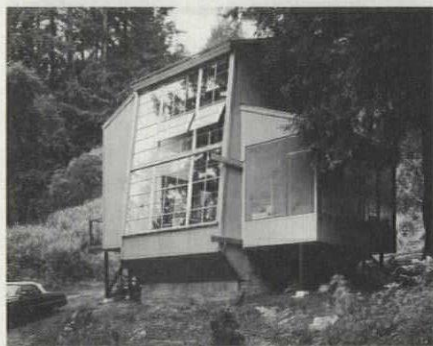
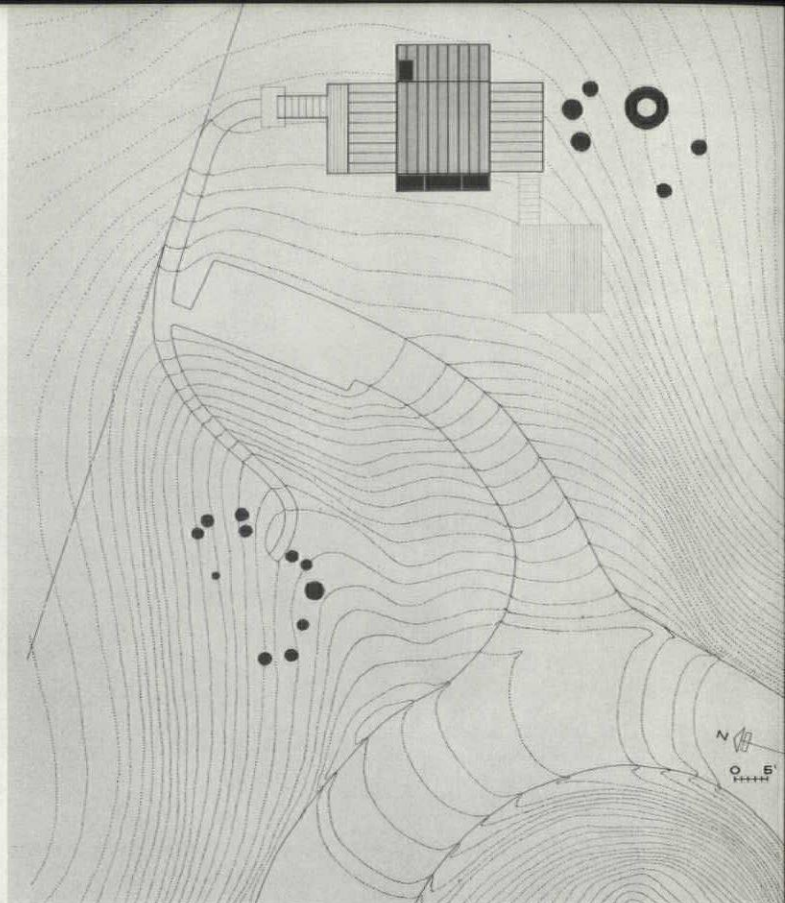
"A Special Place"

Architects: Moore, Lyndon/Turnbull/Whitaker, 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; 1/4" A-D plywood, mostly painted white, for interior wall surfacing; industrial steel sash. **Area:** 567 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 seem to be 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 outsized 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 huge sliding door to a screened porch), which in turn becomes seat height for a sunken area around the fireplace. Just above this fireplace pit, reached by a 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.

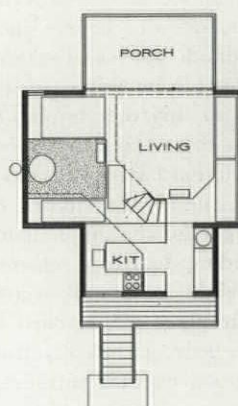
Moore explains that the firm enjoys doing houses because of "the opportunity to work out an idea well within our attention span. We are not seeking to be original in each work, but to try to learn for each job from the last, and on houses we can learn from the real thing very much sooner. . . . Though 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."

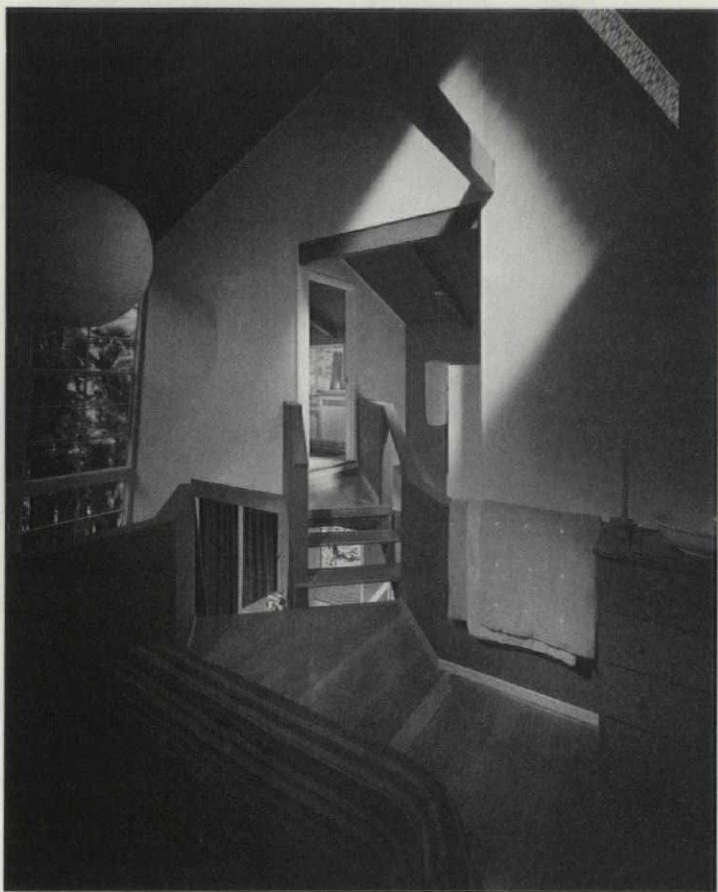
The firm of Moore/Lyndon/Turnbull/Whitaker, formed in 1962, is actually a new one to California. Donlyn Lyndon and William Turnbull Jr. received their M.F.A.'s from Princeton in 1959, where they studied with Enrico Peressutti, Jean Labatut, and Louis Kahn. Richard R. Whitaker Jr. received his B. Arch. 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.





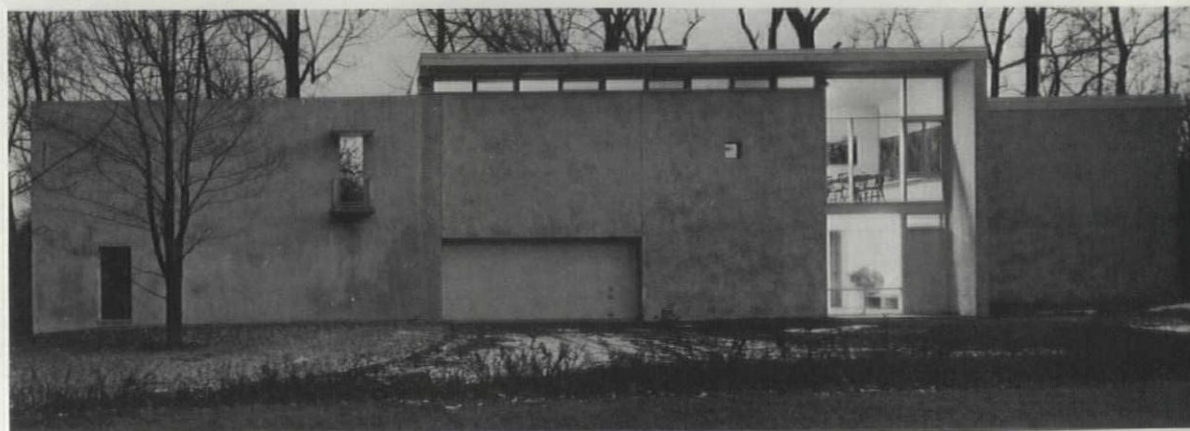
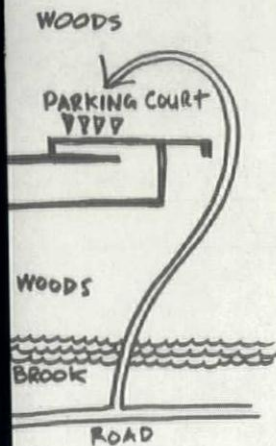
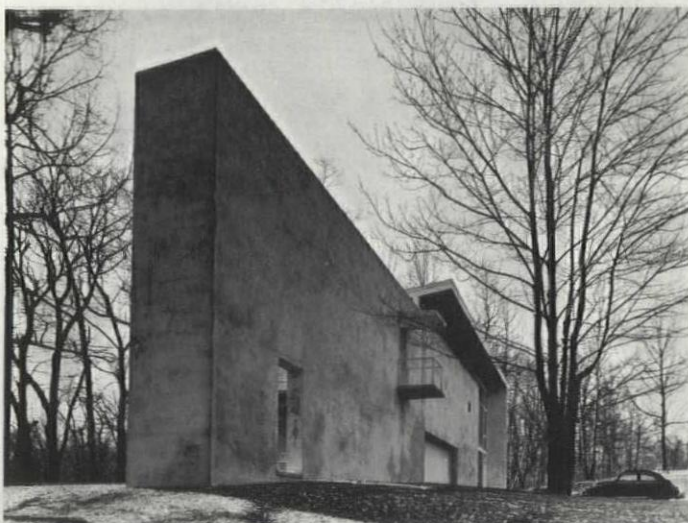


'Solid Against Transparent'

Designer: Bohdan Urbanowicz; **Associated Architect:** Barry Benepe. **Site:** Five-acre wooded hillside with brook at Bernardsville, 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 for roof and upper floor; concrete slab at ground level. **Mechanical System:** Radiant heat air circulation embedded in concrete slab; warm air through ducts and registers on upper floor; separate furnaces for each level. **Materials:** Walls, originally planned in 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. Sylwestroicz, a Polish scientist and his wife, two unusually perceptive laymen 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 one another 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, Gertzelius, 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, where they serve not only to block the north winds, but, in a sculptural way, provide a continuously changing scene of moving 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 intended, 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 except for the many colorful works of art—the gobelin by Jan Matejko 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.



Fikir! 4 Kartho - Krelida Mijet Wang 3-11-1988.
 Diny Kartho to help my big.
 Plan 12 pito glomur
 mer paterony
 pol toras.
 glomur
 nuch
 taparon
 Kuchina
 salou
 toras
 mer paterony
 pol toras
 munt solom
 Kuchina
 Hoge dmi
 mola mubina
 dno
 goner
 mpleur

Dear Barry, Very happy to have the same ideas
suspended roof and ^{light} ~~ceased~~ walls on the south side.
with interior garden (2-3 feet). Contrast between the heavy
walls and ~~light~~ ^{light} construction ~~of~~ on the south side.
~~best~~ Watch for the scale!! The smallest doors and
windows - and lowest garage-entrance. The sizes of the walls.
Best regards Boholan (Two mess).

[illegible][illegible]

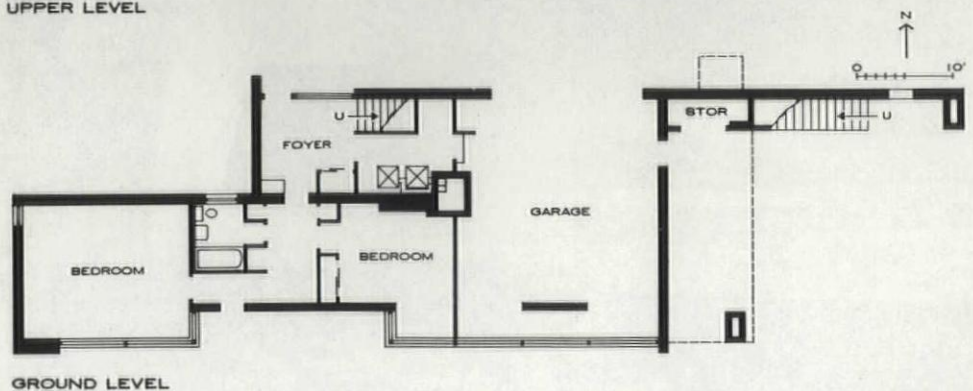
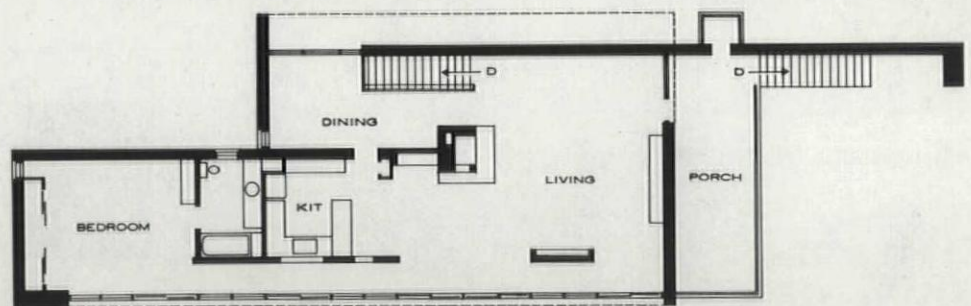
Hand-drawn architectural sketches of a building complex, likely a school or institutional building, with various labels in Polish:

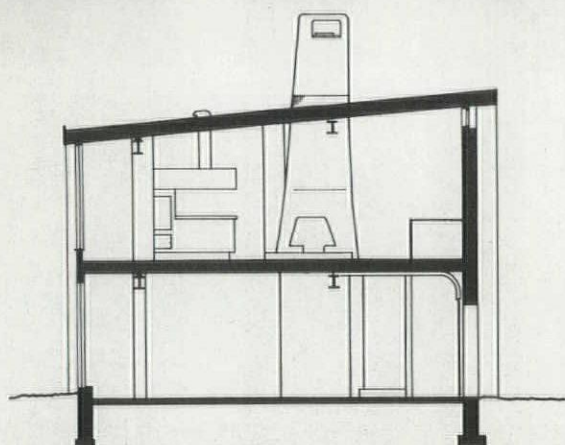
- Top Left:** "Tutaj! Pójdź do Kortky. Daję wam perspektywę wans' chodzący." (Here! Go to Kortky. I give you a perspective of the walk.)
- Top Center:** "Wykum od tarasu" (Walkway from the terrace).
- Top Right:** "dach wieżi mure - zachod" (Roof of the tower wall - west).
- Middle Left:** "Północ" (North), "garaż" (Garage), "Ciepła i ciemna mała kłona." (Warm and dark small slope).
- Middle Right:** "dach podwójny od północy" (Double roof from north).
- Bottom Left:** "murki wewnątrz" (Walls inside), "Kuchnia" (Kitchen), "Poczekalnia" (Waiting room), "Ciepła" (Warm).
- Bottom Center:** "Taras nerkowy" (Nerve terrace), "długość" (Length), "murki wewnątrz" (Walls inside), "Ciepła" (Warm).
- Bottom Right:** "dach" (Roof), "murki" (Walls), "loggia" (Loggia), "długość" (Length), "murki" (Walls), "Ciepła" (Warm).
- Far Right:** "dach" (Roof), "murki" (Walls), "Ciepła" (Warm).

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.

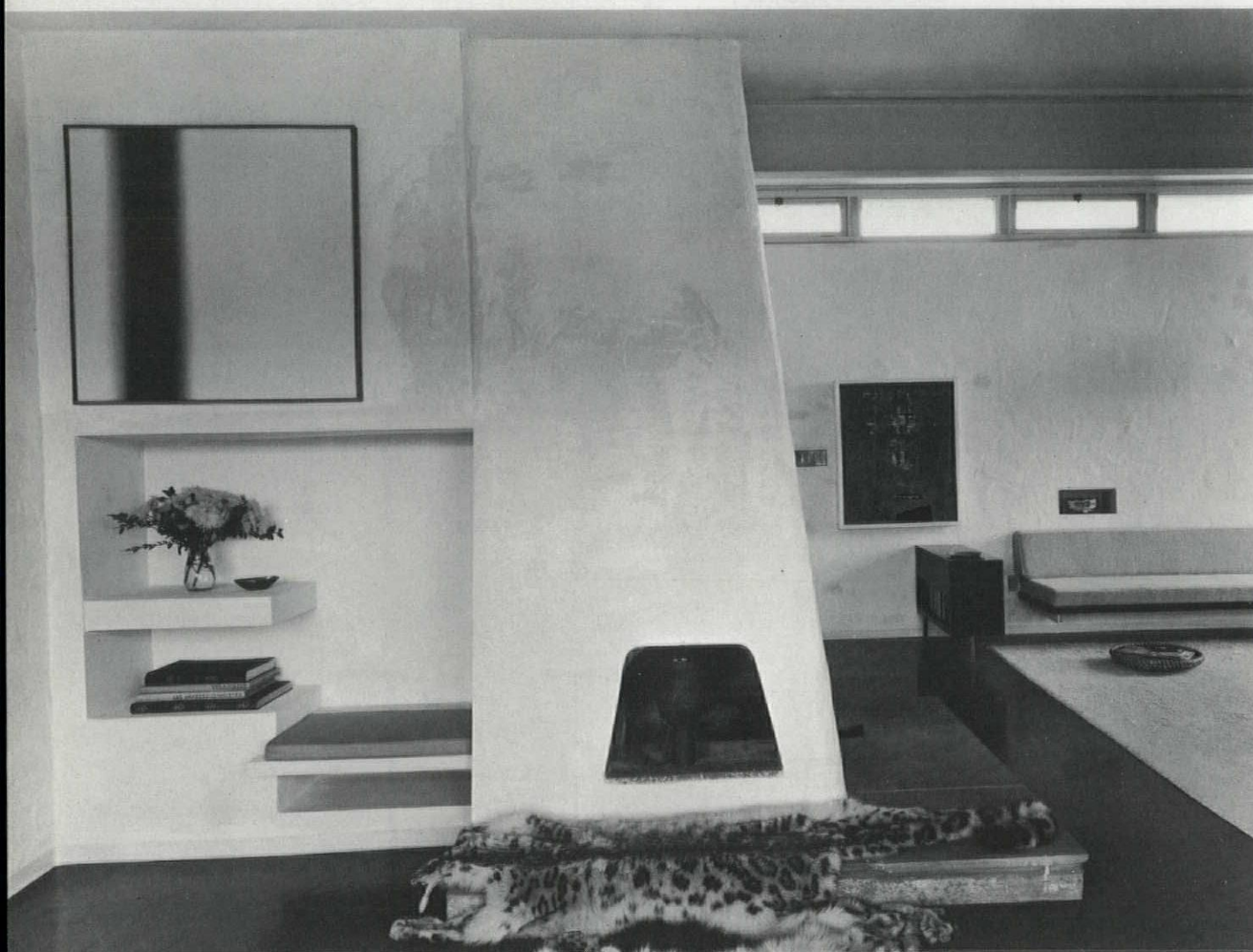
The owners' wish to live "high up" is reflected both in the siting of the house near the top of the hill, and in the two-story scheme, which places the main living quarters on the upper level; the entry hall, two guest rooms with bath, heater room and garage are at ground level.







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"

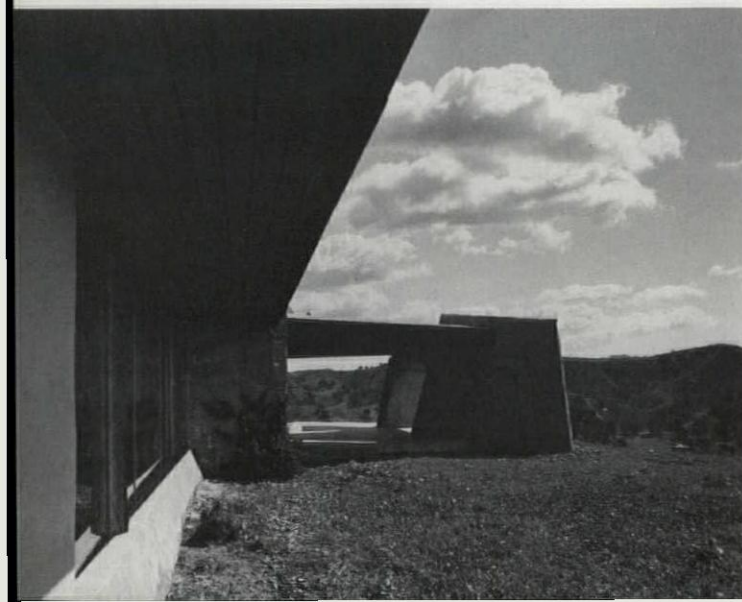
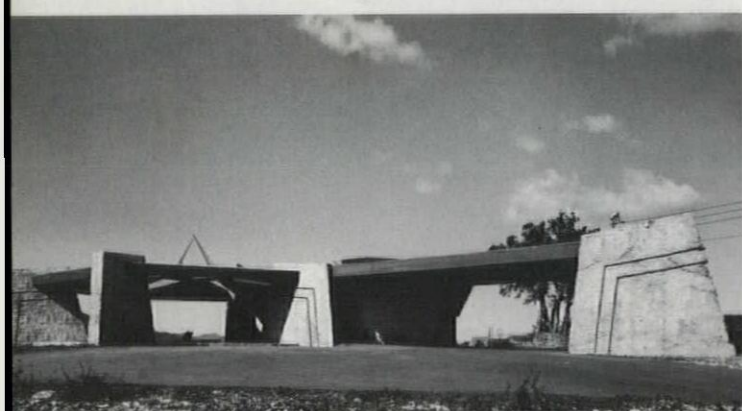
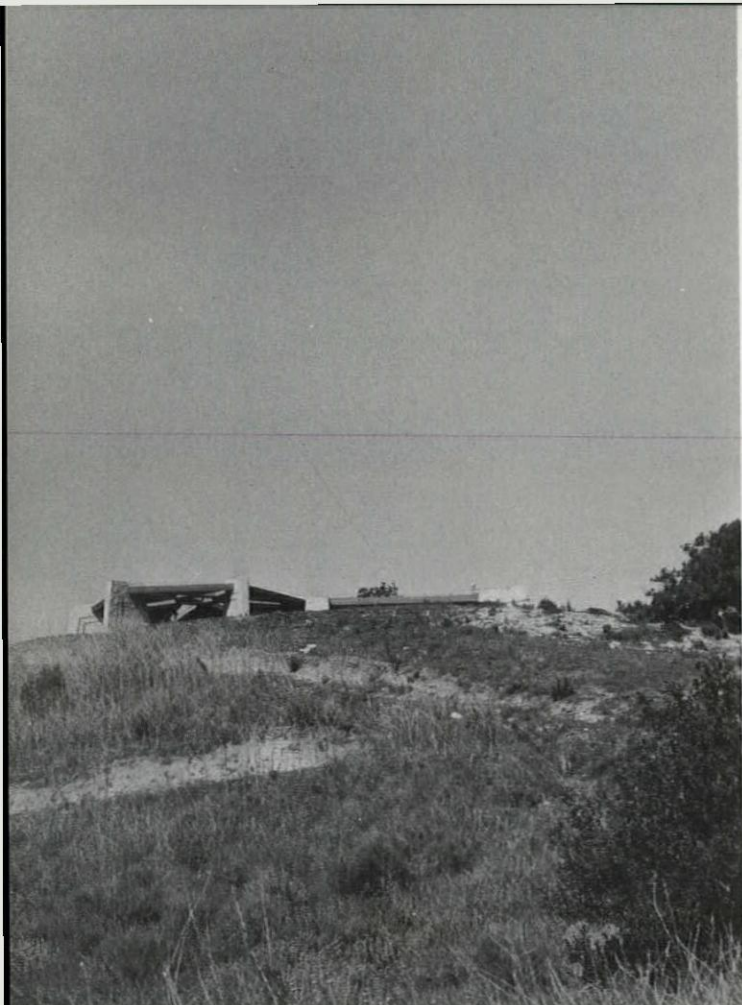
Architect: Christopher R. Wojciechowski. **Associates:** Hans G. Steinmann, Structural Engineer. **Site:** Agoura, California; small, growing community, 35 miles north of Los Angeles. House occupies knoll, bare of vegetation except for a few existing oak trees. Climate dry; hot in summer, cold in winter; Santa Ana winds in late fall and early winter. **Program:** 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.

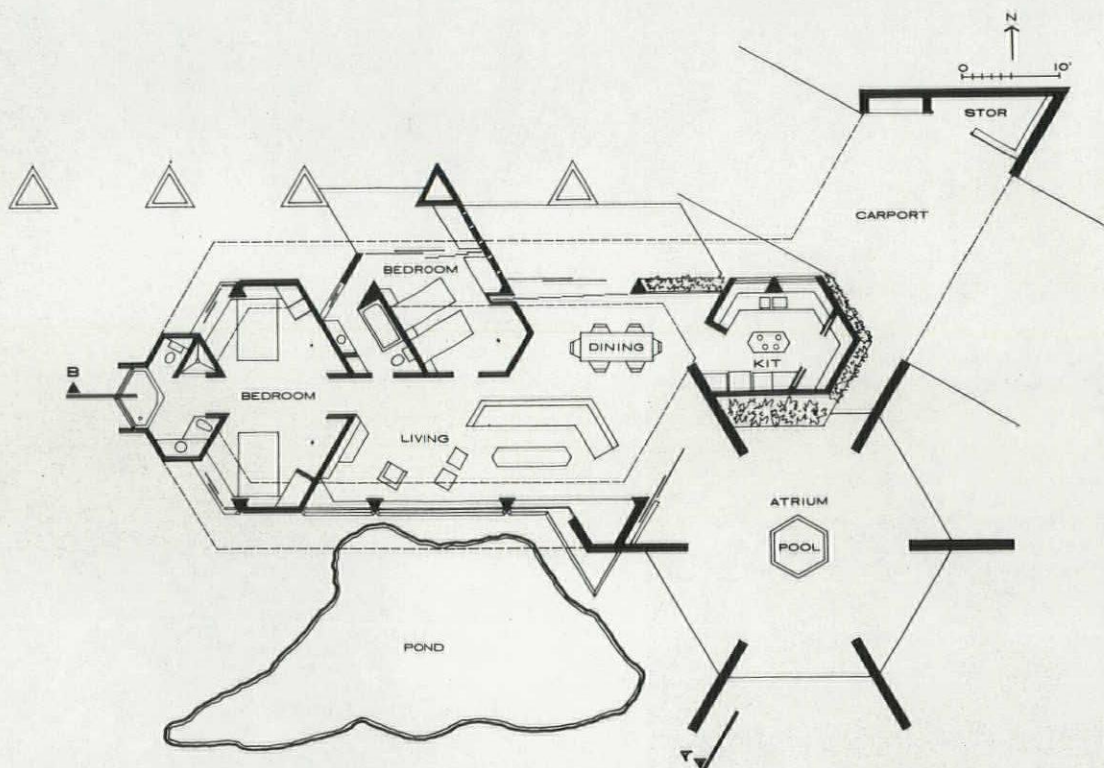
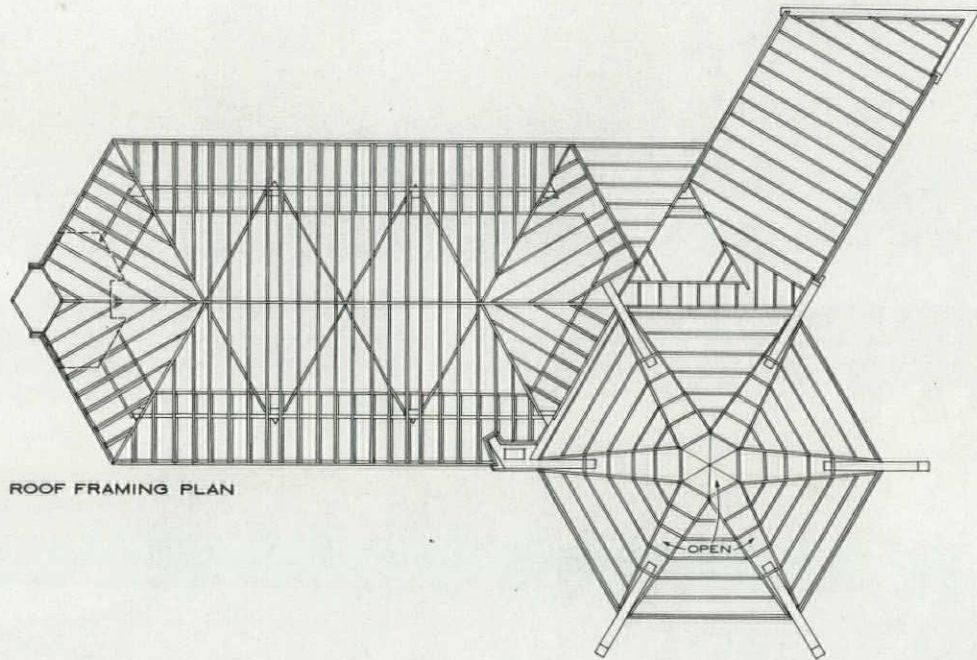
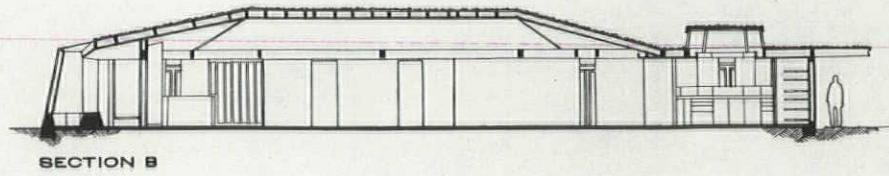
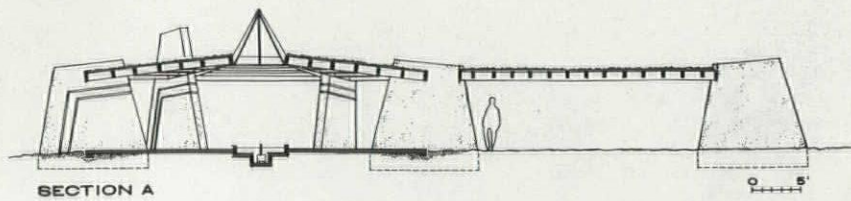
Wojciechowski, who was born in 1934 in Warsaw, Poland, received his formal architectural training from the University of Southern California, Los Angeles. "However," he says, "as I became involved in the practice of architecture soon after my graduation, I realized that to complete and to augment this 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 on 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 views 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, others are to follow, and the search for "architecture as an art form" is to continue.

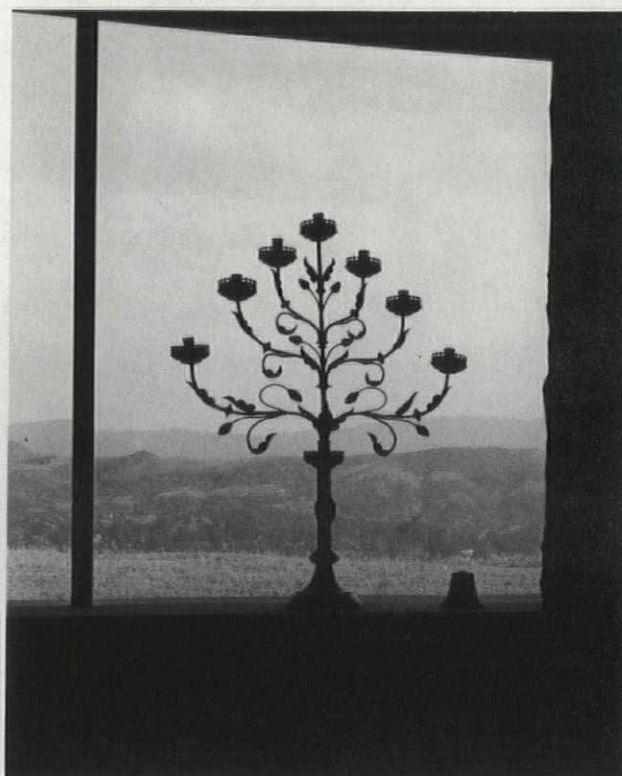








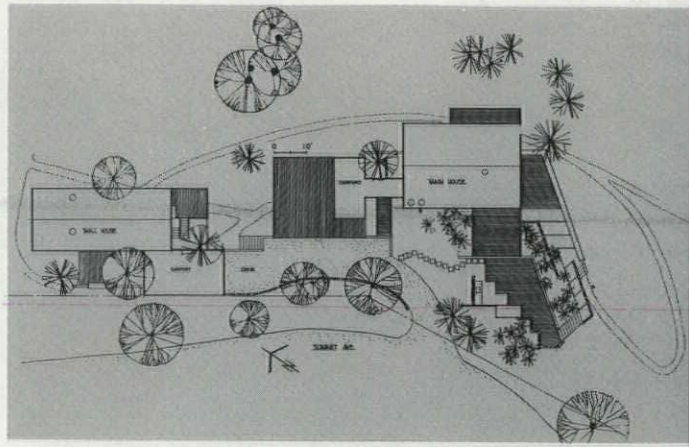
The main room is oriented to the southwest for winter sun and view, and pond serves as coolant in the summer. Triangular module, which underlies the whole design, is particularly evident in the roof ties that criss-cross the interior spaces from pier to pier at a height of 7'-6" above the floor level.







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. **Site:** 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 $\frac{1}{4}$ " plate glass and heavy sheet glass. **Mechanical System:** Gas-fueled forced air system; sheet metal ducts. **Photography:** Ezra Stoller Associates.

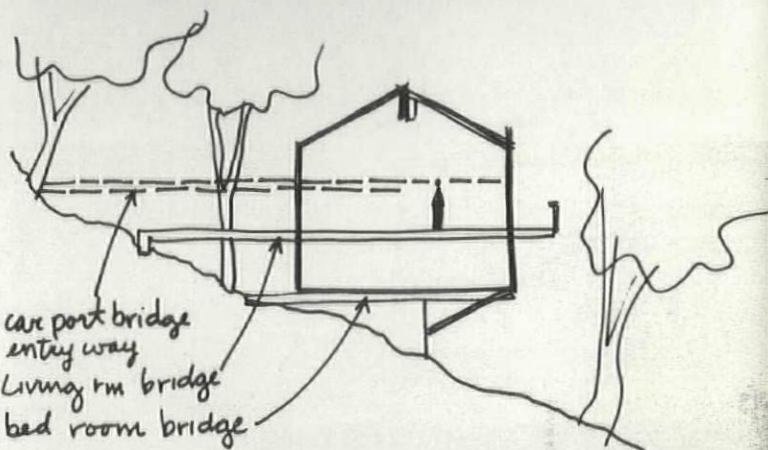
Both clients and architect are pleased with this house (main house, *site plan facing page*): the clients because "it works extremely well," the architects because "it reflects very well our design philosophy," more specifically, "the effective use of interior spaces, and the exploitation of rational 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.

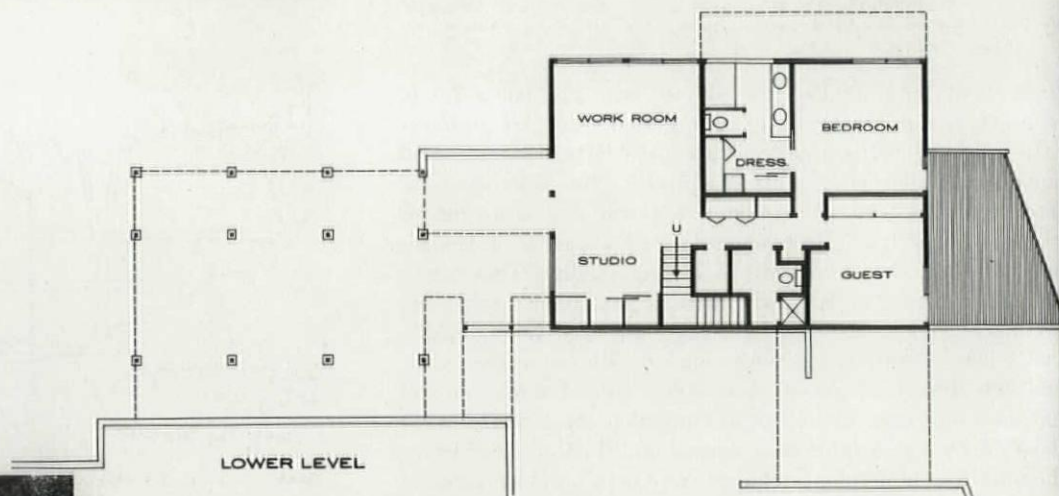
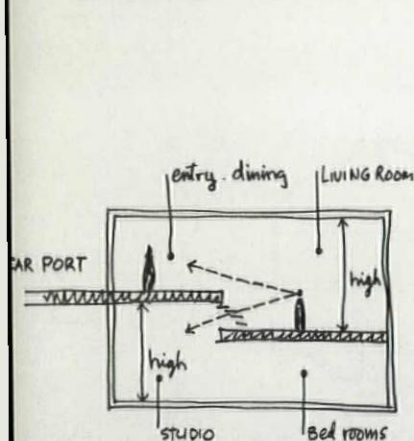
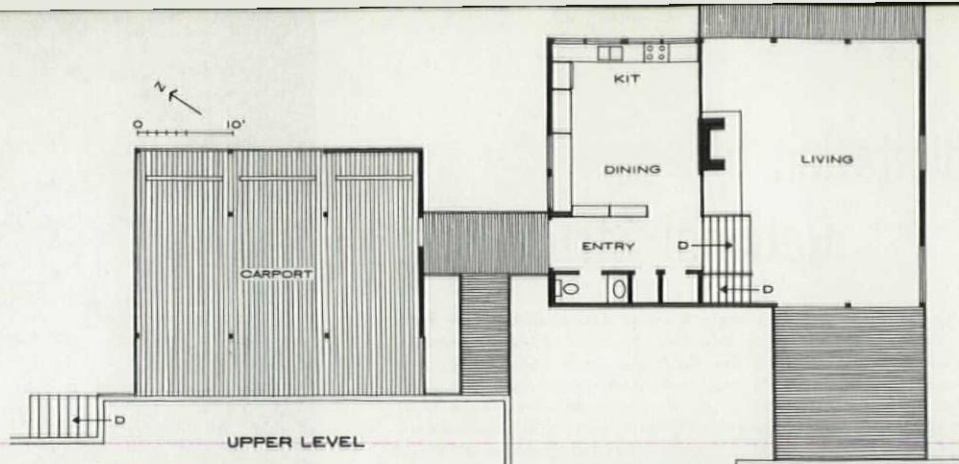
Their own steady design development has fortunately been documented over the years by many U.S. and foreign publications, and numerous honors and awards have acknowledged the seriousness of their design approach.

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

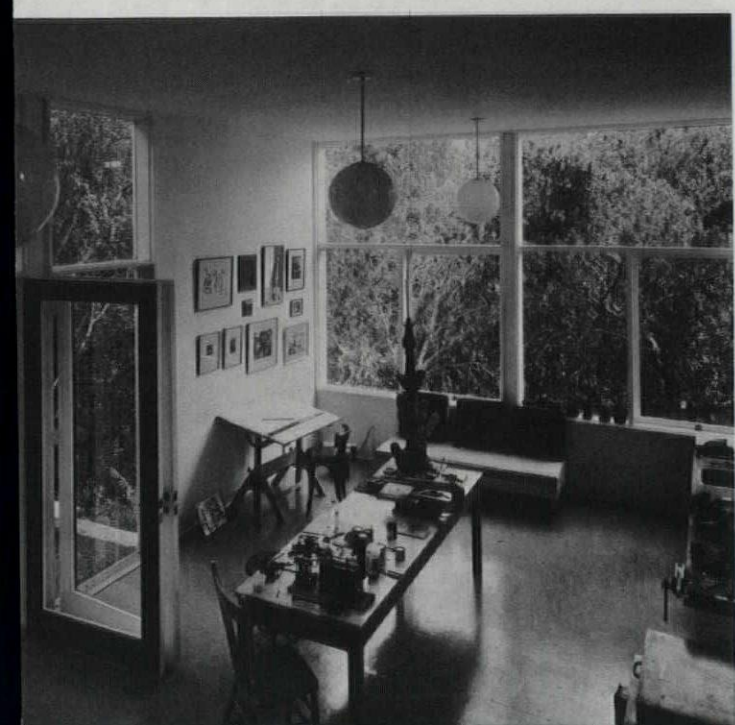


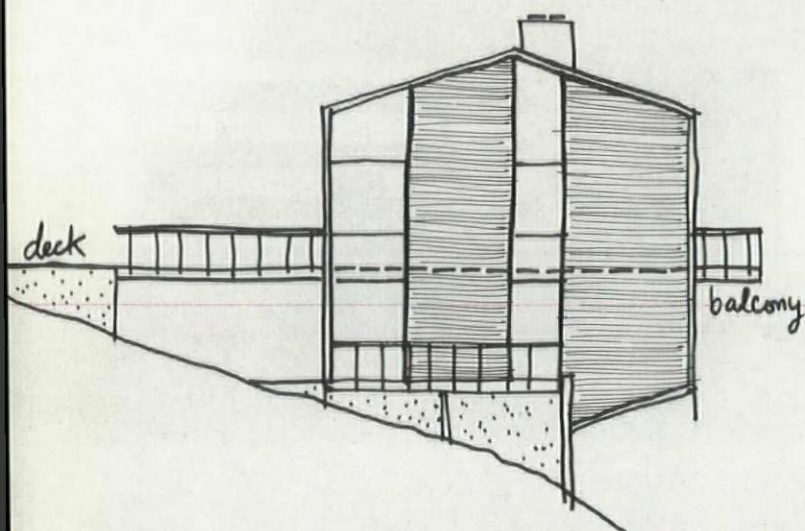


a further refinement of that idea." However, it would be difficult to disregard the charms of the Bay region and the architects fully acknowledge such influences as the anonymous California barns, Green & Green houses, the work of Gregory Ain and John Lautner (with whom Marquis worked for some time) 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."

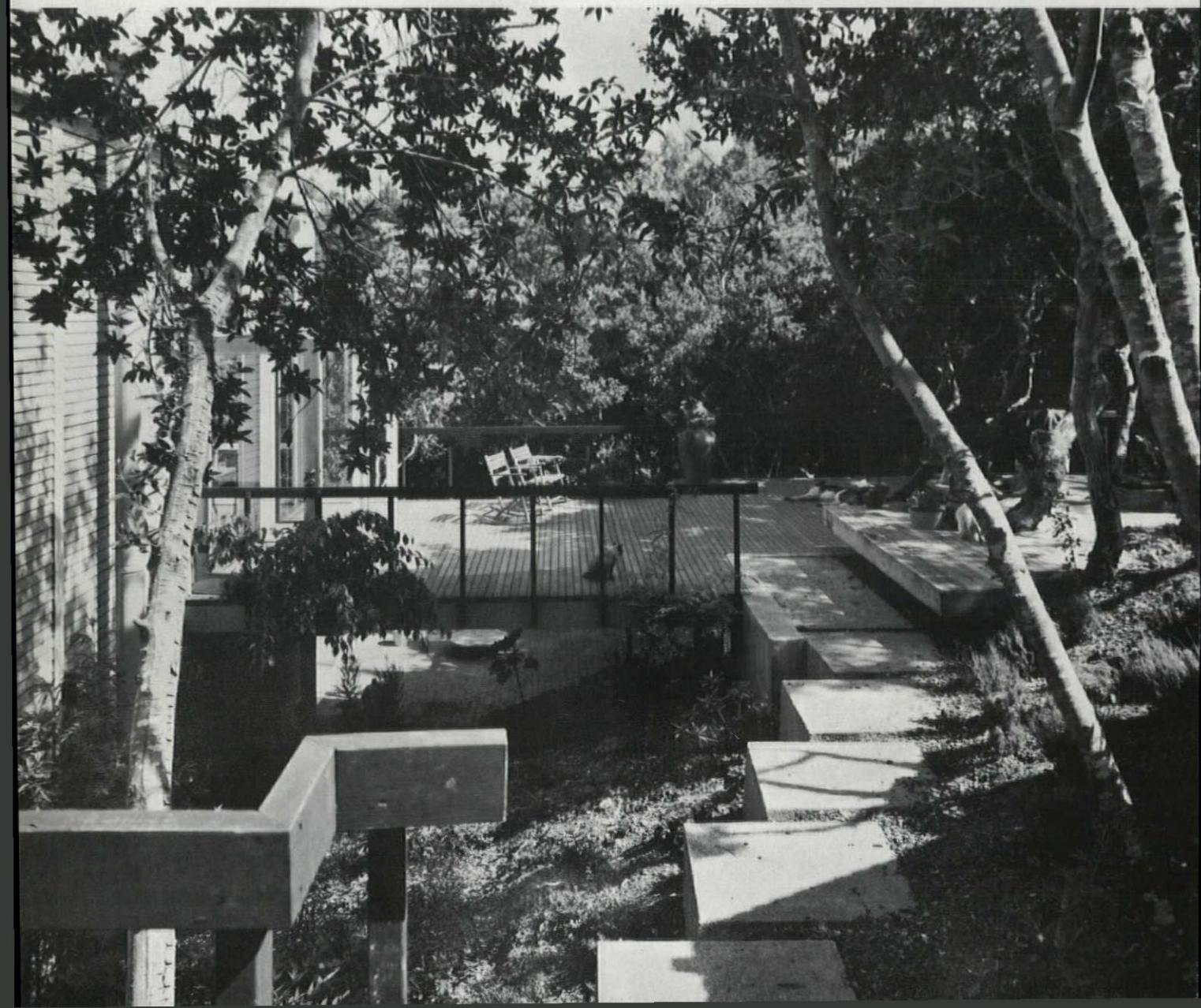
It is, of course, exactly this very personal and intense exchange of ideas between architects and their house clients which often results in the most imaginative architectural solution—a fact particularly obvious when one studies the residential work of Marquis & Stoller.





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.





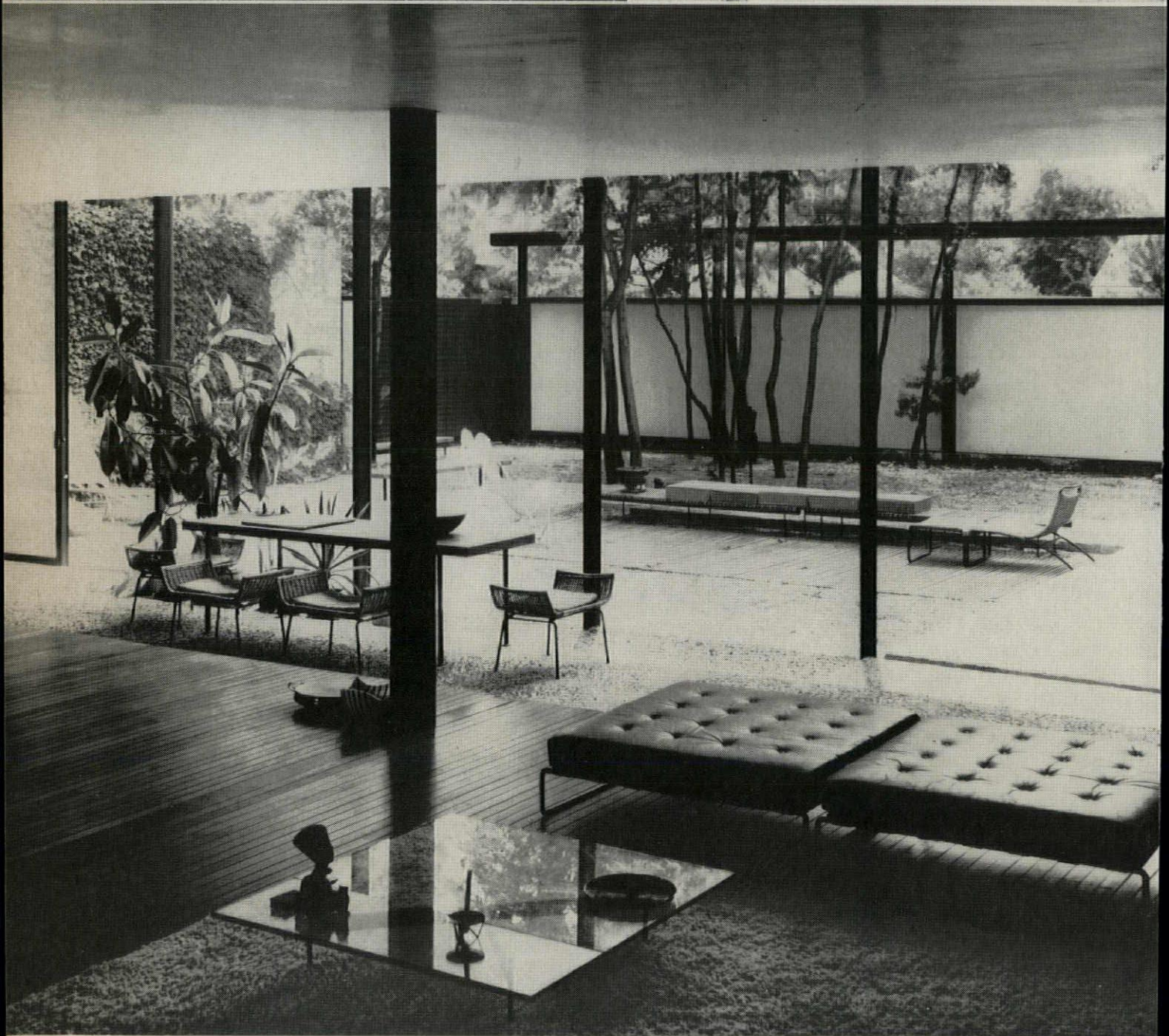
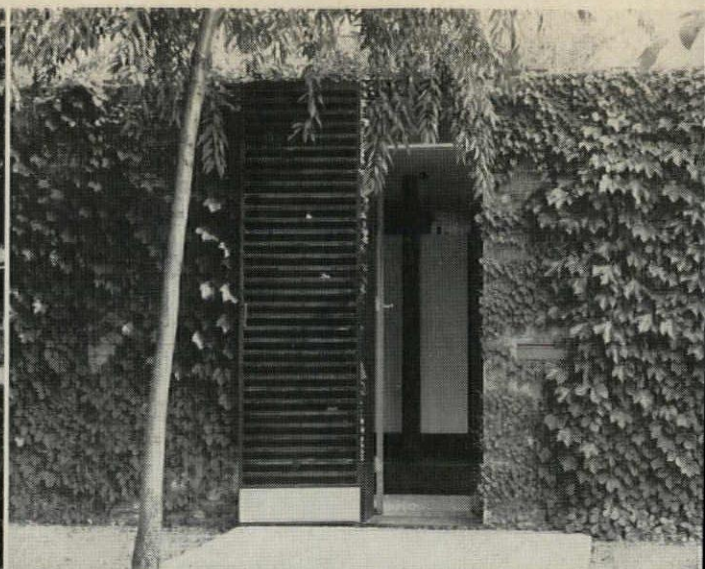
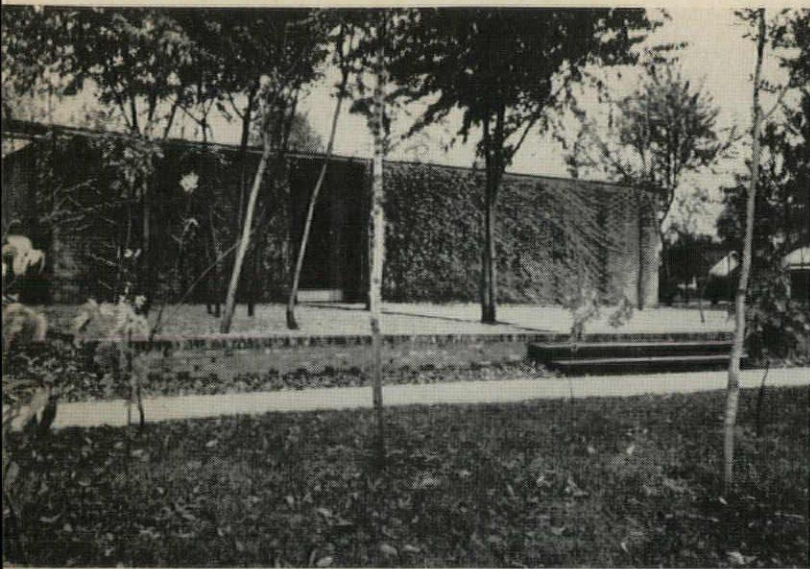


PHOTO ABOVE: RALPH M. LINE; PHOTO TOP RIGHT: GEORGE BARFORD

"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 black, for cabinet work and trim; oiled teak, for floor and core panels; white ceramic tile, for bathroom and kitchen; unpainted plaster, for ceiling; pea gravel and exposed-aggregate concrete, for paving. **Area:** 1680 sq ft. **Photography** by the 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 especially meaningful today in urban settings where there is little open space. This is a town-house situation: in effect, it is a horizontal town house."

Williams also uses the term *non-architecture*. "In a neighborhood already built up, it is always possible to achieve harmony by means of materials, form, scale. This is the usual way. But, I thought, here's a chance to harmonize by a kind of non-architecture, relying much more heavily on landscape. The trees and woods and vines erase the house."

Actually, the vine-covered exterior—making the house almost inconspicuous from the street—is very much tied to the concept of a house as a space, not as an object. To enter the house, one comes through a dense landscape, then through a tall narrow door and into a *space*. The contrast is vivid.

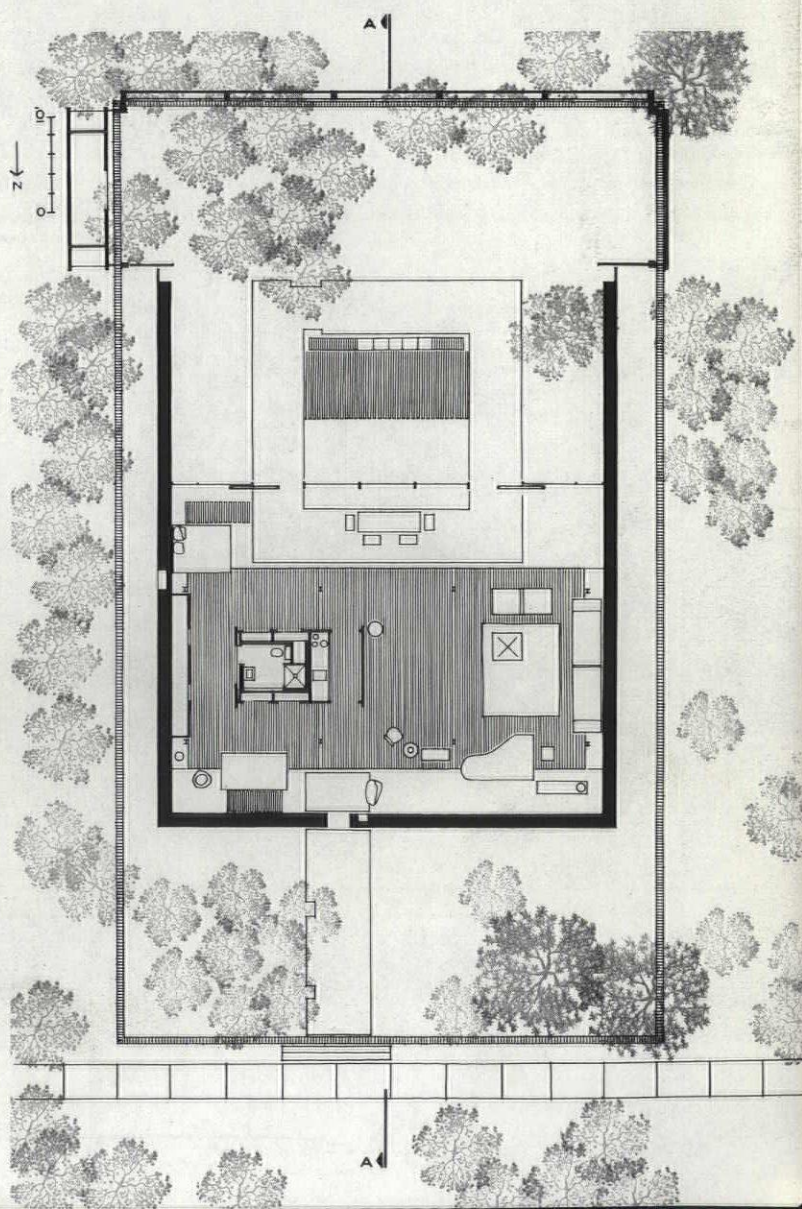
To make the most of the sense of space within the house, Williams has brought together interior and exterior in one system of enclosing walls. The interaction is intriguing, delightful to both mind and eye. Along the entire north wall, for instance, a skylight separates wall from ceiling; the wall seems to extend up beyond the ceiling; and on the wall itself, the moving shadow line creates a constantly and slowly changing composition. At the south wall, floor-to-ceiling glass brings interior and exterior into a more direct relationship, but one that is still not without its mysteries and illusions. 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.



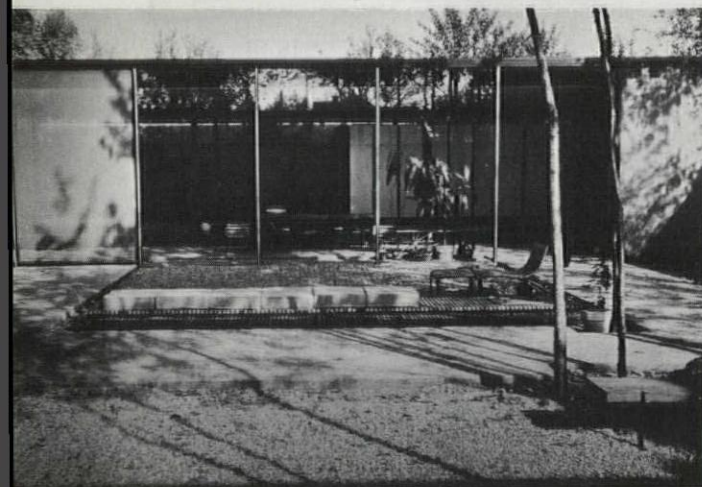


PHOTO ABOVE AND LEFT CENTER: GEORGE BARFORD

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.

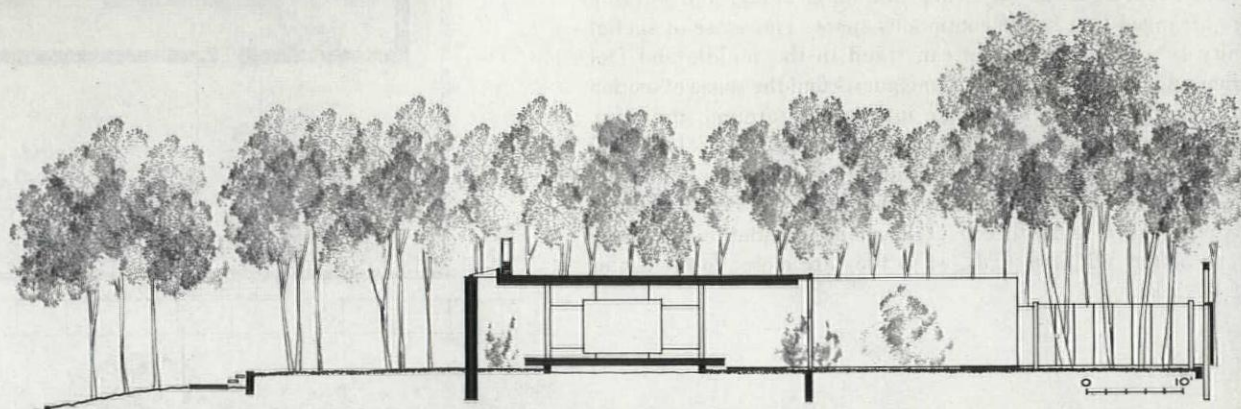
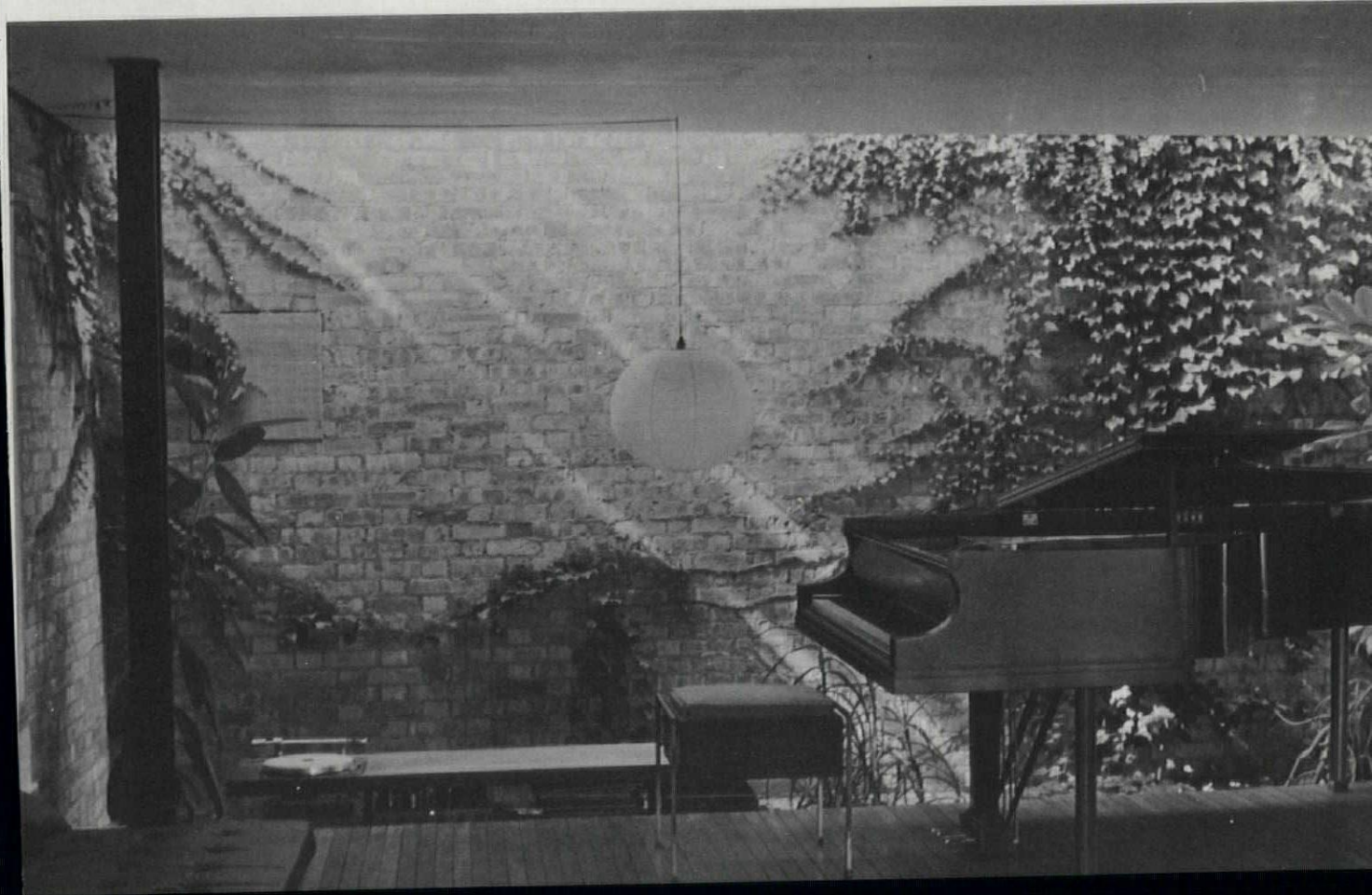
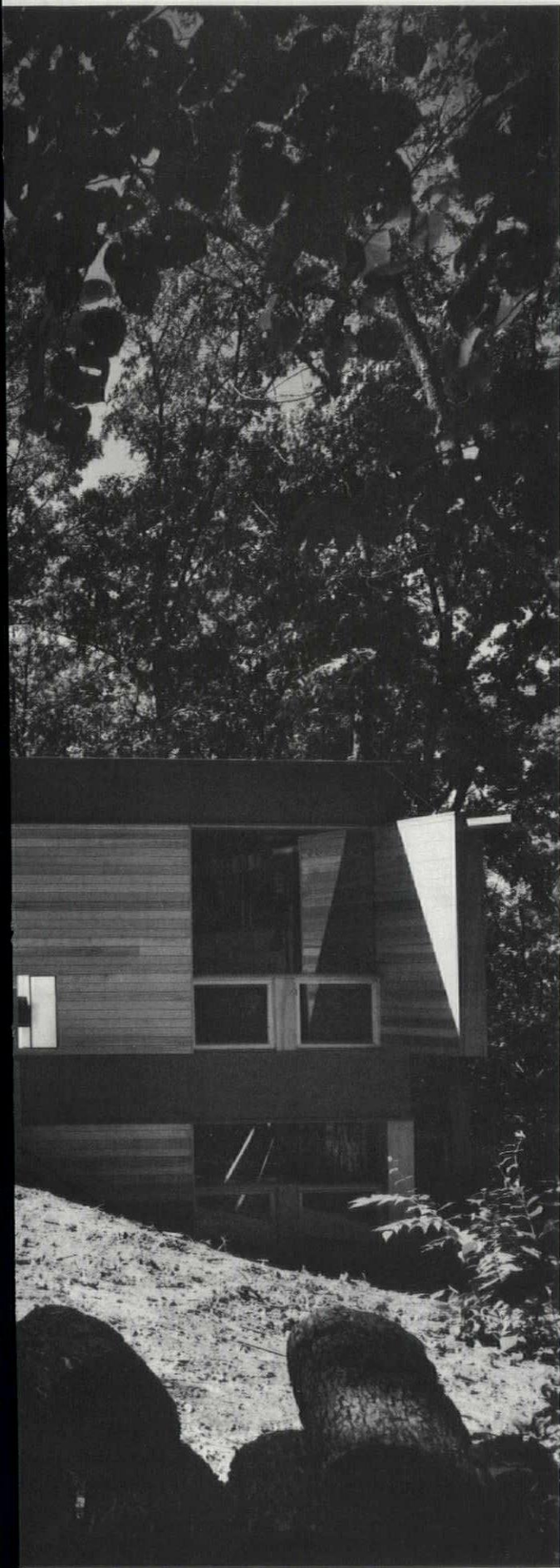




PHOTO ABOVE: RALPH W. LINE; PHOTO BELOW: GEORGE BARFORD







"An Adequate Tool for Living"

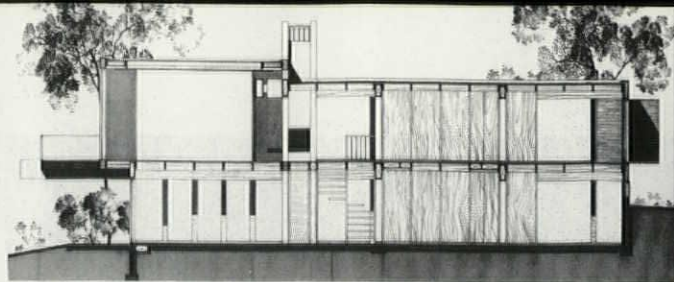
Architects: Crites & McConnell. **Associates:** Richard G. Whiteaker, Mechanical Engineer. **Site:** Cedar Rapids, Iowa. One of 17 heavily wooded sites in a 22-acre tract. The site lies high above its surroundings, and gives a long view across the valley. Despite its country landscape, the area is contiguous 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 sizeable 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.

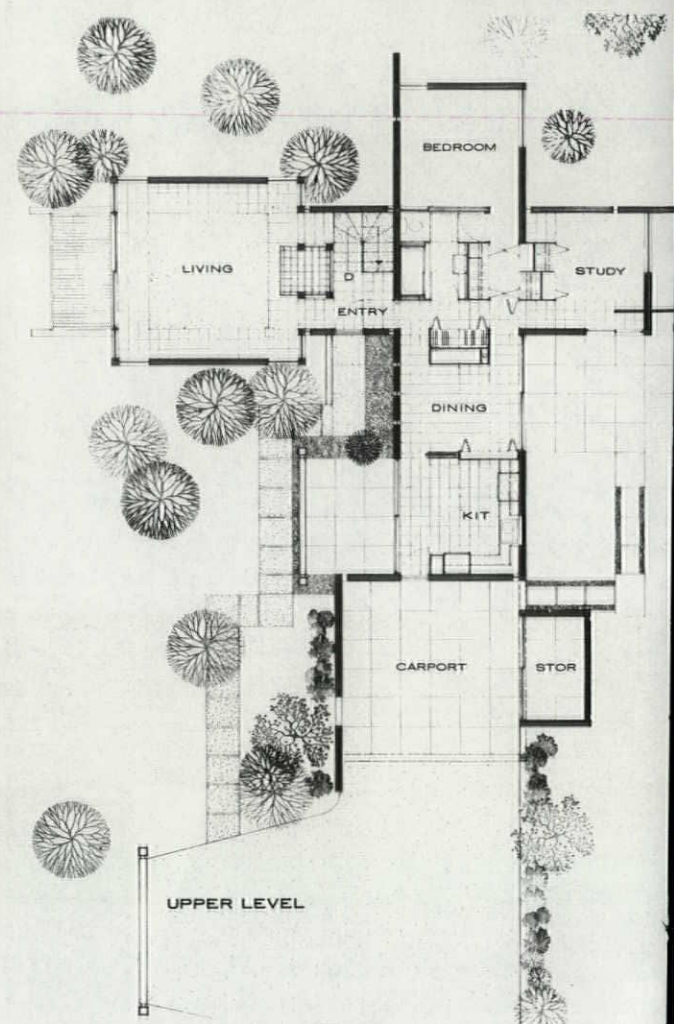
One of the main challenges of this job, Crites says, is to respect and preserve the natural beauty of the area. With considerable sensitivity, he has sited this house so that it makes the most of its forest environment—disturbing the woods as little as possible (the land around the residence has been 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.

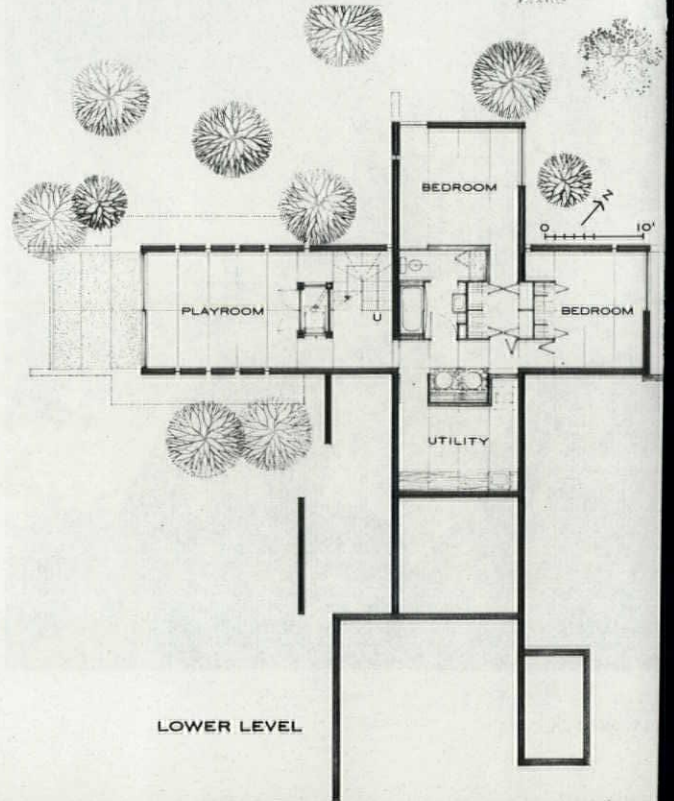
But beyond clarity of organization, comfort, and "liveability," Crites wants a house to have "a reasonable excitement." The design idea in this house is a strong one: the exposed beams start from door height, scaling the interior down to within a foot above the average height of an adult. Originally, 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



SECTION A



UPPER LEVEL

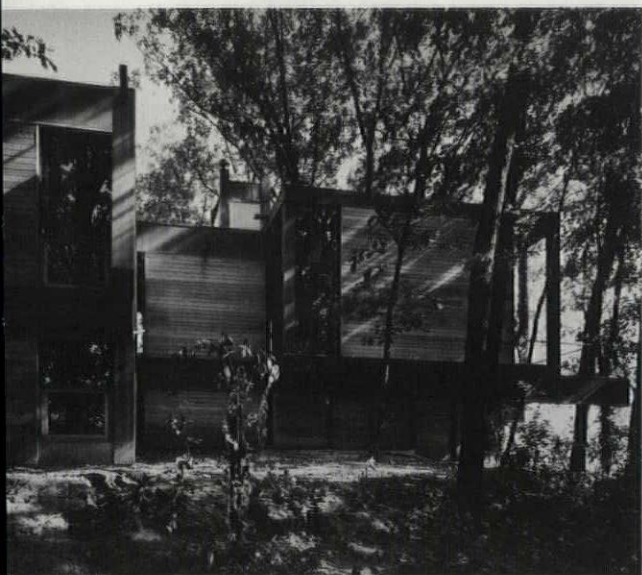


LOWER LEVEL

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"

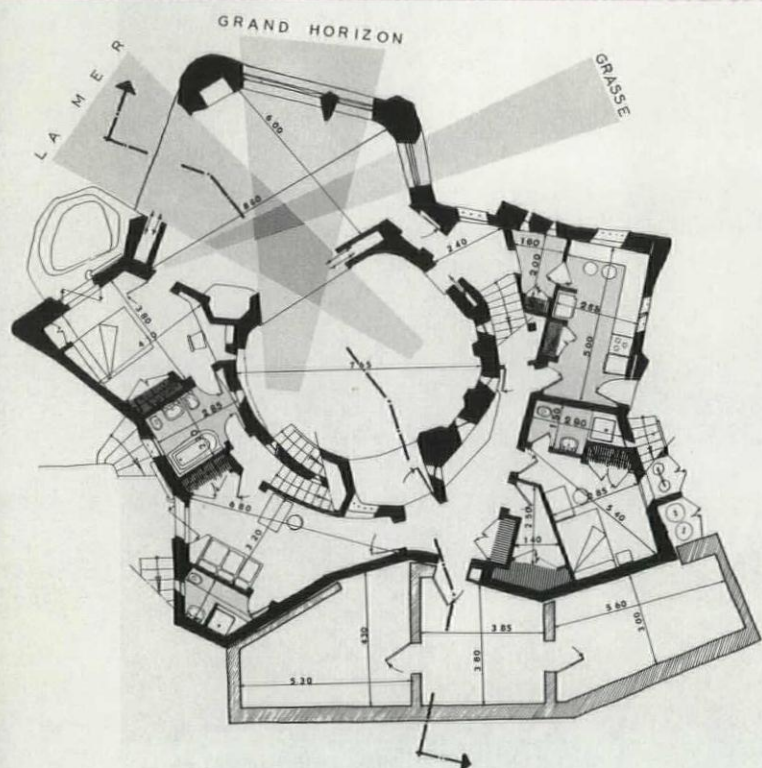
Architect: Jacques Couelle. **Site:** Castellaras-le-Neuf, Alpes-Maritimes, France. A hilly site above the beaches of Cannes, with spectacular views of the sea, Grasse, and the surrounding mountains. The land is sparsely wooded, and covered with lavender, thyme, and gorse. **Program:** A development 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 Château," 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 bank, 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 for 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 Gaudí



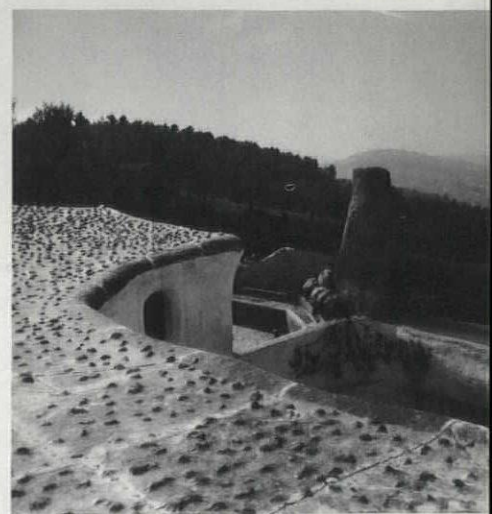
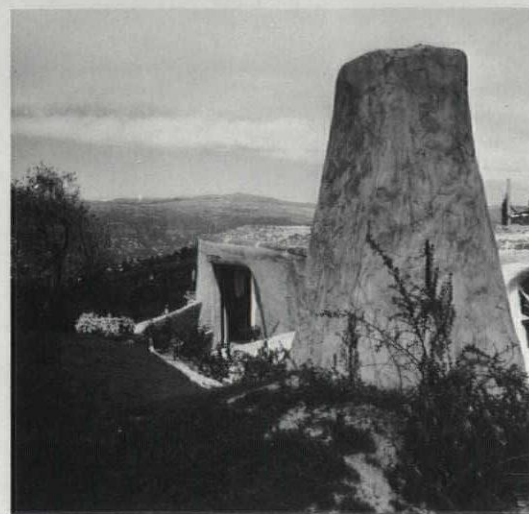
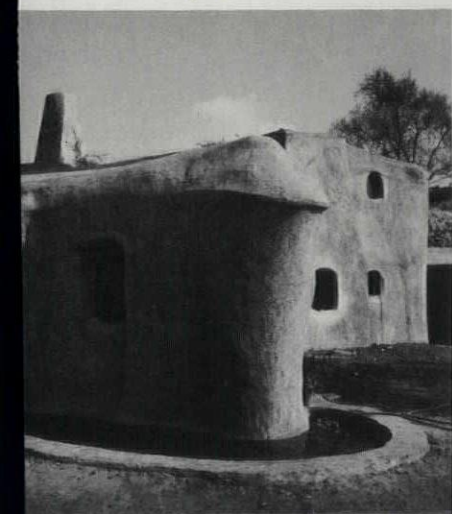
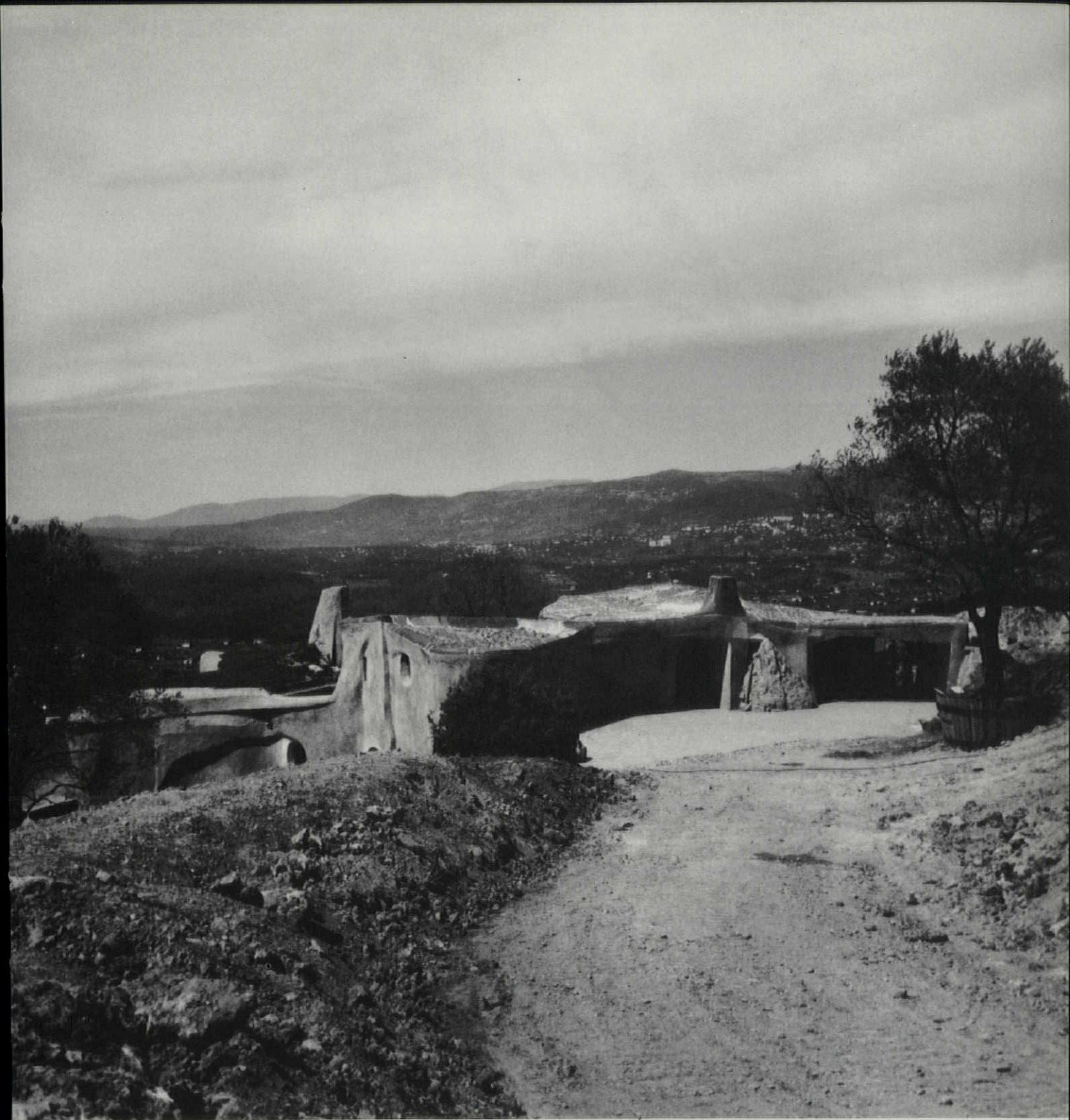
are striking—the same undulating surfaces and freely shaped openings, the same sense of the organic, the playful, the grotesque. Couelle, looking to nature for inspiration, has learned from the relation between form and function to be found in the simplest organisms and plants. He has said that “the 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.) Gaudí’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 Gaudí, 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 Gaudí’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 strictly 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 medieval 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."





Heating by Light

BY WILLIAM J. MCGUINNESS

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 Btuh). 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 8000 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 $66,000 \text{ w} \div 8000 \text{ sq ft}$ —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 main-

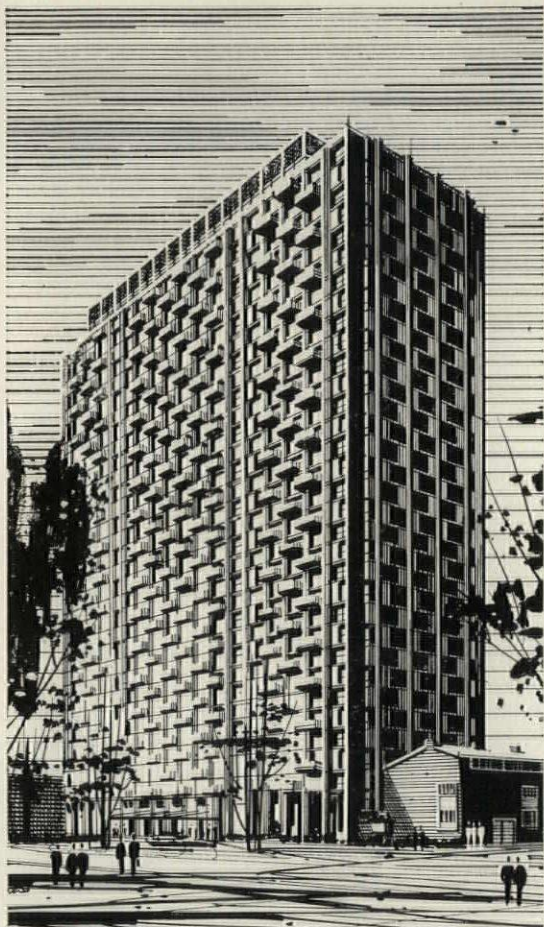
tain the ideal ambient temperature for the most efficient fluorescent lighting. This is done by ventilating the lighting plenum directly with fresh outdoor air and "dumping" the excess heat into the outdoors.

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.



HAUGHTON ELEVONICS*

Brings TOTAL ELEVATOR AUTOMATION to Philadelphia's Newest Prestige Apartment . . . HOPKINSON HOUSE

Total Elevator Automation at luxurious new Hopkins House means that elevator availability is matched precisely to traffic demand 'round the clock.

A remarkable new automatic computer-control system, created by Haughton Elevonics, constantly monitors traffic demand . . . and relays calls for service instantly to the car-control system in the elevator machine room. Response is immediate. Thus, elevator service is never more than just a few seconds away on any of Hopkins House's 34 floors. What's more, the ride is a revelation in velvety smoothness and quiet comfort.

Include Haughton **Total Elevator Automation** in your plans for building or modernization. Ask your Haughton Sales Office (listed in the Yellow Pages) to consult with you, or write to us.

HAUGHTON ELEVATOR COMPANY
Division of Toledo Scale Corporation
Toledo, Ohio 43609

Hopkinson House Apartments
Washington Square South, Philadelphia, Pa.
Winner in 1963 of the AIA Philadelphia
Chapter Award for finest design in
residential structures, Philadelphia area

Architect: Stonorov & Haws,
Architects Building, Philadelphia.
Builder: R. M. Shoemaker Company—
Hopkinson House, Inc.
245 South 24th Street, Philadelphia,

* Haughton's advanced program in systems research and engineering, with specific emphasis on the creative application of electronic devices and instrumentation for betterment of systems design and performance. Registered in U.S. Patent Office.

For more information, turn to Reader Service card, circle No. 339



Weather Stripping

BY HAROLD J. ROSEN

Recommended practices for weather stripping at heads, jambs, 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 & Gruzen, 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 rabbets, 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 cold 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).

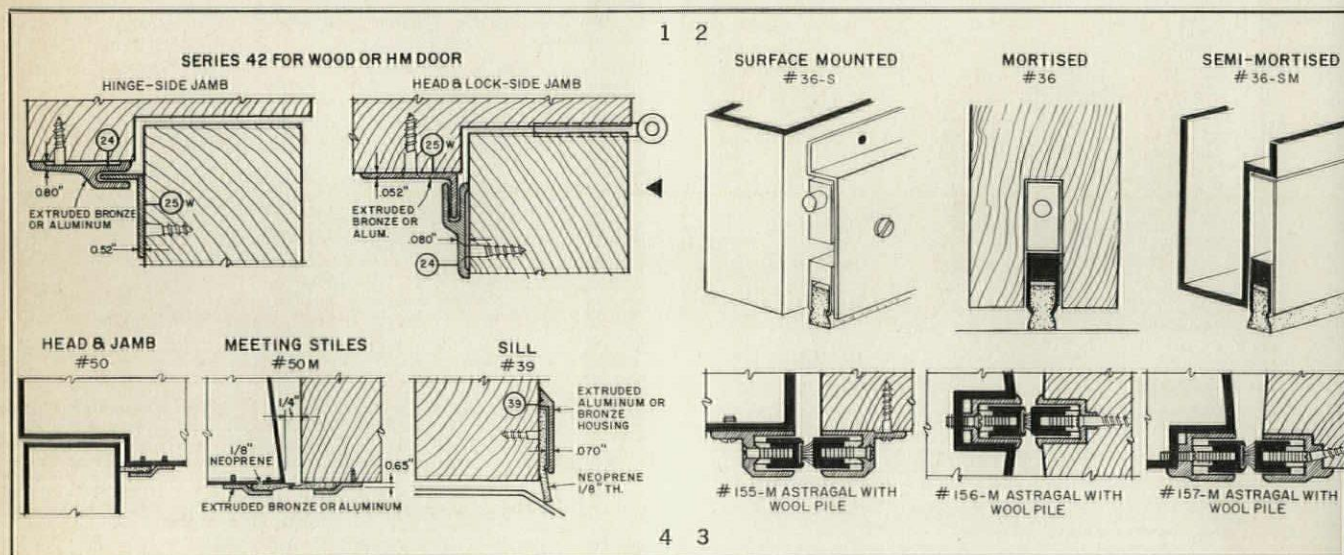
For proper seals at sills of exterior doors, interlocking saddles are recommended. There are many types on the market to suit almost any condition. A surface-applied angle strip of extruded bronze or aluminum is quite satisfactory; a flexible sill hook of aluminum, bronze, or zinc is also available. 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).

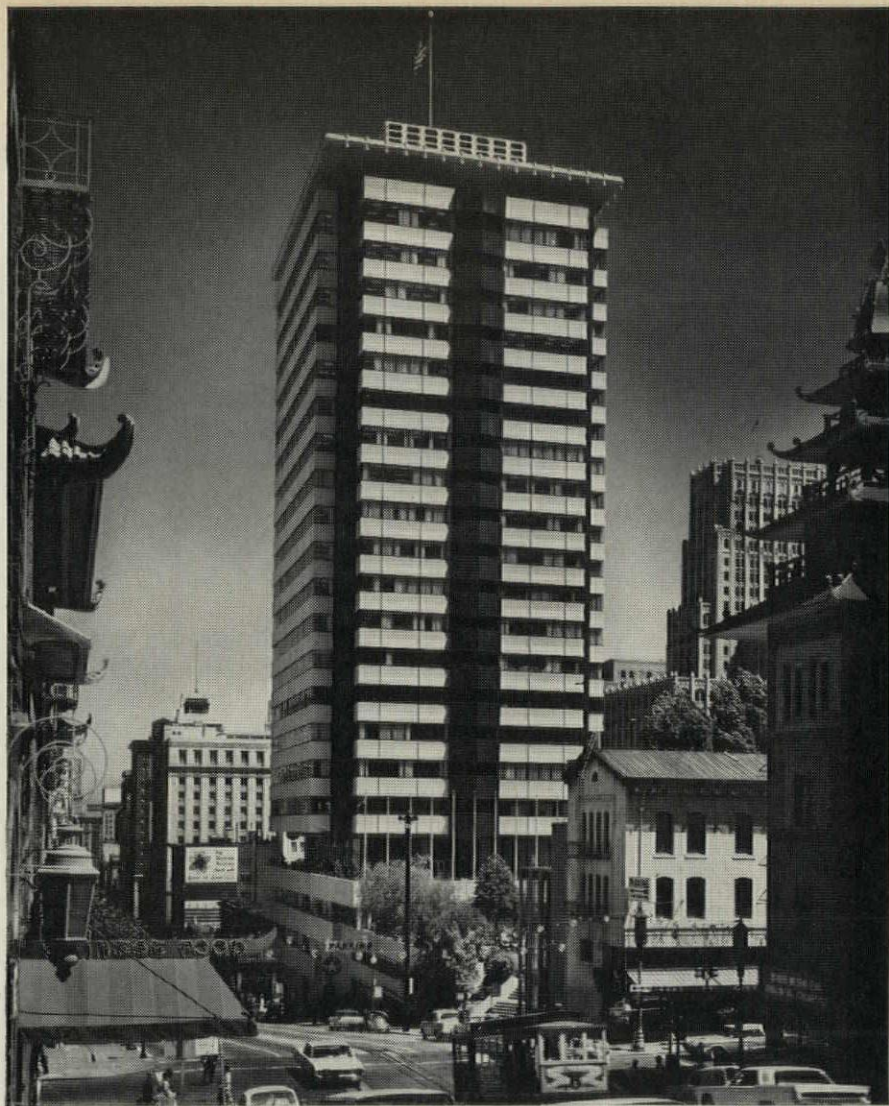
For meeting stiles of double doors, many different types of equipment are available. The adjustable astragal is perhaps the best choice. One member has a plunger and the other has a wool pile insert. When the doors are closed, a seal is created. Here, the adjustable astragals have been designed for surface, 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 now possible 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 23





ANSHEN & ALLEN
architects
EAGLESON ENGINEERS
mechanical engineer
DINWIDDIE CONSTRUCTION CO.
general contractor
JAMES A. NELSON
plumbing contractor
HEIECK & MORAN
plumbing wholesaler
BRIGGS MANUFACTURING CO.
fixture manufacturer

The International Building

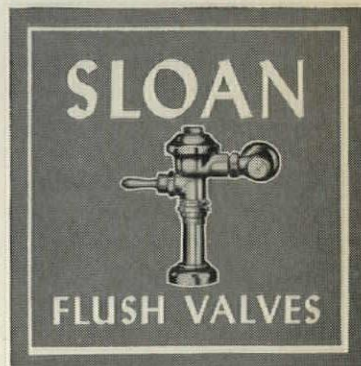
—a Tower designed to capture the charm of its locale

Overlooking beautiful San Francisco Bay, the new headquarters building of the American President Lines looms as a beacon over the home port of their ships that travel the water highways of the world.

■ 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.

As you might expect—the flush valves installed in the International Building are Sloan—famous the world over for dependable service, long life, water economy and lowest maintenance cost. They are *the* Flush Valve of Quality.

Your building, too, can have this same Sloan quality. To be sure you get it, specify Sloan Flush Valves by name—most people do.



SLOAN VALVE COMPANY • 4300 WEST LAKE STREET • CHICAGO, ILLINOIS 60624



Inducing a Breach of Contract: Part 2

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 even 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.



Ageless...because it's stainless



Architects: Curtis & Davis, New Orleans, La. General Contractor: George A. Fuller Co., Pittsburgh, Pa. Stainless Exterior: Limbach Company, Pittsburgh, Pa. Rigidized Stainless: Rigidized Metals Corp., Buffalo, N.Y.


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.

Competitive bids in other materials were obtained to meet design requirements. The result: Stainless steel proved to be significantly lower in cost. Its high strength, coupled with depth of shape, permitted the use of lighter gauge sheet.

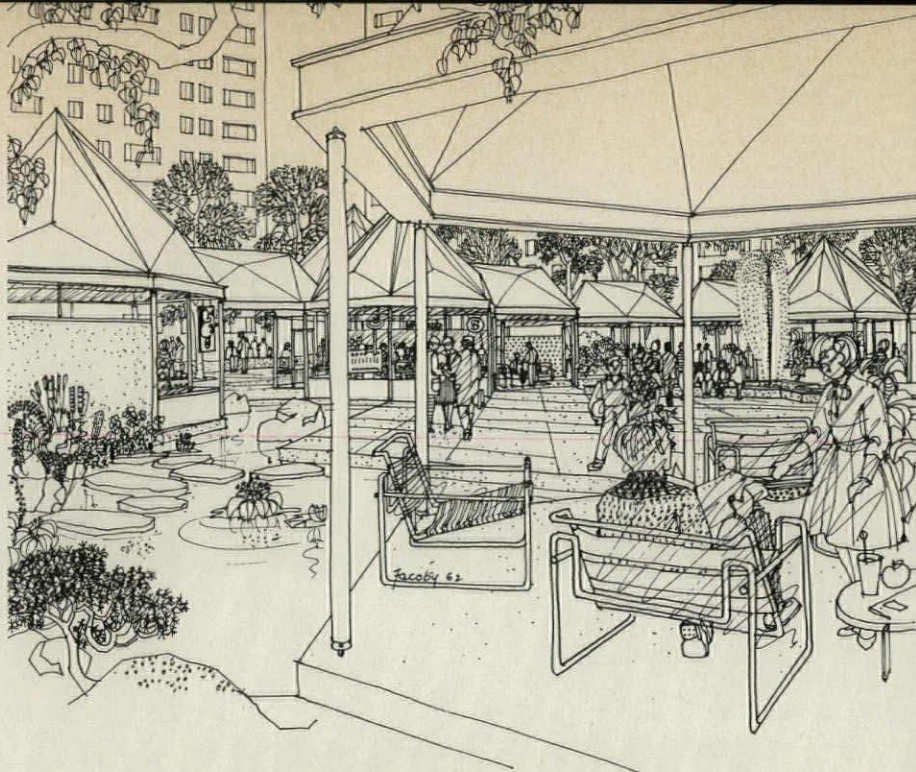
Stainless steel is economical over the years, too. It's solid—maintains its lustrous, corrosion-resistant finish for life with a minimum of care.

Why not utilize the economy, strength, permanent beauty and design flexibility of nickel stainless steel in your own plans? For further information send for Inco's suggested guide specifications and lists of manufacturers for curtain wall, windows, entrances and flashing.

The International Nickel Company, Inc. 67 Wall Street  New York 5, New York

For more information, turn to Reader Service card, circle No. 422

Nostalgia for the Rural Past



BY HERBERT J. GANS

LIFE FOR DEAD SPACES by Charles Goodman and Wolf Von Eckardt. Published for the Fred Lavanburg Foundation by Harcourt, Brace & World, Inc., 757 Third Ave., New York 17, N.Y. (1963, 127 pp., illus. \$12.50). Reviewer is Associate Professor of Sociology and Education, Institute of Urban Studies, at Teachers College, Columbia University.

The mystique of the life-generating force of open space, and the belief that a properly designed open space will somehow transform adjacently residing strangers 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 plan-

ning 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 persuasion share a common interest and meet daily in their simplest pursuits.”

The proposal was also inspired by Jane Jacobs’ wise observation that today’s high-rise public housing projects are surrounded by endless amounts of grass that no one can use, and that becomes dead space inhibiting the street-based social life of the residents. The purpose of the Commons is, as the title indicates, “to bring life—gay and spontaneous human encounter—to dead spaces.”

Goodman’s conception of the Commons calls for fountains, pools, landscaping, sitting areas, activity buildings, and some stores (the latter two housed in open or roofed-over pavilions). He presents technical drawings for the pavilion (a modular design of structural steel), a fully developed site plan of one prototype Commons intended for a public

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.

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

Yes,

Carrier

...and Carrier has the service to back it up!

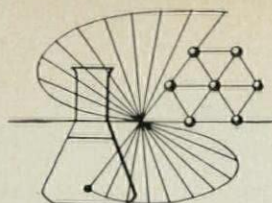
schedule to installation information and certified prints.

And, after the equipment has been turned over to the owner, responsibility for proper performance can be centered on the same reliable shoulders. For beyond our equipment warranty, we offer three types of maintenance contracts known as Carrier Planned Service. Together with our dealers, we back our offer with the largest and best-trained service organization in the business—over 12,000 men strong.

For information about components for *any* apartment job—or *any other* air conditioning project—call your Carrier representative. Or write Carrier Air Conditioning Company, Syracuse 1, New York. In Canada: Carrier Air Conditioning (Canada) Ltd., Toronto 18.

Carrier **Air Conditioning Company**

FRESH!



IMAGINATIVE USE OF STIMULATING MATERIALS

You can select distinctive Haws fountain designs that keep pace with your *own* architectural ideas. They're fresh! Here are a few for your appraisal: detailed specs are yours for the asking.

Fiberglass

HDFC electric water cooler, AIR COOLED! Semi-recessed wall model, molded in strong fiberglass. In 3 colors or white.

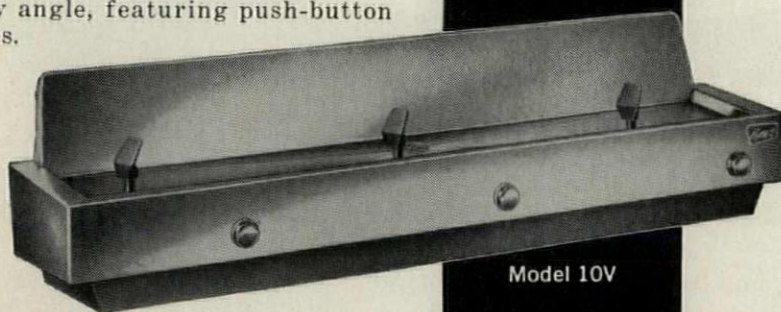
Hard Anodized Aluminum

7L wall fountain in cast Tenzaloy aluminum, hard anodized to rich bronze finish that stands up under rough usage. Here's a real beauty: and practical, too!

7J wall model with same hard anodized finish as 7L, above. Features Haws easy-action push-button valve.

Stainless Steel

10V multiple wall fountain, *new* from every angle, featuring push-button valves.



Model 10V

Model HDFC

Model 7L

Model 7J



DRINKING FOUNTAINS

products of

HAWS DRINKING FAUCET COMPANY
1441 Fourth Street • Berkeley 10, Calif.

Since 1909

For more information, turn to Reader Service card, circle No. 340

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 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 Ottalie 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 exurbia, 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-

Continued on page 22



THIS BOOK HAS SAVED COUNTLESS HOURS

of Costly Designers' Time...

Behind this *36-page manual from the Steel Joist Institute is more than 30 years of research, testing, design, application and standardization of open web steel joists.

From 36,000 psi **J** and **LA** (longspan) series to new 50,000 psi high strength **H** and **LH** (longspan) series... the designer will find everything he needs for fast, accurate specification of open web steel joists for every category of today's building needs.

Steel joists are better and more versatile than ever, thanks to the standardization leadership of the Steel Joist Institute. This handy reference manual shows you how to use these versatile structural members to best advantage.

Send for your free copy today.

**Load and Spacing Tables may also be obtained by writing to the Institute.*



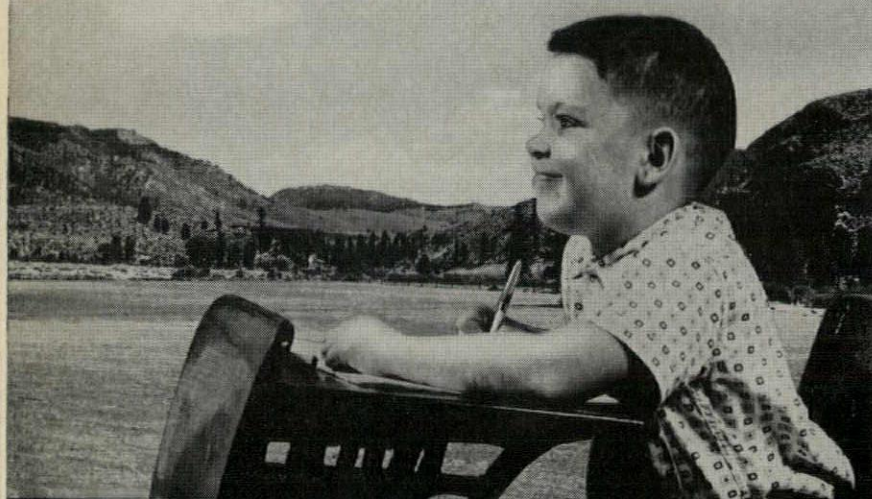
STEEL JOIST INSTITUTE

Room 715
DuPont Circle Bldg.
Washington, D. C. 20036

For more information, circle No. 391.

HELP JOHNNY READ EVEN BETTER!

Bring Natural Outdoor Light into Classrooms . . . All Year 'Round!



PRC[®] TOPLITE ROOF PANELS FOR SOFT, UNIFORM, CONTROLLED SUNLIGHTING!!

By utilizing prismatic glass units, Toplite Roof Panels bring into the classroom a maximum of light from the north sky and the low winter sun. The intense heat and light from the high summer sun is rejected to provide glare-free, shadowless light — without heat (about 60% less heat in summer than conventional skylights). This controlled sunlighting also makes TOPLITE Roof Panels ideal for corridors, gymnasiums, cafeterias and shops.

Prefabricated Toplite panels are available in a variety of sizes. The slim silhouette provides lighting flexibility without design change. Mail coupon for complete technical information.



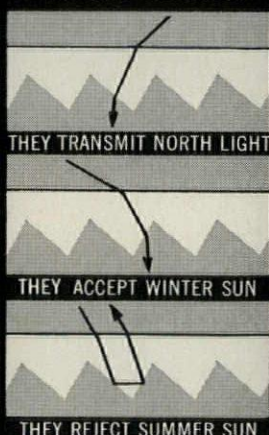
PRODUCTS RESEARCH CO.

"Research is our middle name"

2919 Empire Ave., Burbank, California

410 Jersey Ave., Gloucester City, New Jersey

HOW TOPLITE PRISMS WORK...



PRODUCTS RESEARCH COMPANY DEPT. PA-5
2919 Empire Ave., Burbank, California

NAME _____

FIRM _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

HAVE REPRESENTATIVE CALL ☐

For more information, turn to Reader Service card, circle No. 421

Continued from page 218

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



VISIT THE SPECTACULAR FESTIVAL OF GAS PAVILION AT THE NEW YORK WORLD'S FAIR 1964-1965. ©1962 New York World's Fair 1964-1965 Corporation

Atmos-Pak and Gas cool and heat the Protestant and Orthodox Center at the New York World's Fair.

Cool comfort on the hottest days and generous warmth in cool spells are equally assured for visitors to the Protestant and Orthodox Center at the World's Fair. A 240-ton Atmos-Pak Gas-powered Air Conditioning System is the "double" reason. It cools or heats with immediate response to maintain an ideal climate. Gas — low-cost and versatile — is the fuel that makes this possible. And because Atmos-Pak's Gas engine and flange-mounted compressor form a single roof-mounted unit,

no valuable floor space is wasted. There's always room at the top for Atmos-Pak's original low silhouette! Economical Gas takes care of nearly all the heating and cooling at the New York World's Fair — and Atmos-Pak air conditions more Pavilions than any other brand. Find out more about this winning combination. Call your local Gas Company. Or write Atmos-Pak, Incorporated, 1601 West Edgar Road, Building "N", Linden, New Jersey. AMERICAN GAS ASSOCIATION, INC.

For heating and cooling...Gas is good business



For more information, turn to Reader Service card, circle No. 314



Some people call them —

**ROLLING DOORS
SHUTTERS
COIL UP DOORS
SLAT DOORS
ROLLER DOORS
ROLL UP DOORS**

but most people call them —

Kinnear

And this is true the world over! Kinnear originated the interlocking metal slat curtain more than 65 years ago — for the first time making the efficiency of a metal coiling door practical. As a result, the name KINNEAR is synonymous with doors of this coil-up operating principle.

To specify KINNEAR — and to INSIST ON THE GENUINE — means more than the selection of a door of more efficient design. It's also your assurance of a product of the highest quality — rugged construction that has stood the test of time under every condition of use — and backed by a nationwide sales and service organization, as well as "Registered" Life extension service. Write **TODAY** for complete, detailed information on Kinnear Doors.

KINNEAR[®]
ROLLING DOORS
Saving Ways in Doorways

Offices and representatives in all principal cities

The KINNEAR Manufacturing Co. and Subsidiaries

FACTORIES: { 1900-20 Fields Avenue, Columbus 16, Ohio
1742 Yosemite Avenue, San Francisco 24, Calif.
3683 Dundas Street West, Toronto, Ont., Canada

For more information, turn to Reader Service card, circle No. 350

types of gambrels is particularly informative.

This reviewer laments that the whereabouts of most of the "Victorian" is omitted, and that if the place is given, the precise address is not. It may be an intentional omission, to make us study the illustrations more carefully and to give us the unexpected pleasure of recognition as we drive about the country and come upon these houses "in the wood."

The last chapter, called "An Architectural Melting Pot," is particularly ambitious and successful in listing the external earmarks which distinguish the regional differences of the main styles. In this résumé, the Federal Style is dated 1790-1820, showing how fluid our terminology is at present and how much need there is for a large corpus of documented dating. This book provides so much, it only makes the architectural historian wish for more.

OTHER BOOKS TO BE NOTED

CRSI Recommended Practice for Placing Reinforcing Bars (Including 1963 Supplement). R. C. Reese. Concrete Reinforcing Steel Institute, 38 South Dearborn St., Chicago 3, Ill., 1959. 318 pp., illus. \$3

Handbook on modern field practices in the use of reinforcing bars, wire fabric, and accessories, originally published in 1959, contains a 32-page supplement to bring text into conformity with 1963 American Concrete Institute Building Code. A basic explanation of the principles of reinforced concrete design and a glossary of terms are included. Editor is a past president of the American Concrete Institute.

Chinese Monumental Art. Peter C. Swann. Photographs by Claude Arthaud and François Hébert-Stevens. The Viking Press, 625 Madison Ave., New York, N.Y., 1964. 276 pp., illus. \$16

To be reviewed.

How to Build Decks for Outdoor Living. Sunset Books, Lane Book Company, Menlo Park, Calif., 1963. 96 pp., illus. \$1.95 (paperbound)

Well-illustrated do-it-yourself book considers decks as major alterations in site landscaping and house architecture. Construction details, photos, and plans for numerous low-level, hillside, veranda, and rooftop decks are included.

Modern Bathrooms. Joseph F. Schram. Sunset Books, Lane Book Co., Willow Rd. at Middlefield Rd., Menlo Park, Calif., 1963. 80 pp., illus. \$1.95 (paperbound)

Construction tips on remodeling or adding a bathroom. Book touches on a variety of baths from small, simple ones to garden, laundry, and sauna baths. A survey of fixtures and accessories is included.

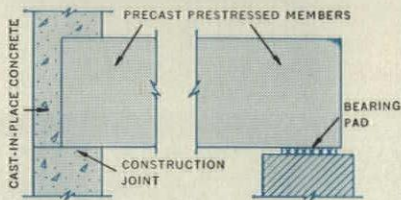
Rehabilitation Programs and Facilities of Western Europe. U.S. Department of Health, Education, and Welfare. U.S. Printing Office, Washington 2, D.C., 1963. 320 pp., illus. \$2 (paperbound)

Survey of the location, building charac-

THERE ARE SIMPLE PRESTRESSED CONCRETE CONNECTIONS FOR EVERY STRUCTURAL APPLICATION

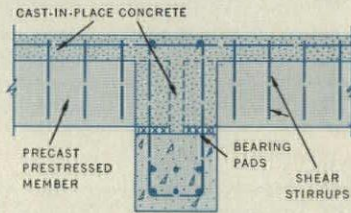
There are many different ways to connect prestressed concrete members. And they're accomplished with common operations like welding, bolting, or cast-in-place concrete requiring only normal construction skills. This wide choice of field-proven connections permits broad flexibility in design. Designers are able to rely on economical standardized connections ranging from simply supported to fully fixed—or develop new solutions. Connections are just one aspect of prestressed concrete's versatility.

These are examples of basic concepts ready for completion by the designer.



GRAVITY

Flexible bearing pads allow for even load distribution, provide for joint rotation and are inexpensive insurance against adverse stress conditions occurring in the bearing area. If moment transfer into the wall is not needed flexible pads can be placed at points of contact where the beam enters the wall. However, with proper reinforcing into the cast-in-place section, continuity can be provided.

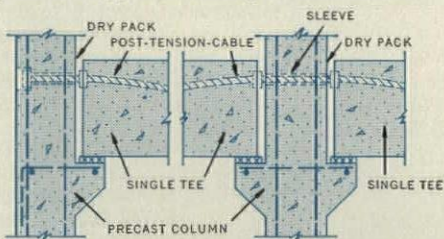


CAST-IN-PLACE

This connection has the appearance and behavior of monolithic concrete. At an interior connection, the top bars may be long enough to extend over the full negative moment area, or the bars may be lap spliced. Close length tolerances of the beams are not required.

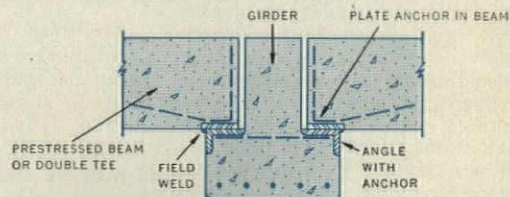
POST-TENSIONED

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.



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.



Connection Details for Precast-Prestressed Concrete Buildings, just published, is the result of more than two years study by the PCI Connection Details Committee. Purpose of this publication is to assist designers in selection of appropriate connection details. Detailed schematic drawings show all established types of connections grouped in four main sections: column base, beam-to-column, beam-to-girder and bearing wall. Illustrated and described are welded, cast-in-place, dowelled, bolted and post-tensioned connections. **Price: \$4.50**

PRESTRESSED CONCRETE INSTITUTE

205 WEST WACKER DRIVE • CHICAGO, ILL. 60606



THIS FREE BOOKLET SOLVES SPASMODIC HEATING PROBLEMS

Here's the answer to clients who want the ultimate in gas heating comfort—a new booklet on electronic modulation.

All gas-fired forced air furnaces are deliberately oversized to provide ample capacity for coldest winter days. Most of the time, heat is delivered in short bursts, followed by long off periods. Result: temperature stratification, cold corners, then hot blasts.

The logical solution is to run a furnace slowly—continuously—just enough to meet heat losses.

Selectra electronic modulation provides this new concept. Except on mild days, the fan and burner run continuously; but, Selectra changes the size of the flame to meet changing demands. Registers emit a gentle flow of warmth, eliminate temperature see-saws.

Key to performance is a tiny space age thermistor in the Selectrastat. It senses 1/10 degree temperature changes, advises an electronic amplifier which in turn causes a valve to regulate gas flow. Selectra is now available on leading gas-fired equipment, including make-up air systems. Send for brochure today for all the data.

Selectra
ELECTRONIC MODULATION

MAXITROL COMPANY
23555 TELEGRAPH
SOUTHFIELD, MICHIGAN



For more information, circle No. 359

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.

Shell Architecture. Jürgen Joedicke. Reinhold Publishing Corp., 430 Park Ave., New York 22, N.Y., 1964. 304 pp., illus. \$22.50
To be reviewed.

Solar Effects on Building Design (Publication No. 1007). Building Research Institute, Inc., 1725 De Sales St., N.W., Washington, D.C., 1963. 174 pp., illus. \$10

Informative essays from BRI 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.

The Japanese Influence in America. Clay Lancaster. Twayne Publishers, Inc., 31 Union Square West, New York 3, N.Y., 1963. 292 pp., illus. \$17.50
To be reviewed.

The Urban Condition. Leonard J. Duhl. Basic Books, 404 Park Avenue South, New York 16, N.Y., 1963. 410 pp. \$10
To be reviewed.

The Urban Pattern (2nd Edition). Arthur H. Gallion and Simon Eisner. D. Van Nostrand Co., Inc., 120 Alexander St., Princeton, N.J., 1963. 435 pp., illus. \$14

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

Tradition of Japanese Garden (2nd Edition). Sutemi Horiguchi. Society for International Cultural Relations, Tokyo, Japan. Distributed by the East-West Center Press, Honolulu 14, Hawaii, 1963. 186 pp., illus. \$15
To be reviewed.

World Architecture. H.R. Hitchcock, Seton Lloyd, David Talbot Rice, Norbert Lynton, Andrew Boyd, Andrew Carden, Philip Rawson, John Jacobus. McGraw Hill Book Co., Inc., 330 W. 42 St., New York, N.Y., 1963. 348 pp., illus. \$17.95
To be reviewed.

NOTICES

Branch Offices

MORRIS LAPIDUS ASSOCIATES, Architects, 1688 Meridian Avenue, Miami Beach, Fla.

New Addresses

GENOVESE AND MADDALENE, Architects, 91 N. Maple Ave., Ridgewood, N.J.

NOLAN & GLOVER, Architects, 660 Richmond St., London, Ontario, Canada.

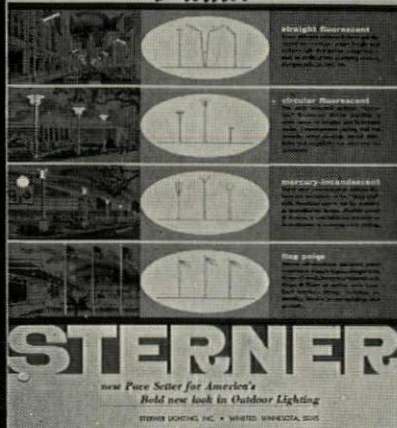
J. M. SCHMIDT ASSOCIATES, Suite 9, 670 No. 3 Rd., Vancouver, Richmond, B.C.,

FREE!

OUTDOOR LIGHTING

AND FLAG POLES

by **Sterner**



STERNER '64 FULL LINE CATALOG

Answers Your Questions About All-Aluminum Outdoor Lighting

STRAIGHT FLUORESCENT

for boulevard, parking lot, shopping center, playground and motel applications, or any installation requiring uniform light distribution from high-mounted source. 6' to 20' mounting heights.

CIRCULAR FLUORESCENT

for campus, motel, drive-in, shopping center applications. Striking, modular design utilizes stacked circular fluorescents. 6' to 20' mounting heights.

MERCURY-INCANDESCENT

variations of "Circa-Lite" described above adapt to mercury or incandescent lamps.

BREAK-PROOF GLOBE LITES

New! Post-mounted, 18" and 24" diameter, seal less hi-impact plastic makes outdoor globe lighting practical for the first time.

ANODIZED ALUMINUM POLES

available in 6 colors.

HINGE-O-MATIC BASE

for one-man, ground-level servicing.

PRE-WIRED POLES AND LUMINARIES

UL approved from the ground up.

Write for '64 STERNER CATALOG
at no cost or obligation —

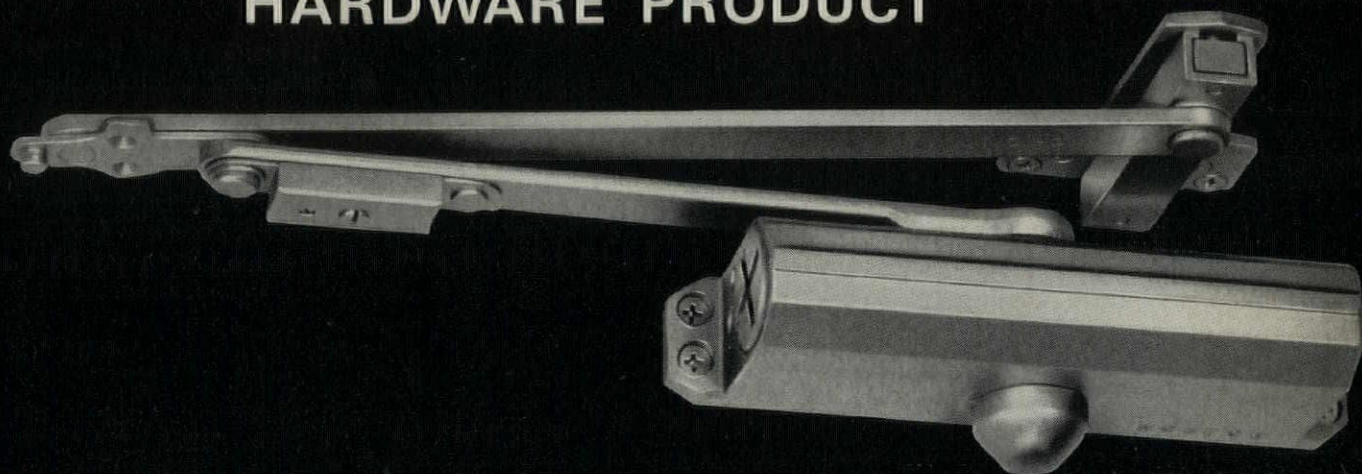
New Pace-
Setter for
America's
Bold New
Look in
Outdoor
Lighting

Sterner
LIGHTING, INC.
WINSTED 1, MINNESOTA

For more information, circle No. 392

MAY 1964 P/A

THIS ENTIRELY
new
HARDWARE PRODUCT



Norton Uni-trol Unitized door control performs all five door control functions

For the first time a single unit has been designed to assure complete coordinated door control. By combining all five door control functions into a single product you have a clean, uncluttered appearance at the door. You also have simplified specifications, only one product to specify. It's even non-handed to facilitate application and installation.

Ask your Norton representative to show you a sample of Norton Unitized Door Control. Or write for Manual U.

COMPLETE COORDINATION OF ALL FIVE DOOR CONTROL FUNCTIONS

- (1) Cushions the opening of the door



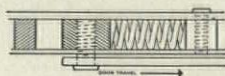
At almost full open, the arm engages a spring in the shock absorber mounted to the soffit plate. Opening momentum is absorbed.



- (2) Stops the door



As the spring in the shock absorber is compressed, the door is stopped. There's no shock to the door, hinges or Uni-trol.



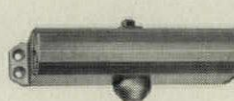
- (3) Holds the door open



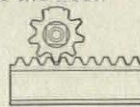
Spring loaded hardened steel ball in the holding mechanism is engaged by a recess in the Uni-trol fore-arm. The door is held open.



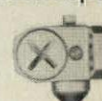
- (4) Closes the door



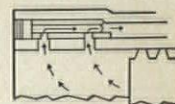
When released a dependable Norton spring-loaded rack-and-pinion mechanism supplies power to close the door.



- (5) Regulates closing and latch speeds

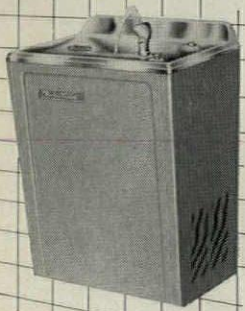


Dependable Norton hydraulic system provides key-operated control to regulate both closing speed and the latch speed.

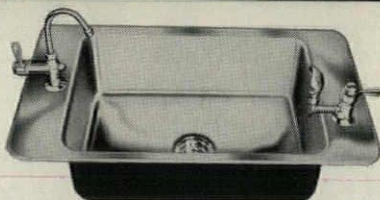


NORTON® UNITIZED DOOR CONTROL 372 Meyer Road. Bensenville, Illinois

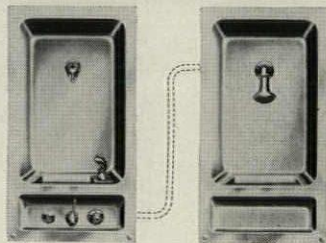
SCHOOLS prefer them



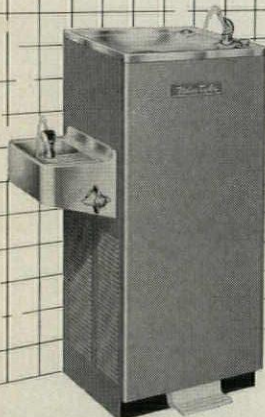
The Wall-Mount, on-the-wall, off-the-floor can be installed at any height.



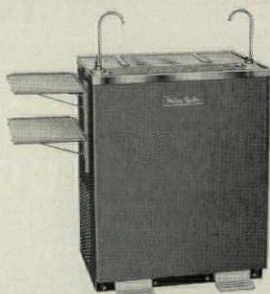
Stainless steel counter-type classroom units, in various models.



Recessed wall fountain in combination with recessed cuspidor unit—a favorite in gyms, clubs and recreation centers.



This two-level cooler conveniently serves "small fry" and adults, too.



One of many cafeteria types to speed service.

and you will too, 'cause they're Taylor-Made

Schools and universities are perhaps the most discriminating of all buyers, especially when the purchase calls for drinking-water equipment. In such cases, *positive sanitation* is a prime requisite, a factor which makes Halsey Taylor fountains, coolers and other classroom fixtures a logical favorite with educational authorities everywhere!

It goes without saying that if they're preferred for such installations, they'll be sure to please you, since Halsey Taylor provides, in addition to health-safety, the assurance of modern design, lasting dependability and over-all economy.

The Halsey W. Taylor Co., Warren, Ohio

Write for latest catalog, or see
Sweet's or the Yellow Pages

Halsey[®] Taylor

464

See the Fountains and Coolers of Today in "The School of Tomorrow" in the Hall of Education at the New York World's Fair

For more information, turn to Reader Service card, circle No. 394

Canada.

SCHULCZ & PADLASKY, Consulting Engineers, 210 S. 13th St., Philadelphia, Pa.

T. TRIP RUSSELL & ASSOCIATES, Architects, 1800 Coral Way, Suite 201, Miami, Fla.

New Firms

DESIGN 4, INCORPORATED, 859 Via de la Paz, Pacific Palisades, Calif.

D R ASSOCIATES, INC., 595 Fifth Ave. New York, N.Y.

EDWARD J. FEHELEY, JR., Architect, 42 Chase Manhattan Bank Bldg., Rio Piedras, Puerto Rico.

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

DONALD W. REIDENBAUGH & ASSOCIATES, 243 N. Duke St., Lancaster, Pa.

RICHARD SAWICKI, Architect, 881 Long Ridge Rd., Stamford, Conn.

MURTON H. WILLSON AND ASSOCIATES, Architects, Planners, 3939 E. Coast Highway, Corona Del Mar, Calif.

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

New Partners, Associates

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

CAUDILL, 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 & WAEHLER, Architects, New York City, announce as their new Associates: GREGORY E. BROOKS, LEE ROGERS KIRK, and WILLIAM NORTH.

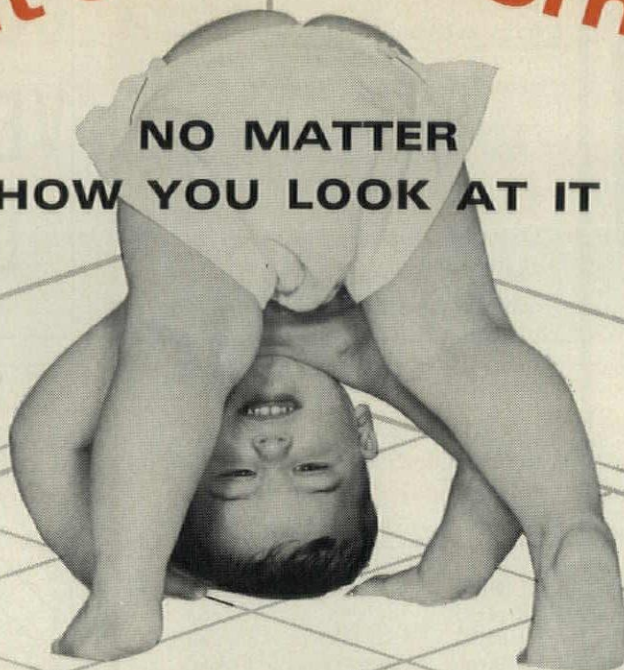
JOHN CARL WARNECKE & ASSOCIATES, Architects of San Francisco, has made ROBERT LAMB HART and MICHAEL PAINTER Vice-Presidents and Partners.

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. PRIDEAUX are now vice-presidents; and A. A. WILHELM is the new secretary.

What's in a Corner?

NO MATTER
HOW YOU LOOK AT IT



THERE IS
A BIG DIFFERENCE

BETWEEN A "PIN-UP" JOB
AND A PERMANENT APPLICATION

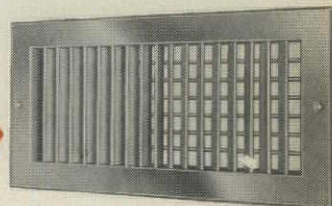
THIS... is a **WATERLOO**
GRILLE CORNER

It has been carefully stitch welded to
fuse the mitered pieces together, buffed
smooth, and carefully prime-coated.

THIS... is a **COMPETITIVE**
GRILLE CORNER

With unsightly crack clearly apparent
between the mitered pieces which are
merely spot-welded to a metal "Dutch-
man".

Sure, WATERLOO spends a little more to
deliver the best. That's why you should
see your WATERLOO representative for
convincing proof that WATERLOO regis-
ters and grilles are **BETTER THAN EQUAL**
IN DESIGN, CONSTRUCTION AND APPEARANCE



52V

Member of Air Diffusion Council



WATERLOO REGISTER COMPANY
DIVISION OF DYNAMICS CORPORATION OF AMERICA
WATERLOO, IOWA

BETTER!
EQUAL?

SPECIFY X-59®

NEW ANTI-CRACKING AGENT FOR PORTLAND PLASTER

Now have minimum shrinkage and drying cracks in all cement base plaster or stucco work. Specify X-59 as a direct substitute for lime as a spreading agent. Contractors welcome X-59 because it helps get jobs done better in less time. Estimates are often lower because the need for call backs to repair shrinkage cracks is reduced.

Many leading architects specify X-59 exclusively. Secure the kind of surface which is a credit to your choice of materials. Specify X-59.

See our catalog in:

SWEET'S ARCHITECTURAL FILE
Section 9/Ca



Telephone Credit Union Building,
Fort Worth, Texas

Architect: Robert P. Woltz, Jr.

Two canopy ceilings showed no cracks in
Portland cement and X-59.

CABOT CORPORATION

125 High Street
Boston 10, Massachusetts

1712 Commerce Street
Dallas 1, Texas
Riverside 1-6117

INTEGRATED DESIGN ASSOCIATES, Inc., has made JOSEPH B. ROSENTHAL executive vice-president.

KELLY & GRUZEN, Architects-Engineers, has announced the appointment of George G. Shimamoto as general manager.

SANDERS & THOMAS, Consulting Engineers, has appointed F. WILLIAM HEILMAN, JR., vice-president in charge of government marketing; and CHARLES S. BICKSLER, vice-president in charge of engineering and architecture.

SUA INCORPORATED, space analysis and planning firm, has announced the appointment of MILES WEINER as vice-president.

GENE TANNEN has been made director of the Design Studio, STRAUS-DUPARQUET, Inc.

WHEN YOU CHANGE YOUR ADDRESS

Please report both new and old addresses directly to P/A five weeks before you move.

PROGRESSIVE ARCHITECTURE

Circulation Department
430 Park Ave., New York, N. Y. 10022

Continued from page 196

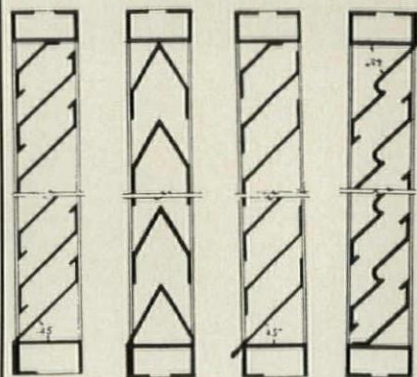
under "Division No. 7, Moisture Protection," and can be treated as a separate section under this division. Heretofore, weather strip saddles, adjustable astragals, and weather stripping in general could be found under several different trade sections. Now they can all be specified under the one trade section for overall responsibility and control.

Zinc should be specified as cross-grain zinc. Cross-grain zinc strips are sheared across the grain, thus providing a more rigid strip that is unaffected by cold weather. Ribbon zinc, which is cut with the grain, has a tendency to split open at the fold in cold weather. Zinc is likewise specified, using a zinc gage that is peculiar unto itself as follows: 8 gage, .016"; 9 gage, .018"; 10 gage, .020"; 11 gage, .024"; 12 gage, .028"; 14 gage, .036"; and 16 gage, .045".

Sheet bronze for rigid interlocking is cold rolled, generally 25 B & S gage. Spring bronze is phosphor bronze, generally 31 B & S gage. Bronze extrusions are architectural bronze. Aluminum extrusions are alloy 6063-T5.

Illustrations were adapted from material supplied by Zero Weather Stripping Co., Inc.

INDUSTRIAL-COMMERCIAL VENTILATING LOUVERS



IN EXTRUDED ALUMINUM AND FORMED METALS!

Adjustable • Stationary
• Automatic and Door
Louvers for Interior &
Exterior use.

Write for our complete
line catalog or look
for it in SWEETS
20d/LOU.



LOUVER

MANUFACTURING CO. Inc.

INDUSTRIAL DIVISION

15200 Highway 5
HOPKINS, MINNESOTA 55343

For more information, circle No. 324

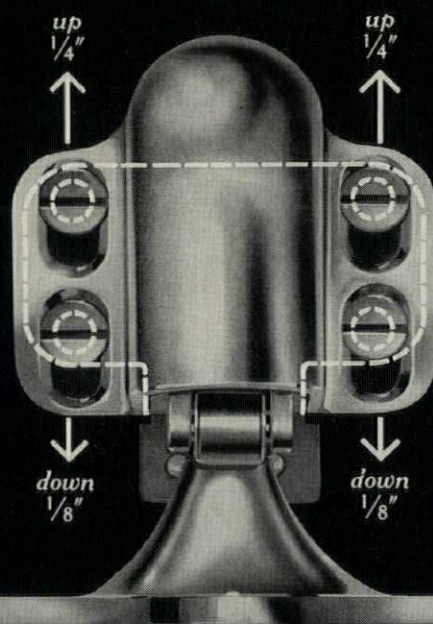
For more information, circle No. 417



F40 A*

FLOOR TYPE DOOR HOLDER

DOOR PORTION
ADJUSTABLE
AFTER INSTALLATION



ADJUSTMENT IS SIMPLE

1. Loosen four screws on door portion.
2. Raise or lower in $\frac{1}{16}$ " increments.
3. Tighten screws.

***A AS IN ADJUSTABLE**
When installed to template, door portion of holder can be raised as much as $\frac{1}{4}$ "—to adjust in the event of door sag.
Can be lowered as much as $\frac{1}{8}$ ".

write for details
GLYNN-JOHNSON CORPORATION



4422 N. RAVENSWOOD AVENUE
CHICAGO 40, ILLINOIS



HUBBELL GRAY LINE

Now... A Complete Gray Line of Quality Wiring Devices To Blend With Modern Institutional Decor

The new Hubbell "Gray Line" provides top-quality wiring devices in a shade of gray that harmonizes with metal furniture and equipment used in modern offices, hospitals and schools. An exceptionally attractive combination is provided when Gray Outlets and Switches are used with Hubbell's stainless steel or new anodized aluminum wall plates.

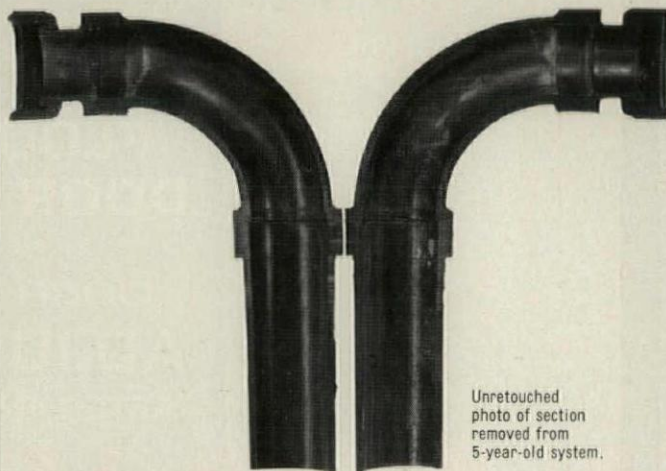
The complete line of rugged phenolic devices includes toggle and press-action AC switches; single and duplex grounding outlets; and outlet and switch plates.

Write now for file-size catalog pages.

**HARVEY
HUBBELL
INCORPORATED**

BRIDGEPORT, CONNECTICUT IN CANADA—AJAX, ONTARIO
For more information, turn to Reader Service card, circle No. 408

LOOK... NO CORROSION AFTER 5 YEARS...



Unretouched
photo of section
removed from
5-year-old system.

This **VULCATHENE®** pipe shows no evidence of corrosion... no contamination... just a little sediment—after 5 years of continuous use. In 1957, Asbury College of Wilmore, Kentucky installed a complete Vulcathene drainline system in their old Science Building. Competitive estimates proved to them that Vulcathene cost about half the price of other systems. For 5 years, all laboratory wastes from Chemistry, Physics, Biology and Bacteriology were handled by Vulcathene. Recently in planning a new Science Building, they found that 90% of the Vulcathene system could be relocated and re-used at a savings of several thousand dollars.

We knew it all the time. These amazing Vulcathene systems never show their age. They're invulnerable to chemical attack from acids, bases and salts—even radioactive wastes poured into them by hospital, school and industrial laboratories. Vulcathene is unbreakable, light in weight, low in cost, easy to install and requires no maintenance. And our patented joining method, using Polyfusion® tools, permanently fuses the pipe and fittings... making strong, leakproof joints. For complete specification sheets and new engineering catalog, write Dept. 3505.



DIVISION OF THE NALGE CO., INC.

NALGENE PIPING SYSTEMS

75 PANORAMA CREEK DRIVE • ROCHESTER, N. Y. 14625

First with polyolefins for corrosion resistant drainline systems

For more information, turn to Reader Service card, circle No. 366

Last year Lees lost 123 sizeable contract carpet bids

We lost a Manhattan theatre chain, a state capitol, a West Coast hotel-motel operation and a lot of other good sized bids.

Some we lost because we weren't low bidder. Most we lost because we wouldn't follow doubtful specifications.

Either we wouldn't skimp on a carpet.

Or we wouldn't make a "bargain" carpet.

Or we wouldn't make a carpet we knew would look good for a month and die on the floor in a year.

Or we wouldn't make an unrealistic carpet.

Or we wouldn't make the wrong carpet for the wrong place.

Why?

Because people expect a decent carpet from Lees, no matter what they specify. If they didn't get it, we'd end up losing them anyway.

So what do we do that's constructive when your specs won't work?

For one thing, we'll help you specify. (Nobody knows better than Lees how tricky it is to spec exactly what you want for exactly what you want to pay.)

If we've ever helped you, you know we steer

clear of fancy carpets and extras unless you're set on them.

Besides that, we'll show you stock carpets that might do the job better, for less money; show you more colors and fabrics than anybody else in the business.

The only thing we won't do is sacrifice quality.

We're carpetmakers, not troublemakers.

For a lot of good, down-to-earth reasons, "those heavenly carpets by Lees."

See them at places like the new Americana Hotel in New York, the New York Hilton at Rockefeller Center, the Tennessee Gas Transmission Co. Building in Houston, Texas.

For information, write to Commercial Carpet Department, James Lees and Sons Company, Bridgeport, Pennsylvania.



©JAMES LEES & SONS CO., BRIDGEPORT, PA., A DIV. OF BURLINGTON INDUSTRIES

SITUATIONS OPEN

ARCHITECT—Immediate opening for graduate architect who is a creative designer. Permanent position with a well established Midwest consulting firm. Salary commensurate with ability. Moving expenses paid. Box #761, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Large concern with main office in Massachusetts has opening for Registered Architect with NCARB certificate—interested in commercial architecture. Must possess thorough background in all phases of architecture including preparation of complete working drawings, experience as job and team captain, project coordinator, client contact and contract negotiation. Responsible position with future for man who prefers detailed work and has executive administrative ability. Must be willing to travel. Submit resume of education, experience, and salary requirements to Box #762, PROGRESSIVE ARCHITECTURE.

ARCHITECT — Registered Pennsylvania or NCARB registrations for position as Job Captain (future promotion) with progressive architectural firm in South Central Pennsylvania. Also architectural draftsmen capable of developing working drawings with minimum supervision. Send resume, salary required and references. Box #763, PROGRESSIVE ARCHITECTURE.

ARCHITECT—With 5 to 10 years experience, for permanent position with architectural & engineering firm in the South. Must qualify for registration in Alabama and surrounding states. Company paid retirement and hospital-

Advertising Rates

Standard charge for each unit is Five Dollars, with a maximum of 50 words. In counting words, your complete address (any address) counts as five words, a box number as three words. Two units may be purchased for ten dollars, with a maximum of 100 words. Check or money order should accompany advertisement and be mailed to Jobs and Men, c/o Progressive Architecture, 430 Park Avenue, New York 22, N. Y. Insertions will be accepted not later than the 1st of the month preceding month of publication. Box number replies should be addressed as noted above with the box number placed in lower left hand corner of envelope.

ization insurance. Send experience resume and salary requirements to PROGRESSIVE ARCHITECTURE, Box #764.

ARCHITECT-DESIGNER—Large Michigan firm with diversified practice has opening for creative designer, experienced in design coordination of large projects. Must be capable in graphic and verbal presentations to clients. Submit resume to Box #765, PROGRESSIVE ARCHITECTURE.

ARCHITECT-DESIGNER—Unusual opportunity for thoroughly experienced man with proven creative design ability, possessing leadership experience, to head design group of medium sized architectural office in rapidly growing Washington-Baltimore area, doing diversified work with emphasis on educational and other major public buildings, balance mainly commercial and industrial. Growing practice demands a reliable and conscientious man anxious to assume the responsibility of directing the design staff effectively and capable of producing rapid but thoroughly competent design studies, schematics and preliminary presentations, personally. Submit complete resume. All replies will be kept confidential.

Box #766, PROGRESSIVE ARCHITECTURE.

ARCHITECTS—State government jobs in Albany and New York City. Salary \$9480. to \$11,385. Full merit status, all fringe benefits. College graduation, two years of professional architectural experience and RA license required. New York State residence not required. Write today—Recruitment Section R-2 (22B), New York State Department of Civil Service, Albany, New York 12226.

ARCHITECTURAL CHIEF DRAFTSMAN—Minimum of eight to ten years experience in a large office, directing others on many projects concurrently, in the preparation of working drawings for all types of buildings. Must be thoroughly familiar with coordinating mechanical and structural features. Box #767, PROGRESSIVE ARCHITECTURE.

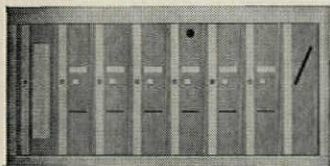
ARCHITECTURAL DRAFTSMAN—Small office doing quality work, commercial, institutional and residential. Good opportunity for young man wishing to learn all phases of architecture and grow with the firm. Send particulars to M. Donald Lane, Jr. 11 Cannon Street Poughkeepsie, N. Y. Tel (914)-GR 1-4125.

ARCHITECTURAL GRADUATES—With design and working drawings experience with architectural office. Growing firm with good opportunities in Madison, Wisconsin. Submit resume of education and experience and salary expected. Box #768, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL POSITIONS AVAILABLE—For youthful architects, experienced draftsmen, architectural graduates in training to assist in the further development of an established thirty-year old firm. Needs are for two work-

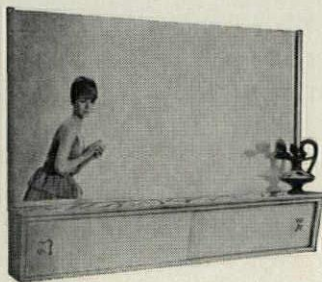
Continued on page 236

DURA STEEL...largest in the West!

THE TOWN HOUSE
APARTMENT MAIL BOX

DESIGN—The first new design in apartment mail boxes—created to complement today's architect-designed apartment houses.

FEATURES—One-hand operation. Space exceeds minimum postal regulations. Extra sturdy construction. Prompt delivery anywhere in the U.S.A. **INSTALLATION**: Installation time reduced because the two-part assembly is designed to eliminate the need for precise alignment.



BATHROOM CABINETS

DESIGN—A full line of bathroom cabinets for both surface and recessed installation. Surface cabinets feature new slim architectural lines designed for today's luxury look in bathrooms.

FEATURES—New type marble tops. Stainless steel and brushed satin gold finishes. Mirrors electro-copper plated. **INSTALLATION**: Surface mounts designed to look built-in but actually hang flat against wall and do not require any wall opening.



RANGE HOODS

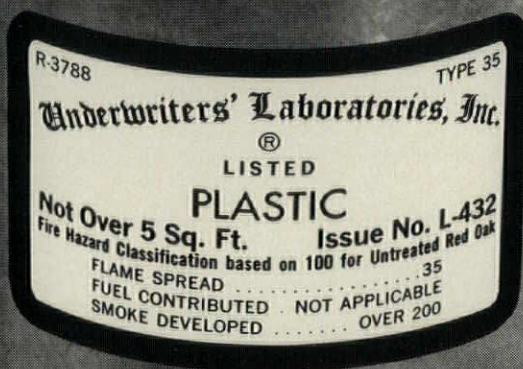
DESIGN—New slim look with contemporary styling.

FEATURES—Unique blade and venturi construction create quietest range hood in field. Hidden Spice Shelf provides extra storage space. **INSTALLATION**: Designed to save installation time on large projects.

DURA STEEL PRODUCTS COMPANY
13901 SOUTH CARMENITA ROAD
SANTA FE SPRINGS, CALIFORNIA

Write to Dura Steel, Box 54175, Los Angeles 54, California, for catalogs and name of nearest distributor.

For more information, turn to Reader Service card, circle No. 411



Fabricator: Resolite Corp.

New Hetron® panel with "Tedlar"®* coating has A U/L FLAME SPREAD RATING OF 35 3 TIMES MORE WEATHER RESISTANCE

This panel refuses to spread a blaze.

Its U/L label tells you this Resolite "Fire-Snuf 35" 8 oz. corrugated panel has a flame-spread rating of 35.

The "Tedlar" surface gives the panel improved color stability and control, and three times the weather resistance.

3700 hours in a weatherometer had almost no effect on a Hetron panel coated with "Tedlar," while the same test did considerable damage to the gloss of an uncoated polyester panel.

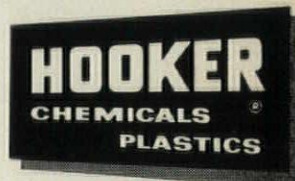
These weather-stable panels are constructed by reinforcing Durez® Hetron fire-retardant polyester resin with glass fibers and bonding it to "Tedlar" PVF film.

Outdoor testing and the EMMAQUA machine show that surfaces remain good and there is no weakening of the bond.

You can order these new panels in white or green. For further information, write Durez Plastics Division, Hooker Chemical Corporation, 7705 Walck Road, North Tonawanda, N. Y. 14121.

*Du Pont registered trademark for its PVF film

DUREZ PLASTICS DIVISION



Continued from page 234

ing drawings draftsmen; also for a young architect to lead as a Project Architect; also for several graduates with some office experience to train as Project Architects and for office management. Neat offices, cooperative staff, comprehensive insurance program, profit sharing, company cars, modern office machines and progressive spirit makes this firm one where opportunity abounds. If you have the qualifications needed, please write or call C. S. Burchart, Burchart Associates, 611 West Market Street, York, Pa. Tel 8-1567

EXPERIENCED ARCHITECTURAL DRAFTSMAN—Steady work, good pay, vacation, bonus insurance, pleasant environment ideal climate, long established (32 years) firm. Applicant should have at least six (6) years experience. Please send resume and photograph or snapshot. Louis G. Hesselden, A. I. A., Albuquerque, New Mexico, P.O. Box #803.

PROJECT MANAGER—Graduate Architect or Engineer, preferably with advanced degrees, thoroughly experienced in design and construction of all types of buildings for industry and government. Assignment requires proven administrator with polished professional skills to direct every phase of consulting service with established firm. Salary open. Moving expenses paid. All replies will be acknowledged and treated in confidence. Write Box #769, PROGRESSIVE ARCHITECTURE (An equal opportunity employer).

SEVERAL POSITIONS—Open to meet requirements of an expanding program. Applicants must have a degree in Architecture, and acceptable record of Architectural experience. Applicants will be responsible for providing

the liaison between a planning unit and architectural consultants in the preparation of plans and specifications for college buildings, both public & private. Experience is necessary in design, details of construction, and office administration. Each position offers paid vacation, sick leave and retirement. Salary range, to \$12,000 a year. Interview will be scheduled after review of qualifications which must be accompanied by two letters of recommendation. Location: Near Albany, New York. Reply to Box #770, PROGRESSIVE ARCHITECTURE.

STRUCTURAL ENGINEER—With three to ten years design experience for Consulting Engineers office in Connecticut on structural design of buildings for top architects. Highest standards of design, working drawings and inspection of construction. Send resume to: Milo S. Ketchum & Partners, Box #362, Old Saybrook, Connecticut.

SITUATIONS WANTED

ARCHITECT—Age 32, registered, NCARB examination. Married two children, seven years diversified AE experience, mainly industrial & governmental. Experienced in all phases of profession. Presently team captain for large AE firm. Seeking similar position with firm in southeastern United States or overseas. Located in Midwest. Box #771, PROGRESSIVE ARCHITECTURE.

ARCHITECT—B.Arch. NCARB, 36, family 10 years comprehensive experience in all phases of architectural practice particularly strong in administration, client contact and design; 4 years own practice with emphasis on commercial and institutional work. Desires responsible position with firm doing contemporary architecture in progressive area. Box #773, PROGRESSIVE ARCHITECTURE.

ARCHITECT—New York registration, NCARB processing, B.Arch., M.Arch., 34, married, children. Nine years diversified experience, five years Chief Draftsman N.Y.C. office. Designing working drawings, detailing, consultant and client liaison, project coordination, specs, field supervision. Desires responsible position with possible future association in N.Y.C. area. Box #774, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Presently in Europe, native American, registered New York, New Jersey, NCARB. Metropolitan U.S. experience background. Recent years varied European experience in several countries with American design offices. Extensive responsible experience heading departments for planning, design, production, administration. General understanding of European conditions. Some facility in German, Italian, French, habituated, adaptable, mobile. Sober professional judgment. Believe I can be useful to anyone with a serious architectural program in the European area. Box #776, PROGRESSIVE ARCHITECTURE.

ARCHITECT—33, desires to settle permanently in Florida. B.Architecture. Georgia registration by examination, eligible NCARB, eight years experience all phases of work. Married, two children. Resume upon request. Box #778, PROGRESSIVE ARCHITECTURE.

FIFTH YEAR—Architectural student desirous of furthering his education in the office of progressive architect. I am seeking temporary employment between school years which will enable me to demonstrate my creative ability as well as add to my knowledge of architecture, and am looking toward permanent employment upon receipt of B.Architecture in June 1965. Personable, conscientious, capable draftsman, three summers experience

STAFF DESIGNERS

Career opportunities are now available in the expanding central Product Styling and Design Department of Armstrong Cork Company, Lancaster, Pennsylvania.

STAFF DESIGNER (1)

Building Products Design—Recent graduate in Industrial Design with prior architectural education, experience in residential or building component design.

STAFF DESIGNERS (2)

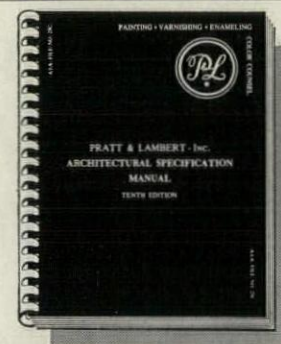
Floor Styling—Recent graduates with majors in Graphic Design, Painting, Fabric Design, or other, but with a flair for two-dimensional decorative design and home furnishings.

Interviews will be arranged at Company's expense for selected candidates. Send details in letter to:

W. J. Van Pelt

Armstrong
CORK COMPANY
LANCASTER, PA.

An Equal Opportunity Employer



COMPLETELY NEW

Architectural Specification Manual (10th Edition)

A valuable working tool for architects. Complete painting specifications . . . finishing suggestions . . . reliable color plans.

Registered architects are invited to request free copy on their professional letterhead. Write Pratt & Lambert-Inc., Architectural Service Department, 75 Tonawanda St., Buffalo, N. Y. 14207; 254 Courtwright St., Fort Erie, Ontario.

PRATT & LAMBERT-INC.
NEW YORK • BUFFALO • CHICAGO • ORANGE, CAL. • FORT ERIE, ONTARIO

For more information, turn to Reader Service card, circle No. 376

in architect's office, portfolio and references upon request. Northern New Jersey or New York City preferred. Box #779, PROGRESSIVE ARCHITECTURE.

FREE LANCE STRUCTURAL DESIGNER—Four years formal education in architecture structural engineering. Five years general architecture, one year Oriental architecture and nine years architectural structural design, working drawings and supervision. Prefer structural design in multi-story reinforced concrete. Will accept work in Mississippi and neighboring states. Box #780, PROGRESSIVE ARCHITECTURE.

GRADUATE ARCHITECT—Age 28, single, B.A. Pratt Institute. 8 years of diversified experience includes preliminary design and presentation through working drawings and job supervision. Seeks challenging position with progressive firm that offers both a commensurate salary and opportunity for advancement. Willing to relocate and travel. Resume upon request. Box #781, PROGRESSIVE ARCHITECTURE.

GRADUATE ARCHITECT — University of Pennsylvania. Pennsylvania registration. Desires position in small progressive office in Harrisburg-Lancaster-York area. 6 years experience in office with particular interest in churches. Age 33, married, family. Resume upon request. Box #782, PROGRESSIVE ARCHITECTURE.

GRADUATE ARCHITECT-TOP DESIGNER — Seven years of varied and comprehensive experience including positions of chief designer and chief of production; 33; married; family; Graduate of University of Illinois. Desire responsible position in ethical, progressive firm interested in producing the best in contemporary architecture. Resume on request. Box #783, PROGRESSIVE ARCHITECTURE.

REGISTERED ARCHITECT—AIA, 26 married, B.Architecture, Ohio State University varied experience in Architects offices. Presently working in Ohio. Desires Association or position of responsibility with the opportunity of a future partnership with a reputable firm doing contemporary Architecture. For resume and references write Box #784, PROGRESSIVE ARCHITECTURE.

REGISTERED ARCHITECT—47, married with administrative experience, well known designer & production with comprehensive experience in dwelling, urban renewal, education and commercial types of buildings, excellent draftsman with many awards, hard working desires responsible position with progressive office, preferably in New York, Washington, D.C. Box #785, PROGRESSIVE ARCHITECTURE.

SECOND YEAR—Architectural student at Pennsylvania State University, seeks summer employment in New York area. Willing to work in any capacity in order to gain office experience. Resume on request. David Pines, 126 E. Nittany Ave., State College, Pa.

SPECIFICATION WRITER—Man 38 years old, 15 years extensive experience wishes to relocate. Experience also includes design work, estimating and field supervision. Responsible position as chief specification writer preferred. Resume of experience, excellent references and sample of work supplied on request. Write Box #786, PROGRESSIVE ARCHITECTURE.

SPECIFICATION WRITER—Registered architect (five states, NCARB). Member: AIA, CSI, ASTM. Long varied experience, high-rise, institutional (hospitals, schools) industrial, commercial, public, contemporary and military work. Office administration; field

supervision, large projects. Rapid, accurate, dependable, married. Detailed, information at interview. Available upon two weeks notice. Box #787, PROGRESSIVE ARCHITECTURE.

MISCELLANEOUS

ARCHITECTURAL & DESIGN AGENCY—Architects, design or production experience \$6M to \$25M. Muriel Feder maintains close contact with the entire Architectural & Design field. The "professional Consultant" for confidential, nationwide, & international coverage. Specializing in personnel ranging through all phases of the architectural office for the past 15 years. 58 Park Ave., New York City, MUrray Hill 3-2523.

CAREER BUILDERS-RUTH FORREST—Over 15 years of quality applicants and service to quality firms in Architectural, Interior and Industrial Design, all Home Furnishings and related fields. Trainees to top executives. Professional screening and personalized service. Interviews by appointment. 515 Madison Ave., New York 22, N.Y. PLaza 2-7640.

CONTACT PERSONNEL AGENCY-LILLIAN FOX—A highly personalized and discriminating service for top-flight architects. Architectural and interior designers, production and draftsmen, in all phases of architecture. Confidential interviews by appointment. 18 East 41st St., New York. N.Y. MUrray Hill 5-1674.

HELEN HUTCHINS PERSONNEL AGENCY—Specialist: Architecture, Industrial Design-Interior Design and Home Furnishings. Interviews by appointment. 767 Lexington Avenue. New York 21. N.Y. TE 8-3070.

NEW YORK

PEOPLE AND PLACES

Photographs by Victor Laredo

Text by Percy Seitlin

The illustrations are meticulously printed by sheet-fed gravure, the text is set in Monotype Perpetua and printed on antique paper. Carefully bound by interleaving the picture pages with the text pages, it all makes for a handsome piece of bookmaking.



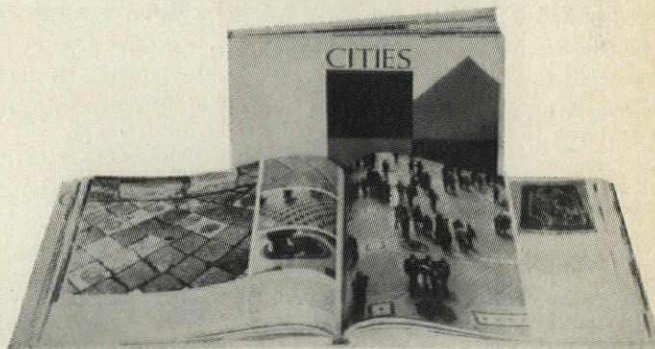
For most people the enduring image of New York — derived from quick visits, picture post cards, and movies — is an imposing but coldly aloof city of towering skyscrapers and anonymous rush hour crowds. It is an image obviously not designed with the human scale in mind — one best observed from a comfortable distance.

This book is a quest through pictures and text for that other, more intimate New York found in its old neighborhoods and buildings — the city in which the human scale is still evident.

192 pages with over 200 photos, 8 1/4 x 10 1/4. \$12.50†

REINHOLD PUBLISHING CORPORATION
430 Park Avenue
New York, N. Y. 10022

... and don't miss CITIES by Lawrence Halprin



10 1/4 x 8 1/4 oblong. 224 pages. \$15.00

"I think this is one of the finest books on the subject. Every page is an experience"—Edmund N. Bacon, Executive Director, Philadelphia City Planning Commission.

"A sensitive presentation of the activities, form and texture that make cities livable"—Burnham Kelly, Dean, College of Architecture, Cornell University.

In this refreshing, new book Lawrence Halprin observes cities through different spectacles—as an urban planner, as an architect, as a landscaper, as an artist, as a political man, as a social scientist, and as a humanist. Mr. Halprin believes that cities always have provided, and will continue to provide, a creative environment for men. He defines this environment in his own perceptive words and pictures. Over 400 superb photographs. A beautiful as well as a practical source book for the architect.

REINHOLD PUBLISHING CORPORATION
430 Park Avenue
New York, N. Y. 10022

DIRECTORY OF PRODUCT ADVERTISERS

Accessory Specialties	26	Hager Hinge Co.	1	Onan Div., Studebaker Industries, Inc.	92, 93
Air Wall, Inc., Subsidiary Hupp Corp.	102	Haughton Elevator Co.	195	Osmose Wood Preserving Co.	240
American Air Filter Co.	117	Haws Drinking Faucet Co.	218		
American Gas Assn.	49, 223	Hillyard Chemical Co.	99		
American Plywood Assn.	30, 31	Hollingshead, R. M. Corp.	41	Pass & Seymour	104
American Sisalkraft Co.	79	Homasote Co.	75	Pittsburgh-Corning Foamglass	53
American Telephone & Telegraph Co.	13	Honeywell	12	Pittsburgh Plate Glass Co.	36, 37
Andersen Corp.	36, 37	Hubbell, Harvey, Inc.	232	Pratt & Lambert, Inc.	236
Architectural Book Society	52			Prestressed Concrete Institute	225
Arkla Air Conditioning Co.	49	Indiana Limestone Co.	89	Products Research Corp.	222
Armco Steel Corp., Sheffield Div.	124	Inland Steel Products Co.	205		
Armstrong Cork Co.	236	International Nickel Co.	199		
Armstrong Cork Co., Ceilings Systems	18, 19			Raynor Mfg. Co.	28
Armstrong Cork Co., Flooring Div. ..	2, 3	Johnson, S. T. Co.	108	Reinhold Publishing Corp.	204, 237
Atmos-Pak, Inc.	223	Johnson Service Co.	38, 39	Republic Steel Corp.	32, 33
Azrock Products Div.	2nd Cover			Reynolds Metal Co.	44
		Kawneer Co.	113 thru 116	Richards-Wilcox Division, Hupp Corp.	109
Bayley, William Co.	78	Kentile, Inc.	4th Cover	Rohm & Haas Co.	14, 15
Blisscraft of Hollywood	106	Keystone Steel & Wire Corp.	100, 101	Ronan & Kunzl	106
Bristol Silica Co.	52	Kinnear Mfg. Co.	224	Rosboro Lumber Co.	106
Brown, Arthur	28	Kliegl Brothers	111	Royalmetal Corp.	10, 11
				Ruberoid Co.	3rd Cover
Cabot Corp.	230	LCN Closers, Inc.	212, 213	Schlegel Mfg. Co.	121
Cabot, Samuel, Inc.	108	Lead Industries Assn.	112	Schokbeton Corp.	219
California Redwood Assn.	80	Lees, James & Sons Co., Div. of Burlington, Ind.	233	Sloan Valve Co.	197
Callaway Mills Corp.	23	Lehigh Portland Cement Co.	40	Smith, Elwin G. Co.	27
Carrier Air Conditioning	216, 217	Libbey-Owens-Ford Glass Co.	45 thru 48	Soss Mfg. Co.	52
Celotex Corp.	118, 119	Line Material Industries, Div. McGraw-Edison Co.	81 thru 84	Space Conditioning System Div., Electronic Specialty Co.	105
Century Lighting, Inc.	239	Lone Star Cement Corp.	97	Staedtler, J. S., Inc.	203
Certified Ballast Mfrs.	77	Louver Mfg. Co., Inc.	230	Stanley Works, Hardware Div.	9
Concrete Reinforcing Steel Inst.	209			Steel Joist Institute	221
Connor Lumber & Land Co.	28			Sterner Lighting, Inc.	226
Corbin, P. & F. Div., American Hardware Corp.	21, 22	Macomber, Inc., Subsidiary Sharon Steel, Inc.	56	Sunroc Co.	206
		Maintenance, Inc.	111		
Devoe & Raynolds Co., Inc.	34, 35	Marble Institute of America	44	Taylor, Halsey W. Co.	228
Douglas Fir Plywood Assn.	30, 31 (See American Plywood Assn.)	Matot, D. A., Inc.	110	Terrafino Corp.	107
Dow Chemical Co.	66, 67	Maxitrol Company	226	Timber Engineering Co., Inc.	104
Dow Corning Corp.	98	McDonald Products, Inc.	44		
du Pont de Nemours, E. I. & Co., Tedlar Div.	214, 215	McPhilben Lighting	16	United States Ceramic Tile Co.	50, 51
Dura Steel Products Corp.	234	Metropolitan Wire Goods	20	United States Stoneware Co.	71
Durez Plastics Div. Hooker Chemical Corp.	235	Miller, Howard Clock Co.	69	Universal Atlas Cement Co., Div. of U. S. Steel Corp.	120
Dur-O-Wal	4	Mississippi Glass Co.	207, 208	Upco Div.	94
		Mosaic Tile Corp.	24, 25	Uvalde Rock Asphalt Co.	2nd Cover
Edwards Engineering Corp.	110	Nalgene Piping Systems	232	Vogel-Peterson Co.	111
		Natco Corp.	201		
Fenestra, Inc.	54	National Gypsum Co.	42, 43		
Flexicore Co.	91	National Lumber Mfrs. Assn.	210, 211	Waterloo Register Co., Inc.	229
		Newman Brothers, Inc.	104	West Coast Lumberman Assn.	122, 123
General Fireproofing Co.	17	NL Corp.	29	Wood Conversion Co.	72, 73
Glynn-Johnson Corp.	231	Norris Dispensers Inc.	95		
Goodrich, B. F. Co., Bldg. Prod. Dept.	103	Norton Door Closer Co., Div. Yale-Towne Mfg. Co.	227	Zero Weather Stripping Co., Inc.	202
Gregg Press	108				

SALES, SERVICE AND CIRCULATION

PROGRESSIVE ARCHITECTURE REINHOLD PUBLISHING CORPORATION

D. B. WILKIN VICE PRESIDENT AND PUBLISHING DIRECTOR
 PHILIP H. HUBBARD, JR. ADVERTISING SALES DIRECTOR
 WILLIAM R. EVANS, JR. ADVERTISING SALES MANAGER

BURCHARD M. DAY RESEARCH AND PROMOTION MANAGER
 JOSEPH M. SCANLON PRODUCTION MANAGER
 DAVID N. WHITCOMBE CIRCULATION MANAGER
 SUE FELDMAN SUBSCRIPTION MANAGER

NEW YORK OFFICE

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

Murray Hill 8-8600

ROBERT L. BASSINETTE

DISTRICT MANAGER

HARRINGTON A. ROSE

DISTRICT MANAGER

DONALD W. THOMPSON

DISTRICT MANAGER

PITTSBURGH OFFICE

Porter Bldg., 601 Grant St., Pittsburgh 15219, Pa.

ATLantic 1-9421 Area Code 412

ALBERT E. McCLIMANS

DISTRICT MANAGER

CLEVELAND OFFICE

East-Ohio Building, 1717 E. 9th St., Cleveland 44114, Ohio

PRospect 1-4011-12-13 Area Code 216

JOHN F. KELLY

DISTRICT MANAGER

CHICAGO OFFICE

111 W. Washington St., Chicago 60602, Ill.

RAndolph 6-8497 Area Code 312

MERRY B. LITTLE

DISTRICT MANAGER

CARL J. NOLTE, JR.

DISTRICT MANAGER

CHARLES A. ULLRICH

DISTRICT MANAGER

WEST COAST ADVERTISING REPRESENTATIVES

Robson, Jordan, Harrison & Schulz, Inc.

17 Post St., San Francisco 94104, Calif.

EXbrook 2-6794 Area Code 415

CHARLES S. HARRISON

CYRIL B. JOBSON

Robson, Jordan, Harrison & Schulz, Inc.

901 W. 8th St., Los Angeles 90057, Calif.

BUbbard 3-8530 Area Code 213

DAVID CLARK

PETER SCHULZ

SOUTHERN ADVERTISING REPRESENTATIVE

Robert L. Watkins Associates

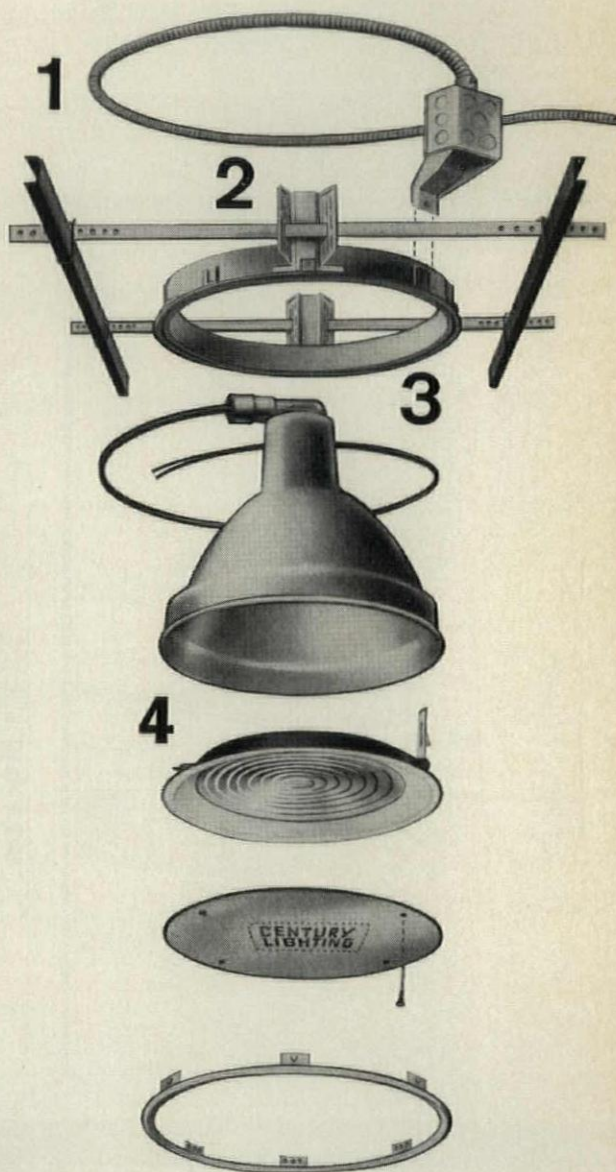
105-805 Peachtree Bldg., Atlanta 30303, Ga.

TRinity 4-6427 Area Code 404

ARMON L. PROCTOR

ROBERT L. WATKINS

More architects specify more Instalite.®



1. Fast installation. Entire fixture assembly snaps into place. 2. Various fixture types are interchangeable in the same size mounting ring. 3. Die cast aluminum ring with stainless steel brackets eliminates the possibility of rust stain. 4. Precise optical performance.

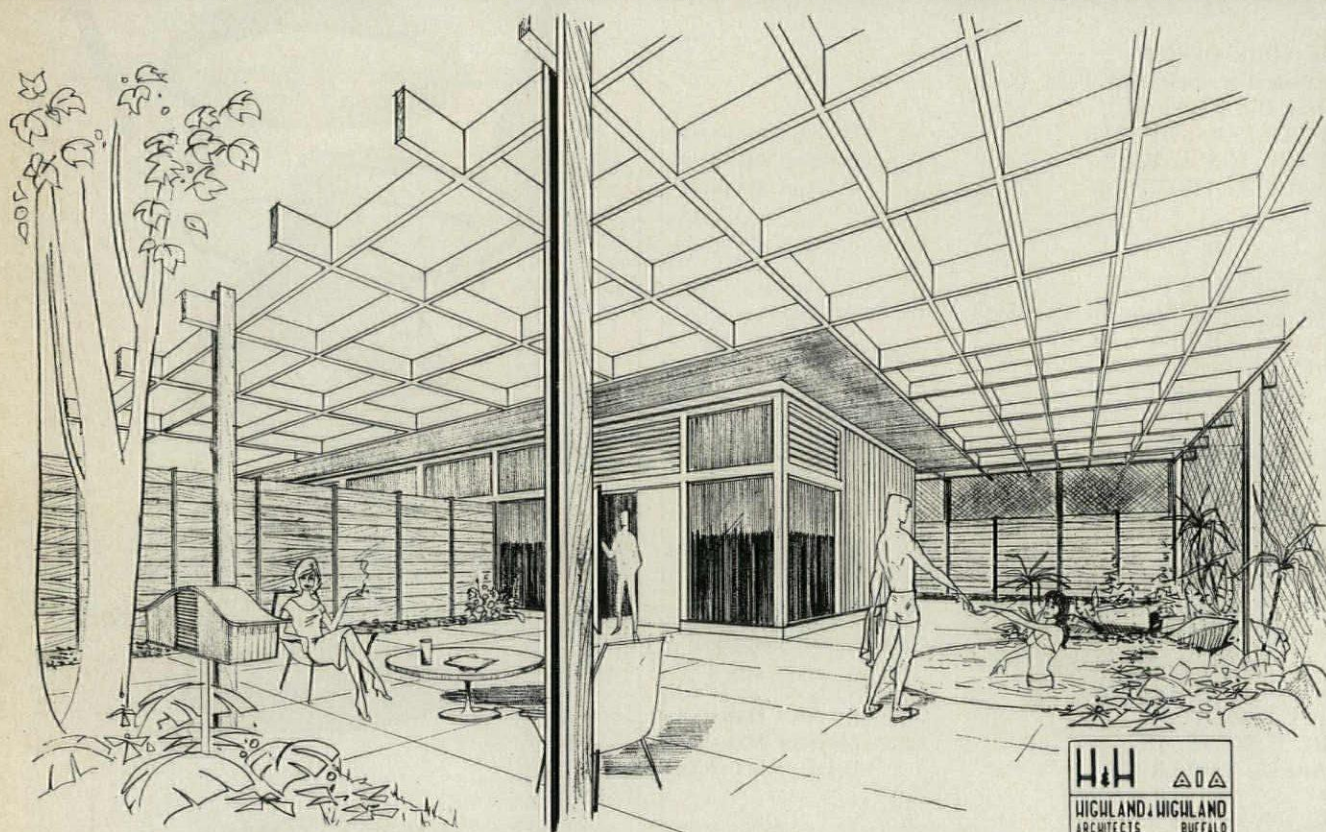
Many fixture types and sizes available. Write for Instalite catalog and prices.

Century Lighting equipment is engineered lighting equipment

**CENTURY
ARCHITECTURAL
LIGHTING**

New York: 521 West 43rd Street, New York, N. Y. 10036
 Calif.: 1820-40 Berkeley St., Santa Monica/2443 Ash St., Palo Alto

For more information, turn to Reader Service card, circle No. 406



THE TROPICAL CAGE

Tired of designing for conventional living? Here's an exotic idea for fun living with all the intimacy of a deserted island, yet with every facility of a fine resort... even to a private plunge. Indoor-outdoor lounging centers around a spacious terrace, framed and screened for privacy with OSMOSE Pressure Treated Wood. Because this long-lasting wood is virtually impervious to decay and termite invasion, you can imbed it in concrete, anchor sills to slab foundations, bring it flush to the ground and expose it to the elements as your design sees fit. You can paint it, stain it or leave it. It won't corrode hardware to mar its natural beauty. It is odorless and clean to handle... important benefits on the job site. Whether you use this "cage" design as an individual unit, or in multiple clusters, you'll find the cost of OSMOSE Pressure Treated Wood compatible with the down-to-earth economy of wood construction. Even so, who would think of using anything but pressure treated wood for a "Tropical Cage"? For more information, write to:

OSMOSE WOOD PRESERVING CO. OF AMERICA, INC., 984 ELLICOTT ST., BUFFALO, N. Y. 14209