





Colors: 980 Shibui Dusk, 981 Shibui Dawn, V-300 Black, V-304 White

Vina-Lux **Shibui** Series

subtle floor beauty that won't "walk off"...

The Japanese **shibui** feeling for design, form and color is uniquely captured in Vina-Lux Shibui Series . . . another exclusive styling in vinyl asbestos tile with patterning distributed through the full thickness of the tile. Shibui makes a beautiful, yet rugged floor for heavy traffic areas—can be installed over concrete — above, on or below grade, or over wood or plywood subfloors. May we send you samples and detailed architectural specifications? Azrock Floor Products Division, Uvalde Rock Asphalt Company, 523A, Frost Building, San Antonio.

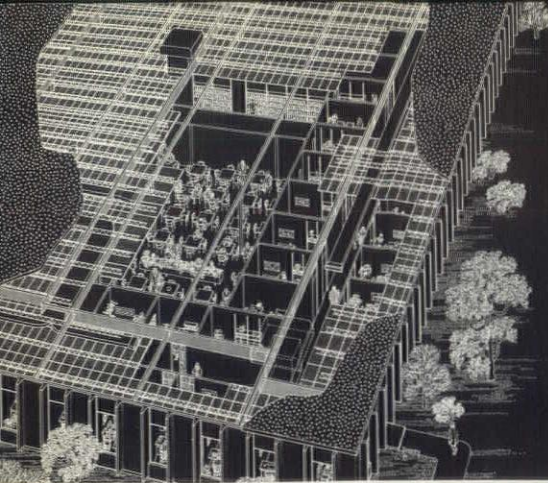
an exclusive styling by **AZROCK**[®]

For more information, turn to Reader Service card, circle No. 311

Magnified view shows pattern distribution through full thickness of tile.

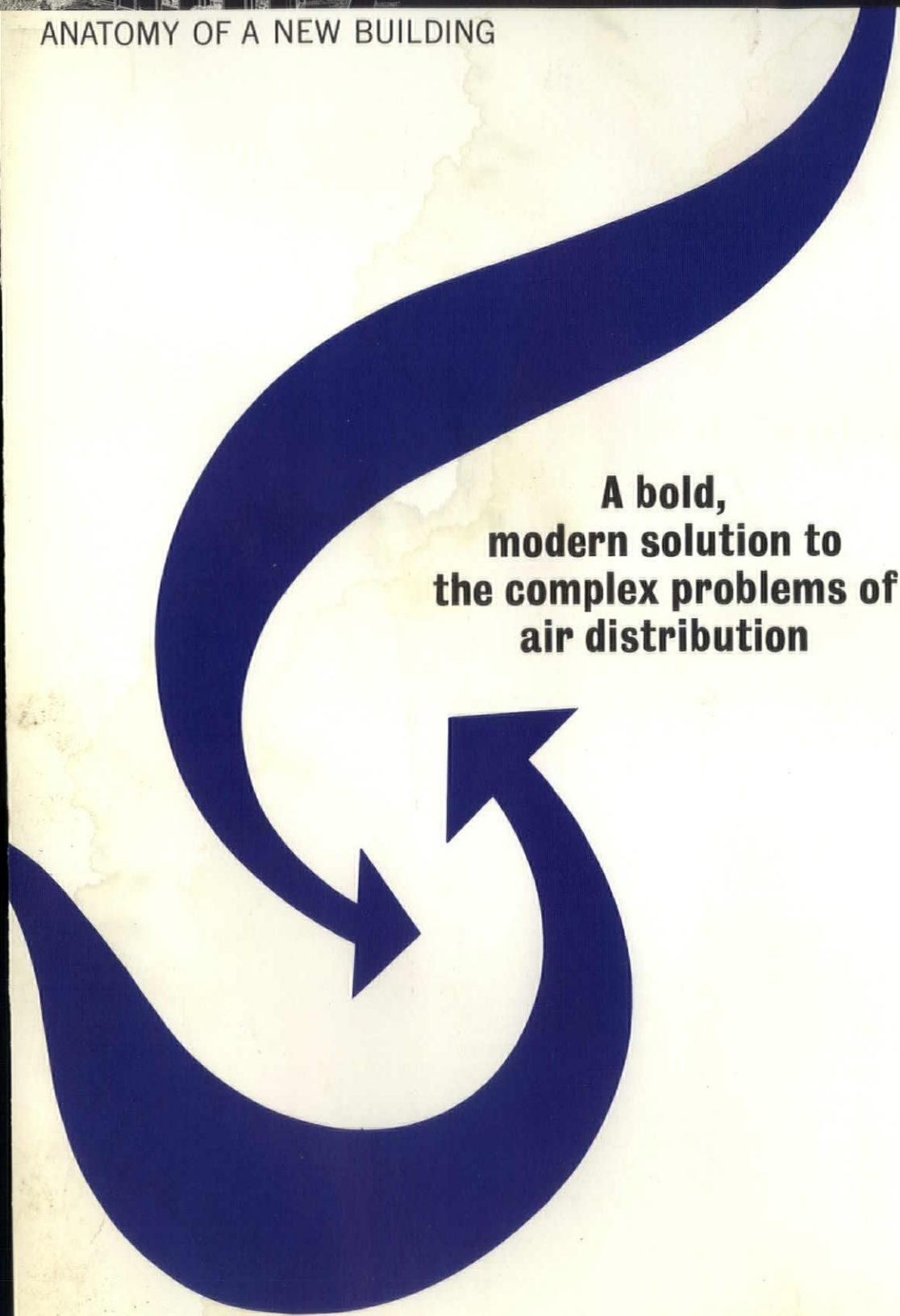
Gauge: $\frac{1}{8}$ ". Standard size: 9" x 9". Modular size: 12" x 12" available in quantities of 9000 square feet per color — at no extra charge.

See us at the
A.I.A. Convention
Exhibition #411



ANATOMY OF A NEW BUILDING

**A bold,
modern solution to
the complex problems of
air distribution**





Aracon Laboratories, a division of Allied Research Associates Inc., Concord, Mass. *Owner:* Robert and Norman Leventhal. *Architect:* Samuel Glaser Associates, Boston. *Interior Designer:* Hans Krieks Associates, Inc., Boston. *Mechanical Engineer:* Stressenger & Adams, Newton Highlands. *General Contractor:* Beacon Construction Co., Boston. *Ceiling Systems Contractor:* Armstrong Contracting & Supply Corp., Dorchester, Mass.

Designed into this building from the start, the Armstrong Ventilating Ceiling System precisely meets the air-conditioning needs of individual areas—yet it cut ductwork, saved time and money, and made room layout flexible.

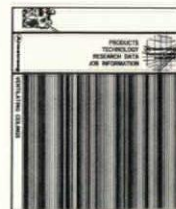
When this single-story building was still on the drawing board, the designers specified the Armstrong Ventilating Ceiling System. (In this system, air is supplied through a sealed plenum and distributed uniformly by the entire ceiling.) It provided several advantages. Zone barriers permitted perimeter areas to get separate heating or cooling treatment compared with interior areas. Yet most supply ductwork and all diffusers were eliminated. *Saving: 34¢ a square foot.*

Building height was reduced, too. With much less ductwork to contain, the plenum was made much shallower, so the entire single-story building is at least 12" lower. *Saving: at least 10¢ a square foot.*

During construction, ceiling installation went ahead even though the client had to change office-partition plans right up to the last minute. Partitions can run anywhere

under the uncluttered Armstrong Ventilating Ceilings, so the room layout is highly flexible. *Saving: about four weeks' building time.* And, with the entire ceiling distributing air, the whole space below it gets even, thorough, comfortable treatment.

By exploiting the Armstrong Ventilating Ceiling System from the start, the architects, engineers and contractors gained advantages in design, performance and economy. To investigate this system further, contact your Armstrong Ceiling Systems Contractor or Armstrong District Office. Now available: an illustrated portfolio, describing the system, with examples, data and specifications. Write to Armstrong, 4205 Watson Street, Lancaster, Penna.

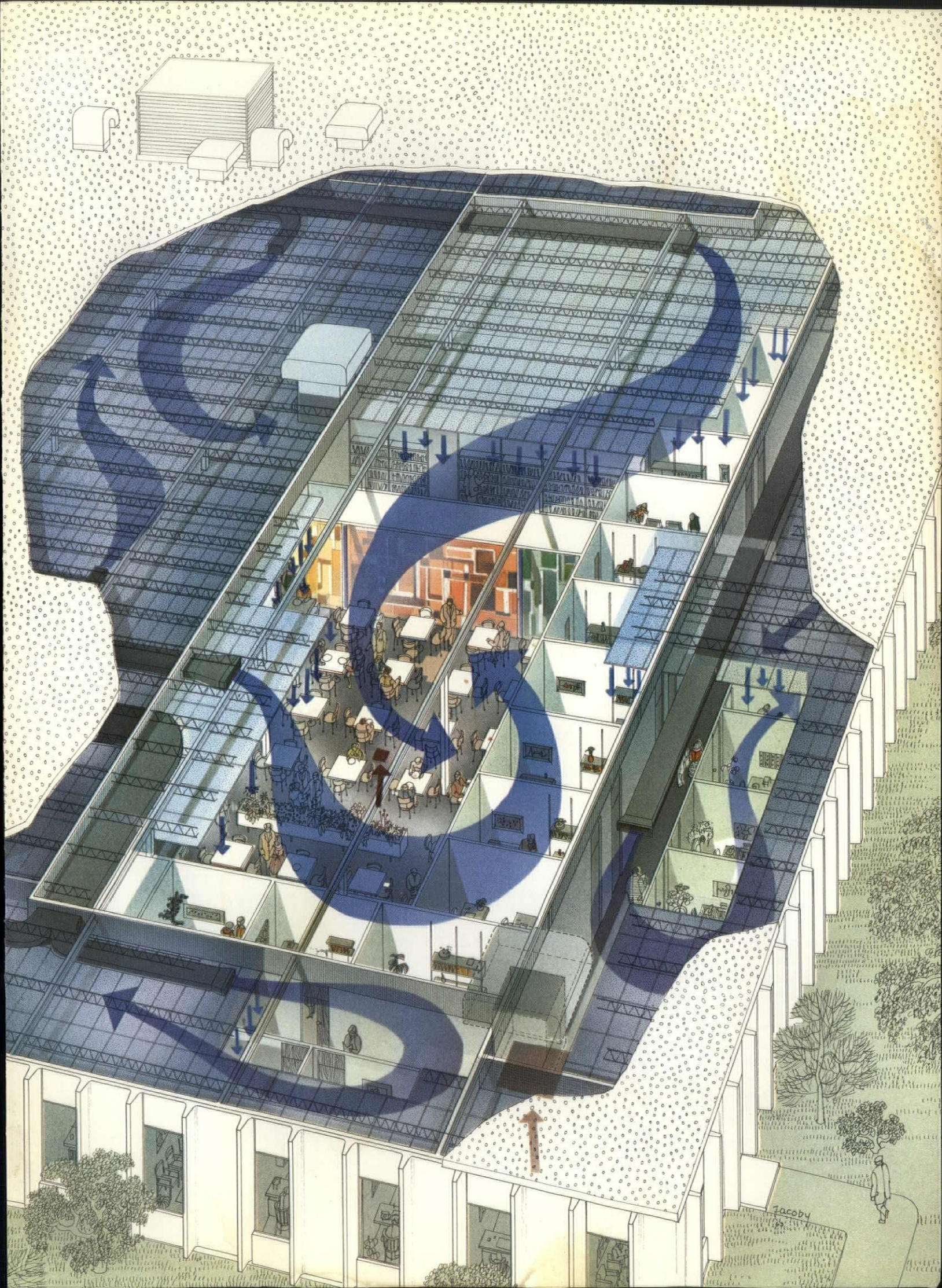


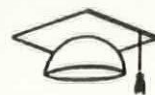
RENDERING BY HELMUT JACOBY.
PHOTOGRAPHY BY LAWRENCE S. WILLIAMS.

Armstrong
CEILING
SYSTEMS

For more information, turn to Reader Service Card, circle No. 300.







**DUR-O-WAL'S
TRUSS DESIGN
STANDS AT
THE HEAD OF
THE CLASS**

Impartial tests by university research engineers prove DUR-O-WAL far exceeds accepted standards for flexural strength

We sent Dur-o-wal masonry wall reinforcement to school—for evaluation by independent university research engineers. Here are the facts: Tests of 8" concrete block walls proved that truss-designed Dur-o-wal increases horizontal flexural strength from 60 to 135 per cent, depending on weight of Dur-o-wal, spacing, type of mortar. When used in lieu of brick headers for composite masonry walls, Dur-o-wal increases ultimate compressive strength. Repair-free years are added to masonry wall life. Please pass the evidence? Write to nearest address below for new comprehensive Dur-o-wal data file.

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.



Strength with flexibility—the two basic factors for a repair-free masonry wall are assured by combining the use of Dur-o-wal with its equally well-engineered companion product, the ready-made Rapid Control Joint, indicated by trowel. With its neoprene compound flange, this flexes with the wall, keeps itself sealed tight, cuts caulking costs.

THIS MONTH IN P/A

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the Reinhold Group for
BUILDING DESIGN,
ENGINEERING
AND CONTRACTING
that also includes
AMERICAN ARTISAN
AND HEATING, PIPING
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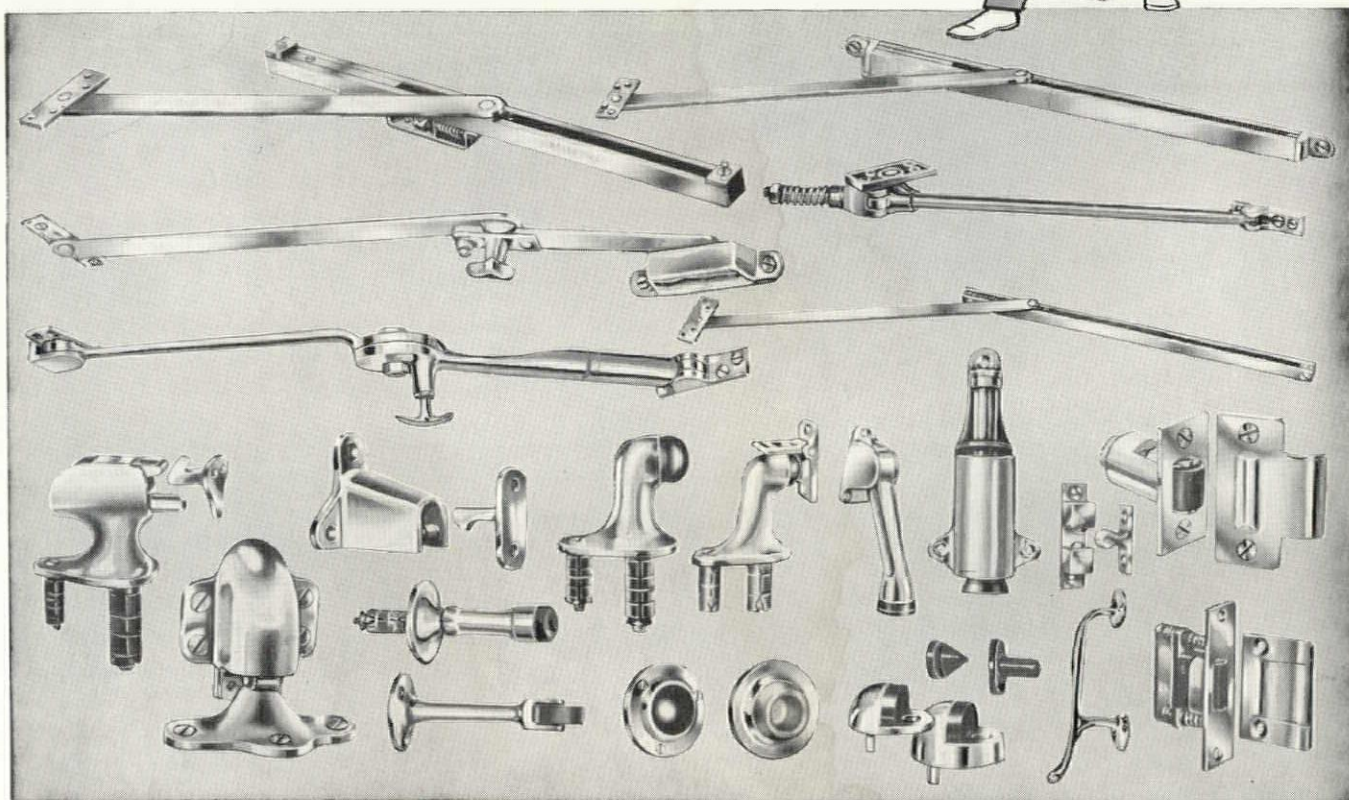
GJ *from your* **DOOR CONTROL SPECIALIST**

... the only complete line of door control hardware, enabling you to select to fit your exact functional and budget requirements.

... experienced analysis of every order with engineering aid when required.

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Your specification means more when you write in
"... shall be GJ."



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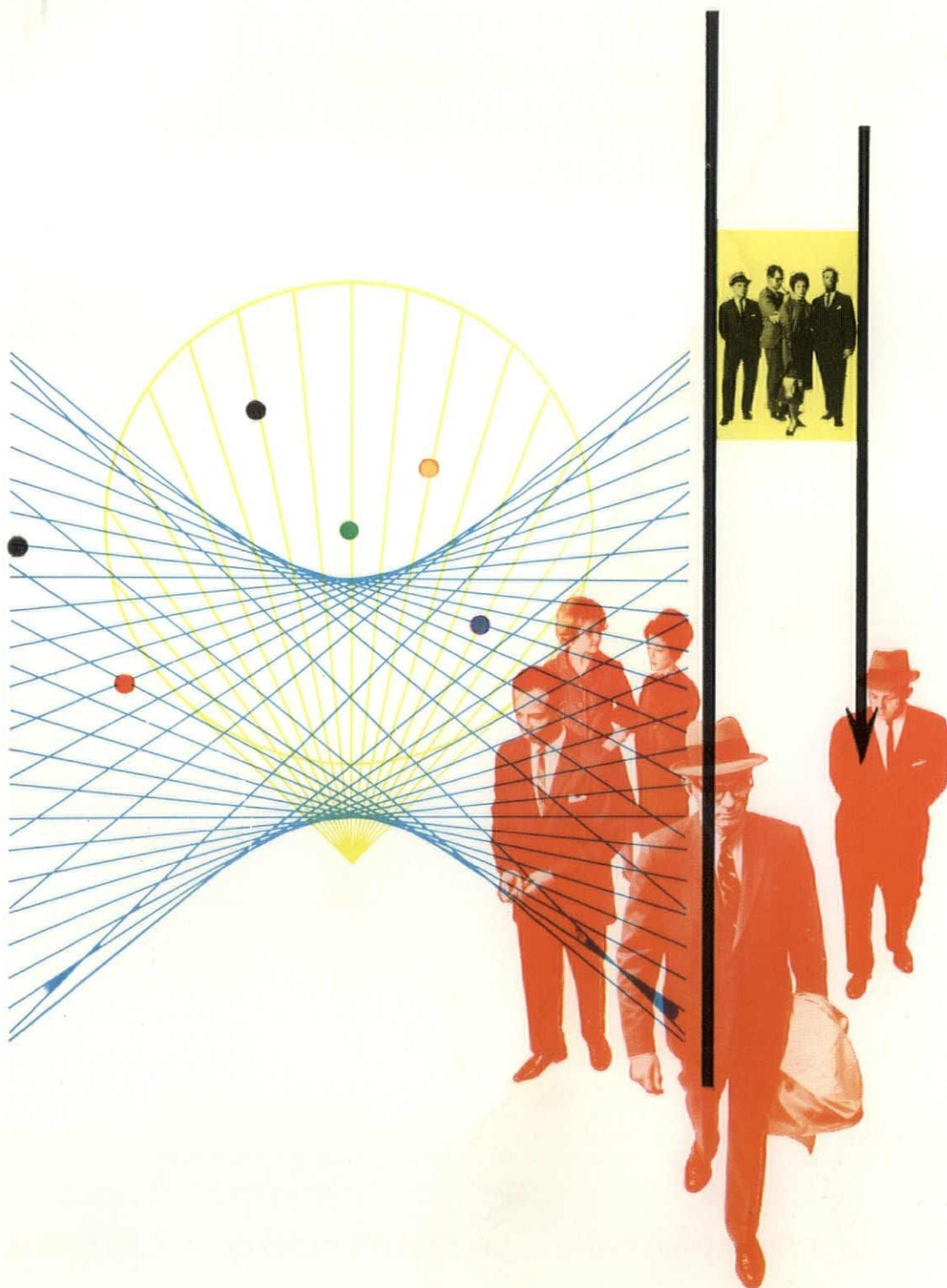


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today it's unlimited elevator automation

—and almost instant elevator service. Still further advances in AUTOTRONIC® elevating. A constantly alert supervisory system keeps elevator service matched to traffic demands—continuously! Thru unlimited elevator automation based upon never-ending 'service sensing'. • This 'service sensing' detects all demands for elevator service and transmits them continuously to the computer—the 'brain' of the installation in the elevator machine room. This data is projected against current elevator performance to reach immediate command decisions. Then, these decisions are converted into signals that direct the elevators to provide the world's most advanced elevator service. • Once again, it's leadership by OTIS. Otis Elevator Company, 260 Eleventh Avenue, New York 1, N. Y.

Otis
AUTOTRONIC ELEVATING



FROM ARMSTRONG . . .

AN ENTIRELY NEW KIND OF FLOOR:

VISTELLE CORLON TILE—

WITH DU PONT HYPALON

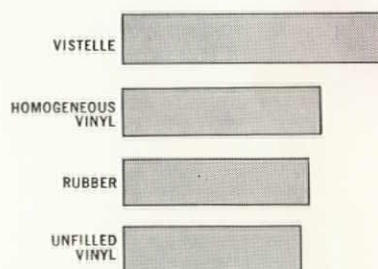
This handsome new floor is probably the most significant development in resilient floors since the introduction of vinyl. It offers the best combination of physical properties and functional advantages ever incorporated into one flooring material.

Here's how Vistelle compares to some other widely used commercial floors:

RESISTANCE TO INDENTATION MARKS

Some flooring materials, such as terrazzo, marble, and the better unfilled vinyl tiles, resist indentation by virtue of their *hardness*. But they offer this benefit at the sacrifice of underfoot comfort. Vistelle's exceptional resistance to permanent indentation is a function of its extreme *resilience*. It gives on impact, but recovers when pressure is released, providing a floor that is free of permanent indentation marks and at the same time, comfortable underfoot. Unlike other resilient floors, the resilience of Vistelle Corlon Tile does not decrease with age.

RESILIENCE

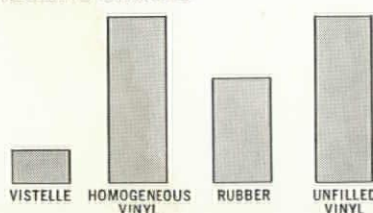


RESISTANCE TO CIGARETTE BURNS

Vistelle's superior resistance to cigarette burns is shown in the chart above right. In this test, cigarettes were left to burn out on the tiles. Then the tiles were cleaned with fine steel wool and a commercial floor cleaner and the remaining stain given a severity rating from 0 to 5. Vistelle rates best with only slight staining; so slight in fact, that it

was undetectable at arm's length. The vinyl tiles were irreparably scarred, the rubber tile severely stained.

CIGARETTE STAINING



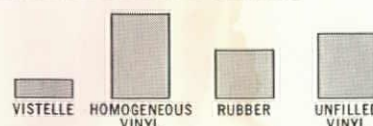
RESISTANCE TO STAINING

Staining tests have also been conducted with more than 100 solvents, acids, and chemicals—and with a like number of common household staining agents such as lipstick, grape juice, crayon, and ink. As shown below, in both sets of tests, Vistelle received a rating of 1 or below indicating very slight or no visible stain. Vistelle is also greaseproof.

ACID, SOLVENT, CHEMICAL STAINING



GENERAL HOUSEHOLD STAINING



DIMENSIONAL STABILITY

Vistelle Corlon Tile has exceptional resistance to shrinkage or expansion, exceeding the requirements of Federal

Specification (homogeneous vinyl tile) Interim L-F-00450—(COM-NBS) by a wide margin. Dimensional stability will be guaranteed in writing by Armstrong.

COLOR CLARITY AND FADE RESISTANCE

Compared to other resilient floors, Vistelle's white is whiter, its black deeper, its colors richer. The delineation of design is sharper, too, because colors do not overlap one another. Vistelle is also highly resistant to fading. Test floors exposed to traffic and sunlight for several years have stayed remarkably color constant.

DURABILITY

Vistelle gives superior service under heavy traffic. Tested on the entrance ramp at the Monsanto House of Tomorrow in Disneyland, it was exposed to a traffic rate of 6,000 people a day . . . a total of four million during the test period. After two years under these severe conditions, constantly abraded by sand and gravel tracked from paths leading to the house, only 20% of the tiles' thickness had been worn away.

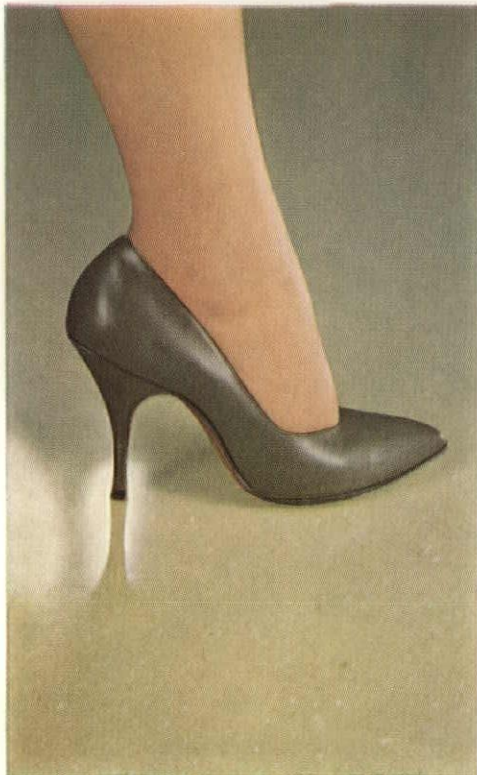
COST

A floor of Vistelle costs \$1.50 to \$2.00 sq. ft. installed over concrete, depending on the size of the installation. Vistelle can be installed at any grade level over any type of subfloor.

For samples of Vistelle Corlon Tile and technical data, call the Armstrong Architect-Builders Consultant at your Armstrong District Office. Or write to Armstrong, 305 Watson St., Lancaster, Pennsylvania.

Vistelle and Corlon® are trademarks of Armstrong Cork Co. Hypalon is a registered trademark of Du Pont.

Armstrong FLOORS



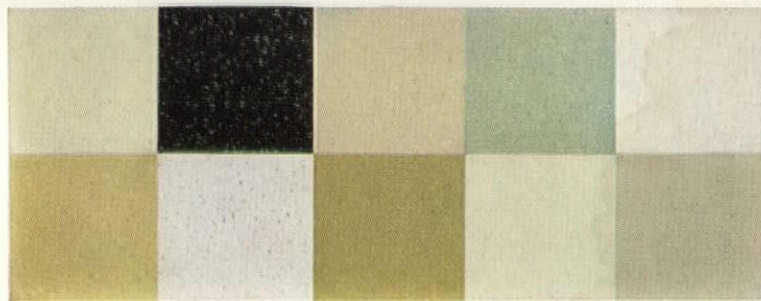
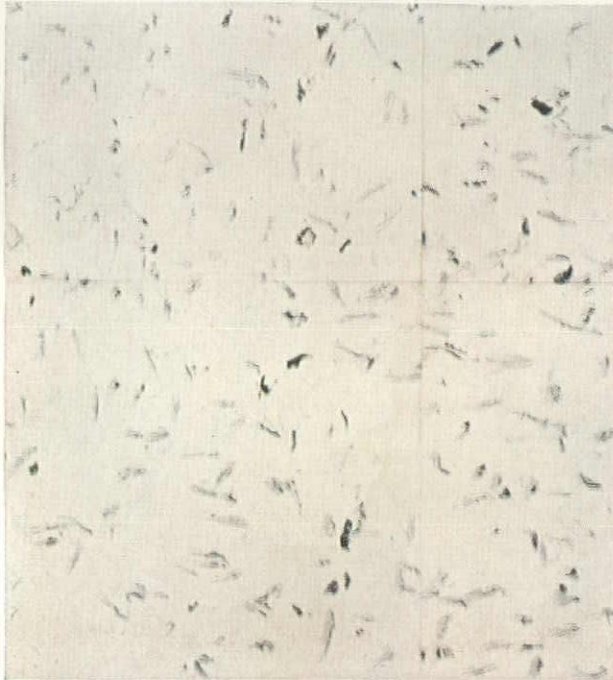
Excellent resistance to indentation — comfortable and quiet underfoot.

Developed expressly for heavy commercial traffic.



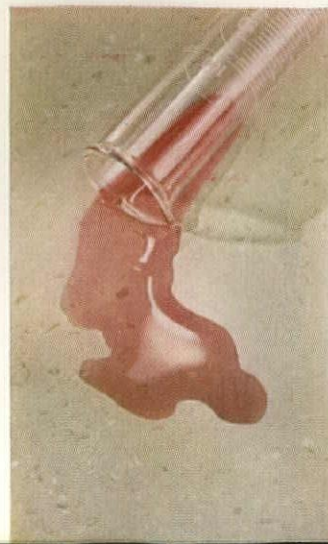
A lighted cigarette will not burn its surface.

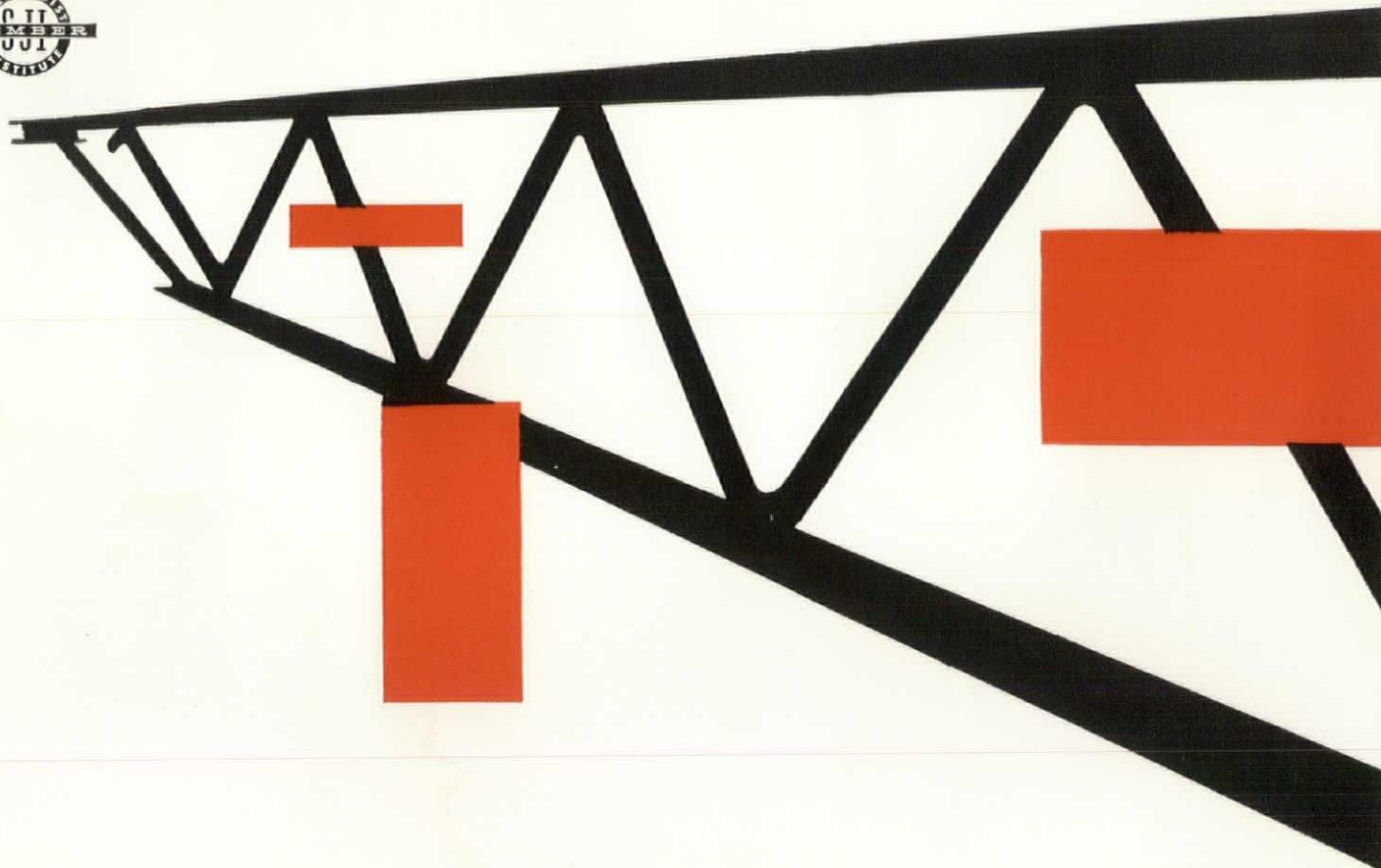
Dimensional stability guaranteed by Armstrong in writing.



Ten colorings in five color-coordinated pairs. Subtle, flecked design gives a plain monolithic effect.

Resists more chemicals, solvents, and staining agents than any other resilient floor.





YOU GAIN DESIGN FLEXIBILITY WITH

When floors and roofs are designed with Sheffield Open Web Steel Joists, pipes and conduit can be readily concealed within the depth of the web. At the same time you get an interior framework that is compatible with the most advanced ceiling products.

In addition, you can take advantage of the high strength-weight ratio of Sheffield Joists, which permits design of the most economical framing and footings. And when the project is under construction, steel joists do not need pampering during bad weather. Work moves quickly. Clients get the earliest practical occupancy.

One thing more. Efficient automated mills that turn out Sheffield Joists have helped us earn a reputation for shipping on time. You can depend on it!

Sheffield Joists are made to specifications of the Steel Joist Institute. Complete loading data and specifications are available in a comprehensive 56 page catalog. Send for your copy today. **Sheffield Division, Armco Steel Corporation, Department S-803, 7100 Roberts Street, Kansas City 25, Missouri. Plants in Kansas City, Houston, Tulsa.**





SHEFFIELD OPEN WEB STEEL JOISTS

Sheffield Division, Armco Steel Corporation

Department S-803, 7100 Roberts Street, Kansas City 25, Missouri

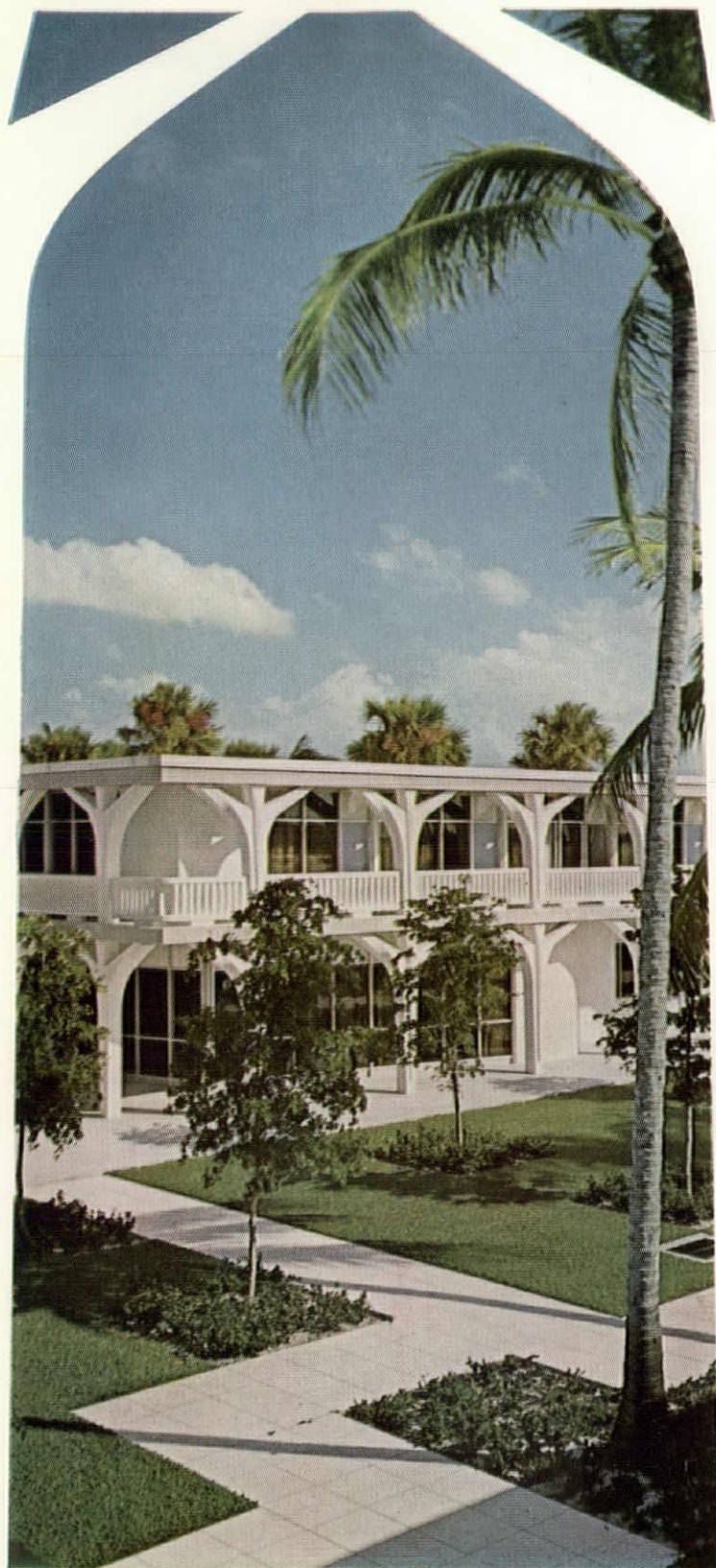
Send my copy of the latest catalog, SHEFFIELD OPEN-WEB STEEL JOISTS (J-SERIES and H-SERIES)

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City _____ Zone _____ State _____

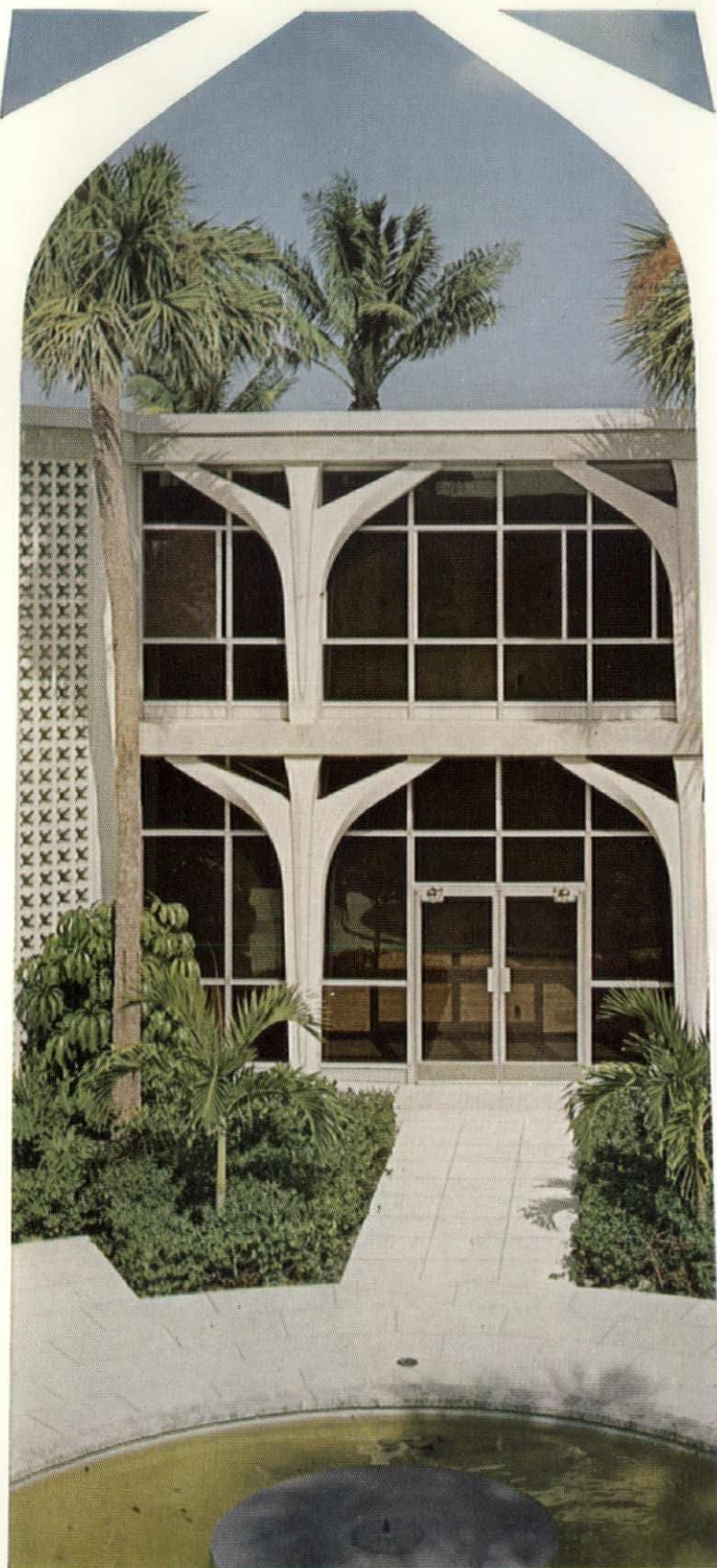


Cruciform Support Columns serve as a design motif throughout the building, and frame vistas viewed from colonnaded galleries. Top panels of ground floor window walls are of opaque white Supratext.



Glare Reduction is dramatically illustrated by strip of natural light shining through open door. Gray-tinted Supratext allows light transmission of only 28%, reduces solar heat by approximately 30%.

AMERICAN SAINT GOBAIN CORPORATION



Cloistered Courtyard of priests' residence features decorative screens of precast concrete blocks which shield windows of residence wash rooms. Window wall and doors are of Supratest. Window frames are aluminum.

Serenity Safety Sun - Control ...with glass by ASG

Gleaming white, clad in subtly tinted glass, the new monastery and retreat house of Our Lady of Florida in North Palm Beach, is a twentieth-century American statement of the centuries-old traditions of monastic life.

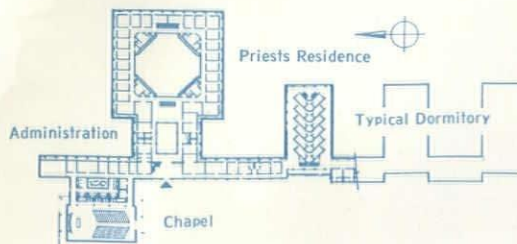
Designed by Brother Cajetan Baumann, F.A.I.A., a Franciscan friar, the two-story structure of reinforced concrete and glass is light and airy, in keeping with its tropical setting. Yet it possesses a dignity and sense of cloistered seclusion.

To create this feeling of serene detachment, to protect against wind damage, and to reduce heat and glare of the sun, ASG's Supratest® laminated glass was specified for all window walls and sliding doors. Supratest is a laminate of two lights of sheet glass bonded together by a plastic interlayer. In this case, the plastic was tinted to give the glass a uniform gray cast.

The gray Supratest is highly reflective and practically opaque when viewed from a distance, increasing the monastery's air of privacy and self-containment. The tint also makes the glass heat absorbing and glare reducing, bringing easy-to-live-with natural light to the interior, and relieving the burden on the building's air conditioning system. The plastic-bonded construction of Supratest makes it shatterproof, assuring interior safety even during the hurricane season.

Supratest is just one of the broad and versatile family of flat glasses available from ASG—the only U.S. manufacturer of all major types of flat glass. Whatever your need—plate, sheet or patterned glass—whatever the application—home, school, office, apartments—there's a quality ASG glass to do the job.

For more information, see your local glass distributor or ASG representative, or write: Dept. E-5, American Saint Gobain Corporation, Box 929, Kingsport, Tennessee.




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PLANTS: Kingsport and Greenland, Tennessee • Jeannette, Arnold and Ellwood City, Pennsylvania • Okmulgee, Oklahoma



the most exciting ideas take shape in plywood

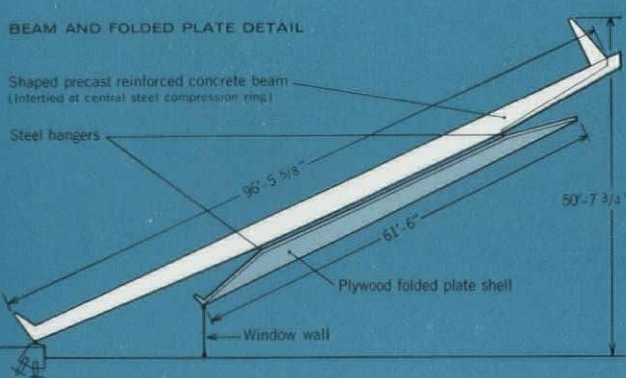




3x4 valley chord
 3/8" EXT-DFPA
 plywood skin
 (nailed only)
 2x4 rafters 24" o.c.
 (3x4 rafters at
 plywood joints)
 3x4 blocking at
 all plywood joints
 Shaped 4x6
 ridge chord
 Texture One-Eleven
 plywood ceiling

20'-0 1/8"

BEAM AND FOLDED PLATE DETAIL



ST. PETER'S CHURCH, PACIFICA, CALIFORNIA

ARCHITECT: MARIO J. CIAMPI, F.A.I.A.
 PAUL W. REITER, ASSOCIATE ARCHITECT
 SAN FRANCISCO

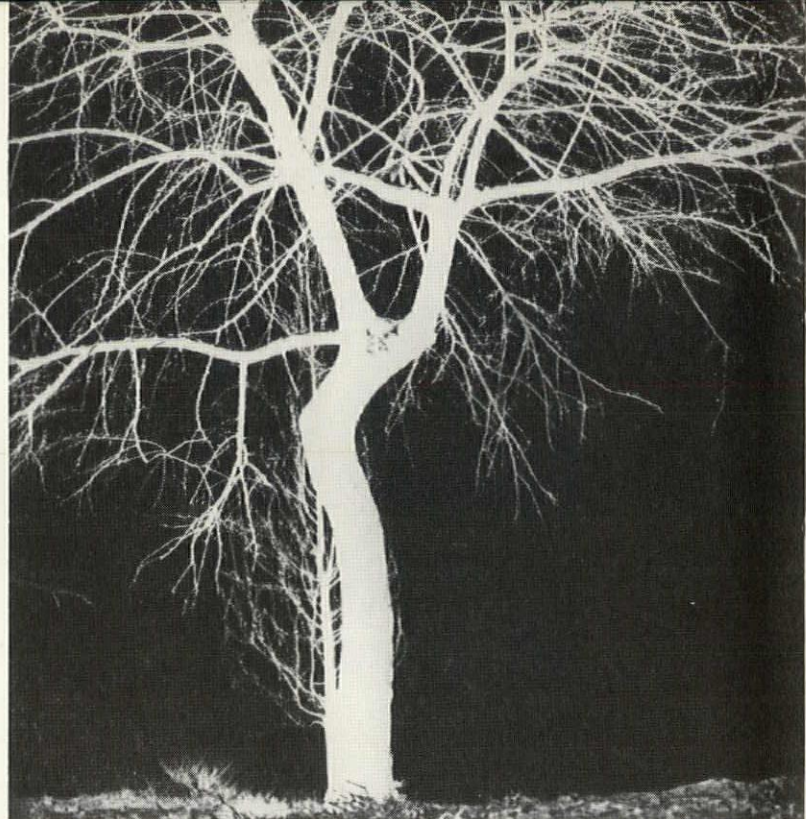
STRUCTURAL
 ENGINEER: ISADORE THOMPSON, SAN FRANCISCO

CONTRACTOR: PACIFIC COAST BUILDERS, SAN FRANCISCO

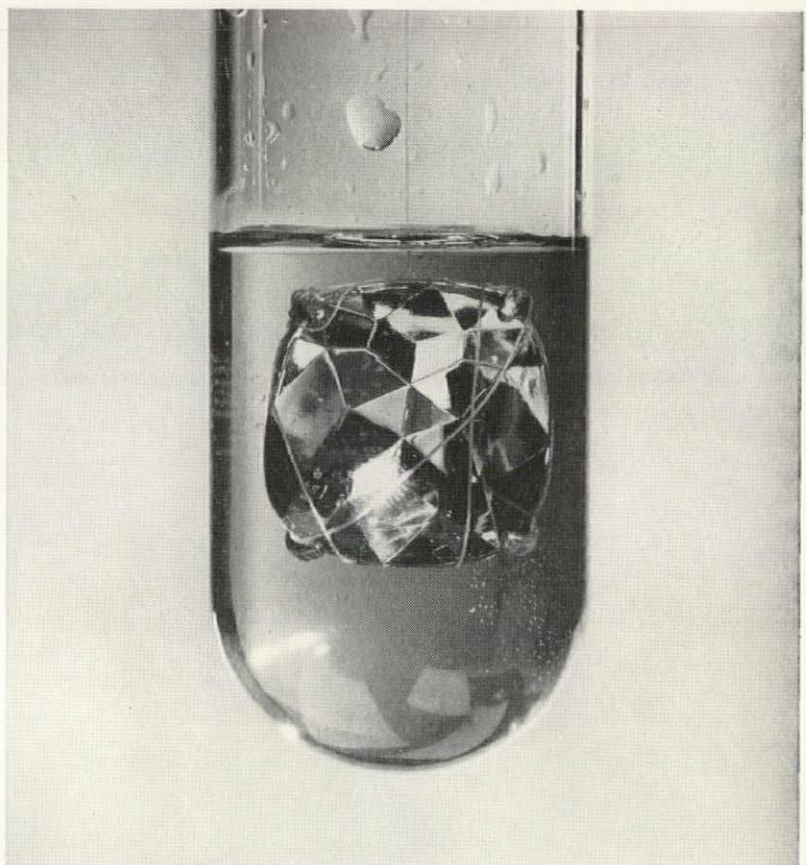
This parasol-like plywood folded plate roof, suspended beneath slender reinforced concrete beams, is another prime example of how modern materials and engineering systems can be combined to create a new architecture, free of traditional restraints. The plywood canopy is so nearly self-sustaining that each folded plate needs only two beam connections. The result is a large clear-span structure of remarkable harmony and simplicity. ■ Construction was efficient and economical. Components were site-fabricated with plywood and light lumber framing, and crane-lifted into place. ■ As in so many of today's new architectural forms, only plywood had the requisite design flexibility coupled with adequate structural and appearance values. For more information, write (USA only) Douglas Fir Plywood Association, Tacoma 2, Wash.



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MAGEE SAYS: you wouldn't paint a pearl... tint a tree



color a cantaloupe... dye a diamond



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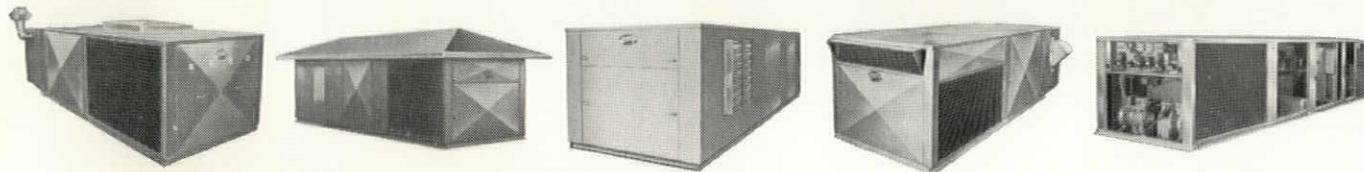
SAMPLES ON REQUEST TO ARCHITECTS AND DESIGNERS. MAGEE CARPET COMPANY, 295 FIFTH AVENUE, NEW YORK, N.Y. MEMBER OF THE AMERICAN CARPET INSTITUTE

ON TOP NOW...

& for the life of the building!



ATMOS-PAK PREFABRICATED ONE-PIECE ROOF-MOUNTED HEATING AND/OR COOLING SYSTEMS



Name the fuel and name the power, describe the building and the load. We'll show you an Atmos-Pak pre-fabricated, roof-mounted unit that will do the heating and/or cooling better. Every Atmos-Pak system is specifically designed and constructed for roof-mounting; one-piece, ready-to-hook-up. Avoid the improvised on-the-roof assembly!

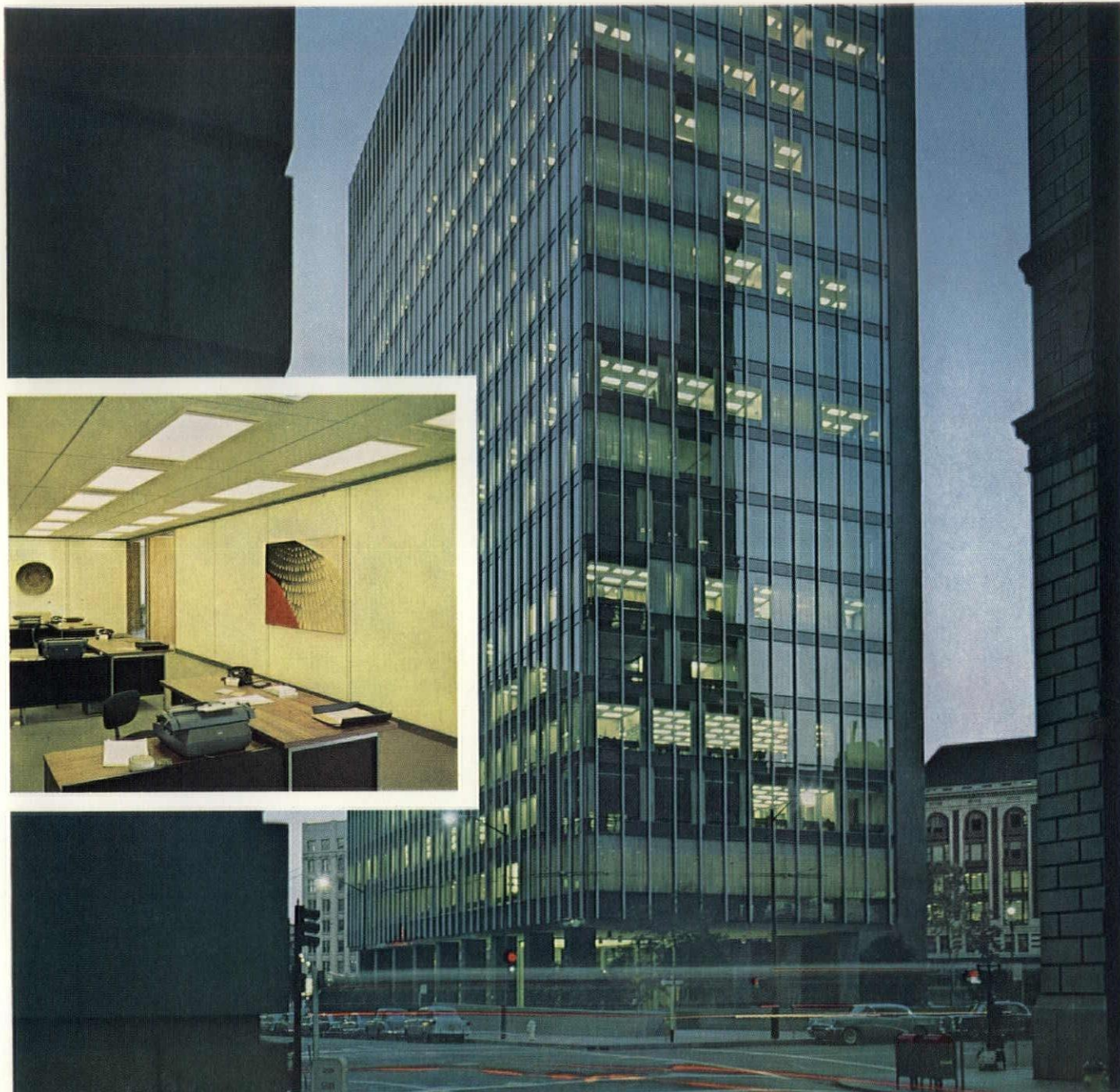
Low-silhouette, weatherproof, Atmos-Pak is handsomely at home atop the roof of any one-story building. The unit system makes for astounding flexibility and expandability. Atmos-Pak minimizes maintenance, delivers efficient, consistent, dependable performance, offers space saving, ease of zone control.

Ask about Atmos-Pak, especially the new RGE models—"Atmos-Pak is cooling with gas!" For an efficient solution of the heating and/or cooling of large one-story buildings, using gas, electricity, steam, hot water, oil, please write. Demonstrations easy to arrange.



THERE'S ALWAYS ROOM ON TOP FOR THE ORIGINAL LOW SILHOUETTE
ATMOS-PAK, INC. 88 NORTH HIGHLAND AVE., OSSINING, N. Y.

Pioneer, Designer, and Manufacturer of Roof-Mounted Heating and/or Cooling Systems



Architects: Hertzka & Knowles and Skidmore, Owings & Merrill

Lighting for prestige buildings— **Plexiglas**

More than 7,000 fluorescent luminaires, each equipped with a diffusing panel of PLEXIGLAS® acrylic plastic, provide lighting of the highest quality at the twenty-story Crown Zellerbach Building in San Francisco. The diffusers measure 2' x 4', have nonreflective matte surfaces, and are formed to a slight upward dome shape.

For lighting, PLEXIGLAS provides...

Durability. PLEXIGLAS remains free from discoloration even after years of exposure to fluorescent light.

Rigidity. It is easy and safe to handle.

Breakage Resistance.

Light Weight.

Efficiency in transmission and diffusion of light.

Beauty in appearance.

Formability to almost any shape.

We will be pleased to send you literature on PLEXIGLAS for lighting, and the names of manufacturers whose equipment includes diffusers or lenses of PLEXIGLAS.

**ROHM
&
HAAS**
PHILADELPHIA 5, P.A.



PLEXIGLAS is a trademark, Reg. U.S. Pat. Off. and other principal countries in the Western Hemisphere.

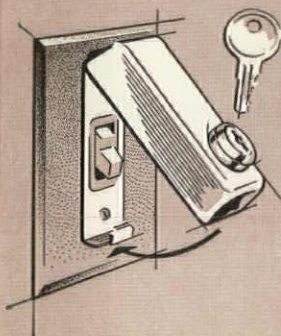
In Canada: Rohm & Haas Company of Canada, Ltd., West Hill, Ontario.

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on special-purpose
electrical wiring devices

**TAMPER-PROOF
SWITCHES & CAPS**

**LOCKING COVER
PROTECTS SWITCHES**

No. 96061 et al



Hinged cover of heavy drawn brass, with Yale tumbler lock, screws onto any metal switch-plate, single or ganged. No rewiring needed. Hinge pin is recessed and concealed.

Available with: (1) the same key for all locks, or (2) a different key for each lock, or (3) one key for one group of locks and other keys for other groups. Master keying is optional. Brushed brass or brushed chrome.

Widely used to prevent unauthorized operation of equipment in workshops, schools, hospitals, and prisons. See Page 127-K Revised in Hubbell Catalog No. 29.

**KEY REQUIRED TO
OPERATE SWITCH
AC or AC/DC Models**



Lock-type switch has a keyway instead of a handle. Only special key furnished with switch actuates it. Snap-type and momentary contact models for AC or T-rated AC/DC.

Specification and standard grades. See Pages 85, 86, 87, 89, 127-H, and 127-M in Hubbell Catalog No. 29.

**SCREW LOCKS CAP
IN OUTLET**



Armored, 3-wire cap No. 5280 or 5283 has a knurled, un-slotted screw running through its U-shaped grounding blade. After cap is seated in outlet, tightening the screw prevents accidental or mischievous disconnection of equipment.

These caps have been used to insure uninterrupted operation of heating cables around pipes exposed to low temperatures. Also on timeclocks, vending machines, freezers, medical equipment.

See Page 126-Q in Hubbell Catalog No. 29.

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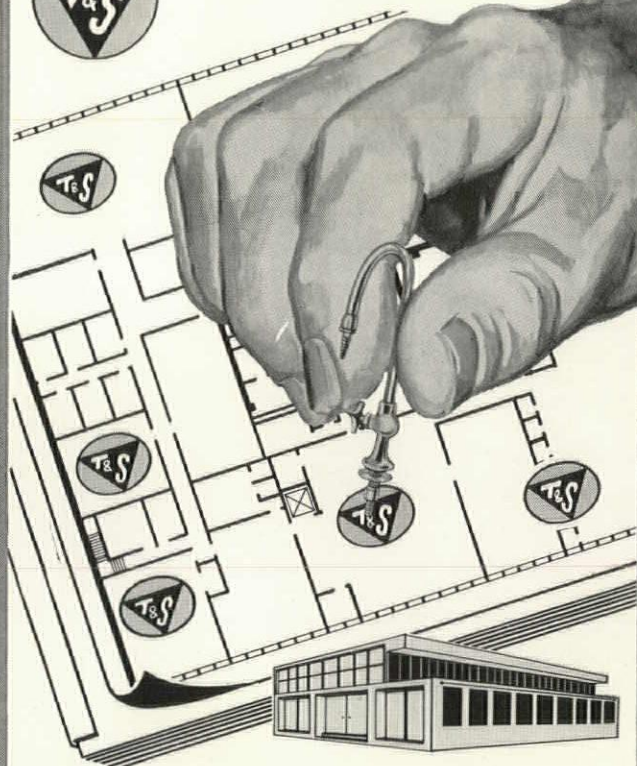
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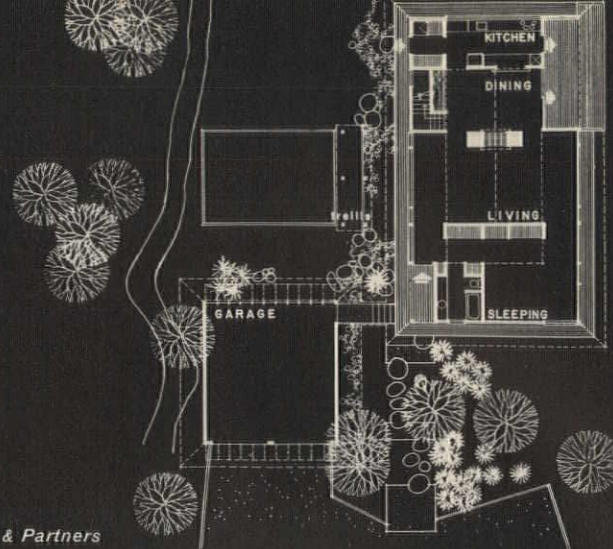
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Architects: A. O. Bumgardner, A. I. A. & Partners



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The natural character of genuine Red Cedar Shingles, their unique color, texture, dimension and line cannot be imitated. Rugged, durable, storm and wind-resistant; a Red Cedar Shingle roof ages gracefully, in fact gains character with the years. If you would like complete

information about applications and specifications for this classic material, write: Red Cedar Shingle Bureau, 5510 White-Henry-Stuart Building, Seattle 1, Washington or 550 Burrard Street, Vancouver 1, British Columbia **RED CEDAR SHINGLES**

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Niagara Falls, New York

Architect:

Aaron Colish of Philadelphia

Builder:

Arthur A. Kober Co.
of Bala-Cynwyd, Pa.

Gypsum Drywall Construction:

Interior Finishes, Inc.
of Buffalo, N. Y.



BETWEEN ROOMS—SEMI-SOLID PARTITIONS



1. Nail face layer to ceiling and floor runners



2. Apply adhesive-coated gypsum studs



3. Secure gypsum studs with nails or screws



4. Apply back face layer to runners and studs

The Gold Bond difference:

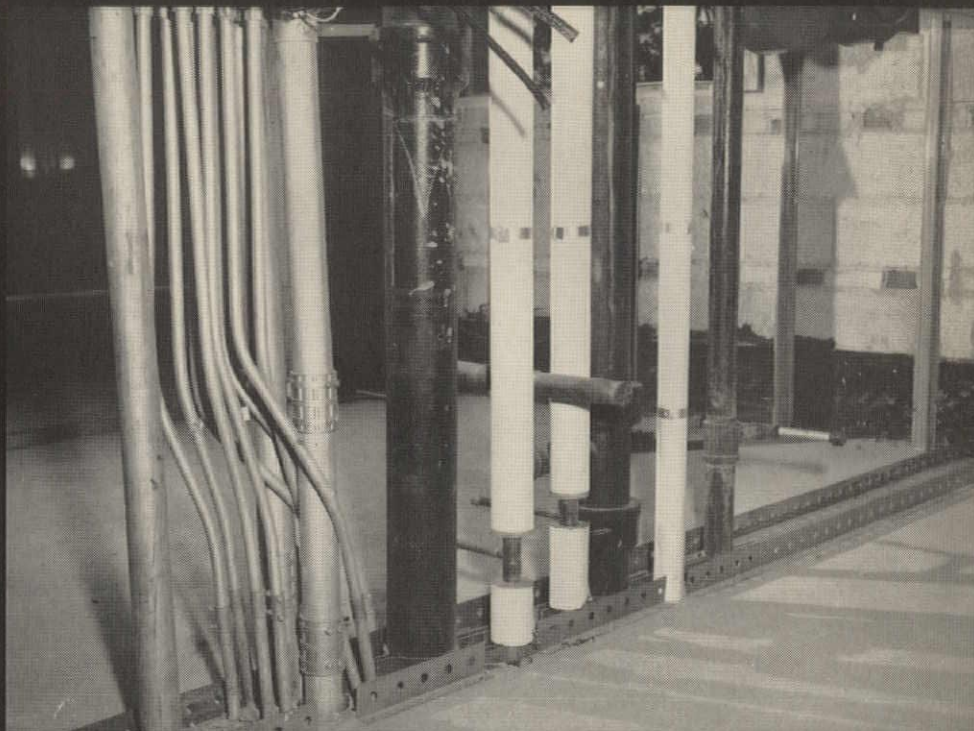
**Gypsum drywall methods
that help sound-condition
\$3,500,000 Parkway Apts.
...two ways**

Quiet conditioning will be a fast-renting feature at the Parkway . . . Niagara Falls' new 144-suite apartment building. Part of the "quiet" feature: two Gold Bond gypsum drywall partition systems. Actual construction is shown in these on-site photographs. For other ways with walls, see Sweet's File 12 C/NA.

BETWEEN APARTMENTS—DOUBLE-WALL, SOLID-LAMINATED PARTITIONS



A. Install metal floor and ceiling runners



B. Space is left for utilities to pass through double walls



C. Attach 1"-thick gypsum coreboard to each side



D. Apply adhesive to back of gypsum face layer



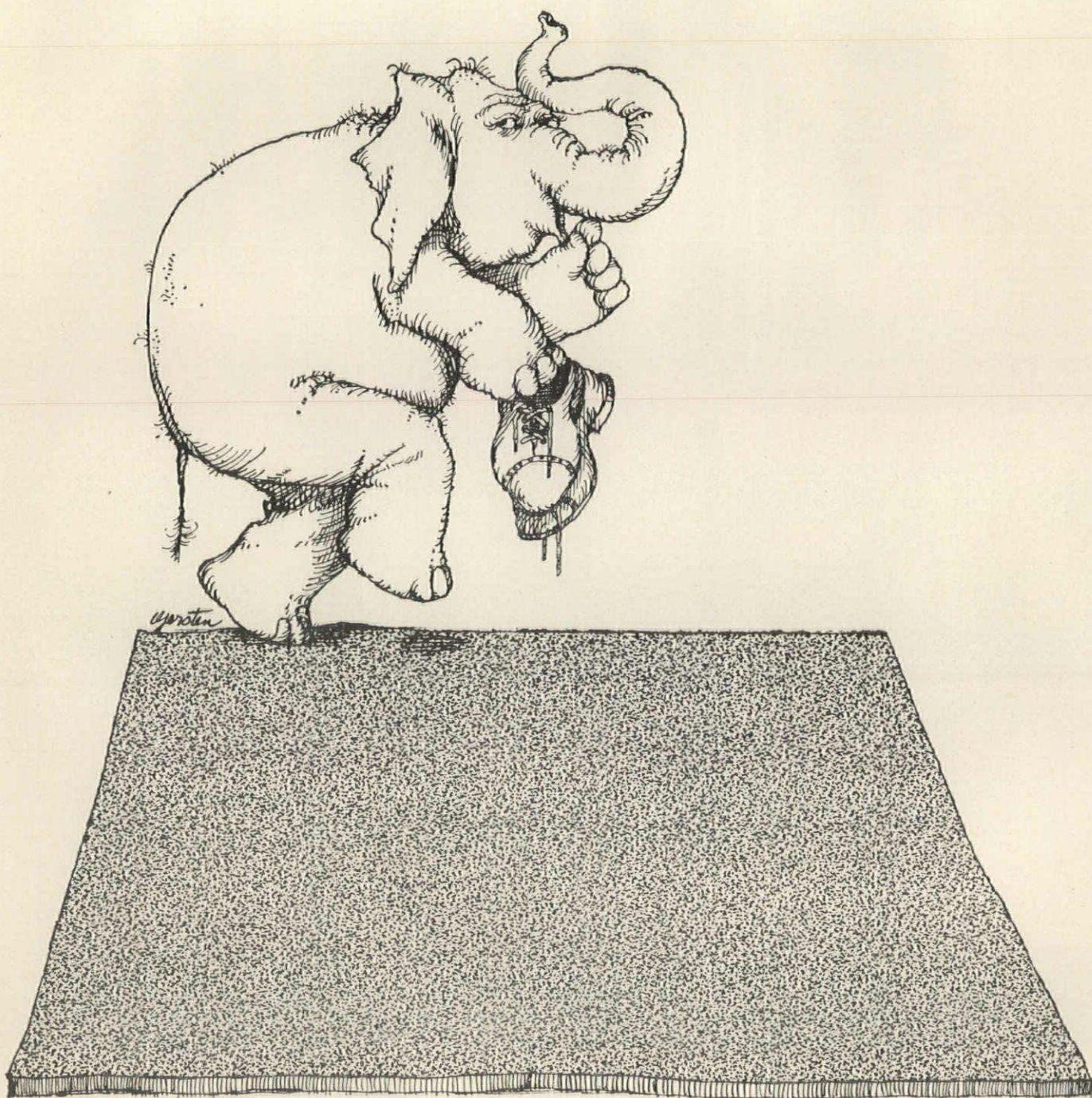
E. Screw face panels to gypsum coreboard on each side of double-wall partitions

BETWEEN ROOMS, privacy is achieved with low-cost, Gold Bond semi-solid drywall partitions. These non-bearing walls were constructed around metal door frames with two faces of gypsum wallboard laminated to gypsum studs. Either 2¼ or 2⅝" thick, these walls go up fast and save valuable floor space. They will withstand normal wall abuse for the lifetime of the building. And when ⅝" Fire-Shield wallboard is used, the walls earn a one-hour fire rating.

Gold Bond materials and methods make the difference in modern building

BETWEEN APARTMENTS, sound transfer is reduced with double-wall, solid-laminated partitions. This system delivers sound-transmission loss ratings up to 45 db. Permits simple enclosure of utilities, including plumbing, heating, and air-conditioning ducts. Call your Gold Bond® representative. Or write to Dept. PA-53, National Gypsum Company, Buffalo 25, New York.





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6000 GLISTENING CONCRETE PANELS

PRECAST WITH
MEDUSA WHITE
PORTLAND CEMENT



OFFICE BUILDING: Michigan Consolidated Gas Company, Office Building, Detroit, Mich. • **ARCHITECT:** Minoru Yamasaki-Smith Hinchman & Grylls, Associated Architects and Engineers, Detroit, Mich.
CONTRACTOR: Bryant & Detwiler, Detroit, Mich. • **PANEL MANUFACTURER:** *Otto Buehner & Company, Salt Lake City, Utah *Member of the Mo-Sai Association

Over 6,000 glistening prestressed, precast concrete panels encase the magnificent 32-story Michigan Consolidated Gas Company building in Detroit. These panels, made in Salt Lake City with Medusa White and white Utah quartz aggregate, were wrapped in polyethylene and trucked 1,700 miles to Detroit. The majority were 24' long and 2'4" wide at the splayed spandrel with an 11" deep rib running through the length.

Certainly this is a most outstanding panel job, one that reflects great credit on the architect, the panel manufacturer and the products industry itself. The building is one of the many outstandingly beautiful panel jobs being erected today in which panels cast in Medusa White are used. We welcome your request for information on Medusa, the original White Portland Cement—for all types of precast concrete units.



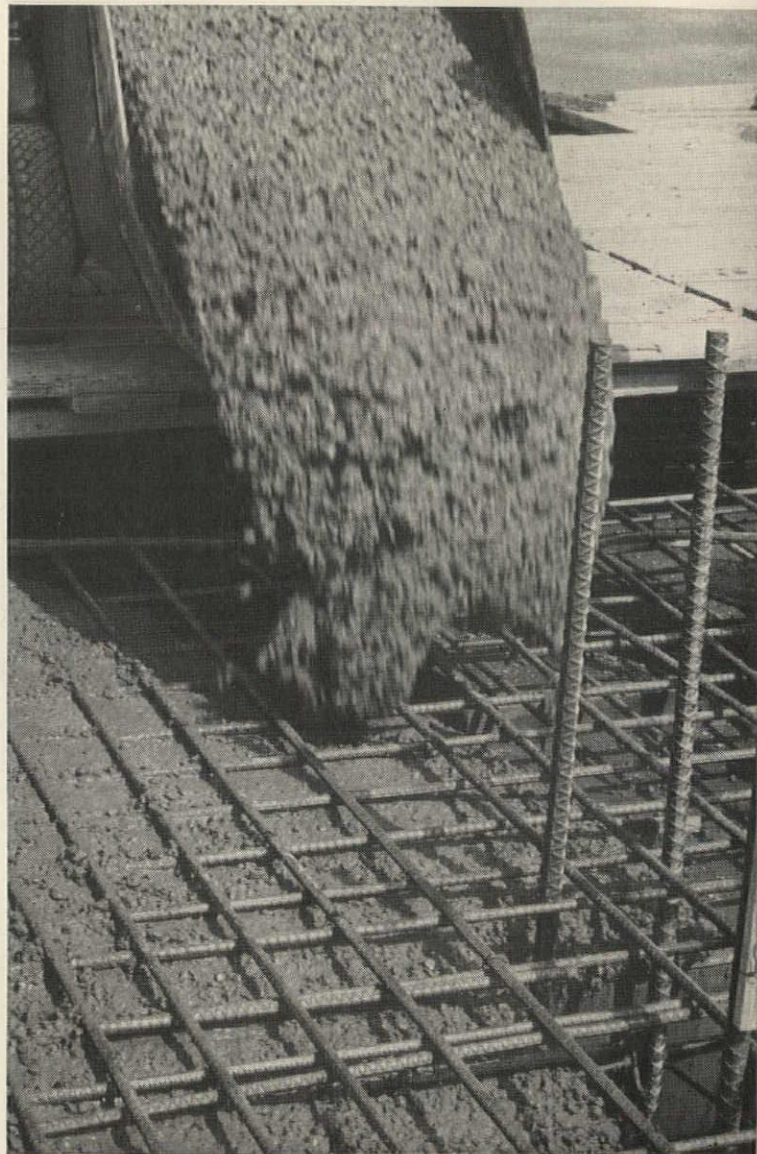
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P. O. Box 5668 • Cleveland 1, Ohio

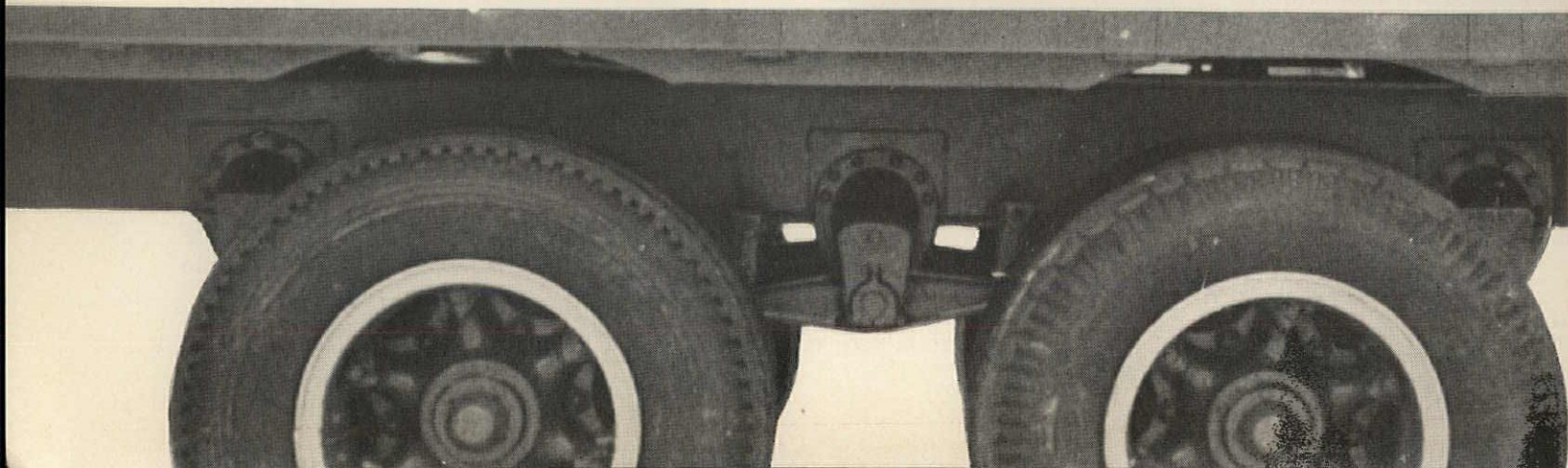
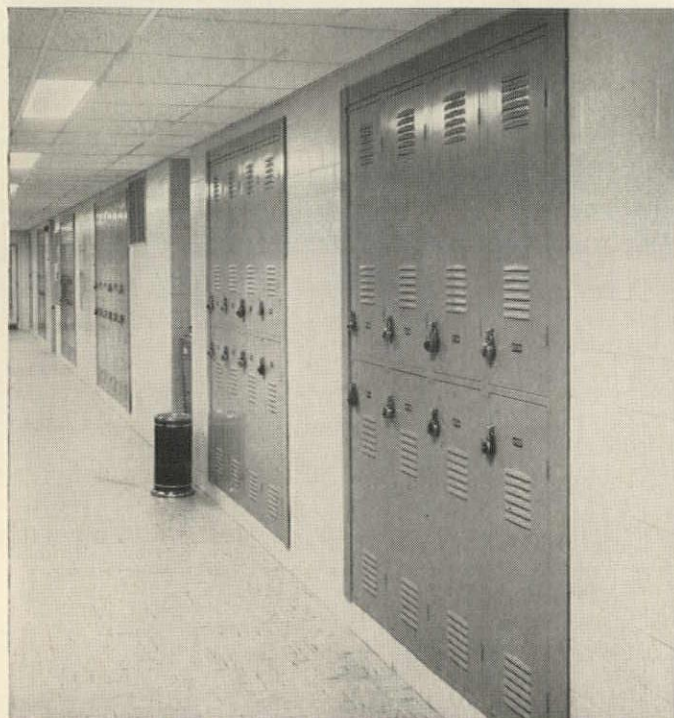


REPUBLIC'S NEW SINGLE-

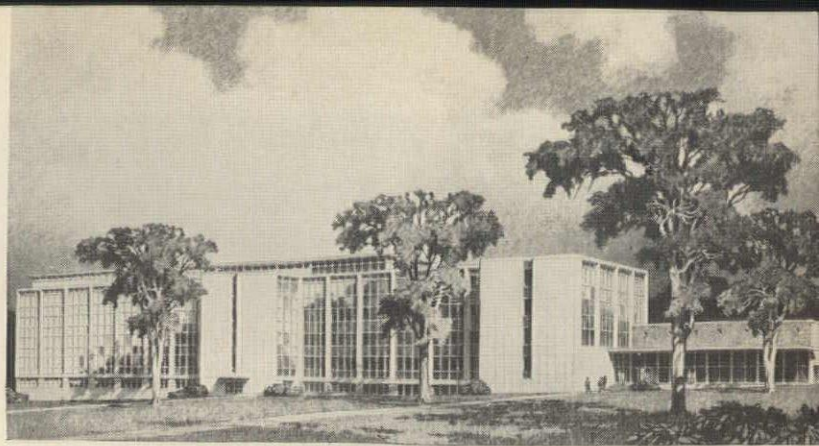
RE-BARS



RECESSED LOCKERS



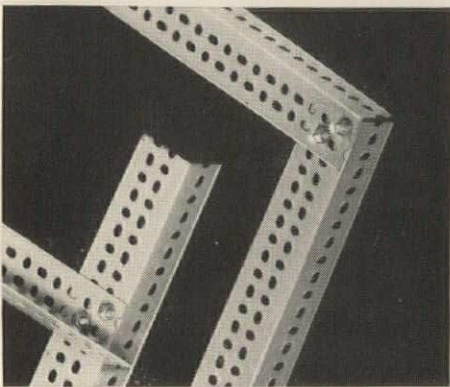
New John Schoff Millis Science Center on Western Reserve University campus, Cleveland, Ohio. Architects: Small, Smith, Reeb & Draz. General Contractor: The Albert M. Higley Company. Mechanical Contractor: Gorman-Lavelle Plumbing & Heating Company.



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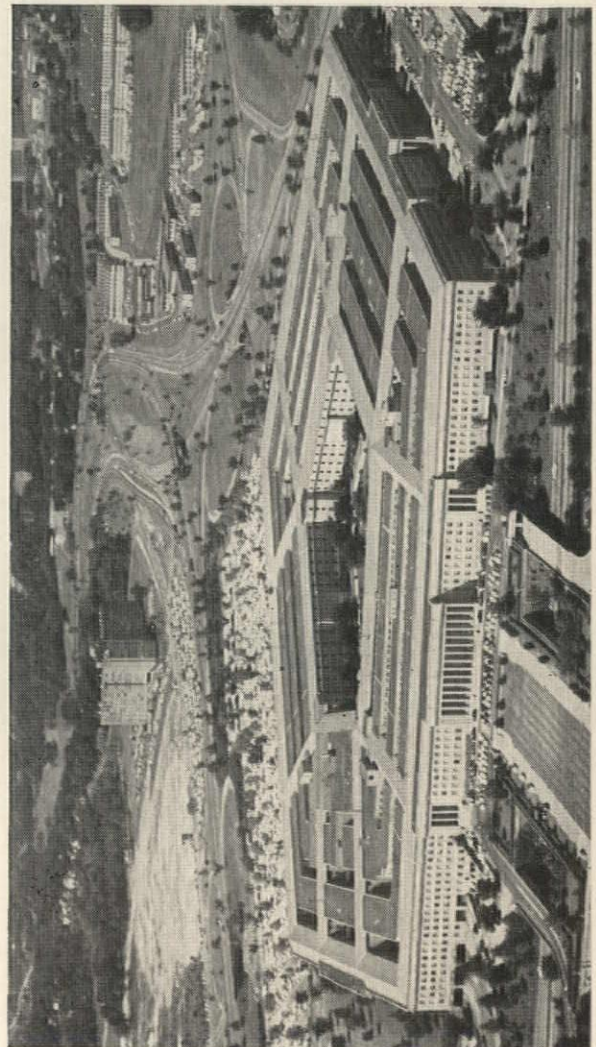
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Carrier Air Conditioning Company

A.C. HORN

CAULKS AND SEALANTS

Hornflex Sealant picked to stop infiltration at the Pentagon



SINCE AS FAR BACK as McKinley's administration, A. C. Horn has been another way of saying quality and dependability in construction and maintenance products.

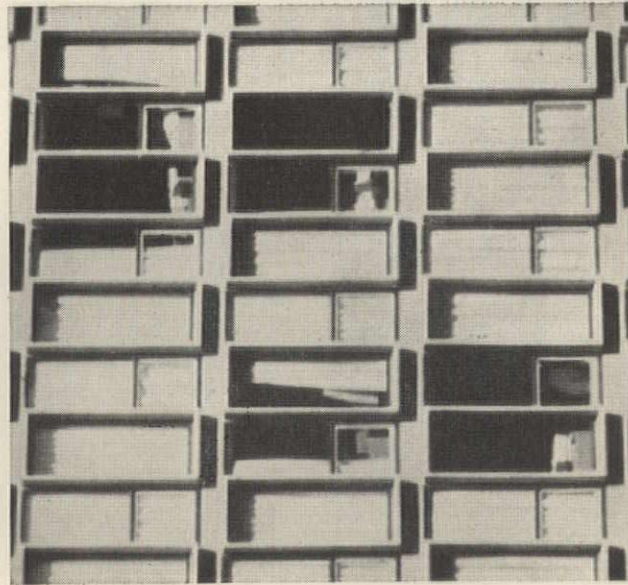
Horn product lines you hear most about include Caulks and Sealants, Floor and Surface Treatments, Waterproofing Products, Industrial Coatings, Admixtures, Adhesives and Bonding Agents.

There are more than 200 time-tested and performance-proved products available from Horn. Chances are you will find one specifically designed to meet your particular construction or maintenance requirements. The man from Horn is ready to work with you — contact him through the nearest regional office listed below.

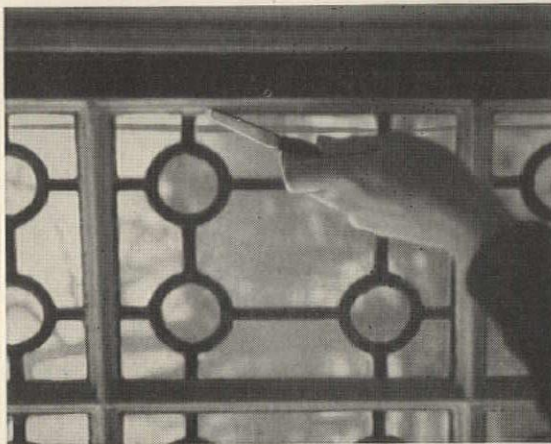


When Standard Waterproofing Corp. of New York City was handed orders a few years back to button up the Pentagon against severe attack from the elements, Hornflex LP-32 Thiokol Sealant was picked to mount the guard. Work involved caulking expansion joints between concrete sections as well as joints between concrete and stone. Open flanks of

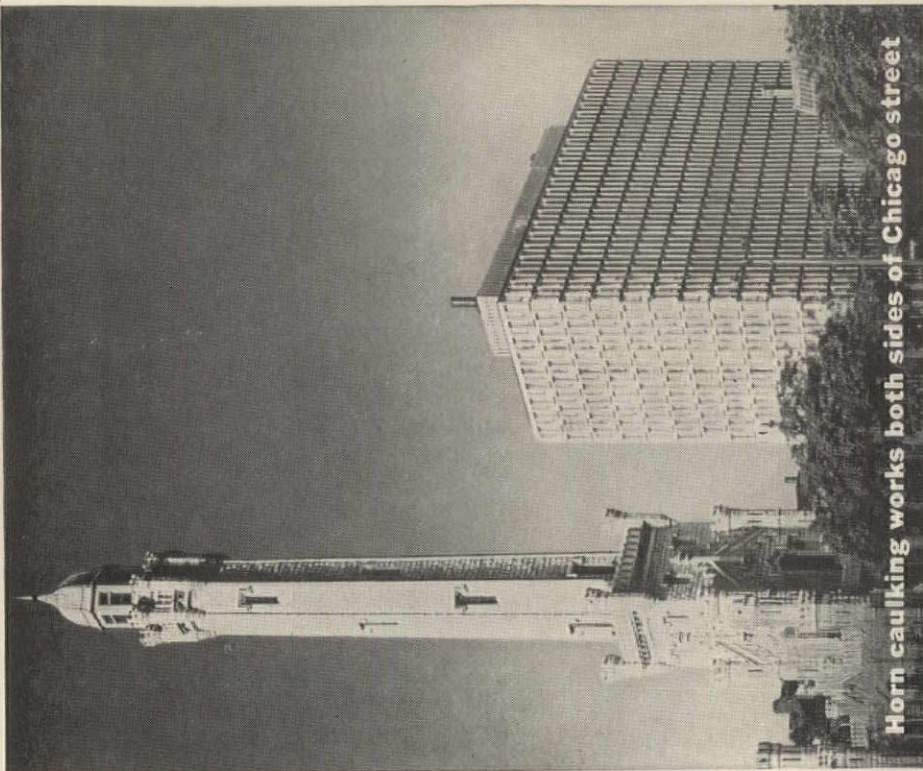
giant, five-sided structure are exposed to both baking heat and biting cold. The exceptional squeeze-stretch range of Hornflex solved the problem readily. For this cold-applied, self-vulcanizing synthetic rubber compound provides an absolutely watertight seal all the way from conditions of 50% compression to 100% expansion.



Hornseal cuts sealing costs on pre-cast concrete panels. For conventional applications on both new construction and maintenance jobs, Hornseal Synthetic Rubber Sealant holds down costs without any sacrifice of function or durability. This easy-to-use, one-component caulking is especially adaptable to weatherproofing pre-cast concrete panel joints. It is easy to apply with ordinary caulking guns. It bonds tightly, lastingly retains its elasticity to resist vibration without cracking. (A Product of A. C. Horn—Canada)



Horn glazing compound makes putty obsolete. On maintenance or new-glass jobs, Horn plastic glazing compound means time and money saved. It's ready to use without kneading, easier to apply. It doesn't set hard or dry out, won't crack or crumble. It sticks tight to wood, steel, glass; self-adjusts to contraction or expansion. Horn glazing compound also helps reduce glass breakage by cushioning shock. Simplifies replacement, too, because it can be peeled off without chiseling or scraping.



Horn caulking works both sides of Chicago street

Vulcatex re-specified for 93-year-old Water Tower landmark.

Historic survivor of 1871 Chicago fire, this famous landmark was caulked with Vulcatex when age began to show in 1933. On its 29-year performance record, Vulcatex was picked again for rehabilitation work begun in 1962. 800 gallons were used for tuckpointing limestone joints. Tough, rubbery Vulcatex made application easy. It will not stain or turn sticky. And its exclusive vulcanizing feature assures long service life.

Hornflex seals curtain walls of plush new Water Tower Inn.

When ultra-modern Water Tower Inn went up across the street, another job-tailored Horn Sealant got the call. Hornflex Thiokol LP-32 Sealant was selected to weatherproof the handsome curtain wall construction (Architects: Hausner and Macsai; Contractors: Schmitz and Liss). This highly elastic polysulfide sealant absorbs exceptional stress without loss of bond. Provides a lasting weather seal even under climate extremes.

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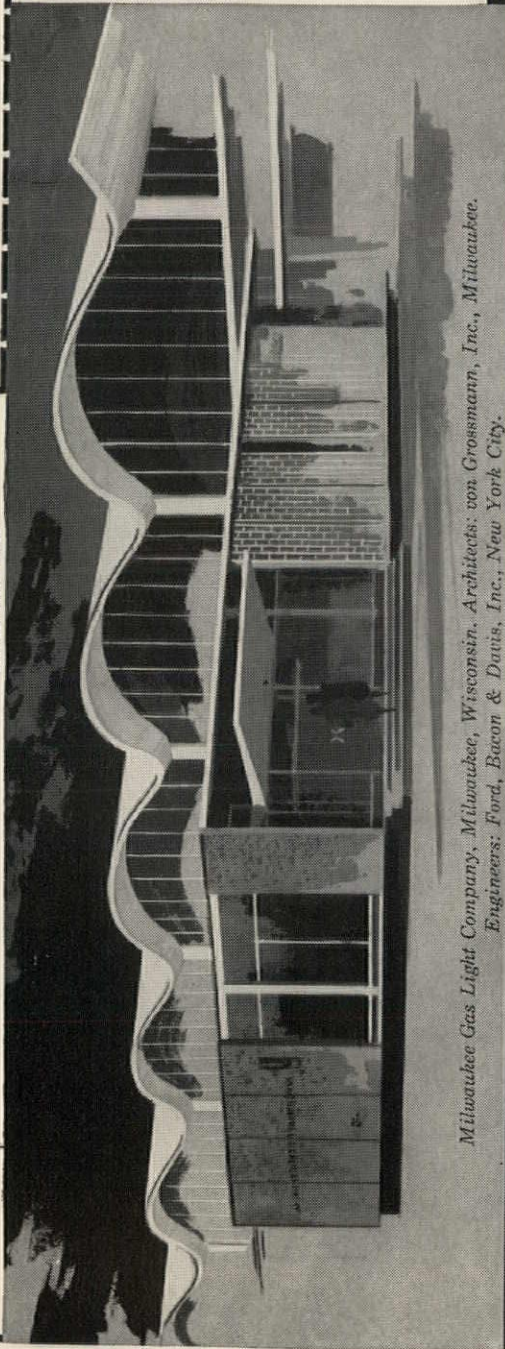
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Prepared as a service to architects by Portland Cement Association

No. 10 long barrel shells

c.i.a. file: 4-a

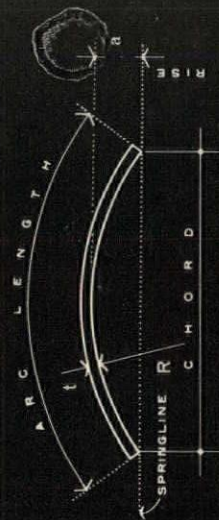
Clip along dotted line



Milwaukee Gas Light Company, Milwaukee, Wisconsin. Architects: von Grossmann, Inc., Milwaukee. Engineers: Ford, Bacon & Davis, Inc., New York City.

Intriguing designs and long spans are readily achieved with concrete barrel shells. Long barrel shells are those which have a small chord compared to span. (Short barrels have large chords compared to span.)

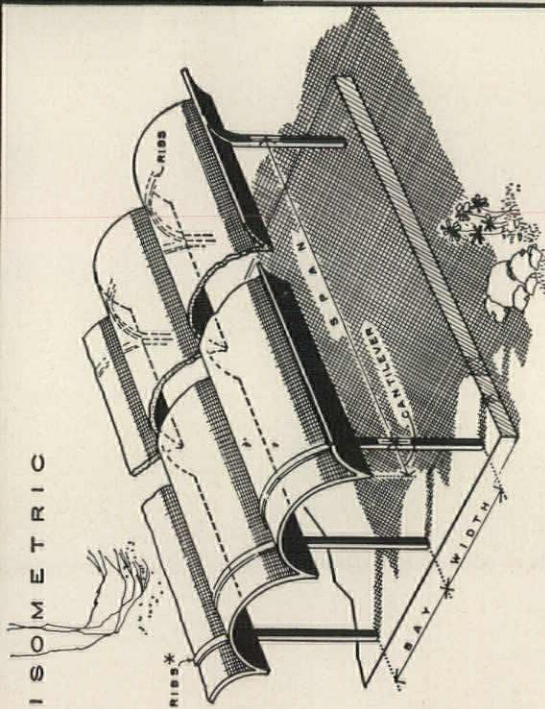
To achieve full shell action (a membrane free of bending moments), support is required along the two curved edges as well as along the straight edges, as shown in the diagram below. In practice, however, the straight edges are never fully restrained so that



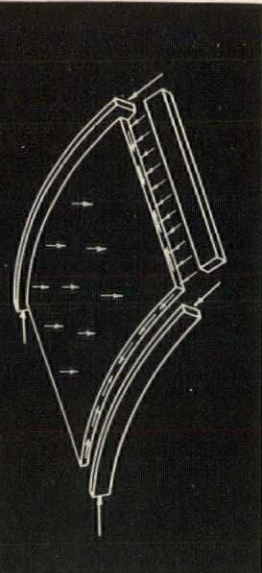
BARREL SHELLS / SPAN DATA ⁽¹⁾

SPAN	BAY WIDTH	a	R	t	reinforcing (2)
80'	30'	8'	25'	3"	3.5
100'	30'	10'	30'	3"	4.0
120'	35'	12'	30'	3"	4.5
140'	40'	14'	35'	3"	5.0
160'	45'	16'	35'	3 1/2"	6.5

(1) for long-span multiple barrels, the usual span-to-depth ratio varies from 1:10 to 1:15
(2) pounds per square foot of projected area



*RIBS, NECESSARY TO STIFFEN THE SHELL AT THE SUPPORTS, MAY BE INCORPORATED ABOVE OR BELOW THE CURVED PLANE. DRAWING ABOVE SHOWS BOTH TYPES.



some small bending moments in the shell must be considered in the design.

The stiffeners along the curved edges usually consist of arch-type ribs or diaphragms spanning between the supporting columns. Cantilevers are easily achieved; thus the visible shell edge can be as thin as the basic shell. Write for further free information. (U.S. and Canada only.)

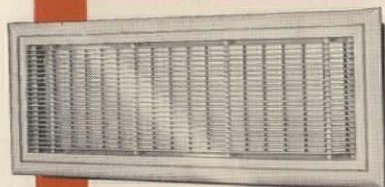
PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete

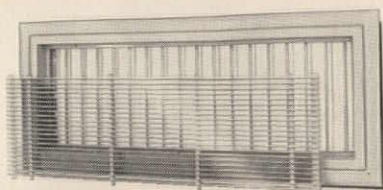
Dept. A5-25, 33 West Grand Ave., Chicago 10, Ill.

For more information, turn to Reader Service card, circle No. 353

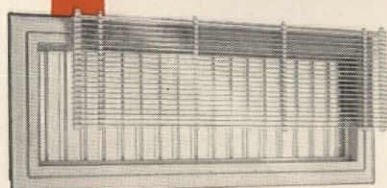
3 SIMPLE STEPS



REMOVE



ROTATE



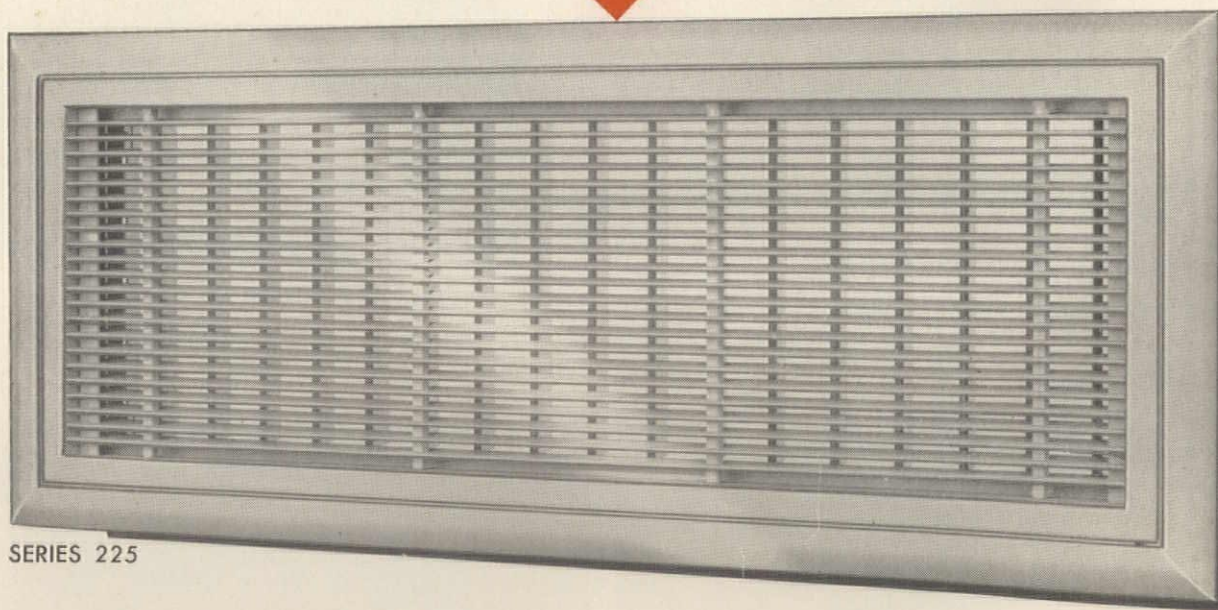
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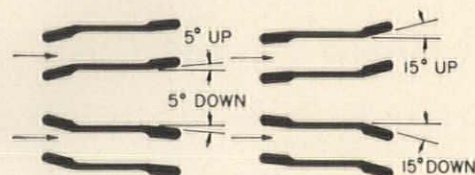


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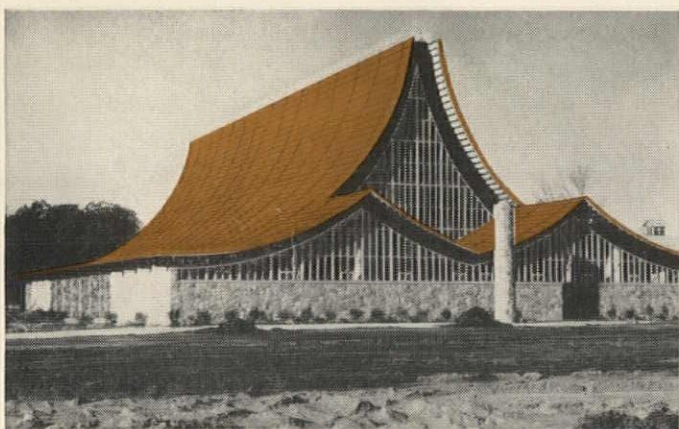
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WATERLOO, IOWA
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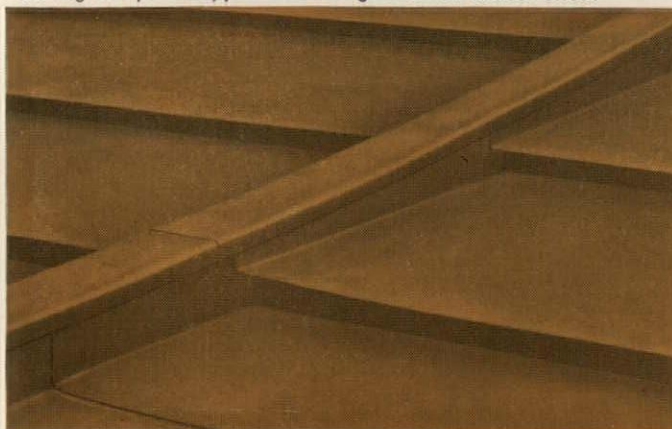
Revere Sheet Copper enables
Architect to combine beauty and
long life in a striking, modern roof design . . .



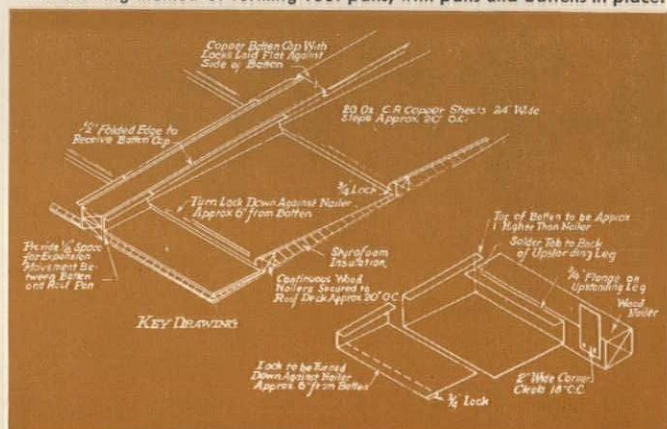
FOR SHRINE CHAPEL OF
OUR LADY OF ORCHARD LAKE,
DETROIT, MICHIGAN

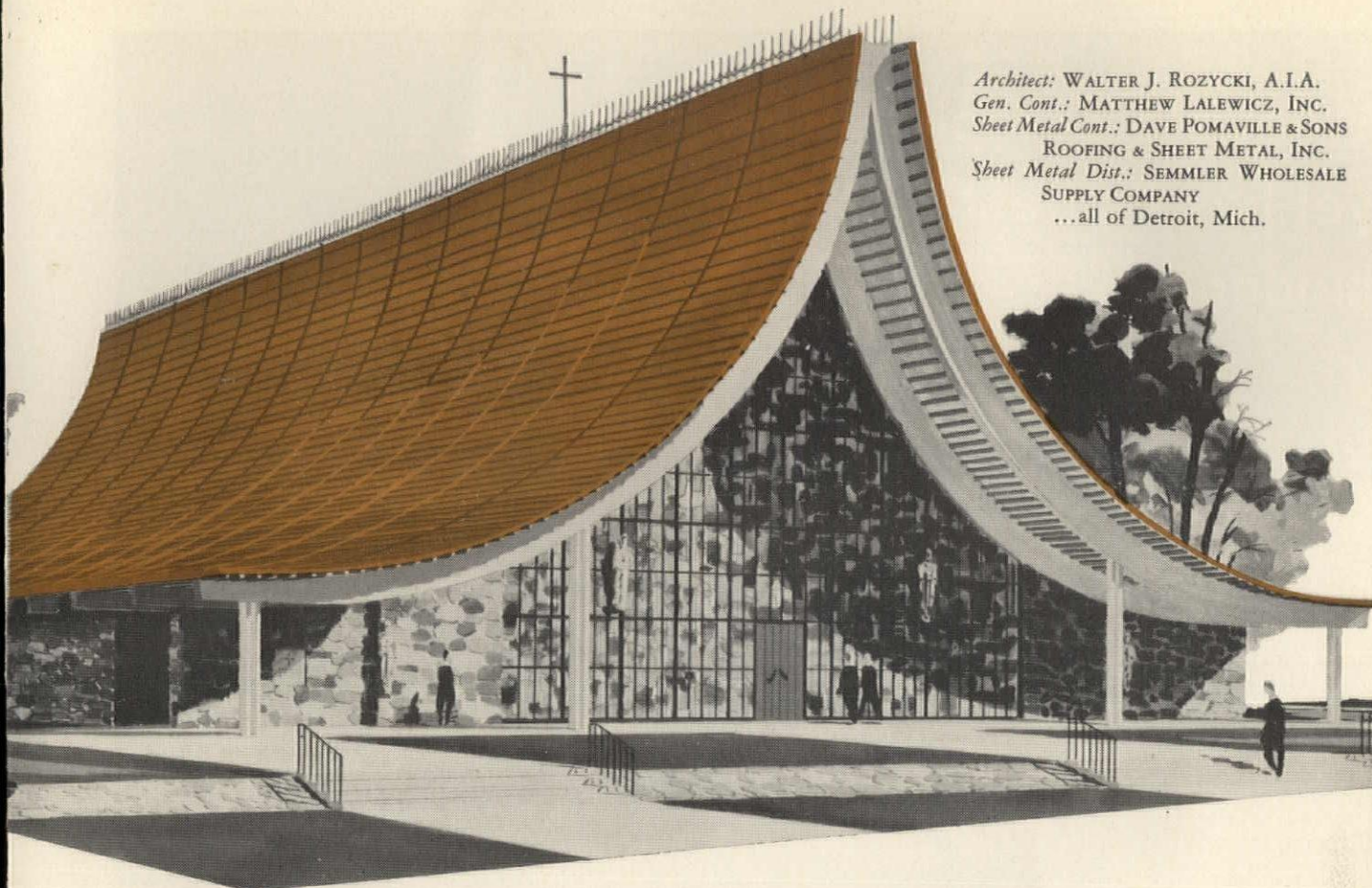


(above) VIEW OF REAR of the Shrine Chapel. (below) CLOSE-UP of roof showing flat pans stepped down to give curved contour effect.



(above) HERE YOU SEE batten covers being affixed. (below) ROOF DETAIL showing method of forming roof pans, with pans and battens in place.





Architect: WALTER J. ROZYCKI, A.I.A.
 Gen. Cont.: MATTHEW LALEWICZ, INC.
 Sheet Metal Cont.: DAVE POMAVILLE & SONS
 ROOFING & SHEET METAL, INC.
 Sheet Metal Dist.: SEMMLER WHOLESALE
 SUPPLY COMPANY
 ...all of Detroit, Mich.

In conceiving the design of this structure the architect, Walter J. Rozycki, visualized the bold, soaring sweep of the roof as the commanding element of the overall structure, both in size and contour. Said he, "Such a roof, without the use of copper and its characteristic design flexibility, would have been virtually impossible."

Other contributing factors in the selection of copper were its permanence, handsome appearance, and ease of fabrication. *And NOW—with the price of sheet copper the lowest in years, it pays to look first to copper.*

Mr. Rozycki's plans called for flat, stepped-down pans. While this is a novel method of sheet metal construction, Mr. Rozycki, in collaboration with the Revere Research and Development Department and Technical Advisory Service, worked out a technique which enabled the sheet metal

contractor to install these pans using only standard tools.

Details of construction are shown in the accompanying illustrations. The 4" x 4" vertical battens are spaced 10'0" on centers; the 2" high steps running horizontally between the battens are spaced approximately 20" apart. Horizontal roof pans are of 24" wide sheets of 20 oz. cold rolled Revere Sheet Copper. A tapered layer of rigid roof insulation is laid between the horizontal steps.

All told, 35,000 lbs. of Revere Cold Rolled Copper were used in 24" x 120" sheets. The versatility and design flexibility of copper is abundantly evident in the unusual details and the final striking results.

For unusual and beautiful architectural effects, remember: "Design with Copper in Mind". Revere's Technical Advisory Service will be happy to work with you.

SEND TODAY for free copy of "Copper and Common Sense," Revere's 140-Page Brochure illustrating the design principals and techniques of sheet copper construction. Also free companion piece, "The Revere System of Copper Flashing," for the complete weatherproofing of masonry buildings. Address Dept. "P-1" at address below.

REVERE

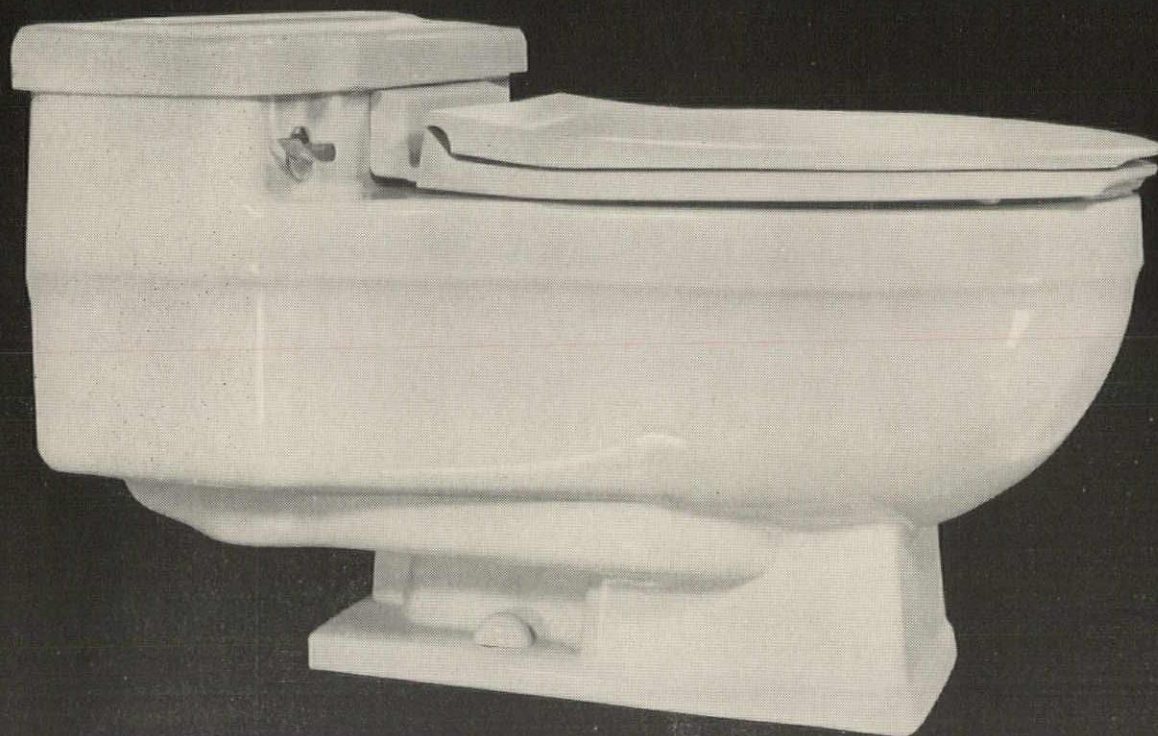
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What closet looks this good
yet has its best features
hidden?



CHAMPLAIN BY KOHLER

That low, attractive profile is the Kohler Champlain closet.

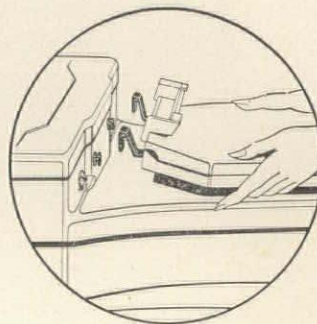
There's no doubt about its good looks—its appeal to people interested in better things.

But outward attractiveness is only part of the story. There's the new low tank (only 19" from floor to tank top), the elongated bowl that will not overflow. Flushing is quiet—almost silent—and thoroughly clean because of the strong vortex water action. Large water area and deep water seal in the bowl offer greater sanitation. And as an added safeguard, water in the tank is isolated from fresh water lines by a vacuum breaker which safeguards against back siphonage.

The Champlain offers the extra touch for your better homes, hotels, and motels...for your finer apartment buildings.

When you consider that Kohler has been making fine products for 90 years, you'll know why the Champlain, like all Kohler products, rates such high public confidence.

The Champlain is worthy of your attention...and your client's attention.

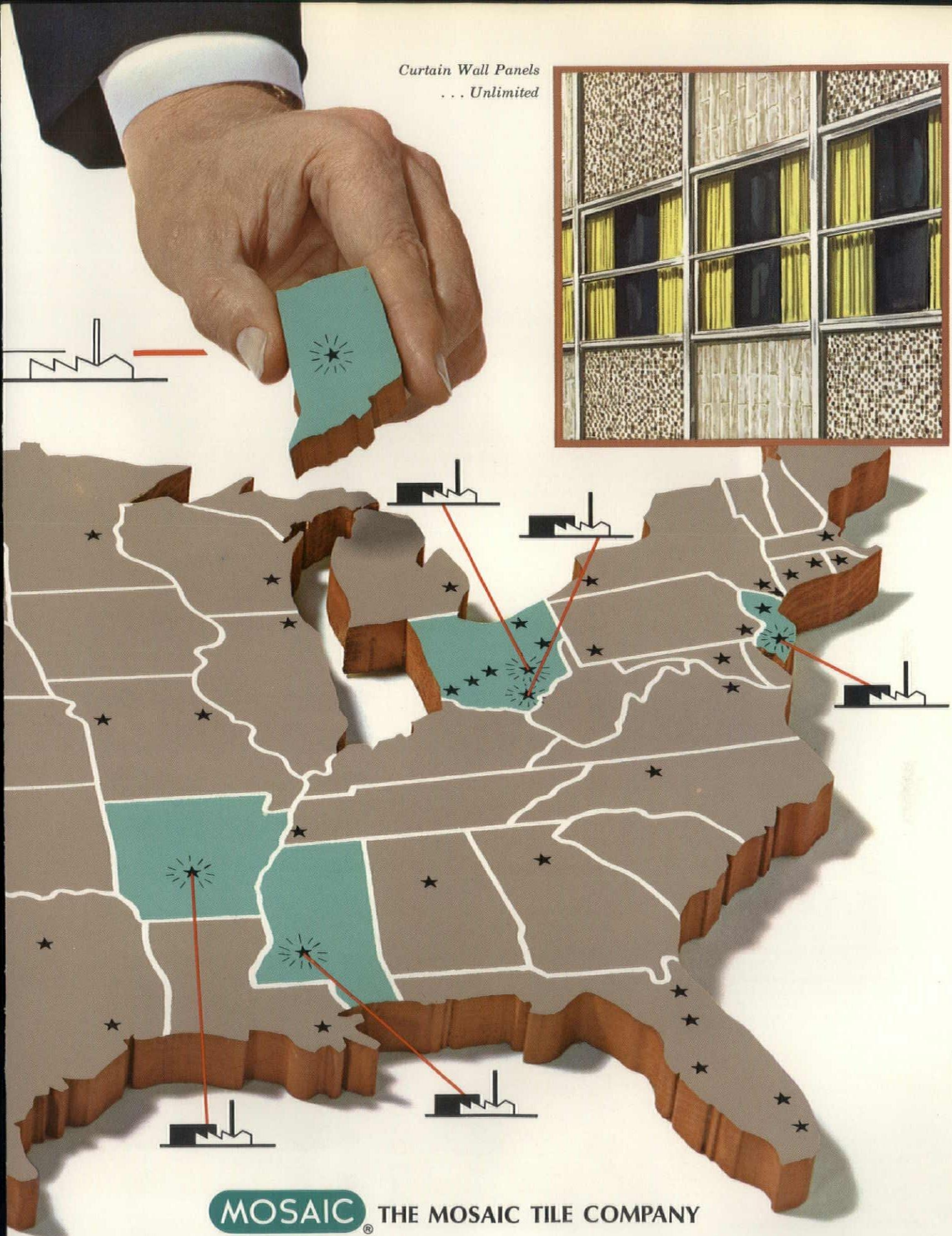


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Kohler Co., Established 1873, Kohler, Wisconsin

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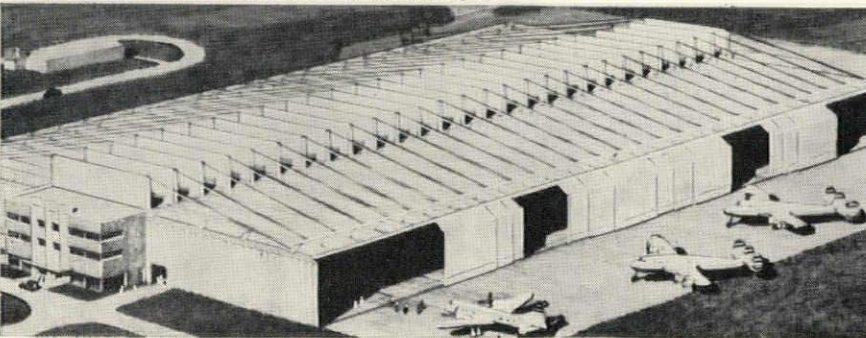
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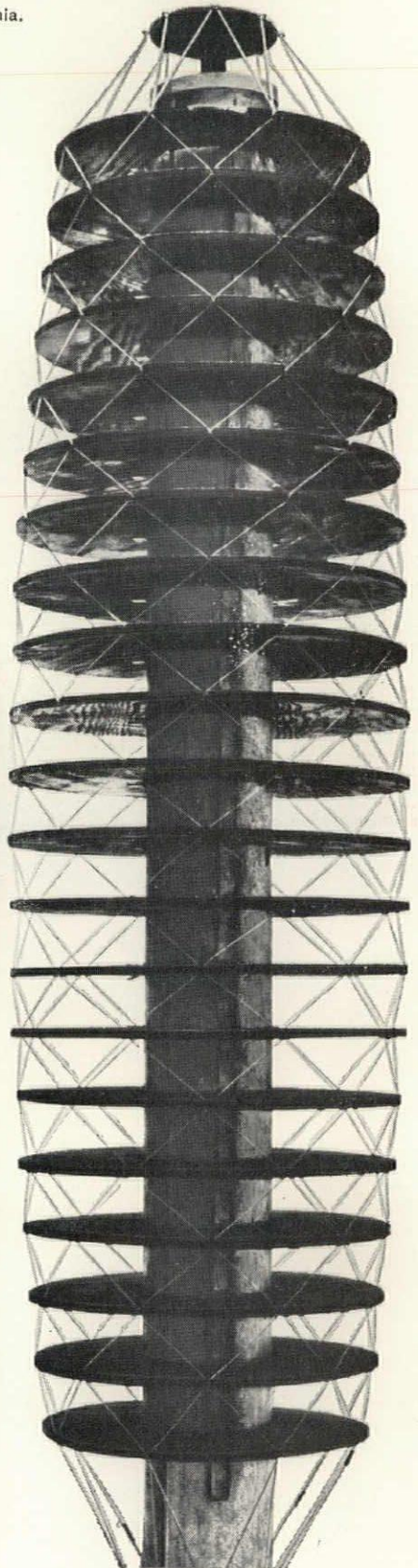


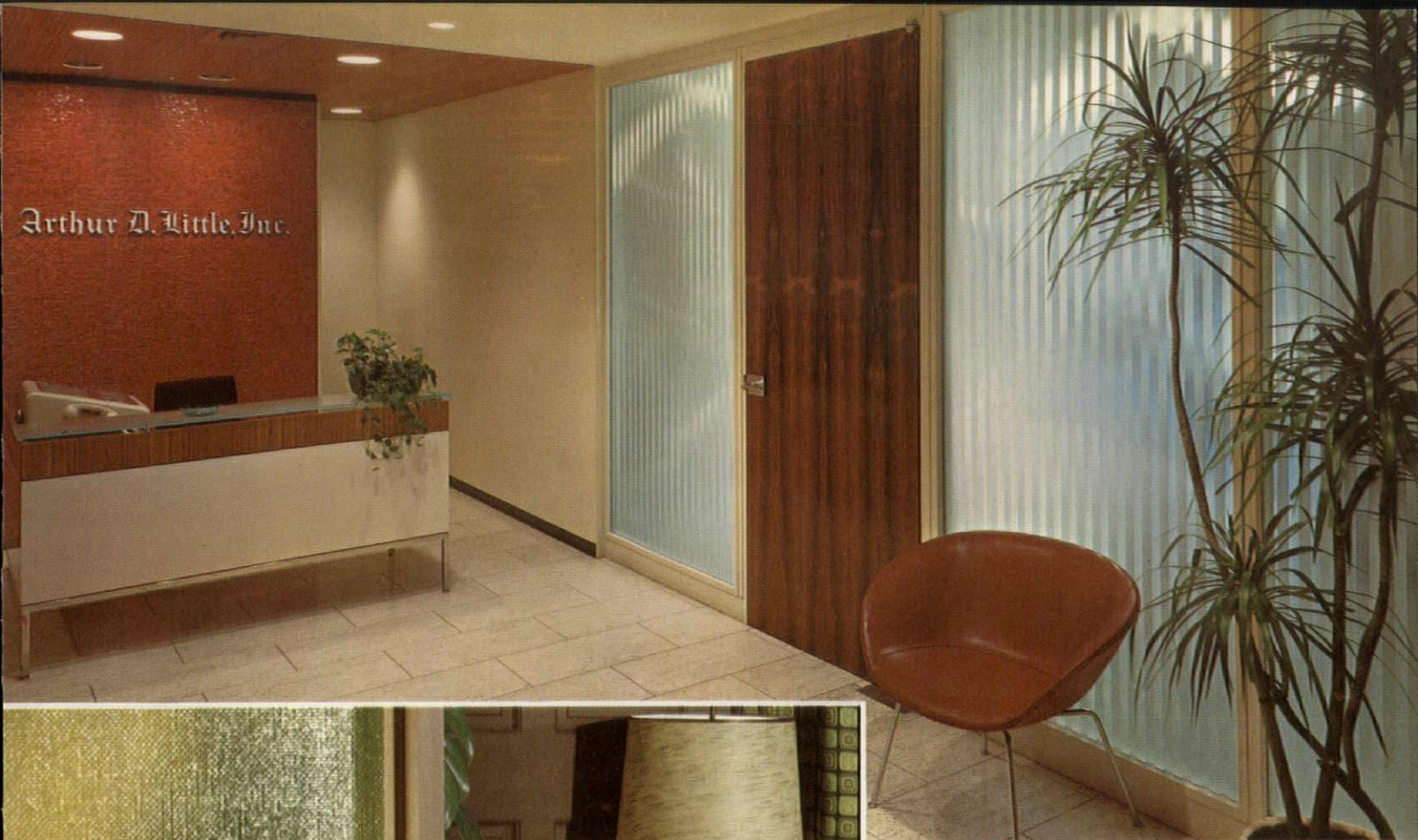
Winter Olympics Ice Arena, Squaw Valley, California. Architects: Carlett & Spackman, A.I.A., Kitchen & Hunt, A.I.A. Structural Engineer: H. J. Brunner. General Contractor: Diversified Builders. Steel Subcontractor: Pittsburgh-Des Moines Steel Company. Cables by Roebling.

TWA Hangar—Mid-Continent International Airport, Kansas City, Mo. Designed by Burns & McDonnell, Kansas City. Consulting Engineers: Ammann & Whitney, New York City. Contractors: MacDonald-Creighton, St. Louis and Nashville. Cables by Roebling.



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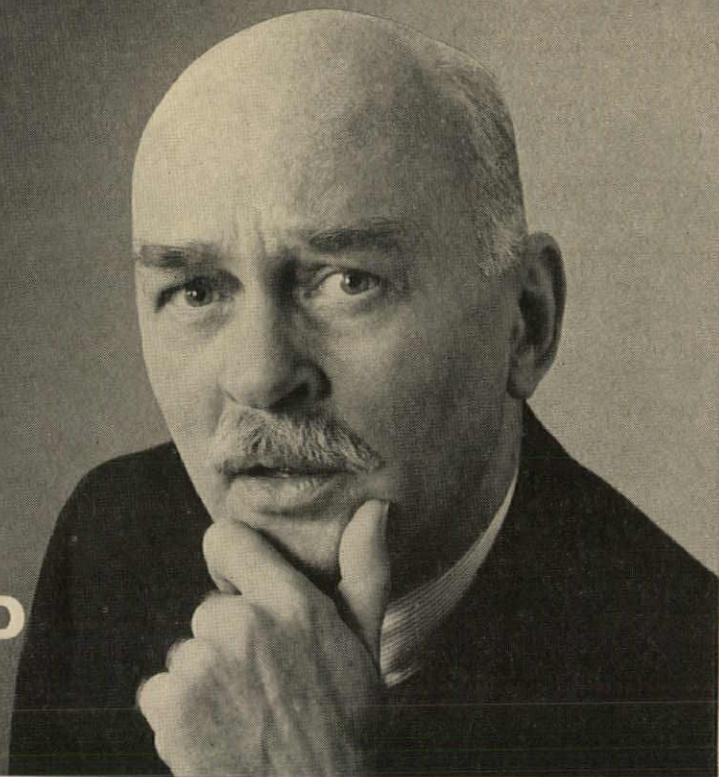
Architecture's Monthly News Digest of Buildings and Projects, Personalities, New Products



Model of Caudill, Rowlett & Scott's Harvard education building at nighttime shows interesting fenestration.

- | | | | |
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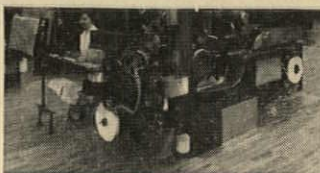


"Our Maintenance Chief says a hardwood floor will reduce dust problems by 60% and permit cleaner premises with less actual labor costs. He figures hardwood is a *must* for any food processing plant or other operation where sanitation is important."



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"Other manufacturers are agreeing in ever-growing numbers. Note the new 120,000 sq. ft. P. Lorillard floor in Greensboro, N. C. It's an Edge Grain Ironbound* Continuous Strip* Hard Maple Floor by Robbins Flooring Company."



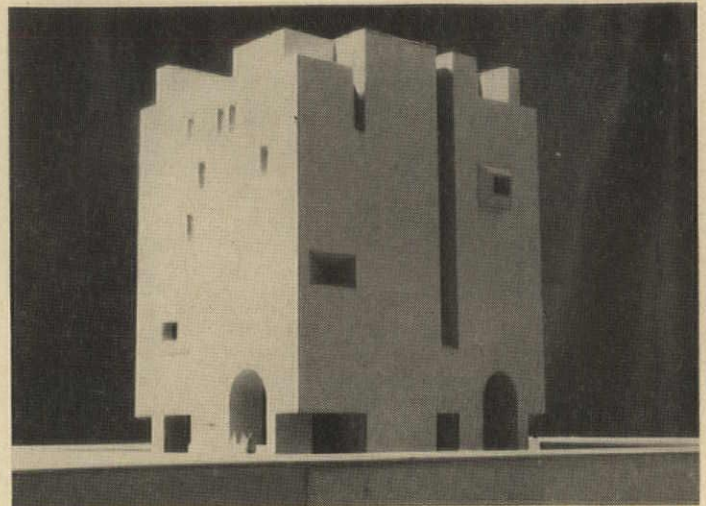
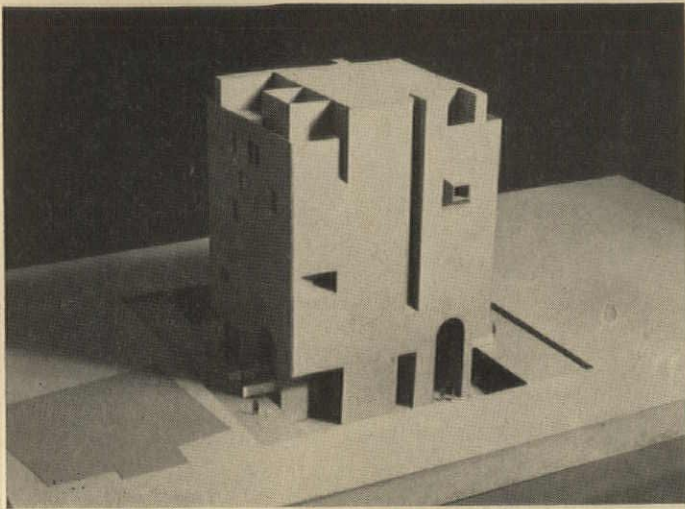
New P. Lorillard floor installed by R. L. Dresser, Raleigh, N. C. Architect-Engineer, Lockwood-Greene Co., New York

*T.M. Reg. U.S. Pat. Off.

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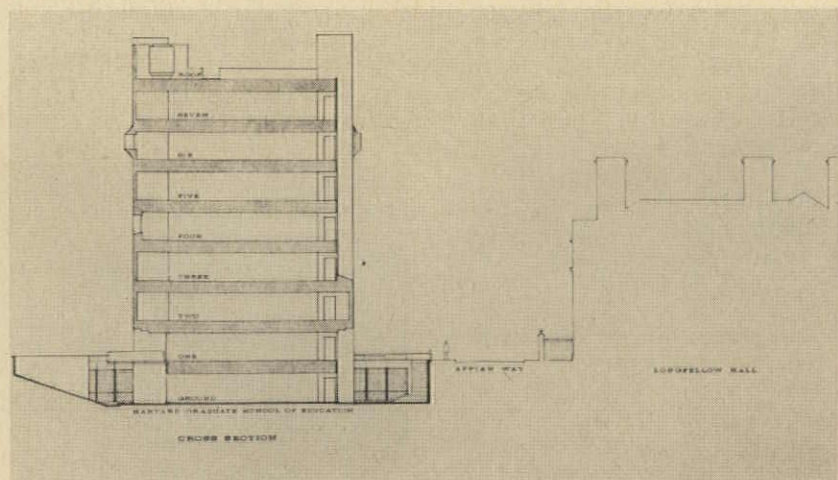
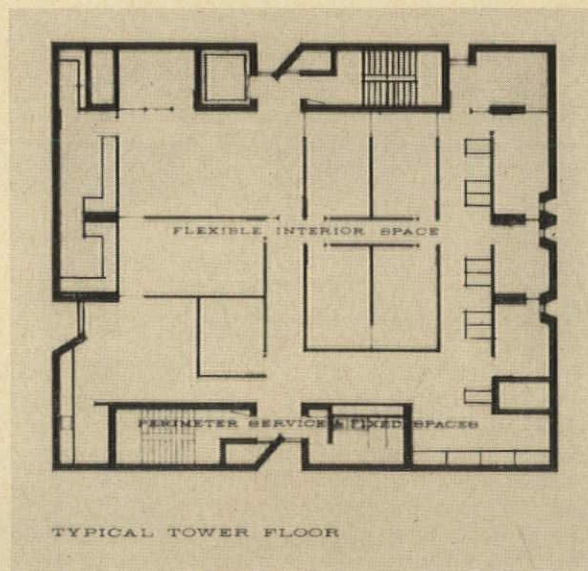


ANOTHER IMPORTANT DESIGN AT HARVARD

CAMBRIDGE, MASS. Soon after the completion of Le Corbusier's Visual Arts Center at Harvard University comes word that one of the most interesting designs ever created by Caudill, Rowlett & Scott has been prepared for Harvard's Graduate School of Education.

The proposed structure, which together with existing Longfellow Hall will form the "campus" for the school, emphasizes great flexibility in the working spaces needed for constantly changing educational programs. Each of its seven stories will have a large central space that can be adjusted and rearranged as needs dictate. Surrounding these central areas will be fixed perimeter spaces for services, offices, conference rooms, reception areas, etc. (*plan, right*). An additional floor will be created below grade to act as a sort of sunken courtyard around a "living exhibit," surrounded by classrooms (*section, right*). The building will be entered mainly via bridges over this courtyard to the first floor, but there will also be access from the courtyard itself.

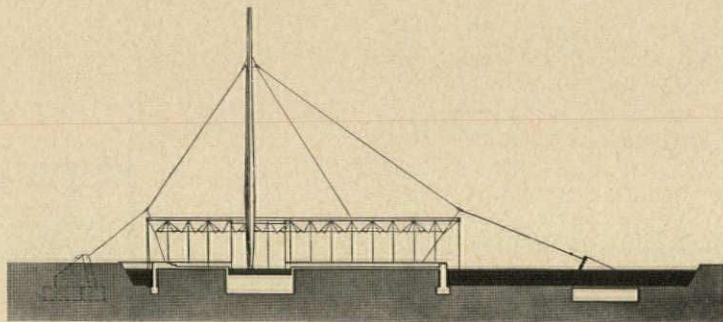
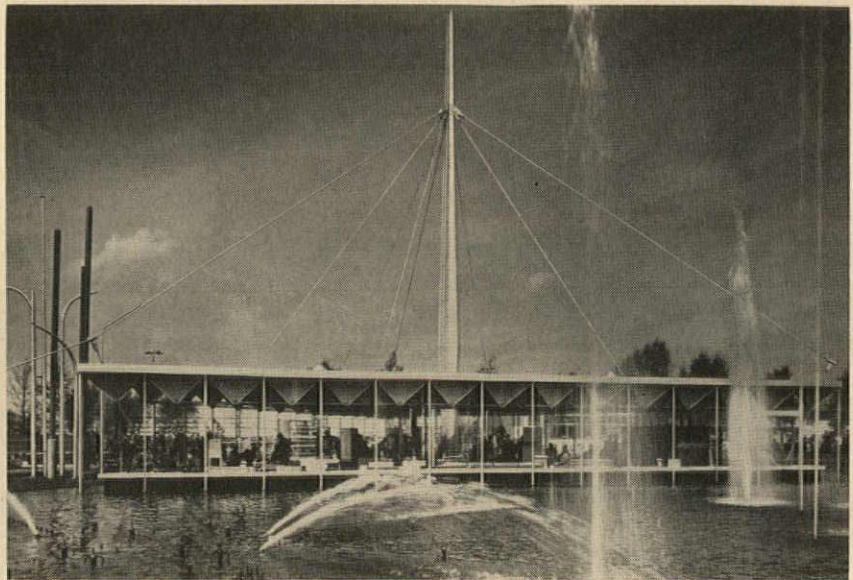
Fenestration is a major design feature of the project, giving it much of its notable character. The apparently random pattern of hooded, recessed, slit, and vertical windows will serve to express the differences in plan of the peripheral areas of each floor. The arrangement will *not* be random, needless to say, but will reflect the needs of the area within. To make the plan of the building "read" to the viewer, two long glassed slots running from the second floor to the roof have been introduced on two sides of the structure. The architects call this a "yardstick" for measuring the generally opaque building. The warm brick generally associated with Harvard will be used on the exterior.



German Wins Reynolds Prize

The 1963 R.S. Reynolds Memorial Award for excellence of design in aluminum has gone to Architect Hans Maurer of Munich, co-editor of *Bauen & Wohnen*. Thus, for the seventh year, the \$25,000 award has gone to a country not yet represented in the prizewinners' circle (tapped so far: the U.S., France, Spain, Australia, Belgium, and Switzerland).

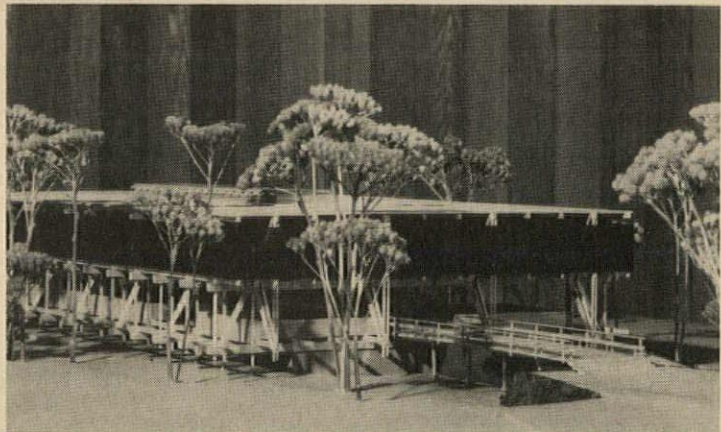
Maurer's winning design is the Aluminum Center Pavilion at the Hannover Fair. It is basically a space-frame roof composed of aluminum tetrahedrons suspended by cables from a 65'-6"-aluminum mast. Aluminum and glass walls are hung from the roof, and extend below the level of the water of the small lake in which the pavilion stands, forming an insulation seal for the interior. Cables are secured to the mast, and also are fastened to the bottom of the lake to provide horizontal stability. A ball joint secures the mast to its base. The pavilion is reached over a small bridge—made of aluminum, of course. The Associate Architect for the project was Ernst Denk.

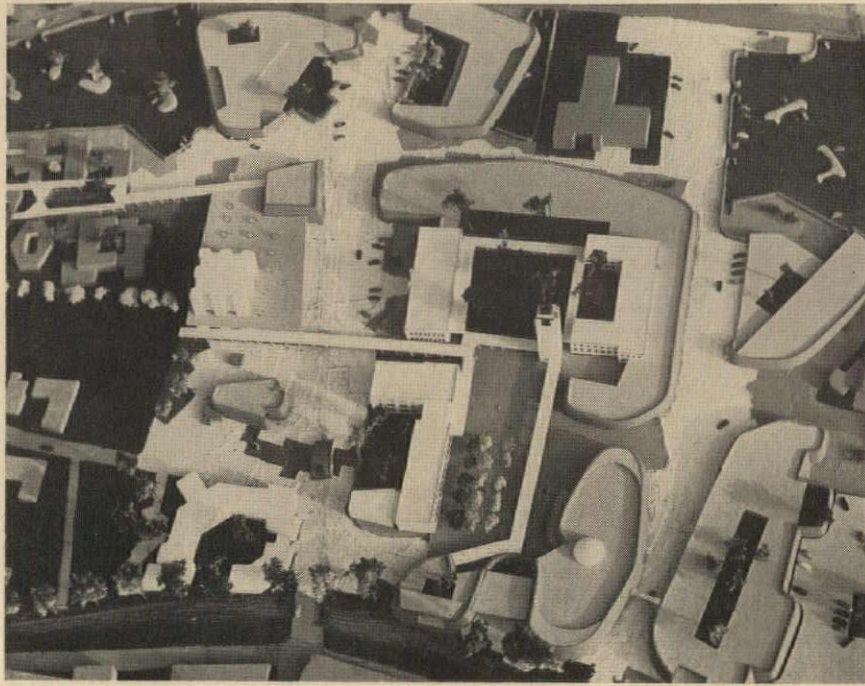


WOOD BUILDING FOR WOOD SCIENCES

SEATTLE, WASH. The University of Washington campus, like most U.S. campuses, is predominately of brick and stone buildings. Consequently, it is of some note when a major addition to be built mainly of wood is announced. When the project is as well designed as the proposed Forest Products Science Building for The University of Washington, by Seattle architects Grant, Copeland & Chervanek, the news is that much more salubrious.

The building will be wood framed with beam ends exposed at the roof line. Beams cantilever out past the building line proper to carry a band of gray glass wrapped around the upper floor; diagonal laminated members help to carry the load. For pleasant working conditions, graduate research offices will be located on the periphery of the building; chemical, electronic, and general laboratory areas will be housed in the interior spaces. Two garden courts will penetrate the structure to give a feeling of added spaciousness. Placing research departments on the interior will lessen the effects of sunlight and weather conditions on sensitive equipment.





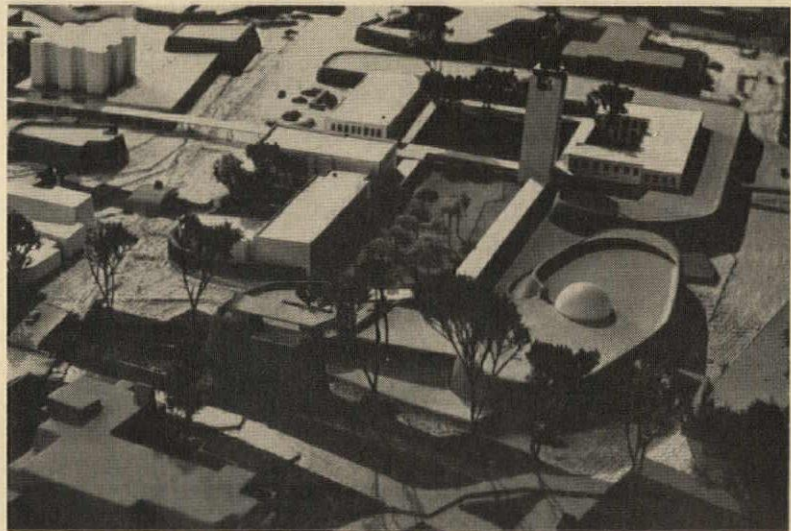
Campus Plan for New Mexico State Capitol

SANTA FE, NEW M. Approval has been granted for the general plan of the expansion of the New Mexico State Capitol by Architects Associated (Architects John P. Conron, Robert E. Plettenberg, and Philippe Register and Designer David deR. Lent).

The 20-year plan will provide for expected space needs of the state government until 2100. First units expected to be built are a new legislative-executive complex and a State Library building. Subsequent plans call for buildings for Health and Welfare, Commerce and Labor, Supreme Court, General Services, Department of Education, and Conservation and Development.

Preliminary designs of the entire complex reveal a strong solution that recalls, but does not imitate, the architecture of the region (*below, right*). Use of thick, sloping, curved walls to define major buildings and areas can be said to reflect in contemporary terms the atmosphere of Indian pueblos, canyon walls, and Spanish colonial architecture.

Unfortunately, the design has come under attack for what seem to be its finest qualities—namely, strength and a sense of regional continuity. Architect John Gaw Meem, a member of the Capitol Building Improvement Commission, objected to the massiveness of the walls and said the buildings should reflect more of Santa Fe's particular architectural history as opposed to that of the state as a whole. As noted, the general plan was passed after a delay, but the architects were instructed to restudy the design.



Nervi Designs Elevated Roadways

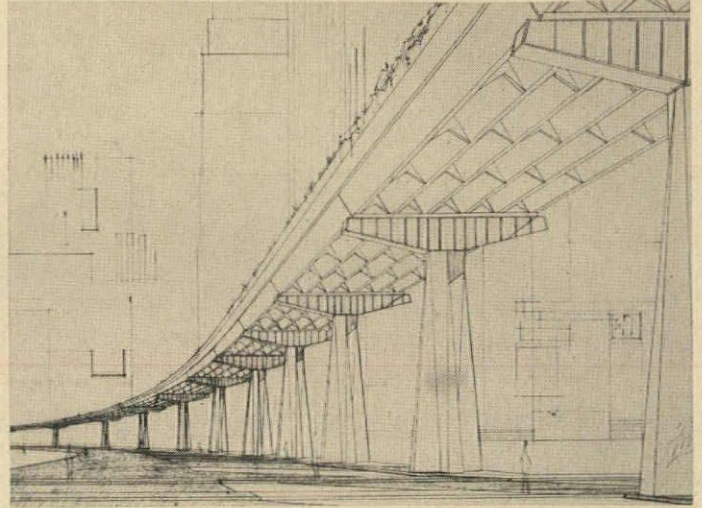
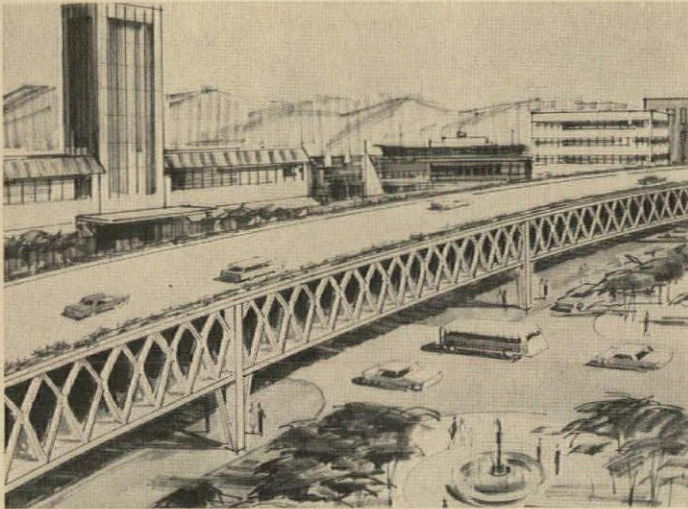
OAKLAND, CALIF. Pier Luigi Nervi, long famous for his concrete structures, has designed five prototype elevated expressway structures in steel for Kaiser Steel Corporation. Nervi searched for schemes that would be economically sound, capable of fulfilling increasing transportation needs, and featuring swiftness of erection. He said that "as in all problems of

structural architecture, the aesthetic expression is attained through the clarity of the static scheme, by the attention and sensitivity given to the parts, and by the preciseness of the details."

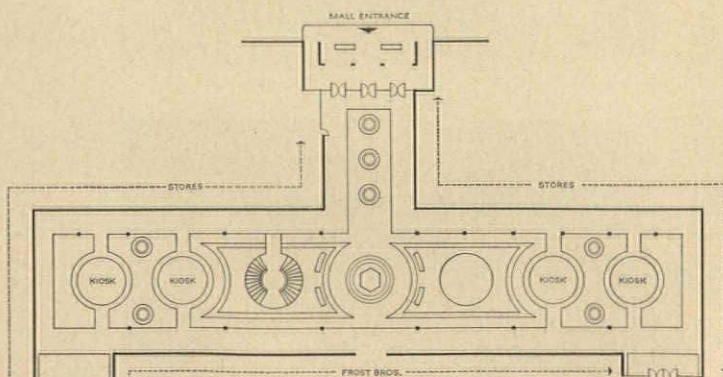
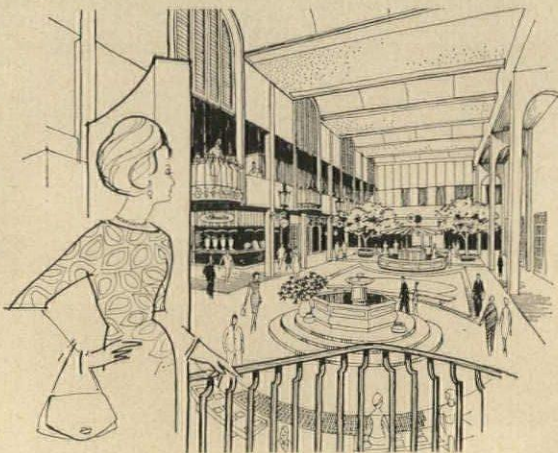
Two solutions seen here are (left) a double-deck freeway featuring a modified version of the standard truss system, notably slim welded box gir-

ders in a stylized kite design. Spans can go up to 300'. Roadway rests on a folded-plate steel deck. Use of hyperbolic paraboloids (right) creates sculptural columns that raise the roadway 40' above the ground for use in parklike areas.

Nervi says that such structures can become one of the most important architectural expressions of our cities.

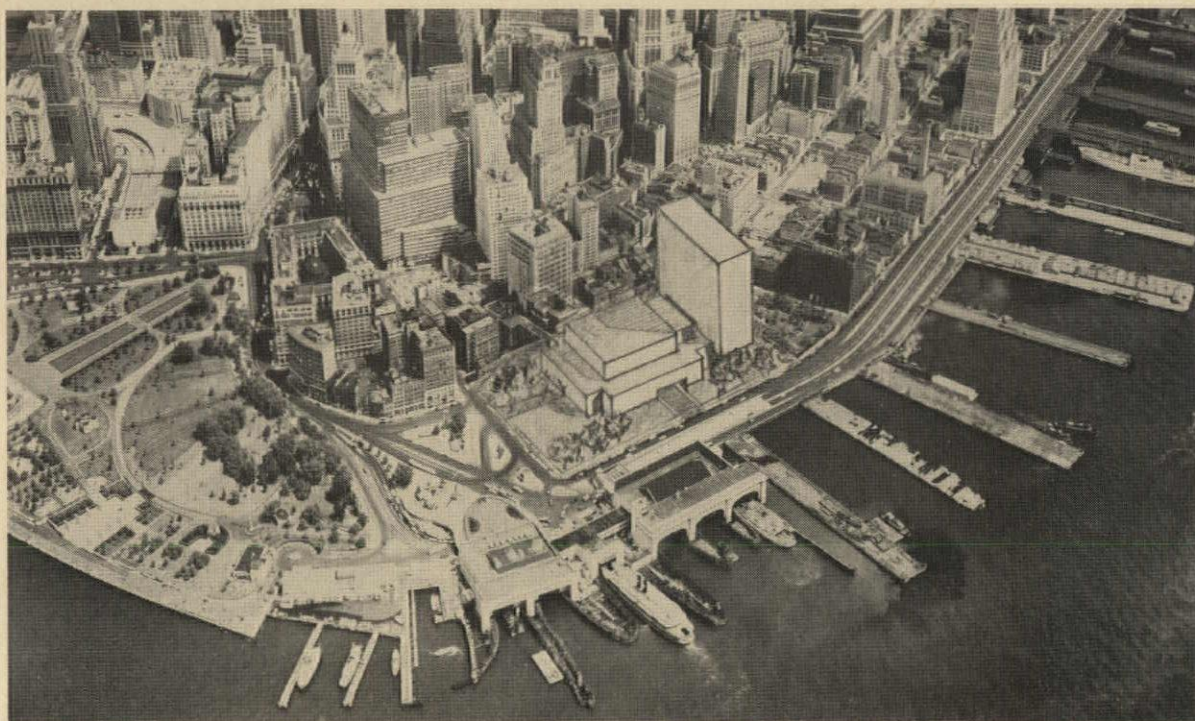


Shopping Center Features Regional Air



SAN ANTONIO, TEX. "Frost's Fashion Square" will be the main element of a large-scale expansion of the existing North Star Mall shopping center in San Antonio. The project, designed by Katzman Associates of New York City with Neal T. Collins as resident architect, will have a decided "regional" flavor, recalling the Spanish heritage of the area in contemporary terms. Arches, colonnades, balconies, malls, fountains, and landscaped areas will evoke a more gracious time in the history of the Southwest. Generous use of carved wood, Spanish tile, and wrought iron will emphasize this atmosphere.

Total area of the project will be 112,177 sq. ft., with 34,277 sq. ft. going to public areas, 75,218 sq. ft. to leasable space, 1493 sq. ft. to canopies and arcades, and the remainder to service areas. In addition to the large Frost store, the mall and arcades will feature small shops of all varieties. Fortunately, the architect has retained design control of these areas, including interior and façade design and graphics, so that the center will emerge as an integrated composition. Two movie houses will be part of the scheme. Another expansion to the east is provided for.



Preliminary Proposal for N.Y. Stock Exchange

NEW YORK, N. Y. The New York Stock Exchange, long in need of additional space (which it almost got when the World Trade Center was proposed for the West Side), now has its sights on a 240,000-sq-ft renewal area of downtown New York adjoining Battery Park. Preliminary plans for the new building by O'Connor & Kilham would almost double the size of the present trading floor, from 26,000 sq ft to 56,000 sq ft, and provide a high-rise building for Stock Exchange offices. The project would be in two elements (*above*): the tall office slab, and the lower structure housing the

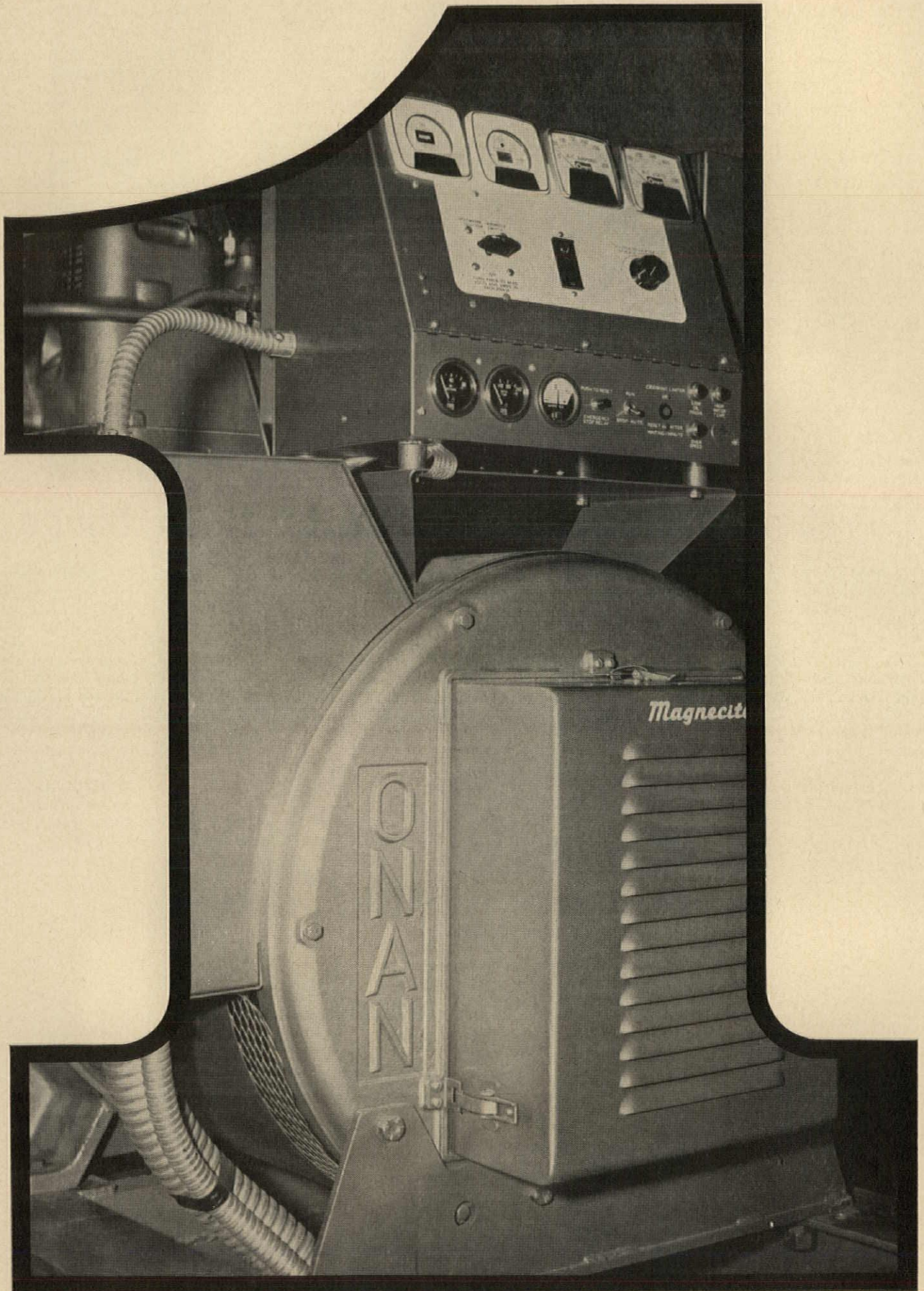
trading floor. The latter element would bridge Broad Street (*below*). Parks and plazas are part of the proposal, although a future expansion seems to take up much of this space.

In its preliminary form, the design and massing of the Stock Exchange seems quite eclectic and heavy-handed. It is to be hoped that these characteristics will be eliminated or refined on more detailed study. Such a building is bound to be one of the most important commercial structures in the United States; it would be unfortunate if it were to become a design throwback to the Jim Fisk,

J. P. Morgan days rather than an outstanding statement of our economic and technological future.

Some New York architects are disturbed about the present plans, feeling that the move would take the New York Stock Exchange too far away from its historic position at the center of the financial district. They feel that a better site would be the one proposed by Webb & Knapp, a few blocks northwest of the present building. Then, if the World Trade Center on the East Side eventually goes through, the Exchange would be once more in the midst of things.





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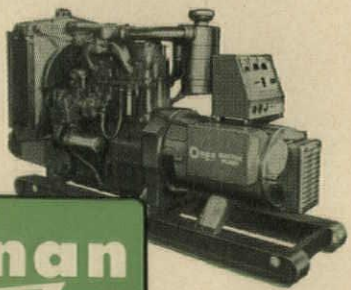
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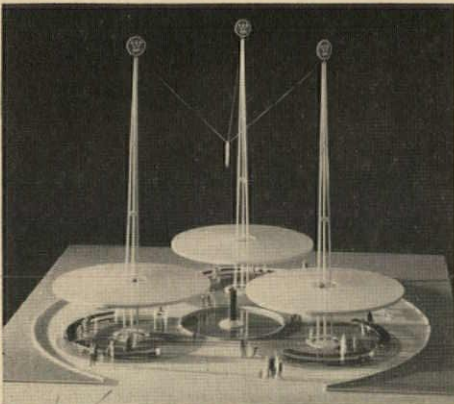
1939 Echoes, "Pietà," Folies Bergère for NYWF

FLUSHING MEADOWS, N.Y. With 100 per cent success for the international exposition still far from assured, many exhibitors have proceeded with their plans for the 11-months-away 1964-65 New York World's Fair. Public pronouncements by Fair President Robert Moses continue to be as sanguine as ever, but observers note a number of as yet uncommitted areas on the fairgrounds.

Current construction under way

takes us from the sublime (Michelangelo's "Pietà") to the Unisphere. Most Fair design remains fair design, with some exceptions, including Lescaze's branch bank and Noyes's Westinghouse exhibit. As is appropriate for such come-one-come-all shows, hyperbole is the order of the day. Pitchmen for the Johnson's Wax Pavilion claim it was designed "to make a contribution toward advanced architectural concepts in the same pioneer-

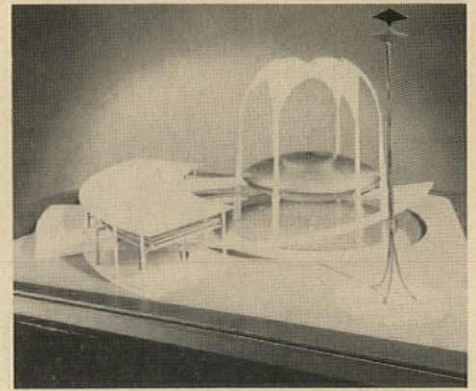
ing spirit attributed to the commissioning of our Wright-designed business buildings" (it was designed by an industrial design firm). The elliptical building at the French exhibit will be "the largest structural ellipse ever built . . . like a mammoth oval—the symbol of life and nature" (this will house, appropriately enough, the Folies Bergère). More on the Fair in months to come, when we have caught our breath.



Eliot Noyes's Westinghouse exhibit will have duplicate of 1939 time capsule and updated version for reference in 6939.



Snail-like structure of Vatican Pavilion will shelter "Pietà". Kiff-Coleman-Voss-Souder, Hurley & Hughes, Luders & Associates, Architects.



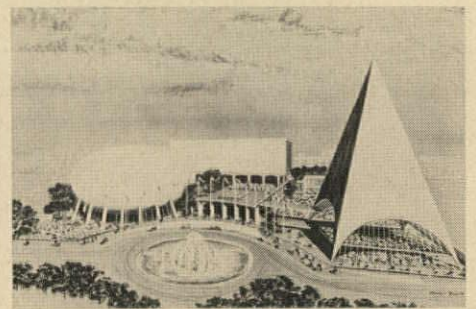
Disc-shaped theater supported between six columns was designed for Johnson's Wax by Lippincott & Margulies, Inc.



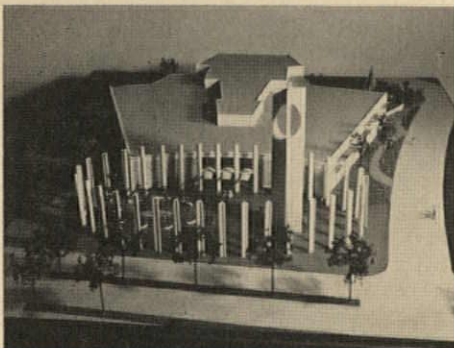
Clean-lined bank featuring masonry and glass walls is William Lescaze's design for First National City Bank.



Nationalist Chinese pavilion—C.C. Yang & Paul K.Y. Chen, Architects—has traditional Chinese approach.



Triangle, rectangle, ellipse for French pavilion by France's Charles Rieger with Katz, Waisman, Weber & Strauss.



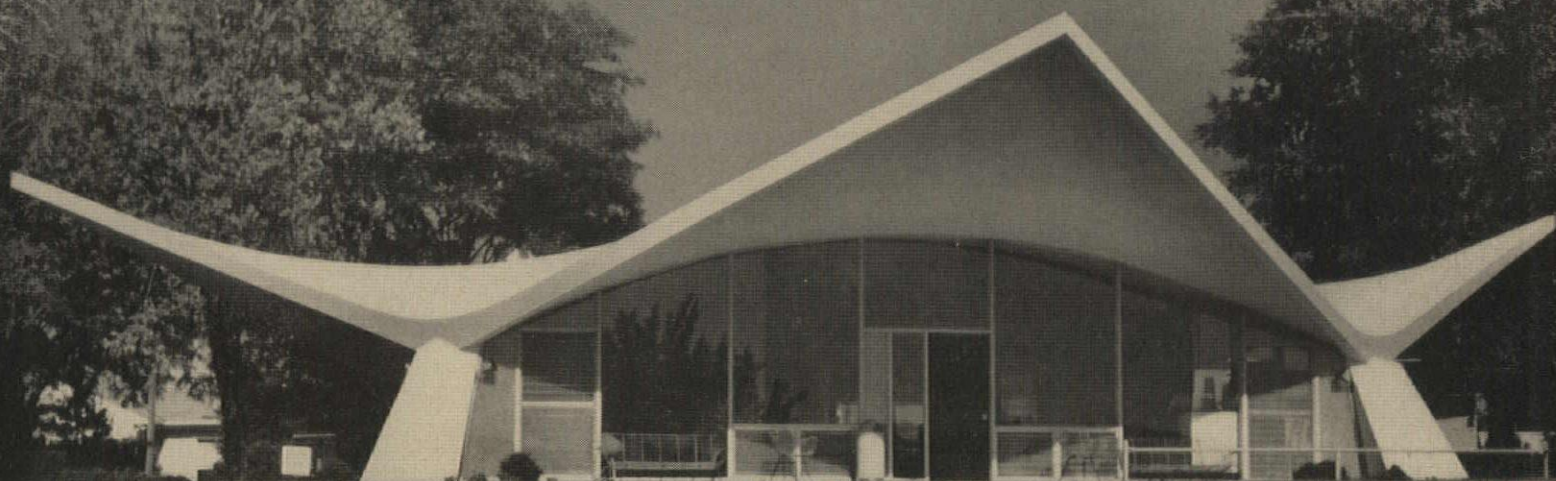
Protestant Center will have a column-circled "Court of the Protestant Pioneers" by Architect Henry W. Stone.



Foremost feature of Ford Pavilion, by Welton Becket & Associates, will be a 235'-diameter circular rotunda.

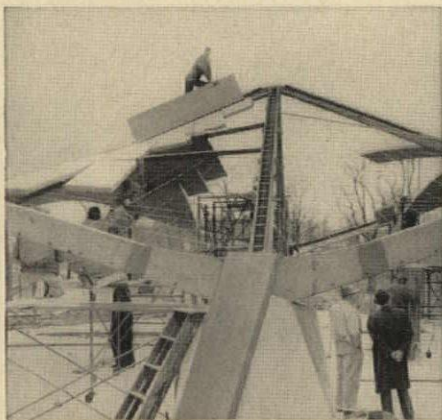


. . . And, of course, work proceeds on the Unisphere, Moses's Disneyesque idea of something-or-other.



GOLF STARTER HOUSE, PURDUE UNIVERSITY ■ General Contractor: KEMMER CONSTRUCTION CO. ■ Architects: PURDUE PHYSICAL PLANT DEPT. Engineers: PURDUE STRUCTURAL ENGINEERING DEPT., School of Civil Engineering ■ Ready-mixed concrete for footings and piers: CONCRETE READY MIX CO. ■ Ready-mixed concrete for floor, sidewalks and roof: VERPLANK CONCRETE & SUPPLY CO. ■ Lone Star Masonry Cement Supplier: SPEER BUILDING MATERIALS, INC. (All of Lafayette and West Lafayette, Ind.)

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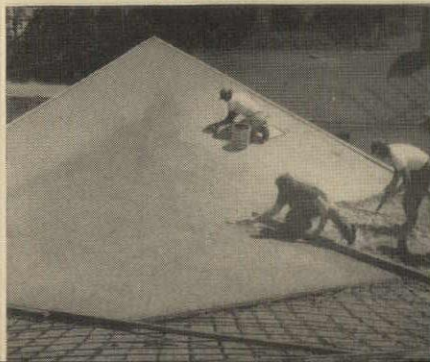
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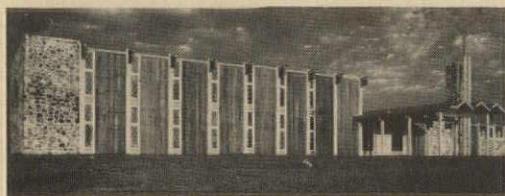


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Removable diamond-lights heighten "Gothic Appearance" of this contemporary church

*Stock Andersen Casements
are used in sanctuary of
Our Savior's Lutheran
Church in Madison, Wis.*

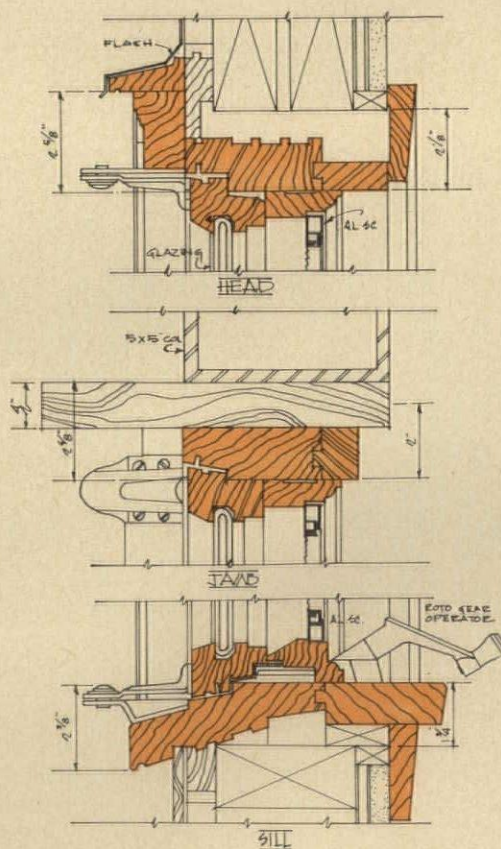
The diamond-light wood grilles in these Casements are removable. Normal maintenance and painting can be done easily and at minimum cost.

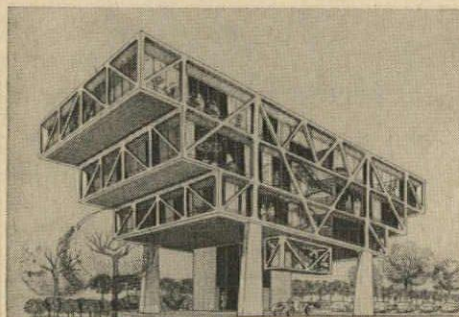
The handsome finely-finished millwork complements the natural beauty of the rough stone, wood siding and the dramatic post and beam construction.

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Exposed-Frame Building

The proposed office building for the architectural firms of Burdette Keeland, Jr. & Associates and Howard Barnstone & Partners, designed by themselves, will be a uniquely shaped structure overlooking the Houston skyline. The exposed structural frame of the building will be composed of a series of truss-like steel members covered with gunite plaster and combined into one great truss extending the full height of the building. Since the upper floors will be rental space commanding the best views of the city, the frame will expand as it rises to provide extra space.

"Rockefeller Center in the Countryside"

New Town Center Federal Building is the first element in New Town Center, an office and residential devel-

opment proposed for Prince George's County near Washington, D. C. Major tenant—the U.S. Department of Agriculture—has already signed for 80 per cent of the space. Building will also contain a cafeteria, restaurant, and cocktail lounge. Master design for the entire complex, by Edward D. Stone,

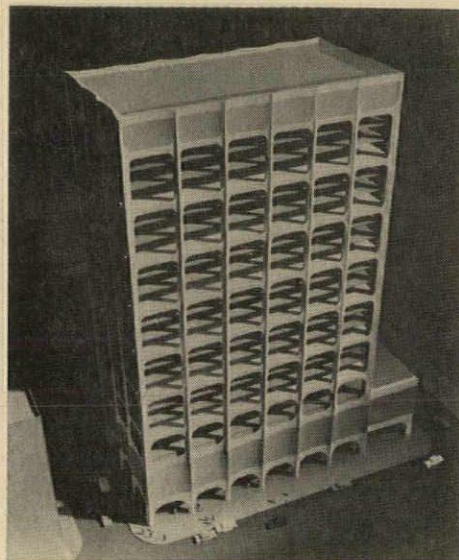


provides residential and community buildings, other office structures, and malls, sunken gardens, canopied walkways, fountains, and reflecting pools. Stone describes the project as "a Rockefeller Center in the countryside."

Crisis at Columbia

The smoldering unrest between the administration of Columbia's School of Architecture and what might be called a "tenure" group of faculty members finally erupted last month, culminating in the resignation of Dean Charles Colbert and Assistant Dean Richard Miller. Kenneth Smith

is now acting as Dean. Colbert's ambitious programs had alienated some of the more traditional-minded staff members, and there was also some student dissension about what they felt were somewhat autocratic methods of running the school. All in all, Colbert had begun translating Columbia from a stagnant, old-line school into a more vital, contributing institution.



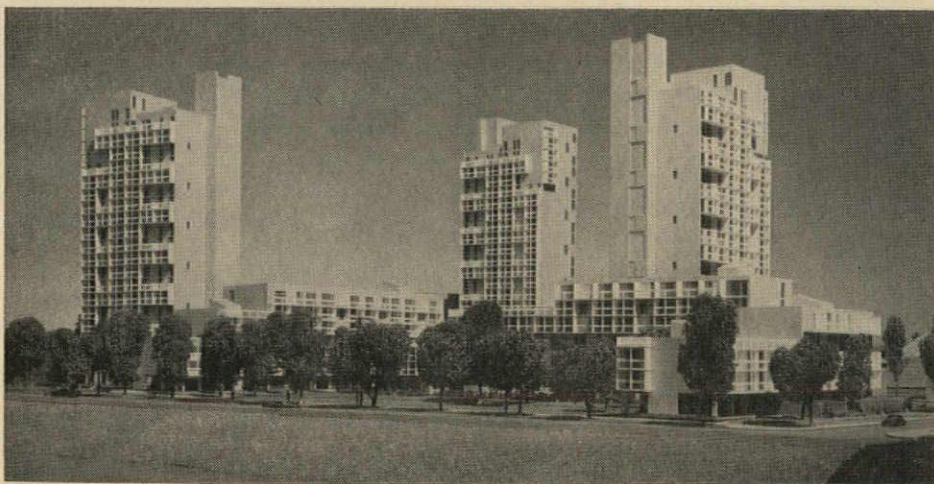
St. Louis's Tallest Since 1928

A 25-story office building will be St. Louis's tallest since 1928, according to the Siteman Organization, the owner. Designed by Hellmuth, Obata & Kassabaum, the building will have a concrete structure sheltering three-floor-high increments set back from the frame and offering a continuous glass expanse on all four exterior walls. The building will have a central core plan with only four interior columns per floor. On-site parking for 400 cars will be provided on the lower floors. Structural engineer is Albert Alper, and mechanical engineer is Hattis Engineering.

PERSONALITIES

LUDWIG MIES VAN DER ROHE received the 1963 Gold Medal for Architecture from the National Institute of Arts and Letters . . . UIA announces: the Sir Patrick Abercrombie Medal goes to the Planning Group led by CONSTANTIN DOXIADIS; the August Perret award to architect KUNZO MAEKAWA, Japan, and to fabricator-constructor, JEAN PROUVE, France . . . Cited by the National Conference on Church Architecture at Seattle were REID, ROCKWELL, BANWELL & TARICS, for the Greek Orthodox Church, Bel-

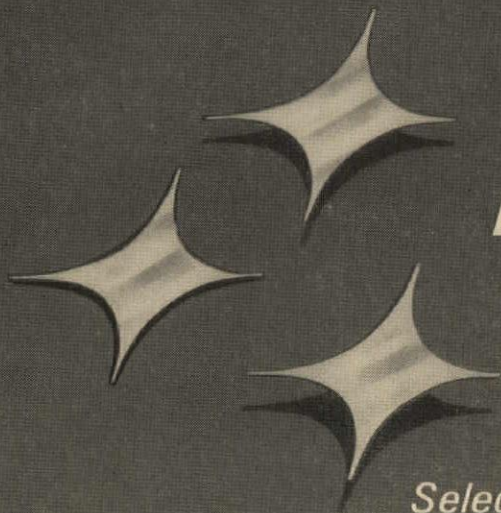
Continued on page 82



Harvard's Married Student Housing

Housing for approximately 500 married graduate students and their families has been designed for Harvard University by Sert, Jackson & Gourley. The complex will provide 87 efficiency apartments, and 225 one-bedroom, 162 two-bedroom, and 22 three-bedroom apartments in three 22-story structures and four buildings

ranging from three to seven stories high. Nonresidential provisions will include a nursery and pre-school area, meeting rooms, a self-service laundry, and a 350-car garage. A pedestrian mall will penetrate the site, connecting Cambridge with the riverfront and a landscaped public area along Memorial Drive.



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Hugh Acton Designer-Manufacturer, Birmingham, Michigan
- ★ **STEEL SHEET OR STRIP**
Henry Dreyfuss Industrial Designer, New York, New York
Walter Furlani and J. W. Stringer Designers, IBM General Products Division
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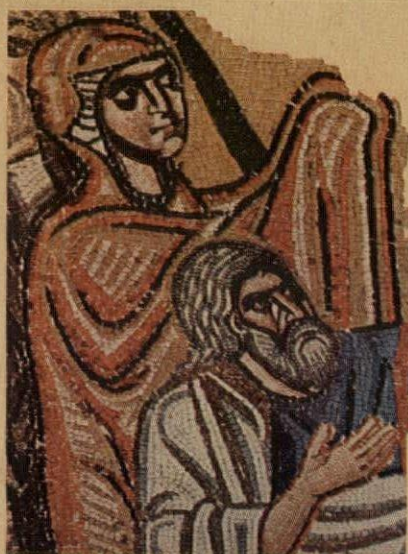
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Continued from page 78

mont, Calif.; GRANT, COPELAND & CHERVENAK, for the Newport United Presbyterian Church, Bellevue, Wash.; MURRAY-JONES-MURRAY for St. Patrick's (Roman Catholic) Church, Oklahoma City, Okla.; and LUSK & WALLACE, for the Broadmore Community Church, Colorado Springs, Colo. . . . CRAIG ELLWOOD, RICHARD M. BENNETT,

and PETER BLAKE are jurors for Portland Cement Association's 1963 Scholarship Awards Program for Architectural Students; scholarships are for summer study in France and will be awarded on the basis of residential designs utilizing concrete . . . Recipients of University of Illinois fellowships for travel and study abroad are students DONALD L. WILLIAMS and

DONALD E. EVENSON, Architecture, THOMAS H. JOHNSON, Landscape Architecture, and WILLIAM P. MILBRATZ, Architectural Engineering . . . KENNETH C. LANDRY succeeds MATTHEW L. ROCKWELL as Director of Public Services for AIA; ROCKWELL leaves the post to serve the Northeastern Illinois Metropolitan Area Planning Commission as Deputy Director . . . AIA Nominating Committee candidates for elections at 1963 Convention are: President, J. ROY CARROLL, JR.; President-Elect (First Vice-President), ARTHUR GOULD ODELL, JR.; Second Vice-President, WAYNE S. HERTZKA; Treasurer, ROBERT F. HASTINGS. Nominations for Treasurer have also been submitted by petition: ROBERT F. HASTINGS and RAYMOND S. KASTENDIECK (incumbent). Regions whose Directors' terms expire in '63 have nominated: D. DAY WOODFORD, California; ANGUS MCCALLUM, Central States; ROBERT H. LEVISON, Florida; ALBERT M. GOEDDE, Illinois; WILLARD S. HAHN, Pennsylvania; LLEWELLYN W. PITTS, Texas . . . OTHMAR H. AMMANN, designer of New York's George Washington Bridge, has endowed an Othmar H. Ammann Research Fellowship in Structural Engineering to be administered annually by the ASCE . . . This year's recipient of ASCE's Professional Recognition Award is DONALD H. MATTERN, Project Planning Chief of TVA: ASCE hails MATTERN's efforts to improve employment conditions among civil engineers . . . MILO H. THOMPSON of Carl Koch and Associates, Cambridge, and RICHARD S. WEINSTEIN of I.M. Pei, New York, were awarded the Rome Prize of the American Academy in Rome for the study of architecture during the 1963-64 year . . . "Chicagoan of the Year in Architecture and Engineering," decided Chicago Jaycees, is LUDWIG KARL HILBERSEIMER, for his contributions to city and regional planning; HILBERSEIMER, founder of the city planning department at the Bauhaus, is now on the staff of the Illinois Institute of Technology . . . Adding luster to the Silver Anniversary banquet of the Architectural Metal Manufacturers, April 26, was JOAN CRAWFORD, recipient of the Association's First Annual Award of Merit—for excellence in the motion picture industry.

Meanwhile, Next Door . . .

Hardly had the sound of the dedicatory speeches for the Pan Am Building died away (pp. 61-62, APRIL 1963 P/A), when announcement was made of another high-rise office building barely a block away in what is fast becoming the most congested business

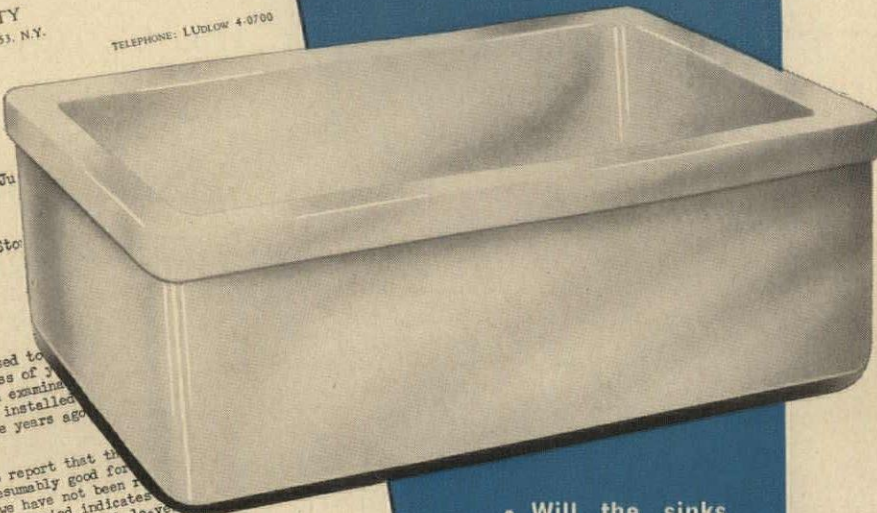


À la Recherche du TIMES Perdu

New York's determination to abolish its noted buildings and landmarks of the past continued last month with the announcement by such a responsible citizen as Allied Chemical Corporation that it has purchased the Times Tower (from which Times Square got its name), and will subject the building to a face-lifting job of thoroughgoing blandness by Voorhees, Walker, Smith, Smith & Haines (descendant of Tower's original designer, C.L.W. Eidlitz & Andrew C. McKenzie).

The building will be used as a

"showcase for chemistry," with the first three, glass-walled floors to be devoted to the exhibition of new products and developments. The office portion of the building will be used as a marketing center for Allied Chemical, including its nylon fiber marketing department, product publicity and advertising personnel, and metropolitan area salesmen. There will be a restaurant on one of the upper floors; in addition, facilities for radio and TV and areas for fashion shows and other divertissements are contemplated.



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DEPARTMENT OF CHEMISTRY

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Vice President, United States Stoneware Laboratory
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Sincerely yours,
E. J. Durham
E. J. Durham
Director, Nichols Laboratory
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cc. Mr. James Cross

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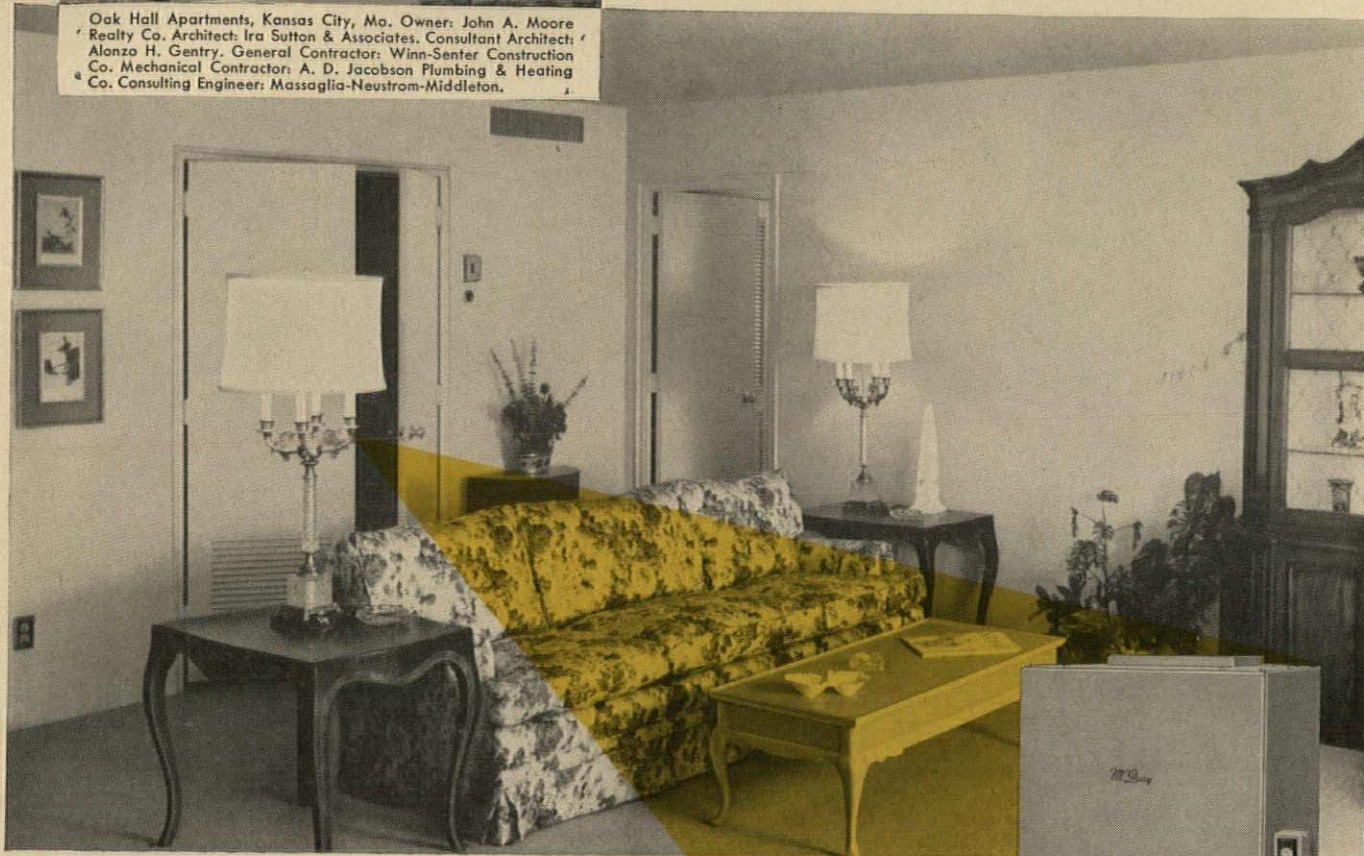
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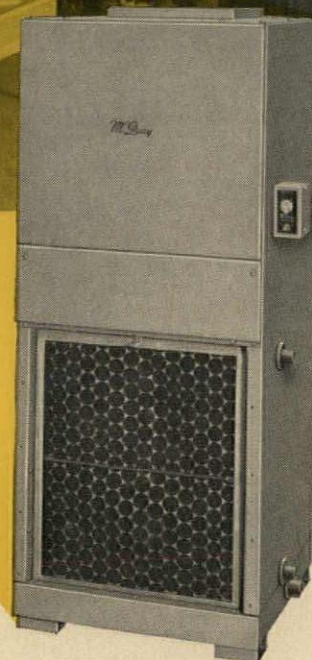
Oak Hall Apartments, Kansas City, Mo. Owner: John A. Moore Realty Co. Architect: Ira Sutton & Associates. Consultant Architect: Alonzo H. Gentry. General Contractor: Winn-Senter Construction Co. Mechanical Contractor: A. D. Jacobson Plumbing & Heating Co. Consulting Engineer: Massaglia-Neustrom-Middleton.

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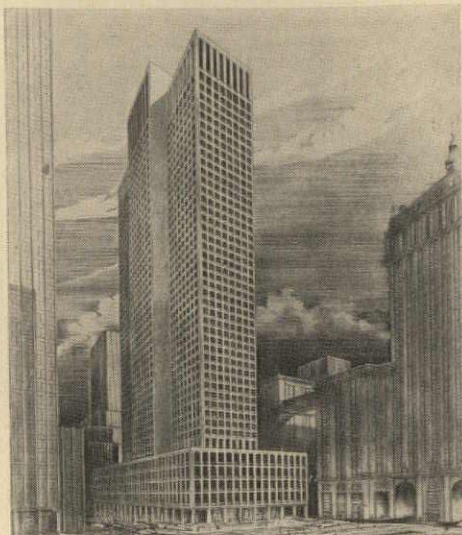
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section in the country. A 47-story, 1,400,000-sq-ft building designed by Shreve, Lamb & Harmon for Uris Buildings Corporation will rise on a block-square site between Park and Lexington Avenues and 46th and 47th Streets. Demolition will proceed in 1964, and will include the office building presently at 247 Park Avenue and the old Grand Central Palace on Lexington Avenue. Since the building was designed under New York's new zoning laws, one-third of the site will be left open for landscaping.

Competitions

Eleventh annual Industrial and Insti-

tutional Landscaping Awards Competition, conducted by American Association of Nurserymen, will accept submissions up to September 1 at A.A.N. headquarters, 835 Southern Building, Washington 5, D.C. . . . Simpson Timber Company has announced a \$1000 award for the person submitting the best design idea using its redwood; deadline for entries is September 30, at Simpson, 2042C Washington Building, Seattle 1, Wash.

3 by SOM

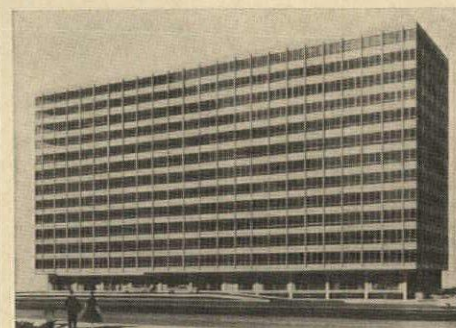
Projects by Skidmore, Owings & Merrill in New York, Pennsylvania, and Illinois have been announced. The National Aeronautics and Space Ad-



ministration Building at Rensselaer Polytechnic Institute (*above*) in Troy will be a \$2.5-million facility to be built in two elements, the first using a \$1.5-million grant by NASA. Project will house the Interdisciplinary Materials Research Center, including the departments of materials engineering, physics, chemistry, chemical en-



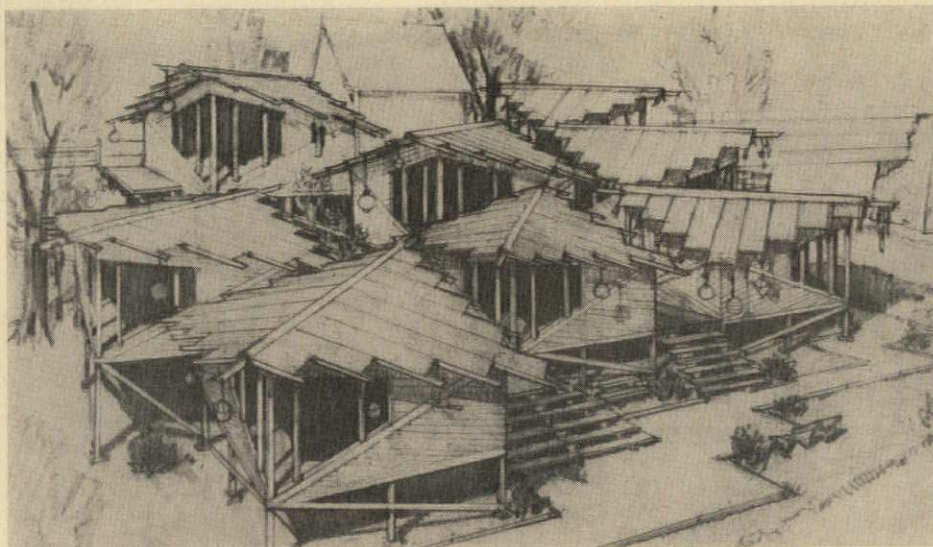
gineering, geology, and mechanics. The new Engineering Building for the Armstrong Cork Company in Lancaster, Pa., (*above*) will be a three-level structure near the company's existing Research and Development Center. Mechanical and service areas will occupy the below-ground level, and the upper two floors will contain engineering, architectural, and technical services, administrative and reception areas, and a reference library. The SOM addition to the Presbyterian-St. Luke's Hospital in Chicago (*below*) will provide facilities increasing the



hospital's annual number of patient visits from 70,000 to 100,000. Among the added or expanded services will be more medical and surgical beds, operating rooms and surgical research areas, clinical, biochemistry, and pathology laboratories, and research facilities for radiology, nuclear medicine, biophysics, and medical illustration.

Calendar

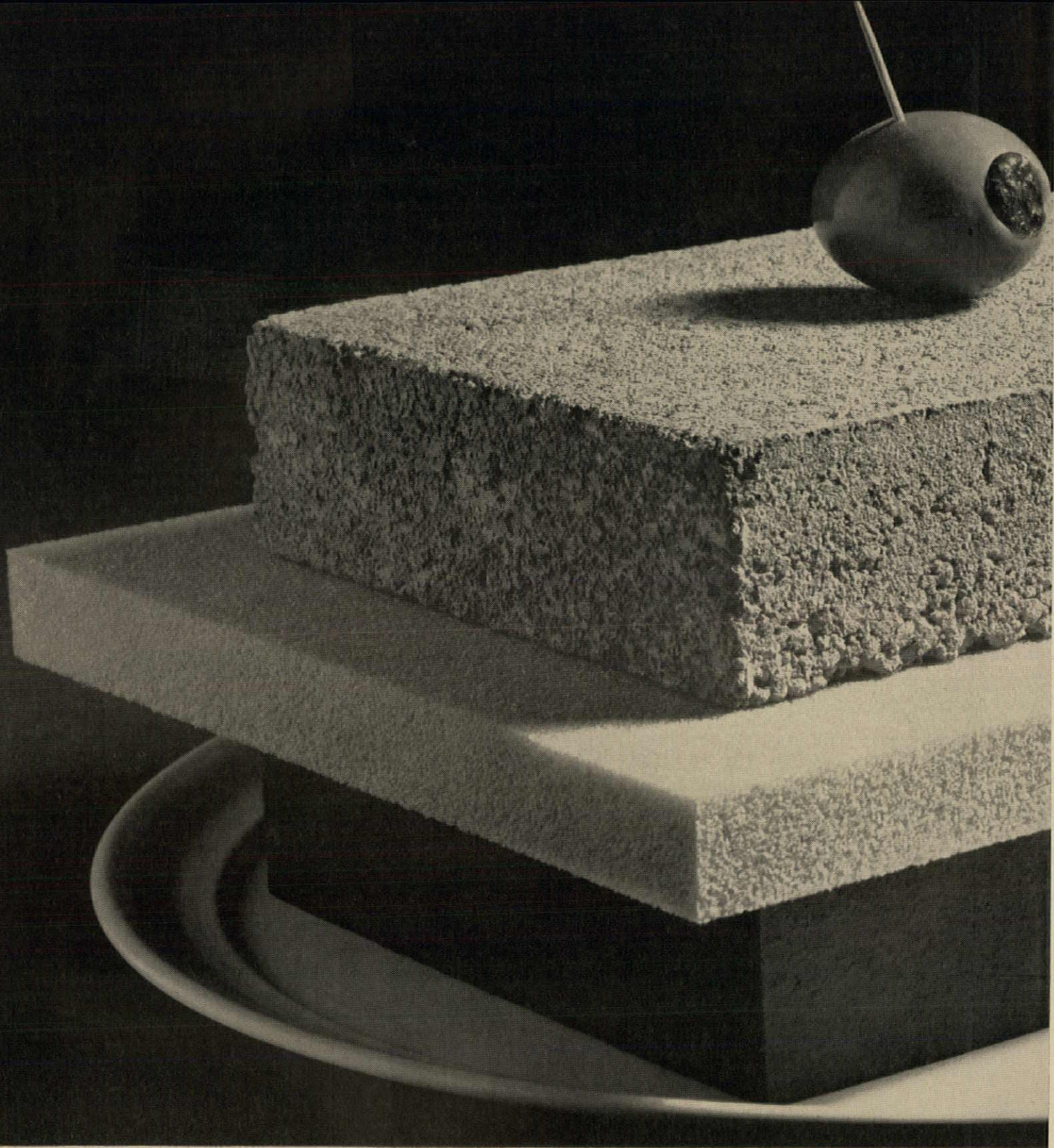
The International Design Conference will be held in Aspen, Colo., June 24-28. Speakers on "Design and the American Image Abroad" will include Eliot Noyes, Edward R. Murrow, Arthur Schlesinger, Jr., Herbert Bayer, Patwant Singh, and Reyner Banham; for details, contact Aspen Chamber of Commerce, Box 739, Aspen, Colo. . . . Producers' Council annual meeting will be at the Shoreham in Washington, D.C., September 17-20 . . . International symposium of the International Union of Architects will be held in Mexico City, October 7-11 . . . New York's Coliseum will be the scene of the 4th annual Decoration and Design Show, October 12-20 . . . 1963 International Building Exhibition will be in London, November 13-27.



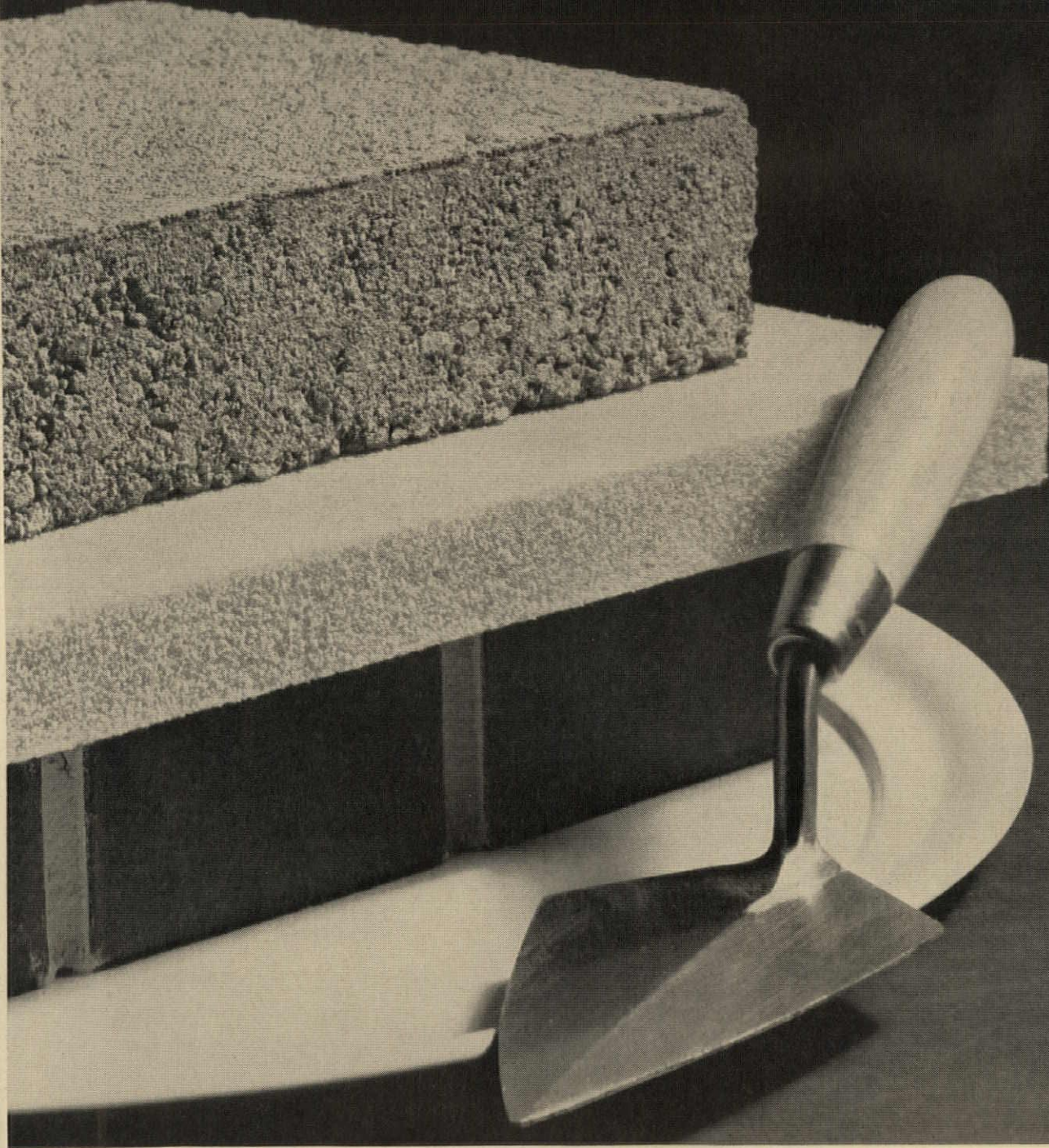
Canalside Village for Crafts

An eight-unit "village" to shelter workshops and showrooms for various handicrafts has been designed for a site on the old Delaware and Raritan barge canal in colorful New Hope, Pa., by Mat Kauten, Architect. Struc-

tures will be of thick, rough planks with corrugated cement asbestos and plastic roofs. The units, which will house ceramics, wood carving, leather work, glass blowing, and other crafts, will step down the bank of the canal.



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by E. E. Halmos, Jr.

Construction industry leaders have mounted a hasty but all-out campaign to defeat a fairly modest \$8.6 million appropriation sought by the Commerce Department.

The money would go to finance a proposed "Civil Industrial Technology Program,"

which, many fear, could be a disruptive force on the sprawling construction industry and might turn out to be an opening wedge for eventual Federal control of the industry.

Idea of the program is that the funds would be used to foster research in "laggard" industries (construction, textiles, and machine tools are mentioned) by loans to "industrial associations," or grants to firms unable or unwilling to support research.

Rallying under the banner of the U.S. Chamber of Commerce, such organizations as the American Institute of Architects and the Structural Clay Products Institute make these points:

The construction industry has never been formally consulted on the program; there's a complete lack of definition of terms under which such a program would be implemented; the political implications of being able to favor one firm or group of firms and enabling them to catch up to industry leaders are obvious. And, the groups allege, the attempt to get such a program started without Congressional debate—through the device of attaching it to an appropriations bill—is politically underhanded.

Here's a thumbnail background: Last September, the Commerce Department approached Congress for a \$3-million "deficiency" appropriation to finance start of the research program. The plea was based on a report by a committee of the Building Research Advisory Board, which noted the need for added research but carefully recommended that any such program be confined to the Bureau of Standards.

The House chopped the money request to \$1.25 million, but the bill died in the adjournment rush. It is now before Congress again.

Then, last January, tucked away in the President's budget and economic messages, there was a request for an additional \$7.4 million to finance the research program. As nearly as could

be gathered from statements to Congress (and to hastily gathered business groups), Commerce would be empowered to decide which industry was lagging, and make loans to private firms as well as to what was vaguely referred to as "industrial associations," and would, in addition, concentrate largely on product development, which could possibly upset the balance of the construction industry. Worse yet, the bill would seem to sponsor entirely new industry groupings, which would certainly overlap or duplicate much existing research effort.

The industry got a strong and immediate champion in Rep. Frank T. Bow (R., Ohio) who called the Commerce proposal "the most ill-conceived, amateurish and dangerous legislative proposals I have seen in years."

Meanwhile, industry people are pushing for a general construction conference within the next two months; they hope that the House Appropriations Committee will hold out the appropriation until the industry has had a chance to comment.

To Send For

Must reading: "How to Obtain Consideration for Architect-Engineer Contracts with the Department of Defense." This 24-page booklet (15¢ from Superintendent of Documents, Washington 25, D.C.) is the long-awaited explanation of recent Defense Department rulings on how many and what kind of contracts can be awarded by military contracting agencies.

In Congress

Although Congress managed to reach its Easter vacation without passing a single major bill, it was possible to spot some trends.

Most important is the evidence that economy moves are having some effect: the Administration, in response to strong Congressional and public reaction to heavy spending proposals which, coupled to tax cuts, would incur a huge deficit, began to cut back some of its own requests.

For example, the House committees chopped 9 per cent from the Interior Department appropriations; cut funds for the Treasury and Post Office Departments by about 2.4 per cent; and Administration stalwarts themselves cut the mass-transit aid request from \$500 million to \$375 million.

It should be noted, however, that most of these cuts still left plenty of money in the government-agency tills. In most cases, what was left re-

mained above levels of last year.

It was obvious, as of mid-April, that Congress was really sharpening its knives for one thing: the foreign-aid bill, when it finally gets to the floor.

On legislation generally, the Senate did pass one measure of interest to architects: S. 816, which would set up a "Commission on Science and Technology" to study programs, methods, and procedures of Federal departments in scientific programs.

Members would represent the legislative and executive branches of the Government, and would include "persons from private life who are eminent in . . . fields of science or engineering."

Johnson Jibes

It seems to be the fashion, nowadays, for everyone to criticize Washington as a city and a setting.

Latest critic is Philip Johnson, who took a dim view of the ancient, dumpy buildings that clutter Pennsylvania Avenue; the haphazard placement of buildings along the Mall; and the slicing up of the city by expressways.

But there might be some help on the way for "the Avenue," anyway: General Services Administration said it had designated two architectural firms to design a \$47.7-million headquarters for the Federal Bureau of Investigation to replace some of the ancient structures on that street.

FINANCIAL

Another warning flag on construction costs was raised when the Bureau of Reclamation said its Composite Cost Index equalled an all-time high in January.

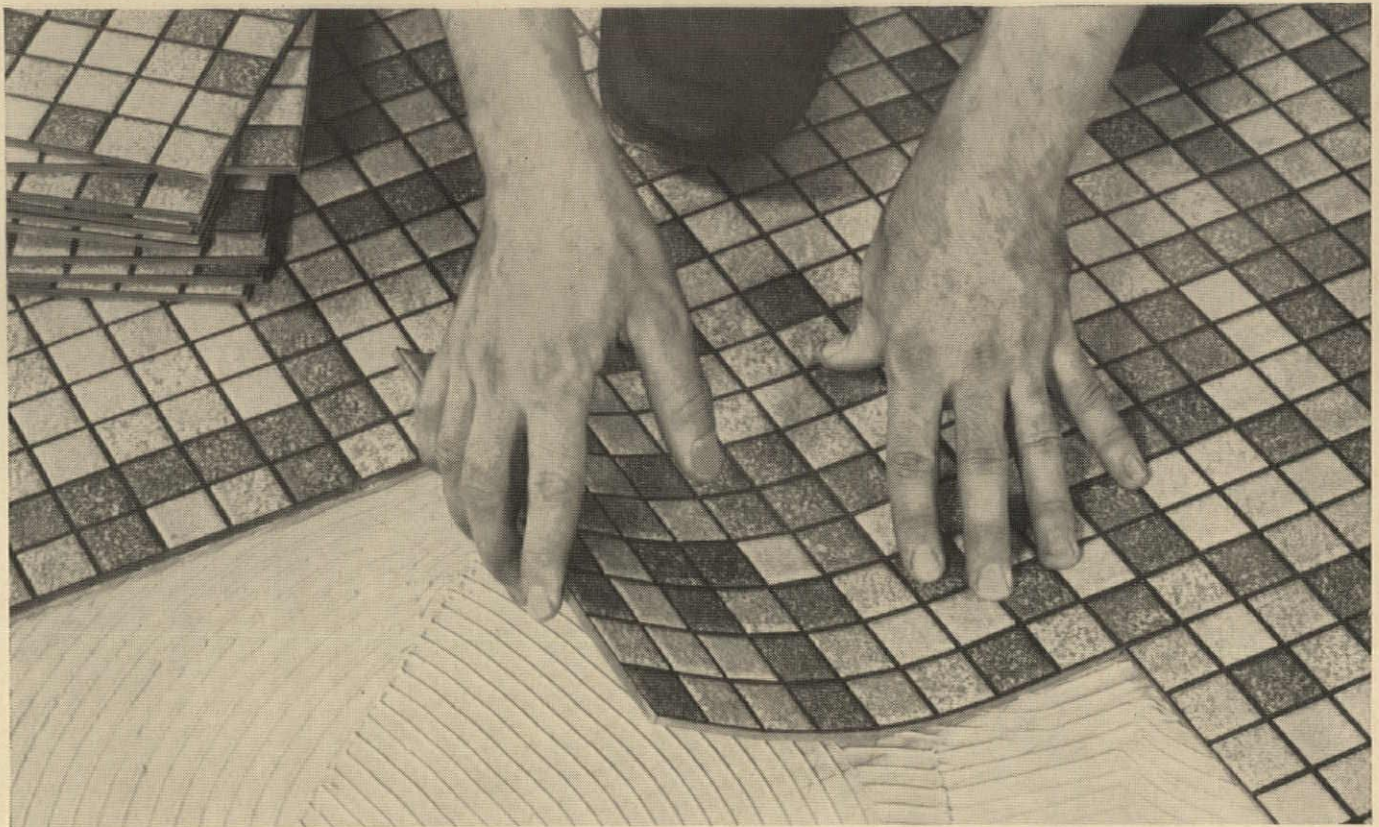
The index (based on the period from 1949-51) rose 1.6 per cent over that of the same month a year ago, and 3.2 per cent over 1961.

Coupled with the Bureau of Public Roads Index, which shows a similar sharp rise at the end of 1962, the BuRec index could now indicate a fixed cost uptrend.

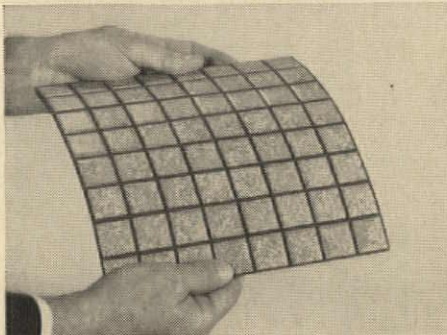
Nevertheless, construction industry health and prospects continued to look good as spring got under way.

The Census Bureau, for example, reported the value of new construction put in place in March as \$4.3 billion—up 8 per cent over February, and up 5 per cent over March a year ago. Housing starts, in February, were 11 per cent higher than a year ago.

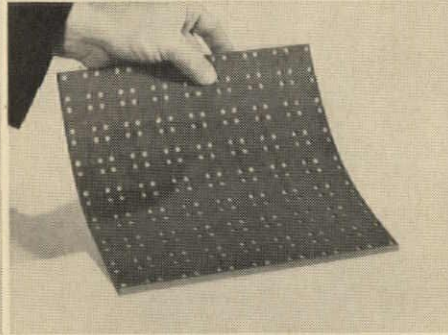
And in January, according to the Investment Bankers Association, voters approved 72 per cent (\$114 million) of all proposals presented.



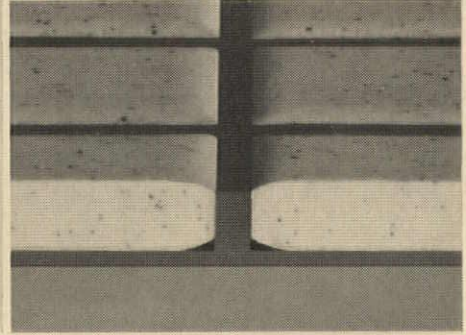
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This enlarged cross-section of Ceramaflex shows the relationship of the rubber grid to both back and sides of each individual tile. Notice how the joint surface is flush with the edge of the tile.

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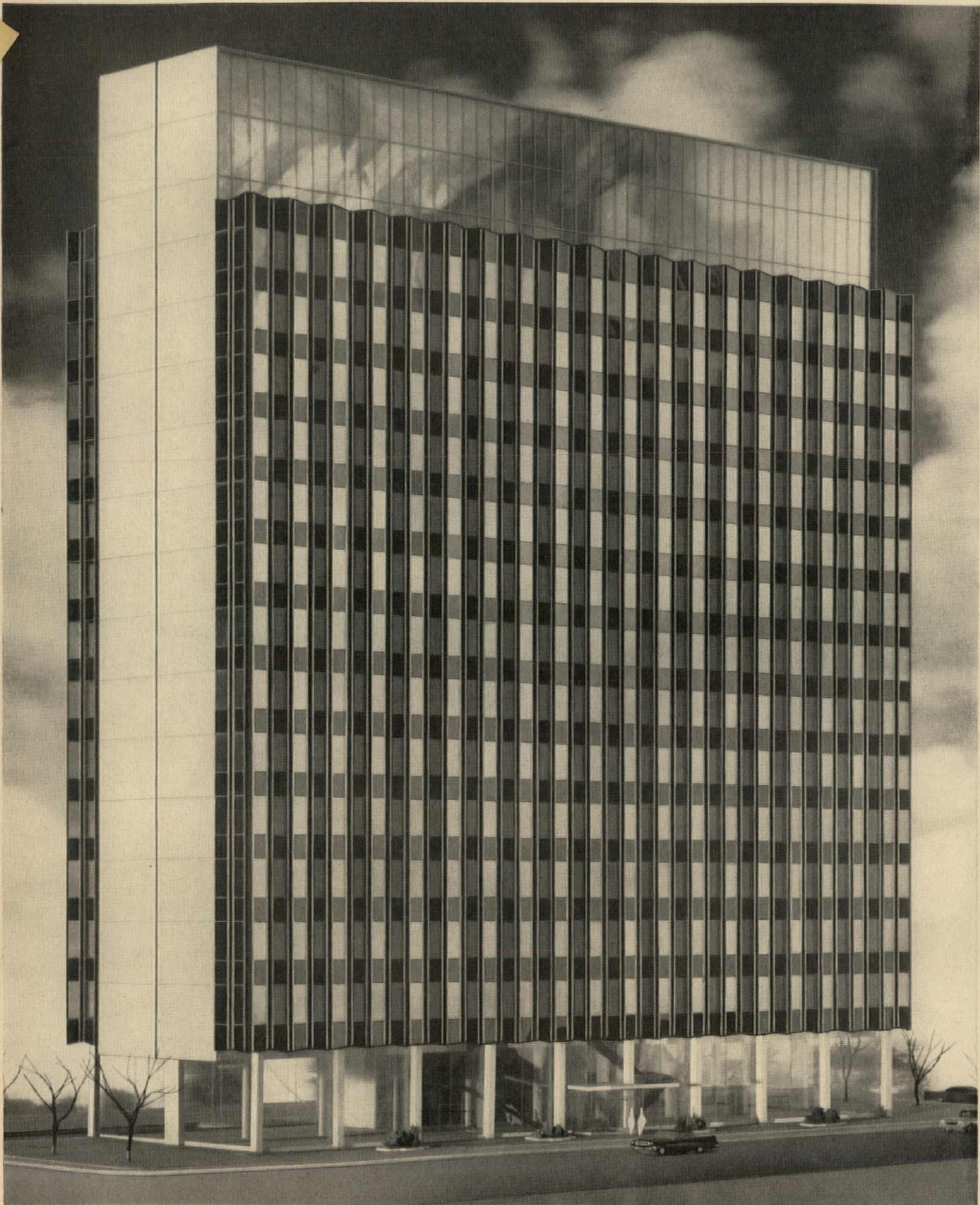
Where resilience, permanence and minimum maintenance are required, there's only one answer—Ceramaflex. Choose from a handsome variety of plain colors and buckshot patterns to create any desired decorative effect. Use unglazed in areas where foot traffic is heavy and either glazed or unglazed where light service is anticipated. Your nearby Romany•Spartan distributor will provide samples and additional information. Or write United States Ceramic Tile Company, Department PA-30, Canton 2, Ohio.



Ceramaflex® is the exclusive product of United States Ceramic Tile Company

UNITED STATES CERAMIC TILE COMPANY





Professional Building for Doctors
and Dentists—Toronto, Ontario

Architects: Gilleland and Janiss
B. J. Arnold, Planning Consultant
Dr. Eugene Janiss, Partner in Charge of Design
Toronto

General Contractors: A Joint Venture,
Doyle-Hinton Ltd. and Perini Ltd.
Toronto

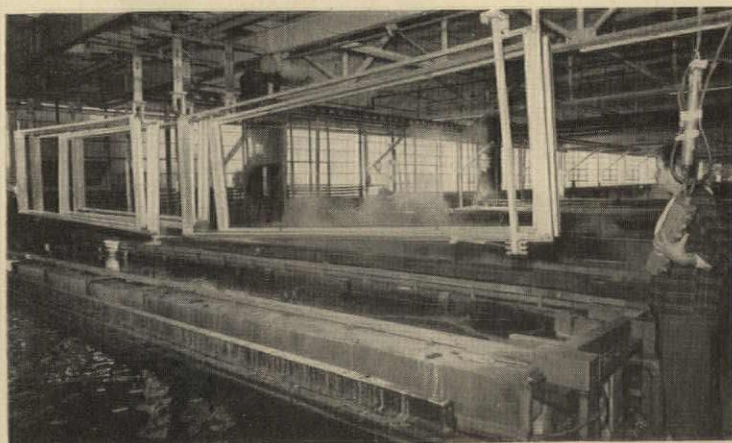
Challenge

To create a vibrantly alive building! Accomplished
with aid of Kawneer Anodic Colored Aluminum

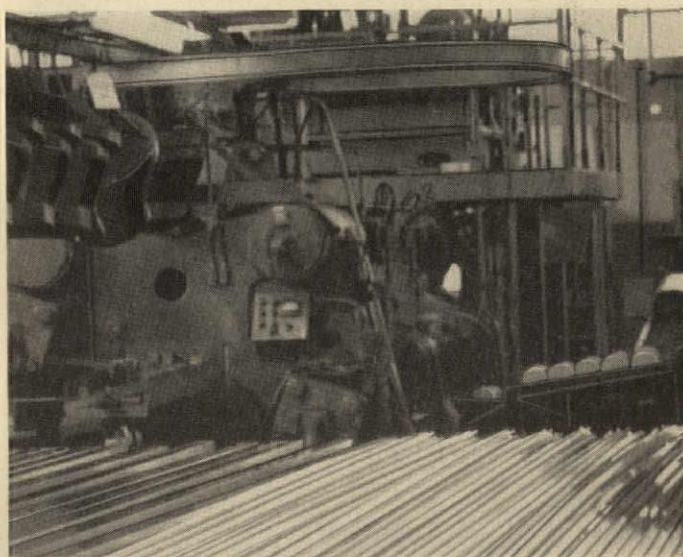
Dr. Eugene Janiss, partner in charge of design, Gilleland and Janiss, met the challenge of the new Toronto Professional Building by cladding it in sparkling precast aggregate and black anodic color coated aluminum. He designed undulating butterfly shaped angular planes of grey glass which reflect a giant montage of the surrounding townscape, giving the facade a fascinating changing pattern . . . making it vibrantly alive. Dr. Janiss' use of contrasting black and white serves as a dramatic symbol of life and death.

Kawneer is helping meet this challenge by custom designing, extruding, anodic color coating, fabricating all aluminum and erecting the complete curtain wall. This service assures uniform quality and on-schedule erection.

Write for interesting architectural challenge case histories.



Kawneer Anodic color process means enduring beauty!
Practically impervious to dulling effects of weather and industrial gases! On this building it is black, but Kawneer anodic color coated aluminum is also available in amber and gold.*



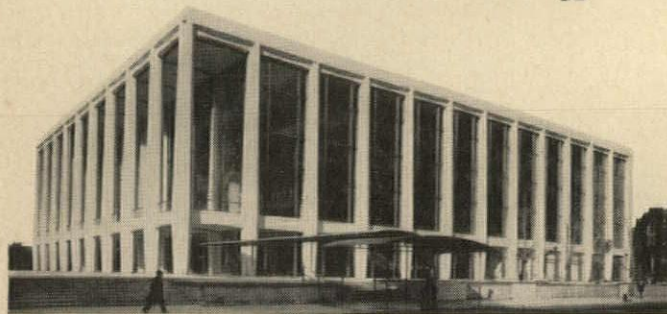
Kawneer extrudes and fabricates to specification.
Our facilities and know-how are advantages for you to consider on any monumental or standard curtain wall system project. What are your metal fabrication problems? Kawneer can help you solve them.

Kawneer Company, A Division of American Metal Climax, Inc.

Niles, Michigan • Richmond, California • Atlanta, Georgia • Kawneer Company Canada Ltd., Toronto, Ontario, Canada

*Color process in U.S. is Kalcolor, a licensed trademark of Kaiser Aluminum and Chemical Corp.

Lighting News
 AT **PHILHARMONIC HALL**
 IN NEW YORK'S LINCOLN CENTER
 FOR THE PERFORMING ARTS



...another
 installation
 by **KLIEGL**

Max Abramovitz, Architect
 Syska & Hennessy, Inc., Cons. Engrs.

Keynoted throughout by newness, this showcase of the symphony introduces a wide range of lighting innovations. Designed by Richard Kelly—and developed and produced by Kliegl Bros., lighting at the Philharmonic promises to establish trends for years to come.

Though yours may be a project far different from a Lincoln Center, the same Kliegl assistance is available to you. The experience of more than half a century can be applied to your lighting whether the job is small or large. Our broad knowledge and skill in optics and reflector design can provide a solution for any lighting application. You gain important savings in time and money *plus* long-term satisfaction. There is no obligation—call on your Kliegl representative or write us direct today.

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.

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Safety for operator as well as equipment. Several positive and exclusive safety features available only in Dock Mate.

DOCK MATE Economy

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 "Bookends just out of a deep freeze."
 "A simple, strong, sculptural and architectural statement in terms of today."



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 350 photographs (over
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by THOMAS CREIGHTON
 Editor of PROGRESSIVE ARCHITECTURE

LEARN The concepts behind the architecture of monuments and memorials.

KNOW The background of this highly controversial competition and the facts behind the critical storm.

REINHOLD BOOK DIVISION

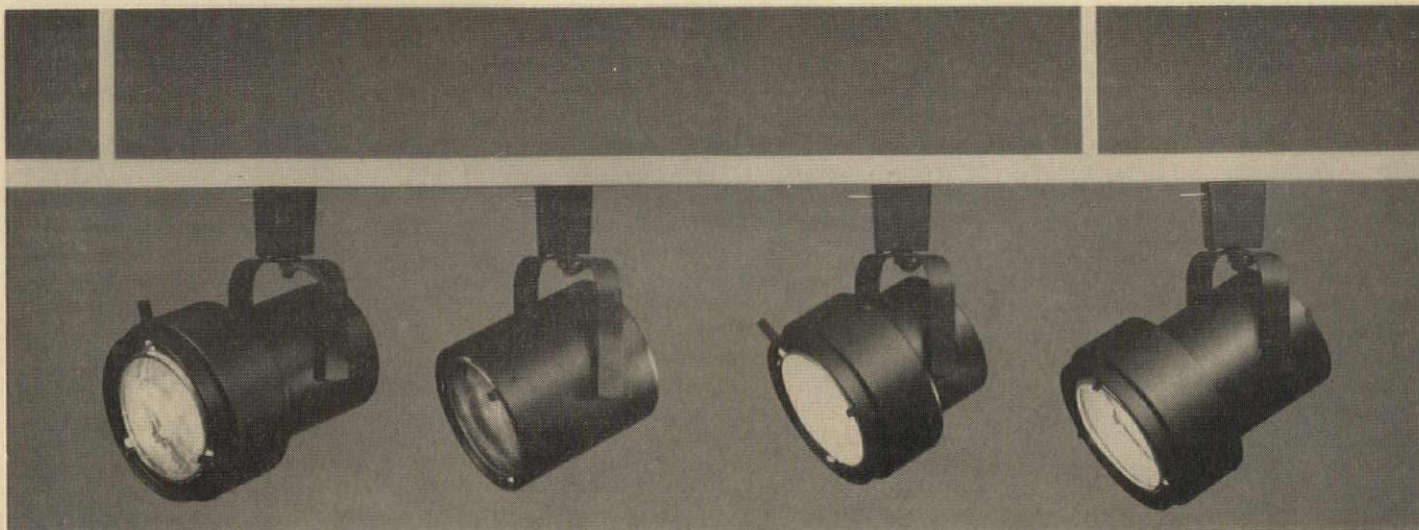
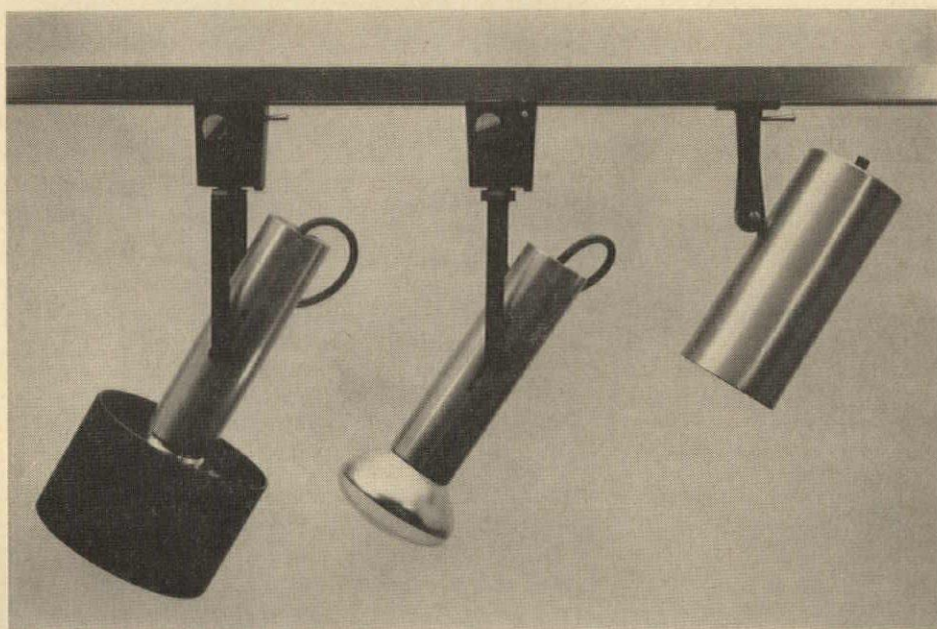
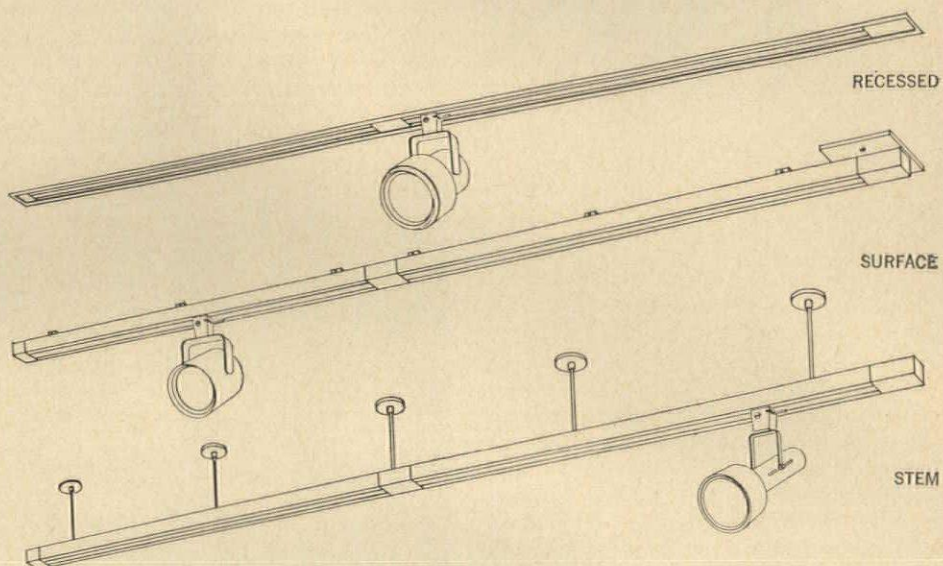
Dept. M-397; 430 Park Avenue, New York 22, N. Y.

Flexible System For Accent, Display Lighting

NEW YORK, N.Y. An exceptionally flexible system that can be adapted for use as display-, accent-, or spot-lighting—"Lytespan Lighting Track"—has been introduced by Lightolier. The system, using the company's "Lyte-spots" and the large variety of bulbs that fit them, can produce a wide variation of effects in quantity and intensity of light, beam spread, beam throw, beam pattern, beam shape, and color effects.

Lytespan is constructed of extruded aluminum with a cross section only $1\frac{1}{8}$ " square, and can be recessed, surface mounted, or stem mounted. The spots can be snapped into the track and fastened securely at any point without sag or droop. Track comes in two modules, 4' and 8', which can be joined to each other, built-up, and extended from a single electrical outlet using connectors. When recessed, system is fed through its own junction box; when surface- or stem-mounted, from standard junction boxes at ends, corners, couplers, or any point between. Stem and surface mountings turn corners by means of a 90-degree connector. A patented "Torsionite Spring" assures easy installation in the recessed system. In addition to ceiling use, track may be installed either horizontally or vertically on walls. Since most spots have individual switches, they need not be removed from track when not in use, but can be easily removed and stored. Lytespan is UL-approved and polarized and grounded throughout. Capacity is 20 amps at 120 v per branch circuit (2400 w incandescent load). Lightolier, 346 Claremont Ave., Jersey City 5, N. J.

On Free Data Card, Circle 100





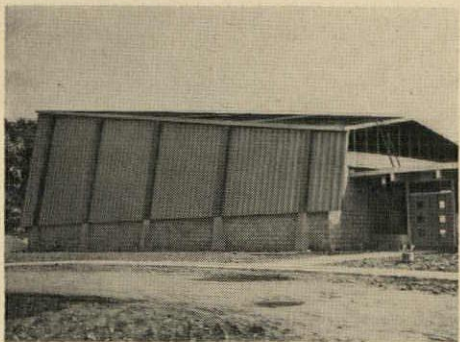
Glazed and Unglazed in a Single Tile

An innovation in floor tile—"VICO Glazed Sculptile Pavers"—combine the durability and sure-footedness of quarry tile with the decorative possibilities of glazed ceramic tile. A bright-colored glazed portion is depressed below natural-color unglazed parts of the designs, so that the unglazed lines afford a nonslip surface while protecting the glazed surface against wear and damage. There are six basic designs, in stripes and geometric patterns; 14 standard colors. Tiles are impervious to water, moisture, and extremes of heat and cold, and are applicable both to indoor and outdoor use. Size is 6" x 3". Amsterdam Corp., 285 Madison Ave., New York 17, N. Y.

On Free Data Card, Circle 101

30-Year Epoxy Primer for Aluminum Siding

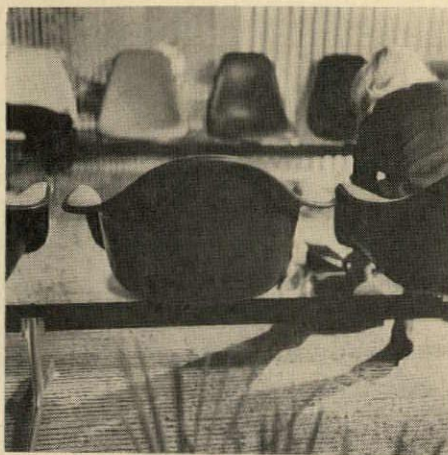
An epoxy-based primer for aluminum siding is expected to give at least 30 years protection against the elements. The new material, in addition to pro-



viding a tough protective coating for siding, gives a high-strength bond for a final coating of acrylic. This durable bond reduces erosion of the acrylic and adds greatly to its life span. (Until recently, most aluminum siding was coated with a single layer of acrylic material, which had a life expectancy of about 15 years.) The epoxy-based primer is the result of a collaboration between Alsar Manufacturers, Inc., Southfield, Mich., and the Cook Paint & Varnish Co., Detroit, using an epoxy formulation based on

Shell's "Epon 1007" resin. Alsar has now developed an application method for the system that is both fast and economical, with the epoxy coating and the acrylic top coat applied in the same processing line. Shell Chemical Co., 50 W. 50 St., New York, N.Y.

On Free Data Card, Circle 102



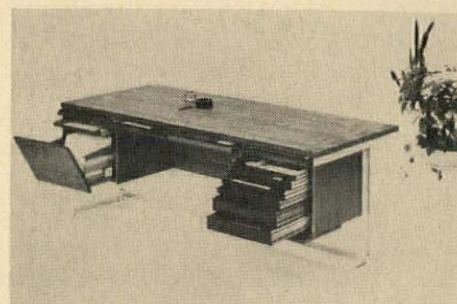
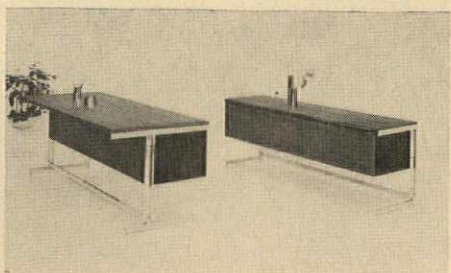
Other Chairs on Eames Base

In addition to the seating described on the new tandem base by Charles Eames in NOVEMBER 1962 P/A, pp. 140-145, one can also have his plastic chair shells used in La Fonda del Sol in New York. Both side and arm shells can be mounted on the base, in multiples of three to five. They are available in all standard Herman Miller plastic and upholstery colors. Herman Miller, Zeeland, Mich.

On Free Data Card, Circle 103

Well-Articulated Desks

Precisely articulated, mechanically jointed steel structure in mirror-chrome finish is the keynote of an executive desk group designed by Hugh Acton. Desk, desk table, cabinet, and conference table comprise the group. Desks can have 14 drawers, but to prevent a cluttered façade, the door of the drawer cabinet swings down under the pedestal on pantographic arms. Drawers also have a front access detail, which enables papers to be filed

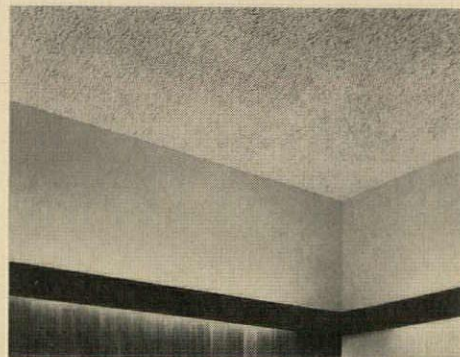


without opening the drawers. Front of file drawer tilts to facilitate viewing. Hugh Acton Design & Mfg. Co., 588 Brookside, Birmingham, Mich.

On Free Data Card, Circle 104

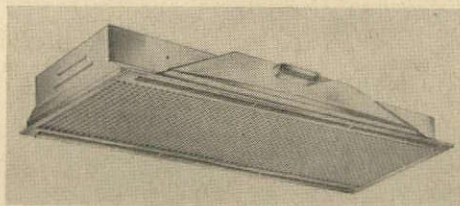
Monolithic-Appearing Tile

Heavily-textured surface of "Acoustone Glacier" ceiling tiles conceals joint lines and contributes the monolithic ceiling appearance common to



job-applied "wet" installations. Tiles feature 90% sound absorption and 70% light reflection. Sizes are 12" x 24", with either plain or foil backing. They may be applied with adhesive or suspended on the USG concealed Z-spline system. United States Gypsum Co., 300 W. Adams St., Chicago 6, Ill.

On Free Data Card, Circle 105



New Air-Light Troffer

"A-L" troffer is designed to work with any one of various air diffusers made by different manufacturers, as specified by the professional. The diffuser is positioned outside the light troffer, thus keeping supply air from entering the light troffer; the air damper adjusts without opening the fixture. Units can be used for either supply or return air, or supply and return air in the same package. Troffers are 1'

Thanks to modern, malleable lead, a pool's place is practically anywhere these days. Take the pool below for instance—one of many unique touches at the new Blue Cross building recently completed in St. Louis. This man-made pond and its tangent planters form an eye-catching replica of the Blue Cross insignia, highlighting an open-deck promenade fronting the new structure. Beneath this promenade and pool lies a 90-car, sub-grade parking area. In between: the invincible protector—lightweight, leakproof lead.

Keeping pools like this in their place—at a practical price—is a snap for modern lead sheeting. No other material can even approach its combination of watertightness, corrosion-resistance, workability, and economy of installation. Concerned about maintenance? Lead never needs any. Replacement? Never needs that, either. When the building it betters is but a memory, the lead will still be serviceable.

Pools and planters like those below are adding dramatic flair to more and more of the nation's new structures. Thanks to low-cost, sheet-lead waterproofing, they can be added practically anywhere.

How about you—do pools have a place in your plans? Detailed technical data on pool-and-planter applications of lead may help you to decide.

Ask us for it. Lead Industries Association, Inc., Department N5, 292 Madison Avenue, New York 17, New York.

4521

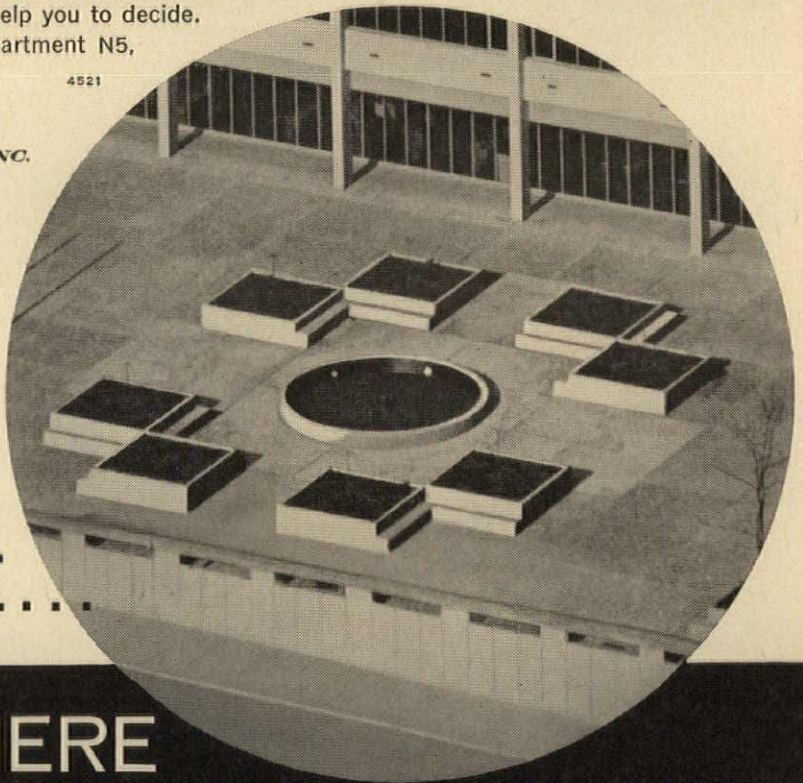


LEAD INDUSTRIES ASSOCIATION, INC.
292 Madison Avenue, New York 17, New York

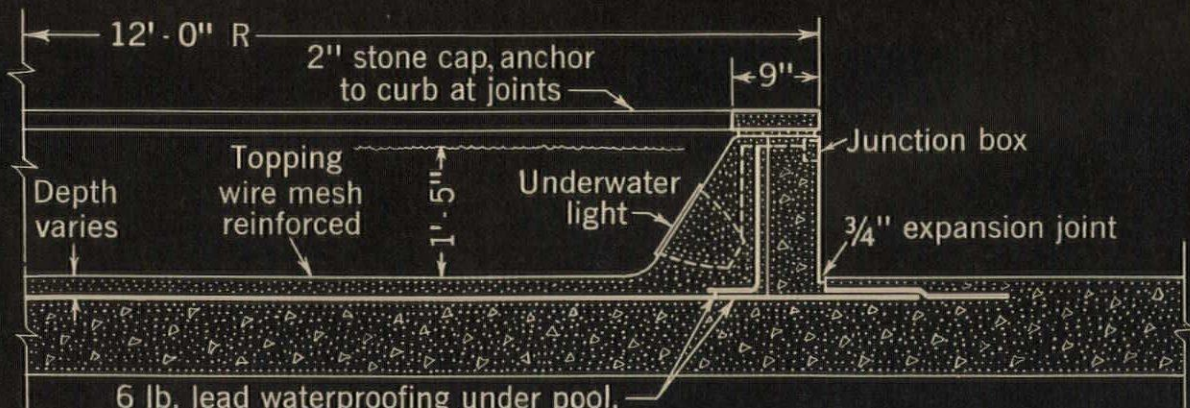
Look Ahead with Lead

For more information, circle No. 380

HOW TO PUT A POOL IN ITS PLACE...

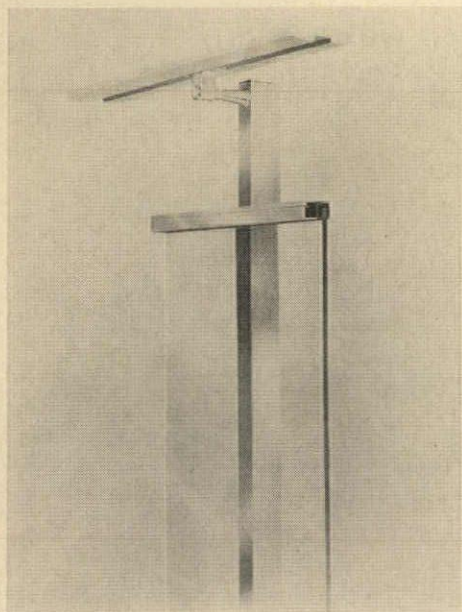


AND KEEP IT THERE



or 2' wide. Units can be installed in most ceiling suspension systems for individual mountings, or in continuous rows. Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 3, Mo.

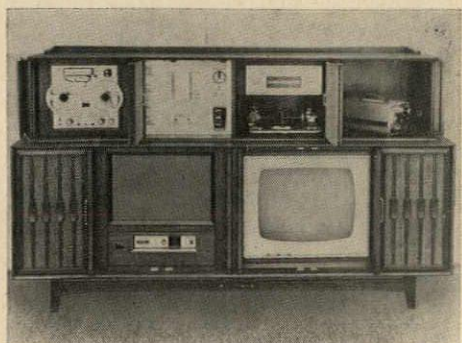
On Free Data Card, Circle 106



New Railing Components

The Julius Blum "Carlstadt" aluminum railing system has seen the addition of several new components, including a concealed post fastener that utilizes a hidden wedge-type assembly to eliminate fascia flanges. Handrail shapes and brackets have been streamlined, and a new snap-in glazing section allows use of panel inserts for decorative or safety purposes. Older Carlstadt line continues to be available. Julius Blum & Co., Inc., Carlstadt, N.J.

On Free Data Card, Circle 107



Two Elements Lacking in Entertainment Center

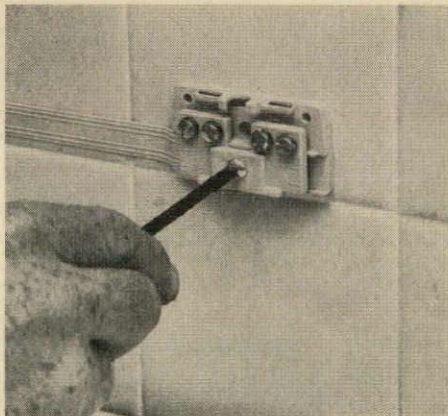
The only change that might be made to Sylvania's new \$5000 "home entertainment center" would be the addition

contains a television set; tape recorder; stereophonic high fidelity phonograph and an AM/FM stereo tuner; a public address system; a remote controlled automatic 35mm slide projector; and space for a closed circuit television camera. If your delicatessen delivers and your doctor still makes house calls, you'll never have to go outside again. Sylvania Electric Products, Inc., 730 Third Ave., New York 17, N.Y.

On Free Data Card, Circle 108

Cable Sytem to Simplify Installation

Pressure sensitive flat-cable system called "Scotchflex" has been developed to simplify installation of telephone, signal, and control wiring in new con-

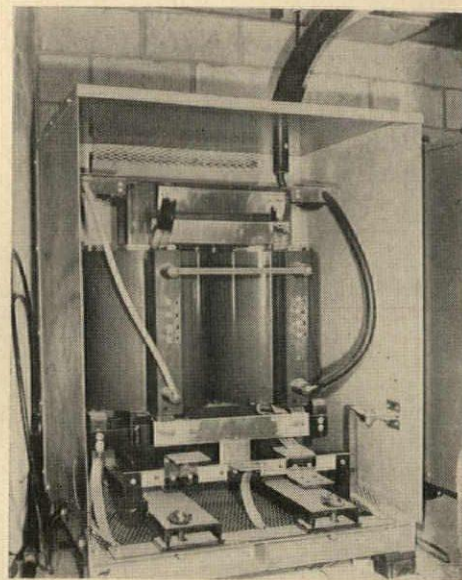


struction, building alterations, and additions in all types of structures. This system is designed to solve wiring installation problems where ceramic tile, concrete block, or cinder block construction is used. Cable and accessories, coated on one side with high-tack adhesive that will stick to almost any surface, eliminate holes, screws, staples, or other fasteners. This unit speeds wiring installation, makes it possible to run wire without defacing wall surfaces, and provides low unobtrusive silhouette. Minnesota Mining and Manufacturing Co., 2501 Hudson Road, St. Paul, Minnesota.

On Free Data Card, Circle 109

Transformer for High-Rise Buildings

General Electric offers newly designed cast-coil dry-type transformers to lower power in high-rise residential buildings to a usable level. Transformer is quieter, lighter, and requires less space than liquid-filled transformers. Transformer coils are



are not necessary for installation. Cast-coil construction gives equipment higher basic impulse level, thereby eliminating potentially weak-link in primary distribution systems for high-rise apartments. This higher basic impulse level of cast-coil transformer offers better protection against lightning and switching surges than ordinary dry-type transformers. Having high-voltage winding encapsulated in epoxy material also prevents damage from dust, dirt, and moisture. General Electric, Schenectady 5, New York.

On Free Data Card, Circle 110



Air-Conditioner and Gas Heater Combined

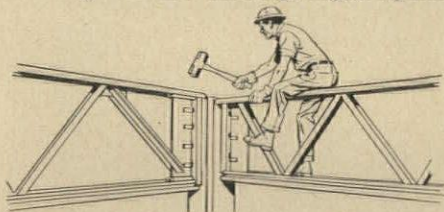
"Suburban Dyna-Temp," first and only combination air-conditioner and gas heater, is a thermostatically controlled unit, 23 3/4" x 15 1/2" x 21 3/4", operated by push-button control permitting selection of heating or cooling with high or low settings. An unusual feature is its adjustable louvered panel to direct warm air downward for heating floors first, or cool air upward to start cooling from ceiling down. This system consumes no room oxygen and requires no flue or chimney because



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(NO ON-THE-JOB BOLTING, WELDING OR RIVETING)

Only a sledge is necessary to tap V-LOK® framing into place. Simplified assembly of this strong, rigid system



means you can build *faster*, with resultant savings in time and money. Income-producing occupancy begins weeks sooner.

This comprehensive system is ideal for all light construction such as schools, warehouses, shopping centers and factories. Important from a long-range standpoint, V-LOK facilitates future expansion. Architects and builders are now specifying V-LOK more than ever. You will too when you become acquainted with it. Write today for our complete Design Manual.

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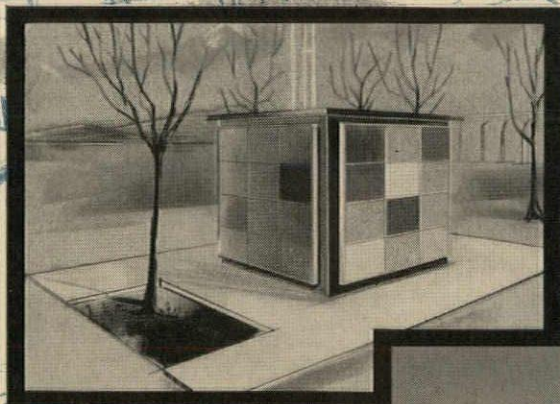
SUBSIDIARY OF SHARON STEEL CORPORATION



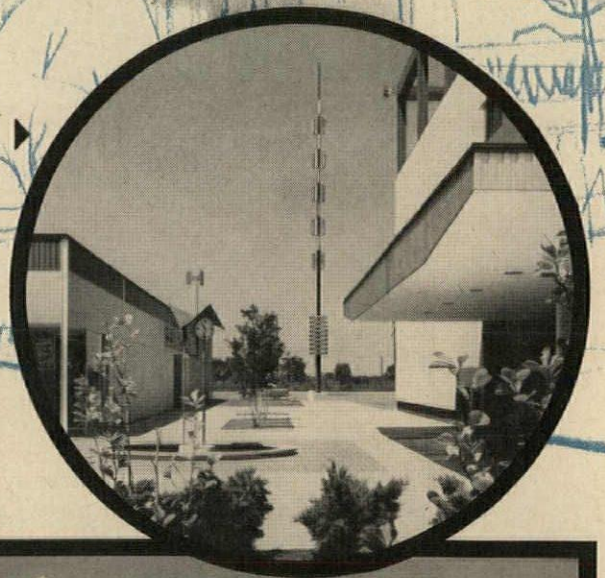
For shopping centers...

specify beauty, styling,

L-M fabricated the lights and pole in this photo to the specifications of the architect and consulting electrical engineer.



L-M's proposed design of a Transclosure® to house transformers and other electrical equipment. An example of the styling L-M can supply when the need arises.



L-M lighting equipment is styled to be attractive and designed to afford efficient lighting at night.





dependability with Line Material equipment...

Styled Outdoor Lighting and Outdoor Electrical Service Equipment gives you variety of design that is always attractive.

DESIGN FOR BEAUTY—Select equipment for function and know it will look good. Regardless of your power or lighting requirements L-M equipment will perform exceptionally well and afford a pleasant appearance.

PRODUCT STYLING—L-M equipment is designed for beauty as well as function; styled by Jean Reinecke, noted industrial designer. It is unobtrusive. It blends well into its surroundings. It can assist in creating a decor.

FLEXIBILITY—Whether you're planning distribution of bulk power or power at utilization voltage L-M equipment offers a maximum degree of flexibility. Electrical service equipment supplying power to your center can be overhead or underground. Lighting ranges from high intensity to mood.

SPACE SAVING—Most L-M electrical service equipment can be installed outdoors to save costly indoor space. It is safe, tamper-proof, and above all, affords an attractive appearance.

DEPENDABLE—L-M has supplied utilities and industrials for over 50 years. The electric utility supplying your center probably has millions of dollars of L-M equipment. You can depend on the quality and long life of L-M equipment.

FOR YOUR NEXT SHOPPING CENTER BE SURE YOU CONSULT YOUR AUTHORIZED L-M DISTRIBUTOR FOR

Styled Outdoor Lighting	Overhead Power Distribution
Distribution Substations	Voltage Regulators
Automatic Line Protection	Line Protective Equipment
Power Factor Capacitors	Line Construction Materials
Distribution Transformers	Styled Protective Enclosures
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LINE MATERIAL[®] Industries

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DISTRIBUTION TRANSFORMERS • RECLOSERS, SECTIONALIZERS AND OIL SWITCHES
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MEMBER

Continued from page 98

vented outdoors. Heating capacity on all models is 20,000 Btu on high and 13,500 Btu on low. Cooling capacity is 8500 Btu and 9400 Btu, depending on selection of models. "Suburban Dyna-Temp" can be installed in window or outside wall, and either near flush or half-in/half-out. Finish is weather resistant. Suburban Appliance Co., P.O. Box 551, Morristown, New Jersey.

On Free Data Card, Circle 111

Sliding Exterior-Walls Stored in Remote Area

Sliding exterior-wall sections called "Phantom Wall" create complete selling areas to lessen customer traffic when moved to remote storage areas. These walls consist of 8'x11' aluminum and glass panels, flush mounted

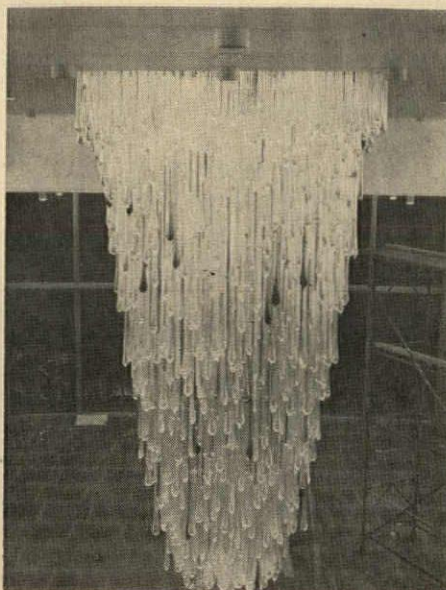


on single flat track. New-type wall sections can turn 90° corners on as little as 6" radius, producing unlimited choice of remote storage location. To open wall, panel units are glided individually, without mechanical assistance, along track to storage area where automatic switch stacks them in sequence in minimum space. In closed position, entire wall is secured by single lock, giving flush, fixed-wall appearance. Alumiline Corp., Dunnell Lane, Pawtucket, R. I.

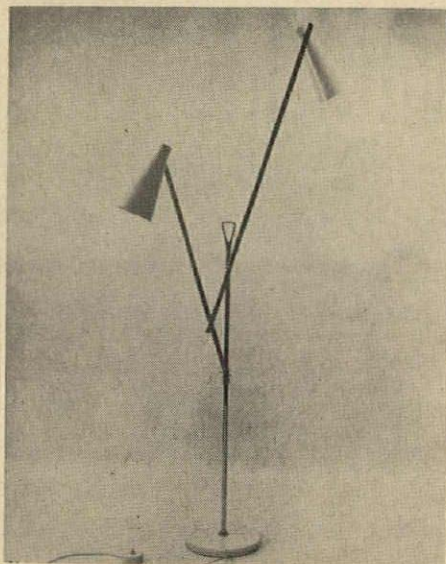
On Free Data Card, Circle 112

Elegant Italian Lighting

Venini glass teardrops of varying



lengths and many colors are available on custom order for assembly into elegant and effective chandeliers of variable sizes. Illustrated is one of four, each 30-ft long, recently installed in the Manchester, England, air terminal. The crisp floor lamp is adjustable:



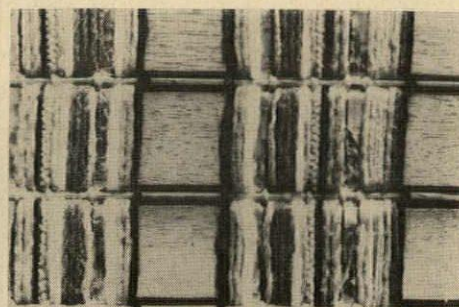
chromium or brass arms on pivots extend outwards and contract upwards by sliding the lower arm along the metal shaft. Base is white marble; swiveling shades are white metal. Also new are hanging fixtures that use Saint Gobain glass diffusers under semi-circular or drum-shaped metal shades. Altamira, 125 E. 55 St., New York 22, N.Y.

On Free Data Card, Circle 113

Woven Window Blinds

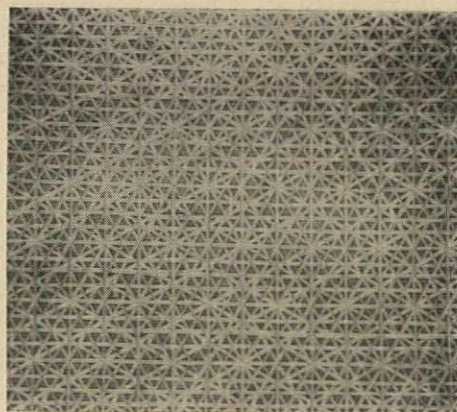
Four recent designs for blinds by Tropicraft are woven of walnut dowels, rattan reeds, sueded strips of leather, rug warp, Woolsuede, brass,

copper, and gold yarns, and brightly colored fiber yarns. Rich textures can be added to offices and studies, among other rooms, by the use of such blinds, which are detailed by the design stu-



dios of the firm. Tropicraft of San Francisco, 568 Howard St., San Francisco, Calif.

On Free Data Card, Circle 114



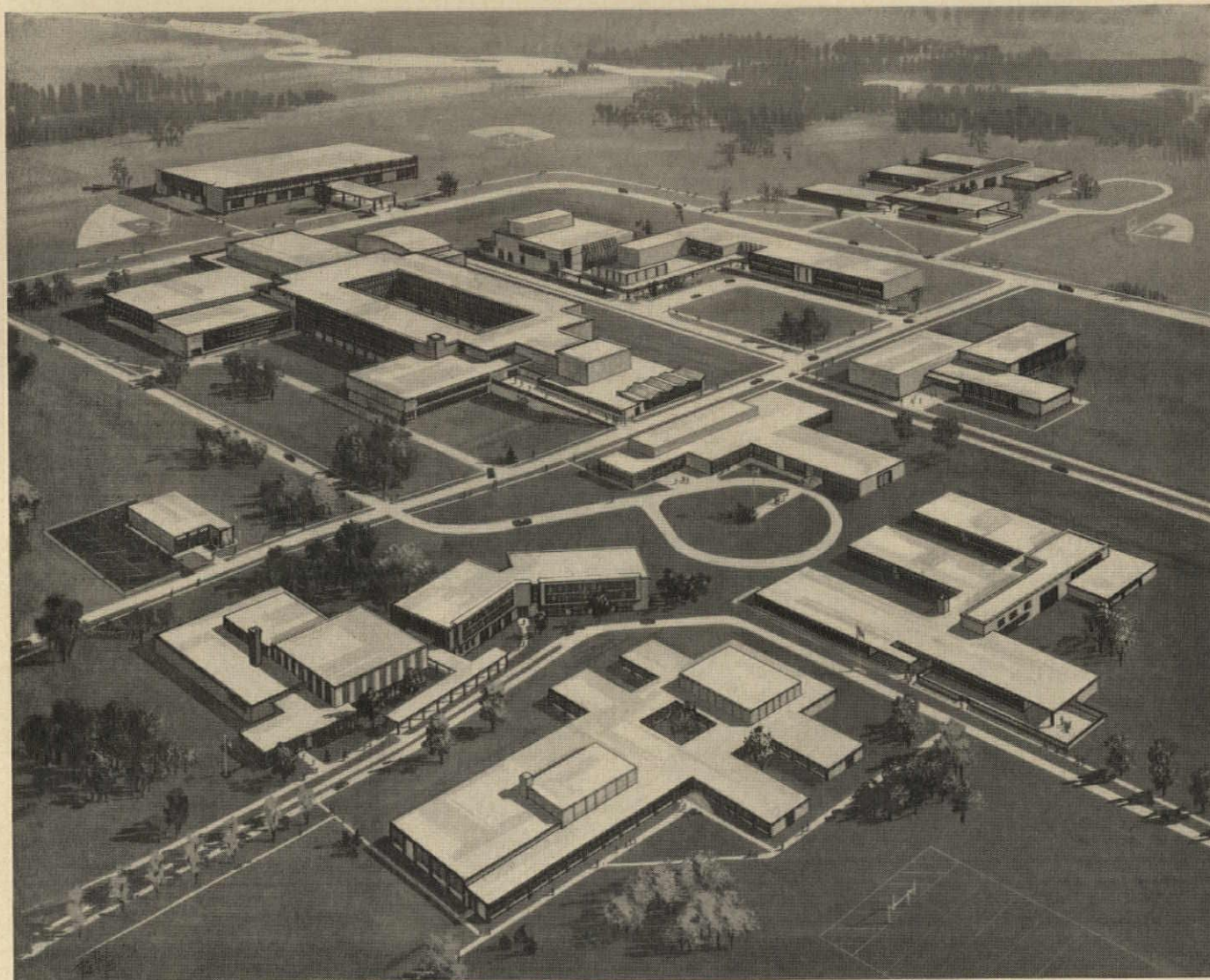
Natural Materials Under Vinyl

Herbert Bright uses crystal-clear vinyl as a protective coating for a variety of natural materials that might otherwise show wear, stain, or collect dirt in non-smooth surfaces. True wood veneers can be coated in this way to protect table-tops; smooth, durable countertops can be produced with the appearance of pebble chips or caning (shown). That this technique has been developed primarily for flooring material should give an indication of durability. Herbert Bright, 509 Madison Ave., New York 22, N.Y.

On Free Data Card, Circle 115

Danish Textile Source

A new contract line of Danish drapery and upholstery fabrics and Rya rugs is available here on a two-week delivery basis exclusively from the Danish Interior Group. About 65 designs are in drapery weight—plaids, stripes, solids, and woven patterns. Several color combinations in the stripes are



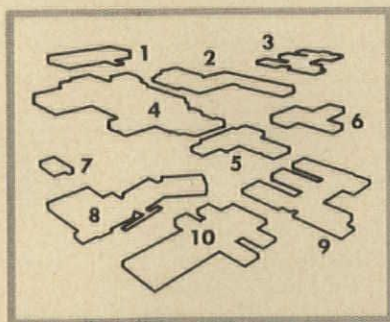
CITY OF SCHOOLS

KNAPPE & JOHNSON, Architects

Ten separate projects involving school buildings of every type, from Elementary to Senior High School, designed by New York architectural firm Knappe & Johnson, are now complete or under construction in suburban New York, Long Island and New Jersey.

Acoustics Manufacturing Corporation is proud to have been given the chance to participate in these school construction projects. A total of some 1,000,000 feet of AMC's 18 x 36 acoustical metal pan was selected and used for ceiling installations in all ten of the projects.

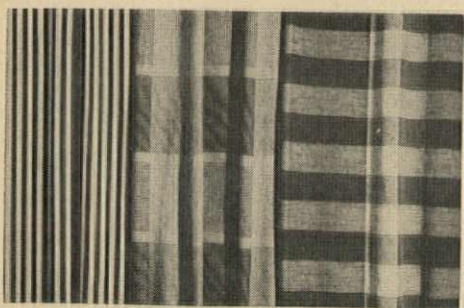
AMC takes this opportunity to congratulate Knappe & Johnson for the outstanding job of school building design . . . and to thank them for the opportunity to participate in these worthy projects which represent better school facilities in the Greater New York area.



1. Cantiague Elementary School, Jericho, New York 2. Oceanside Senior High School Addition, Oceanside, N.Y. 3. Parkway Elementary School, Plainview, Long Island 4. Plainview High School, Plainview, Long Island 5. South Parkway School, Jericho, Long Island 6. Tooker Avenue Elementary School, West Babylon, New York 7. Bank Building, Plainview, Long Island 8. Amityville Junior High School, Amityville, New York 9. Pasadena Elementary School, Plainview, Long Island 10. Emerson Junior High School, Emerson, New Jersey.

AMC

ACOUSTICS MANUFACTURING CORPORATION
17210 GABLE AVENUE, DETROIT 12, MICHIGAN



highly effective. Eighty woven upholstery designs comprise textures, basket-weaves, stripes, and plaids. The Rya rugs are offered in 4 designs of

5 colors each; 4 sizes of each pattern are available. The rug designers are Rita and Vincent Lerche. Flat-weave reversible rugs designed by Arne Jacobsen are also offered. Danish Interior Group, 201 E. 56 St., New York 22, N.Y.

On Free Data Card, Circle 116

Weather-Resistant Film

Protective film "triples" weather resistance of fire-retardant polyester panels made by Durez Plastics Division of Hooker Chemical Corp. Panels

are made by using Hooker's "Hetron" reinforced glass fiber panels bonded to DuPont's "Tedlar" PVF film. Tedlar is chemically inert, extremely tough, abrasion-resistant, and highly weatherable. It does not affect inherent fire retardancy of polyester panels and can withstand boiling water, solvents, and hot caustic with no appreciable effect on finish. Film creates color-matched, uniform finish, free from pin-holes and voids. Surface is resistant to peeling, blistering, crackling, crazing, or chalking. Like Hetron, Tedlar has high degree of corrosion resistance and is practically maintenance-free, requiring only soap and water or ordinary washing compounds to keep surface free from stains. Hooker Chemical Corp., 4721 Buffalo Ave., Niagara Falls, N.Y.

On Free Data Card, Circle 117

ZERO HAS THE WEATHER STRIPPING YOU NEED



Get ZERO'S new 1963 Catalog, with full size details of the complete line of saddles & weather stripping. Write for your copy today!

ZERO Weather Stripping for:

- Doors
- Windows
- Lightproofing
- Soundproofing
- Sliding Doors
- Saddles
- Saddles for Floor Hinged Doors



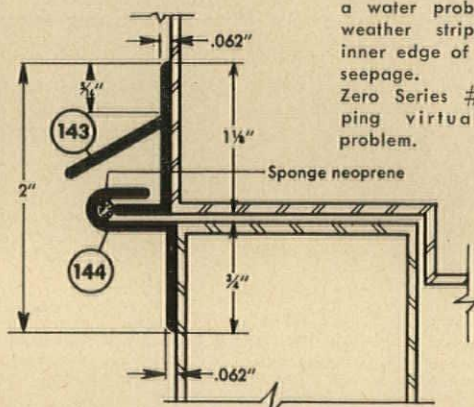
Undyed Wool Carpets

Virile-looking "Saville Row" undyed wool carpeting for contract market has been announced. Features include densely packed loop pile construction, permanent mothproofing, and latex-coated jute backing. Three-ply yarn carpets, limited to 12' widths, come in natural fleece colors of thatch, hemp, hickory, acorn, oak, briar, honey, and pewter. Combinations of designs can produce herringbone, nubby fleck, or pin-stripe patterns in close clipped or shaggy textures. Magee Carpet Co., 295 Fifth Ave., New York 16, N.Y.

On Free Data Card, Circle 118

INTERLOCKING WATER SHED FOR OUT OPENING CURTAIN WALL DOORS

Modern curtain wall construction makes little allowance for back-set on out opening doors. This creates a water problem because customary weather stripping fastens on the inner edge of the door inviting water seepage. Zero Series #87 Water Shed Stripping virtually eliminates this problem.



#87 INTERLOCKING WATER SHED



ZERO WEATHER STRIPPING CO., INC.

451 East 136th St., New York 54, N.Y. • (212) LUdlow 5-3230

For more information, turn to Reader Service card, circle No. 377

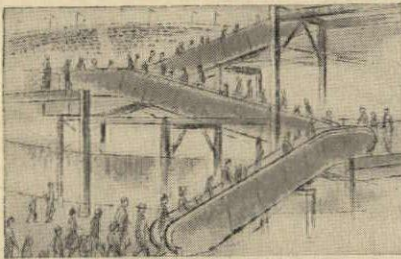
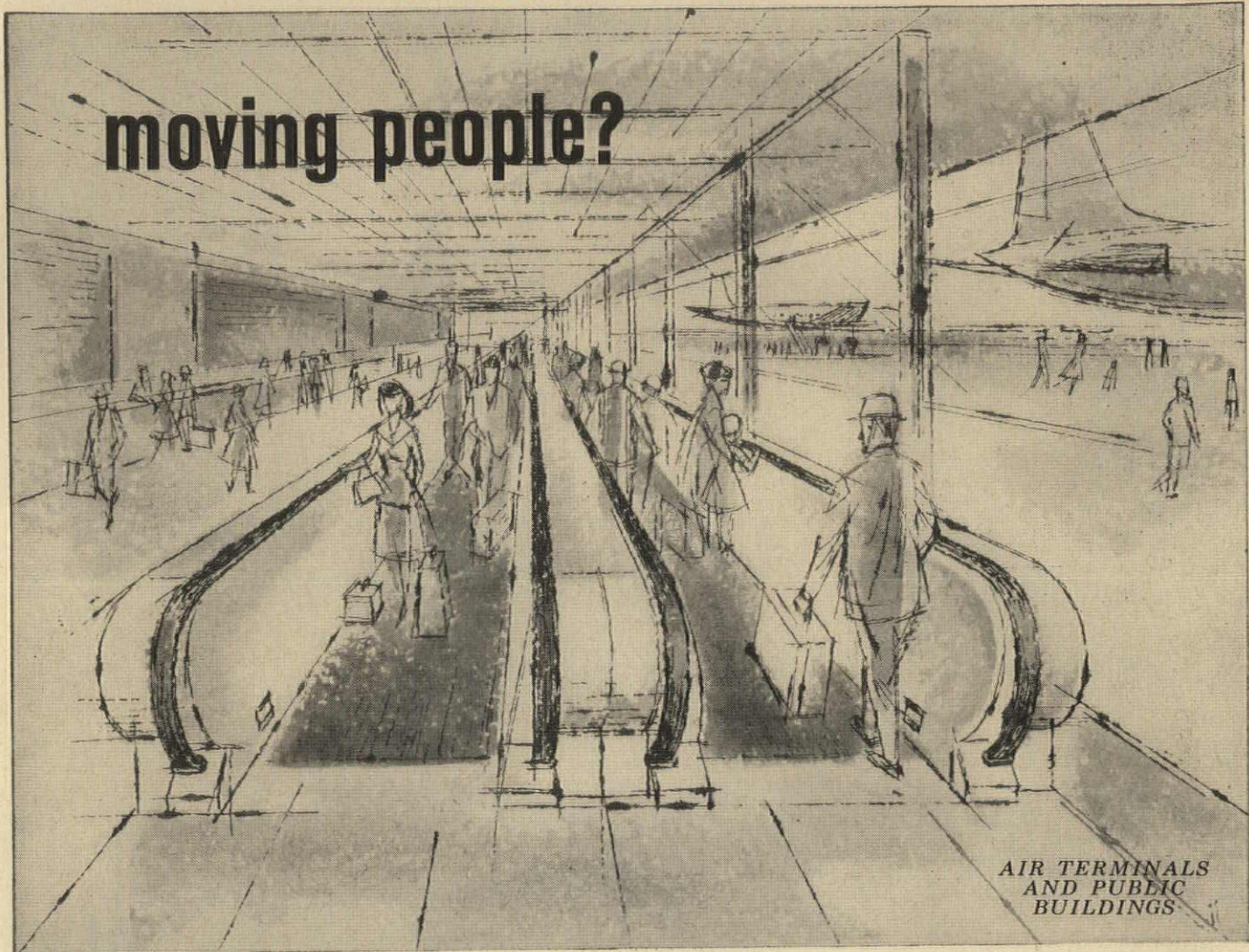


18b-ZER

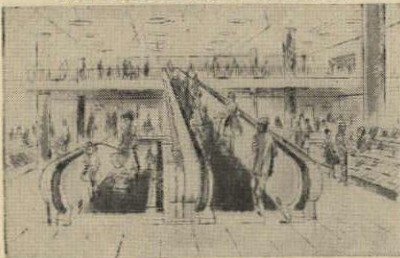
Fire-Resistant Fabric

"Vanaweve" wall covering, made with Dow's Rovana monofilament, is fire-, mildew-, and stain-resistant, and durable, easily cleanable, and colorfast. Wall coverings are 37" wide and drapery fabrics 52" wide. Vanaweve is available in solid colors, damask patterns, textures, and stripes including color-matched drapery fabrics also woven with Rovana yarn. C.W. Stockwell Co., 3262 Wilshire Blvd., Los Angeles 5, Calif.

On Free Data Card, Circle 119



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ARENAS, PUBLIC
RECREATION AREAS



DEPARTMENT
STORES AND
SHOPPING CENTERS

there are places where **SPEEDWALK® and SPEEDRAMP** passenger conveyors do it best!

Places where people congest . . . where heart taxing walks or climbs are involved . . . where shopping carts, baby strollers, wheelchairs, etc. are needed . . . these are the places that SPEEDWALK and SPEEDRAMP Passenger Conveyor Systems are exclusively outstanding. Why . . . because SPEEDWALK and SPEEDRAMP Conveyors move crowds of people conveniently, effortlessly, and safely from point-to-point or between levels. Only SPEEDRAMP Conveyors can provide the exclusive Stephens-Adamson shopping cart attachment. Carts move effortlessly between levels and are automatically discharged without the handler touching them. Baby strollers and wheelchairs are easily conveyed without inconvenience or interruption to normal traffic flow. No other form of vertical transportation can offer this advantage. Economy is a big feature, too, with low initial cost and minimum maintenance. Stephens-Adamson has the priceless experience of installations from coast-to-coast and abroad. All this and beauty too. Investigate our claims—no obligation!

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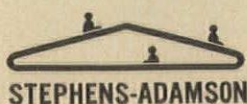
The Original "Moving Sidewalks" By

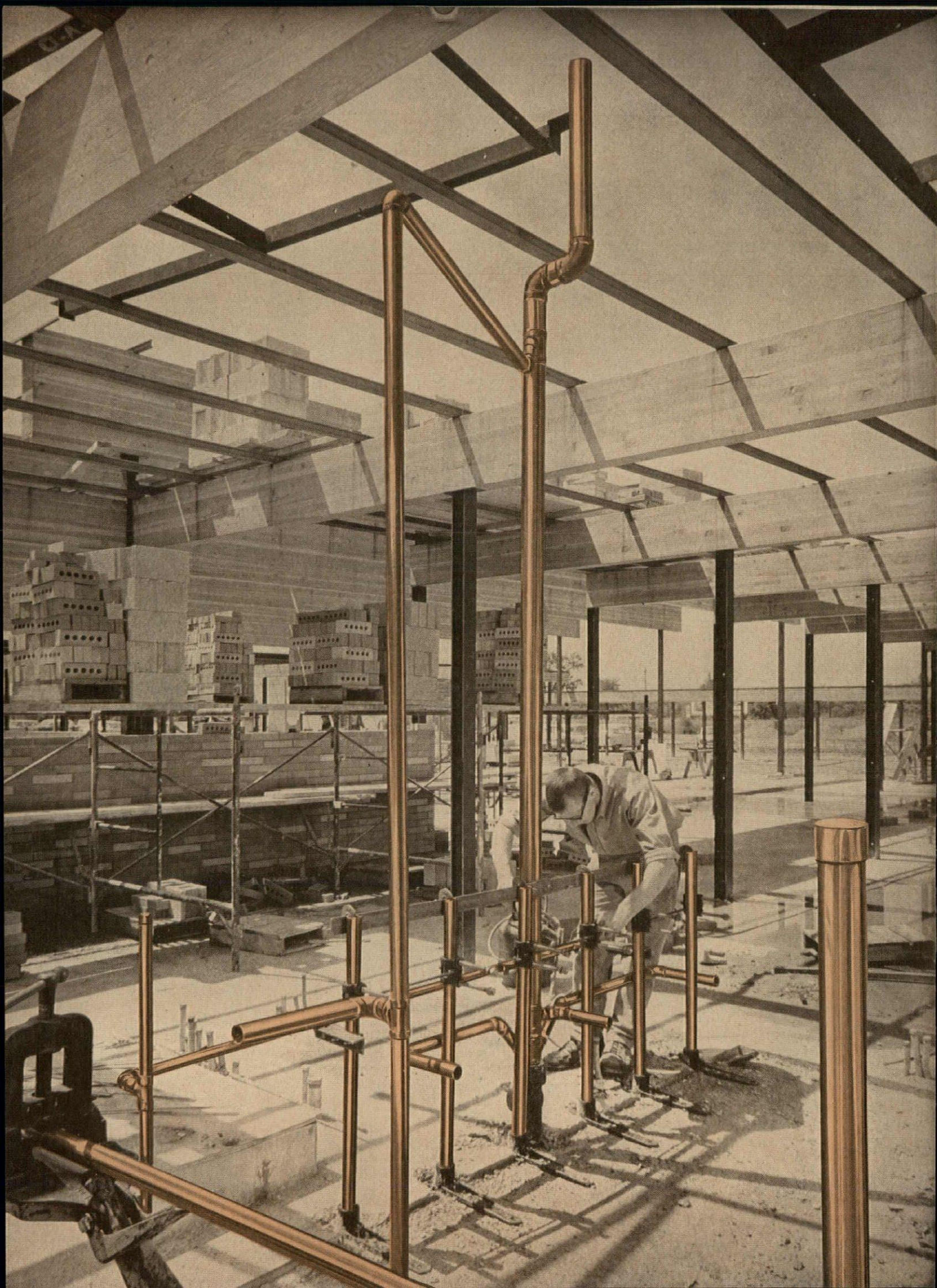
PRODUCTS DIVISION • STEPHENS-ADAMSON MFG. CO.

General Office & Main Plant, 45 Ridgeway Avenue, Aurora, Illinois

Plants Located in: Los Angeles, California • Clarksdale, Mississippi

Belleville, Ontario • Mexico D.F.

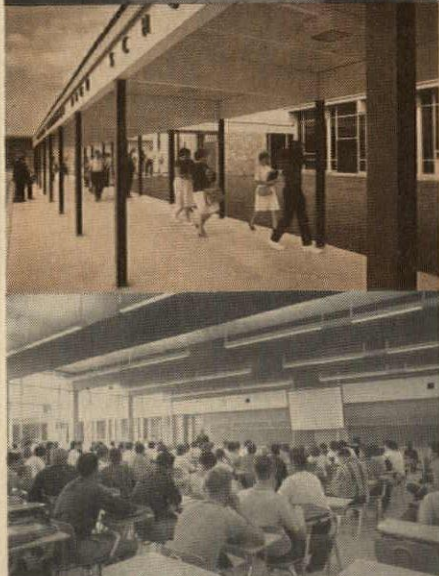
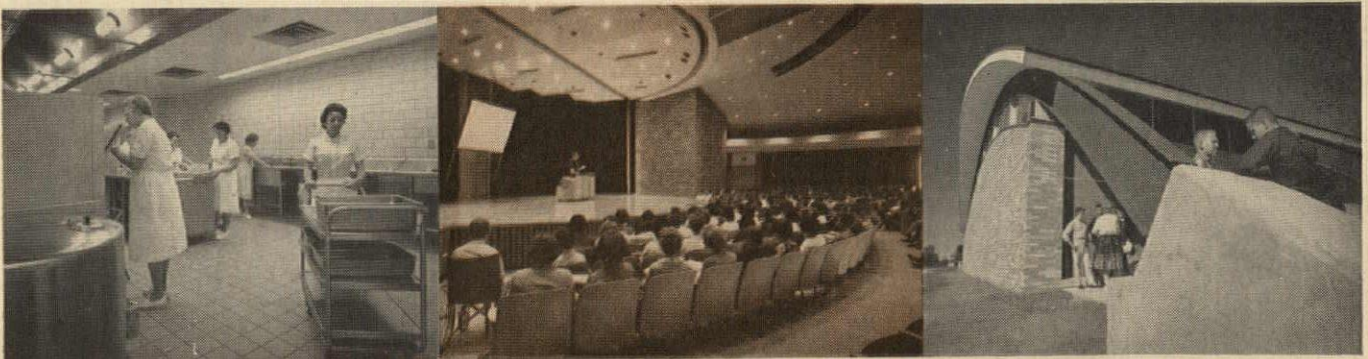






OUTSTANDING NEW HIGH SCHOOL INCORPORATES
ALL MODERN FEATURES—INCLUDING
Streamline® COPPER TUBE AND FITTINGS—
FOR BOTH SUPPLY AND DRAINAGE PLUMBING

Architect: Frederick E. Wigen Architect & Associates, Inc., Saginaw, Michigan
Mechanical Engineering Consultants: Hyde & Bobbio, Inc., Detroit, Michigan
General Contractor: Consolidated Construction Company—Bay City, Michigan
Mechanical Contractor: Budd-Eurich Plumbing & Heating—Saginaw, Michigan



This striking new \$2.5 million dollar Community High School in Bridgeport, Michigan, is completely modern . . . inside and out. Built to accommodate 1500 students, the school employs all modern educational aids . . . closed circuit television . . . language laboratories . . . and adjustable classroom areas. This new school has been classed as one of the most outstanding in the nation to be constructed in recent years. The plumbing is as modern as the teaching methods because both the supply and drainage systems were fabricated from Streamline copper tube and solder type fittings. Copper costs no more than rustable materials and the school will enjoy a lifetime of dependable service. All windows, curtainwalls, and entrances were supplied by Valley Metal Products Company, a subsidiary of the Mueller Brass Co.



MUELLER BRASS CO.
PORT HURON 27, MICHIGAN

Composite Steel Data Handbook

Bethlehem Steel has recently published a 306-page design-data file entitled "Properties of Composite Sections for Bridges and Buildings." Charts and tables contain properties of composite sections for beams from 8" to 36" deep, with or without cover plates, combined with appropriate concrete slabs from 3½" to 10" thick. All charts and tables relate specifically to composite beams with concrete slab placed directly on steel beam. Beam is either a rolled section or a rolled section with cover plate on tension flange. For each combination of slab thickness and steel section, properties are given for practical range of values of transformed slab width. Charts contain the section modulus for bottom fibers of the section as a function of transformed slab width. Each chart pertains to one slab thickness and each curve in any one chart pertains to one steel section. Tables give section properties for indi-

vidual composite sections of a given slab thickness, steel sections, and transformed slab width. For each composite section, tables list dimensions and weights of steel section, section moduli (for bottom fibers, for fibers at junction of slab and beam, and for top fibers), moment of inertia, distance between neutral axis and bottom fiber, and certain properties of partial lengths. Following introduction is entire section explaining the computation involved in using charts and tables as well as their uses with specific reference to beams without cover plates, rolled beams with cover plates, interpolation procedures, draped or haunched slabs, deflections, and shear connections. Also included is the solution of one design problem showing the various areas involved in computation. Bethlehem Steel Co., Bethlehem, Pa.

On Free Data Card, Circle 200

AIR/TEMPERATURE

Valance Cooling Systems

Color-illustrated, 4-page brochure describes packaged hydronic valance air-conditioning systems. Operation requires no fans, blowers, or maintenance. Schematic layouts show how to install systems. Edwards Engineering Corp., 101 Alexander Ave., Pompton Plains, N. J.

On Free Data Card, Circle 201

Radiant Heating Panels

Electric radiant-heating panels are described in 4-page brochure. Topics discussed include economy, cleaning, and heating factors. Illustrations are provided. Thermonic Devices Inc., 437 Fifth Ave., New York 16, N. Y.

On Free Data Card, Circle 202

CONSTRUCTION

Economical Grid System

Acoustical ceiling suspension system is described in a two-page folder. The ceiling system requires no special joints, clamps, or tabs. System consists of three basic heavy-duty components: main beams, 12' long x 1½" high, slotted on the top and bottom at 2' intervals; cross tees, 8' long x 1½" high, slotted alternately on top and bottom at 2' intervals; and intermediate cross tees, 8' x 1½" high, slotted



on the bottom at 2' intervals. The system offers materials savings of over 1½¢ per sq ft. If a main tee or cross tee has to be cut short to fit the dimensions of odd-sized rooms, no special tools, other than hacksaw or tinsnips, are needed. Flangeklamp Corp., 1971 Abbott Road, Buffalo 18, N. Y.

On Free Data Card, Circle 203

Forecasting Marble

Marble Institute of America has made available 8-page brochure containing information on domestic and imported marbles, color ranges, finishing characteristics, as well as lists of members. Chart on domestic marble includes name of manufacturer, color, and finishing properties. Chart on imported marble contains information on color, type, and in what country marble is quarried. Marble Institute of America, Inc., 32 South Fifth Ave., Mount Vernon, N. Y.

On Free Data Card, Circle 204

Roof Coating System

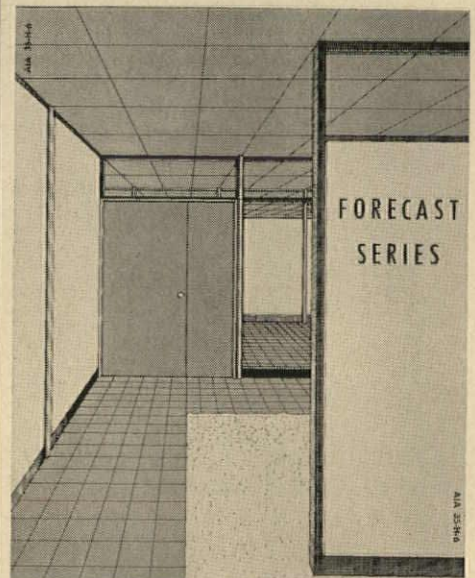
Cold-applied, liquid-neoprene Hypalon coating has been introduced for decorative roof coverings for unusual designs. Coating is flexible, fire- and mildew-resistant, and requires no perimeter flashing. Working joints, steep pitches, and need for low dead load makes coating appropriate for geometrically shaped roofs. System also is used on monolithic reinforced concrete, lightweight aggregate concrete, and exterior plywood, as well as when a specific color effect or white for reflectivity is required. Miracle Adhesives Corp., 250 Pettit Ave., Bellmore, N. Y.

On Free Data Card, Circle 205

Built-Up Roofing Specs

Specifications for built-up roofing are the subject for 28-page booklet. Features are various roof types—nailable, non-nailable, spray pond roofs, shingle roofs, promenade tile decks, vapor barrier roofs. Roof surface, incline, type of construction, U/L rating, and flashing requirements are also considered. Details and illustrations supplement each category. The Philip Carey Manufacturing Co., Cincinnati 15, Ohio.

On Free Data Card, Circle 206



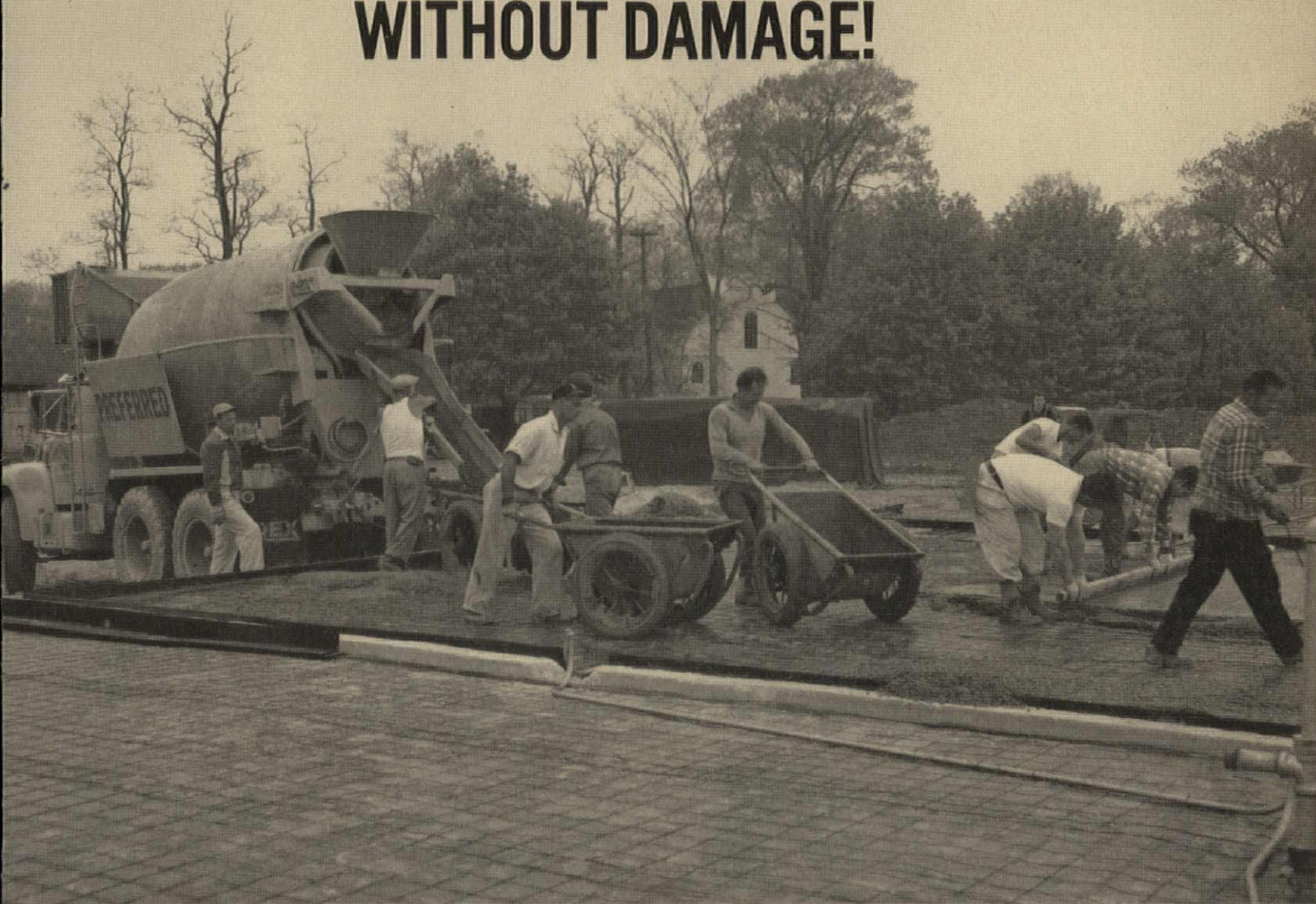
Operable Wall System

Three types of operable wall systems are described in 27-page booklet, including details, specifications, and photographs. "Forecast Series" offers over 55 basic profile combinations from standard components. System is 2¼" thick with 2¼" glass-to-glass dimension. Other features include complete

Continued on page 112

MOISTOP

MOISTURE-VAPOR BARRIER CAN TAKE A BEATING WITHOUT DAMAGE!



This is the kind of rough treatment that a lot of vapor barriers, including 6 mil polyethylene, just can't take! Rips and punctures will allow moisture to get through. But super-strength MOISTOP won't let this happen! Moistop is a combination of tough, reinforced, waterproof Sisalkraft plus polyethylene . . . this combination is far tougher than polyethylene by itself.

Moistop has an MVT rating of 0.15 perms, and exceeds

FHA minimum property standards. Available in 1,200 sq. ft. rolls, 72", and 96" wide, lays down fast over areas prepared for concrete slabs or basement floors and crawl spaces in homes. Specifications in Sweet's File 8h/AM. Send for additional information and samples.

AMERICAN SISALKRAFT COMPANY

56 Starkey Avenue, Attleboro, Massachusetts • Division of St. Regis Paper Company

MOISTOP

a Lamination of Reinforced
Paper & Polyethylene

For more information, turn to Reader Service card, circle No. 305

\$300

PER SQ. FT.

COST OF NEW HOSPITAL WALL SYSTEM

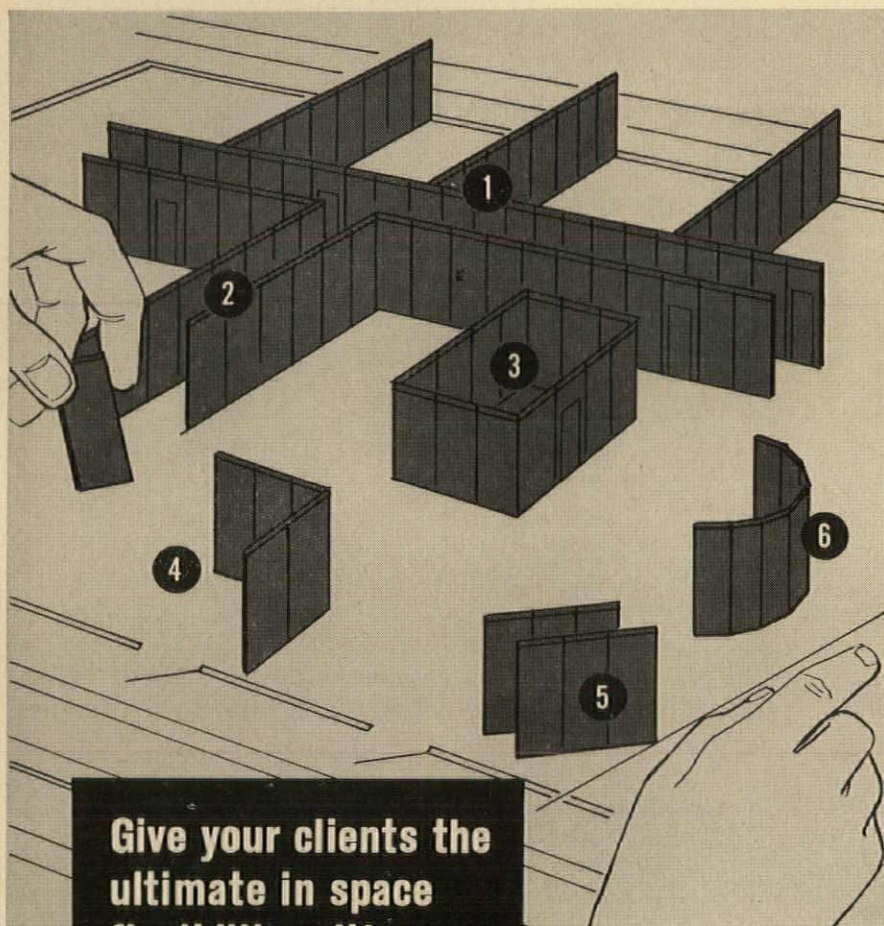
**new construction method utilizes
simple system of metal studs,
KEYMESH® Paperbacked Lath
and spray-on exterior wall;
gets 2-hour fire rating.***

*This wall meets the 2-hour fire rating for hospitals.

Architectural and engineering ingenuity create an exciting new development in low-cost wall construction for buildings where fire safety is a prime factor. Schools, hospitals, offices and valuable industrial buildings can all use this method of construction—utilizing Keymesh Paperbacked Lath—profitably. Wall surface is flexible to meet any design requirement: Texture, color and finish. For complete information about applying this simple system to your next job, call your Keystone representative, or write

KEYSTONE STEEL & WIRE COMPANY • Peoria, Illinois

MAKERS OF KEYCORNER • KEYSTRIP • KEYWALL • KEYMESH® AND
KEYMESH PAPERBACKED LATH • WELDED WIRE FABRIC • NAILS



**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.

AirWall Inc.

16716 S. GARFIELD AVE., PARAMOUNT, CALIF.

A SUBSIDIARY OF

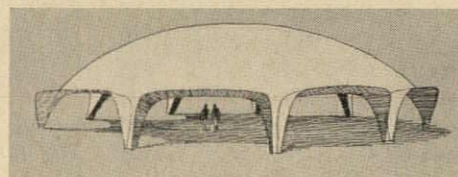
RICHARDS-WILCOX MFG. CO., AURORA, ILLINOIS

For more information, turn to Reader Service card, circle No. 302

continued from page 108

perimeter sound seals, fully-cushioned door frames, sound-tight posts, and packed panels for sound control. "Aluminum Series" method of space division is completely interchangeable to facilitate layout changes. Universal posts, 2½" wide, receive 15/16" or 21/8" thick panels while allowing for future extensions without post replacement. "Mainliner Series" consists of free-standing, cornice-high, and floor-to-ceiling partitions for most economical division of space. Panels are 1½" thick, comprised of two steel sheets with insulating honey-comb core. Universal posts, 1¾", have buttons which engage spring locking device. This series is available in four heights and 11 widths. The Mills Co., 965 Wayside Road, Cleveland 10, Ohio.

On Free Data Card, Circle 207



Designing with Foam

Unusual architectural designs using rigid urethane foam as structural material are described in 18-page brochure. After an explanatory introduction and a history of rigid urethane foam, brochure discusses its functional properties as well as forming techniques. To describe more fully capabilities of urethane foam, several design solutions are fully illustrated and discussed, including beach house, motor hotel, theater/restaurant, concert hall, pavilion, and chapel. Mobay Chemical Co., Penn Lincoln Parkway, West, Pittsburgh 5, Pa.

On Free Data Card, Circle 208

Applying Flashing

How factory-formed flashings are applied in specific situations is defined in 20-page booklet. Features described are two-cap, in-the-wall, and spandrel-beam flashing. Booklet includes illustrations, details, and specifications. Revere Copper and Brass Corp., 230 Park Ave., New York 17, N. Y.

On Free Data Card, Circle 209

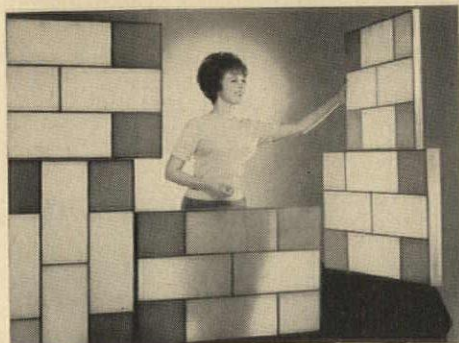
Glass Applications

Glass for industrial, commercial, school, and residential use is announced in 15-page booklet. Advantages and functions, of rolled, figured, and wire glass are discussed. Features include prop-



erties, determination of light distribution, installations, and special types of glass reduction. Specifications and illustrations are given. Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo.

On Free Data Card, Circle 210



Insulated Wall Panels

Four-page folder on insulated wall panels, including specifications and detailed drawings, has been released. Particular attention is paid to glare-free translucent panels recommended for exterior wall systems, interior partitions, carports, canopies, marquees, skylights, wallways, and other types of applications. The panel is a sandwich-type with two surfaces of glass-fiber-reinforced acrylic-plastic, laminated to an interior gridwork core of extruded aluminum. In addition to being glare-free, panels are shatter-proof, lightweight, and available in many pastel colors or multi-color grids. Caloric Corp., Architectural Division, Topton, Pa.

On Free Data Card, Circle 211

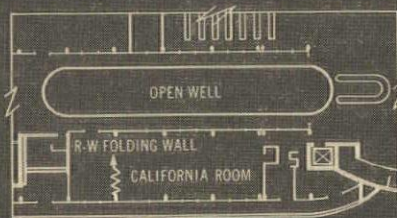
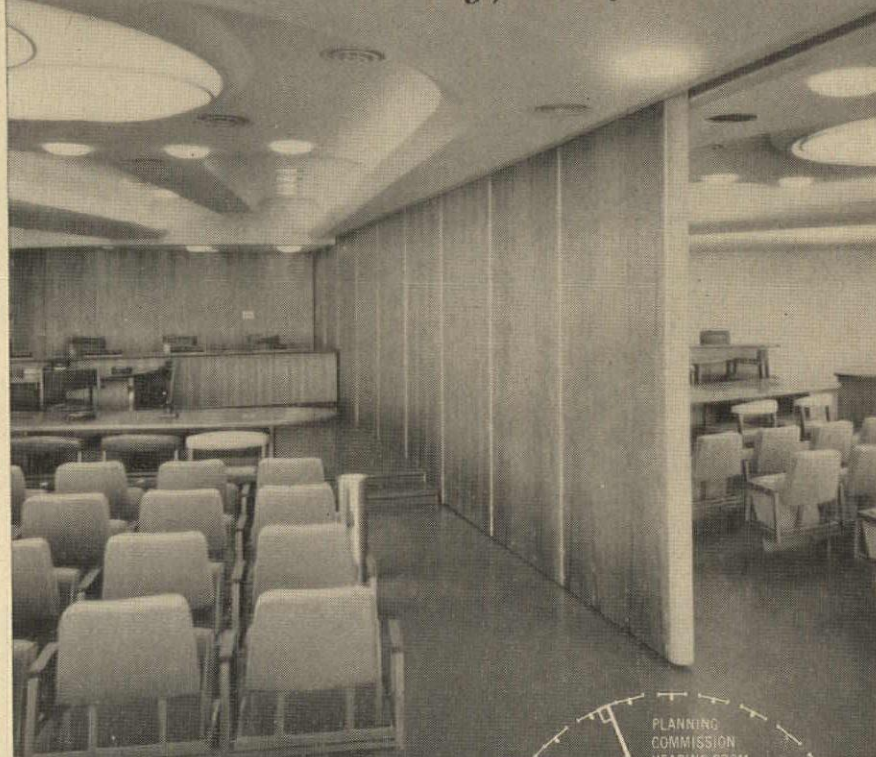
DOORS/WINDOWS

Special Service Doors

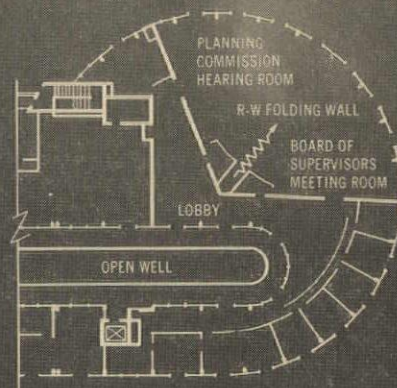
Special service doors are illustrated in

R-W FOLDING WALLS

...in the Frank Lloyd Wright designed Civic Center of Marin County, California



PARTIAL FLOOR PLAN—THIRD LEVEL



PARTIAL FLOOR PLAN—SECOND LEVEL

R-W Folding Walls were selected to provide functional flexibility and practical sound control in two areas of the beautiful Marin County Civic Center. Architect: Frank Lloyd Wright; Taliesin Associated Architects, William Wesley Peters, Chief Architect; Associated Architect, Aaron G. Green, San Francisco.

For complete information request Catalog No. 602.



Richards-Wilcox

MANUFACTURING COMPANY

120 THIRD STREET • AURORA, ILLINOIS

For more information, turn to Reader Service card, circle No. 355

12-page catalog. Types shown are roof scuttles, smoke hatches, interior and exterior doors, ceiling access doors, basement doors, and stair stringers. Catalog provides specifications and details. The Bilco Co., P.O. Box 1203, New Haven 5, Conn.

On Free Data Card, Circle 212

Savings on Specialized Window

Advantages of "Amelco" window are charted and discussed in 4-page brochure. Aluminum window framing consists of two panes of glass separated by 2" air space. Venetian blind is placed between panes. Frames and vents resist corrosion, pitting, and discoloration. Since there is no through metal, conductivity of heat and cold is eliminated. Brochure compares Amelco to single unshaded window, insulating glass, in-room venetian blinds, and single heat-absorption glass. Cooling and heating system factors and operating costs are given. Special feature shows how to compute savings by using Amelco window. The American Elumin Co., 1676 Commerce Drive, Stow, Ohio.

On Free Data Card, Circle 213

ELECTRICAL EQUIPMENT

Floodlighting

"Building Floodlighting," is examined in 20-page booklet. Features include principles of floodlighting, finding



number and size of floodlighting units, grazing, and interior floodlighting, and characteristics of light sources: incandescent, fluorescent, and mercury lamps. Also discussed are uses of architectural screens, light patterns, color, and sparkle. Photographs, charts,

and details are included. General Electric Co., Nela Park, Cleveland 12, Ohio. On Free Data Card, Circle 214



Improved Office Lighting Techniques

GE has released a booklet on the benefits, principles, techniques, economics, and various other aspects of good office lighting. Booklet explains how good lighting can contribute to efficiency of business operations by aiding visual performance and improving employee attitudes. Taken into consideration is relationship of lighting to total office environment, how to assure that lighting system is comfort-



Mobile General Hospital, Mobile, Ala.
Thomas Cooper Van Antwerp — Archt.

Manhattan Construction Co. of Texas — Contr.
Houston, Texas



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able visually, lighting cost perspectives, and qualities of lighting recommended. Also discussed under separate headings are lighting techniques for general offices, private offices, conference rooms, drafting rooms, lobbies and reception areas, corridors and stairs, and office building exteriors. Included is a special section on electrical space conditioning that involves integration of lighting, heating and air conditioning, and environmental lighting, which increases human satisfaction and enjoyment of working areas. Photographs, charts, and sketches are used to illustrate text. General Electric Co., Inquiry Bureau, Dept. TP-114, Nela Park, Cleveland 12, Ohio.

On Free Data Card, Circle 215

PROTECTORS

Anti-Static Coatings

Anti-static coatings called "Merix Anti-Static #79 and #79 OL" are described in four-page brochure. Additives protect surfaces from electrostatic charges, dust-attraction, and shocks. Compound #79 is used on acrylics, polystyrenes, styrenes, vinyl,

thermoplastics, and thermosets. Compound #79 OL is used on polyethylenes, linear polyethylenes, fabrics, textile fibers, natural and synthetic yarns. Merix Chemical Co., 2234 East 75 St., Chicago 49, Ill.

On Free Data Card, Circle 216

SANITATION/PLUMBING

Planning Washrooms

Planning washrooms and use of wash-room equipment is described in 15-page booklet. Planning section discusses basic plans for men's and women's washrooms that shows how to avoid traffic confusion. Equipment section details various types of towel and waste dispensers. Both sections include illustrations, plans, and specifications. Scott Paper Co., International Airport, Philadelphia 13, Pa.

On Free Data Card, Circle 217

Selecting Drain System

"Vulcathene" noncorrosive plastic drainlines are announced in 12-page engineering catalog. Vulcathene is a completely integrated, permanent,

virgin polyethylene waste and drainage system. Catalog discusses Vulcathene's resistance to severe chemicals and radioactive wastes as well as specifications, tables of thread sizes and dimensions of pipes, sinks, traps, and fittings. Special features include installation methods and connection of drainlines to other existing pipe systems. Nalgene Piping Systems, 75 Panorama Creek Drive, Rochester 2, N. Y.

On Free Data Card, Circle 218

SPECIAL EQUIPMENT

Planning Guides

A series of seven planning guides, covering the latest advances in automatic-control systems and building automation, has been issued by Minneapolis-Honeywell. Subjects covered are: clock and programming systems, security and equipment surveillance systems, automatic fire protection, electronic air cleaning, temperature control, automation techniques, and preventive maintenance. Booklets range in size from 20 to 32 pages, and give full information on system applica-

Torjesen LeadX[®] ACOUSTICAL CURTAINS

PROVIDE ACOUSTICAL PRIVACY FOR TEAM TEACHING

ELECTRIC VERTICAL OPERATION

ACTUAL FIELD TEST RESULTS ON SOUND TRANSMISSION LOSS

Western Jr. High School, Washington, D. C.

Sound Transmission Class of 32 db

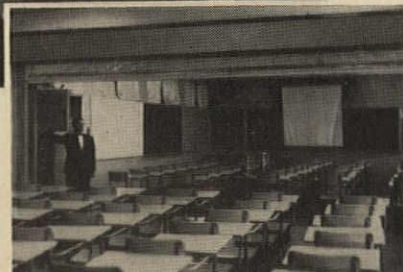
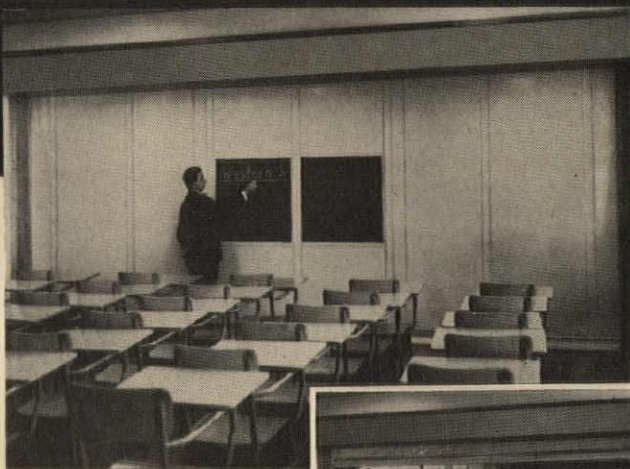
Hamilton Avenue School, Greenwich, Conn.

Sound Transmission Class of 31 db

COMPLETE FIELD TEST REPORTS ON REQUEST

FEATURES:

1. Available with chalk panels and chalk pockets.
2. Electrically operated; rolls up into an 18" square ceiling enclosure in seconds at touch of key switch.
3. No floor track.
4. Sideguides take only 10" x 3" of floor space on each end regardless of size.
5. Gasketed sides and top, and weighted loop at bottom of curtain assure perimeter sealing.
6. Tests by Riverbank Acoustical Laboratory to ASTM E-90-61T show 3 lb. (1/8" thickness) LeadX gives a 9 frequency transmission loss of 32 db and a sound transmission class of 34.



WRITE FOR BROCHURE INCLUDING DETAILED DRAWINGS AND SPECIFICATIONS

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TORJESEN OF CANADA, LTD., 128 CARTWRIGHT AVE., TORONTO 19, ONTARIO

Affiliates: BAR-RAY PRODUCTS, INC. • X-Ray Products and Radiation Protection • CAPITAL CUBICLE CO., INC. • Hospital Cubicles and Track

tions and operation. Commercial Div., Minneapolis-Honeywell Regulator Co., Minneapolis 8, Minn.

On Free Data Card, Circle 219

Overhead Track Support

Fully adjustable overhead track support for intravenous feeding in various hospital rooms has been announced in a 2-page folder. The monorail intravenous support has the following characteristics: universal adjustability, positive locking, five hook "rams horn" bottle holder, completely clear of floor area, high or low gravity feed, an all nylon "nonslip" carrier with a positive lock between vertical rod and carrier, and rust-resistant finish. Grant Pulley and Hardware Corp., High Street, West Nyack, N. Y.

On Free Data Card, Circle 220

Louver Size Guide

Slide chart called "Louverlog" is used for sizing and selecting wall louvers. Chart contains eight engineering readings from one slide setting. One can determine maximum intake velocities, eliminate danger of pulling in snow or rain, and select proper size louver for

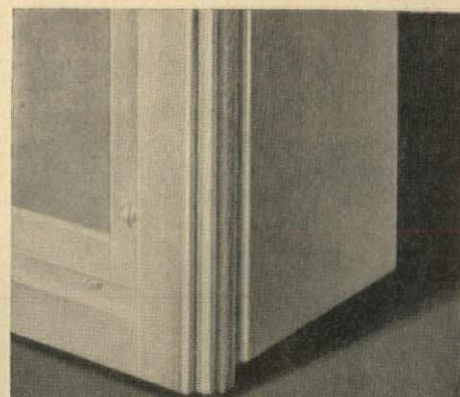


fan discharge or pressure relief. One setting gives louver width and height, free area, S.P. loss for louver and screen, S.P. loss for louver only, recommended intake velocity, face velocity, and capacity in cfm. Penn Ventilator Co., Inc., Customer Relations Dept., Philadelphia 40, Pa.

On Free Data Card, Circle 221

Reversible Astragals

Brochure shows reversible adjustable astragals used to weather-seal doors. Astragals feature reversible plunger, which is employed for conventional metal-to-metal contact or pole-to-metal contact. Latter uses wood-pile insert strips that permit more positive weather seal. Astragals are available in surface, mortise, and half-mortise types. Brochure gives complete specifications, descriptive photographs, and



full-scale detail drawings. The Michaels Art Bronze Co., Catalog #27B, P.O. Box 668, Covington, Ky.

On Free Data Card, Circle 222

PROGRESSIVE ARCHITECTURE NEWS REPORT

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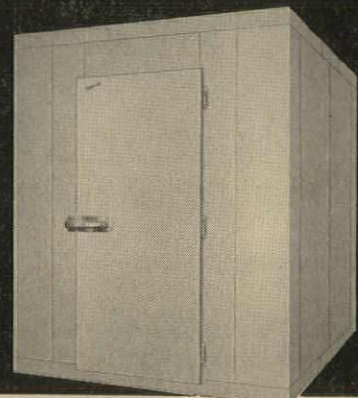


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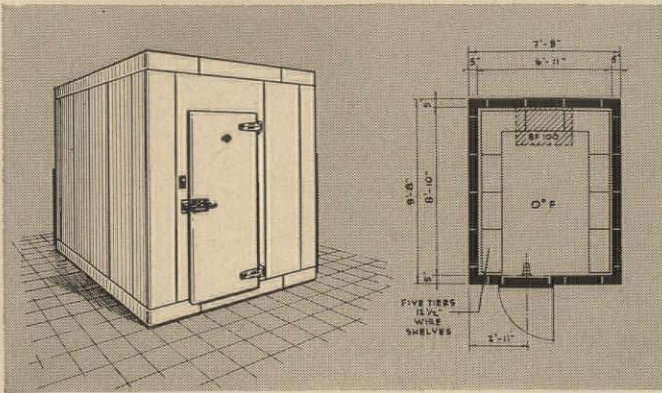
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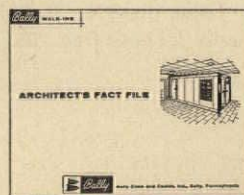
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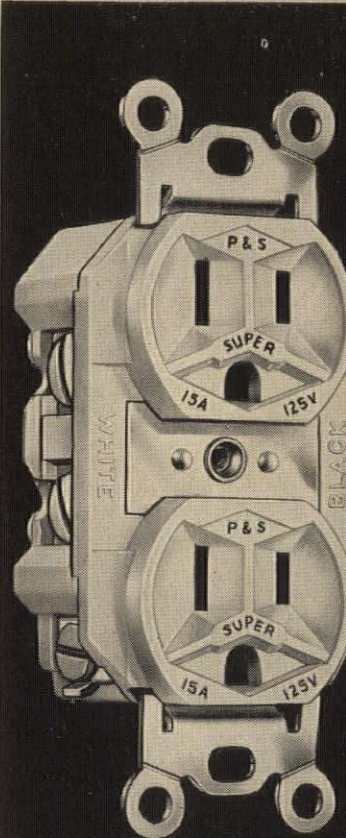


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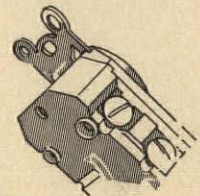
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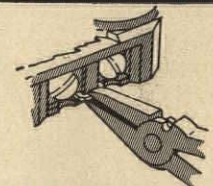
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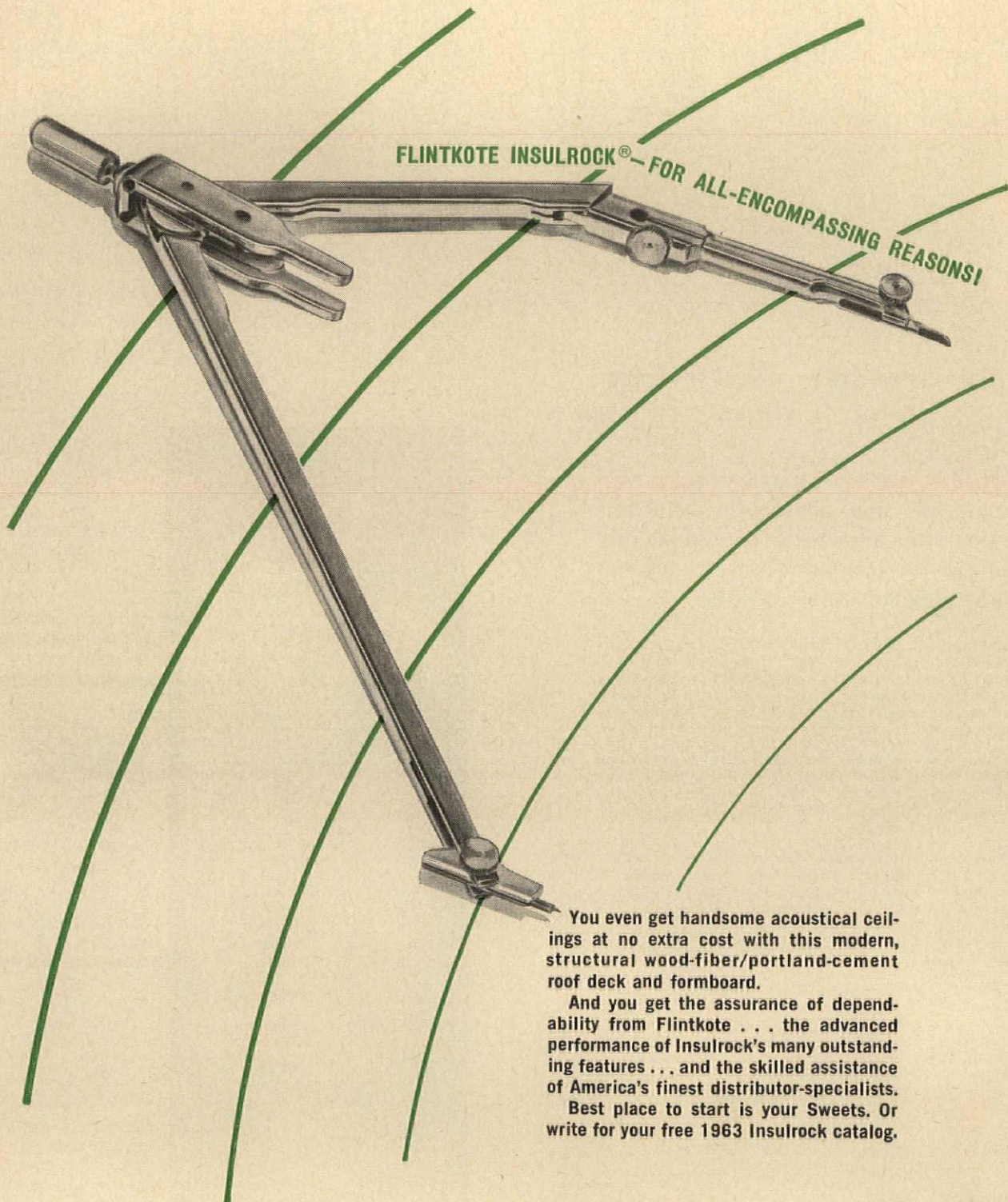


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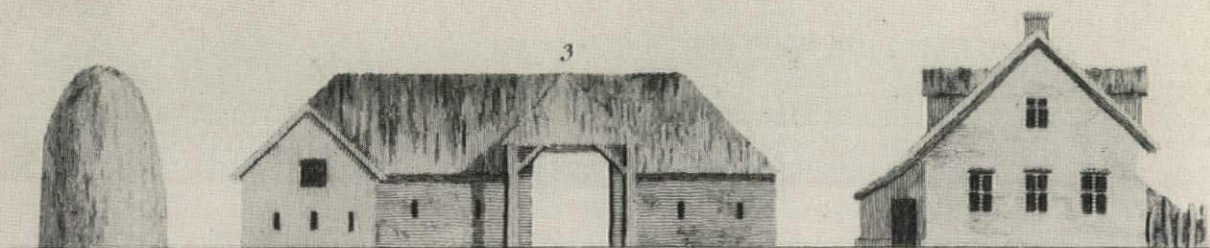
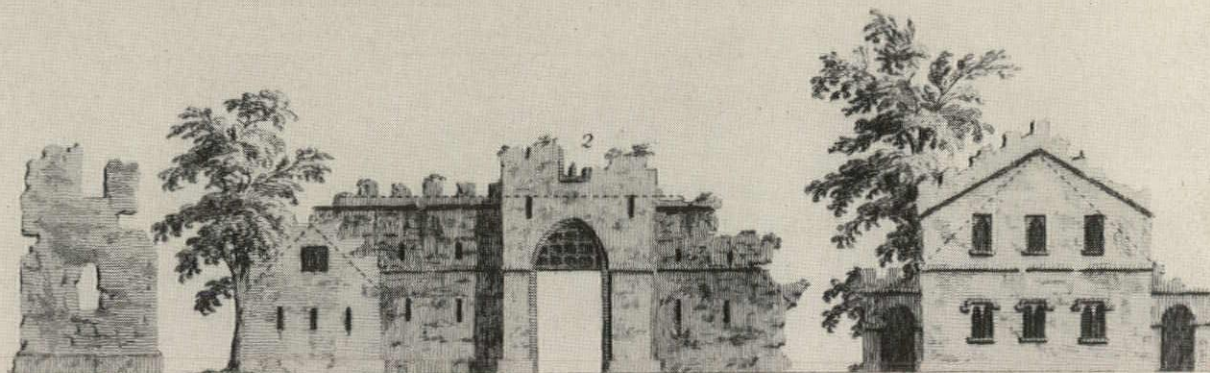
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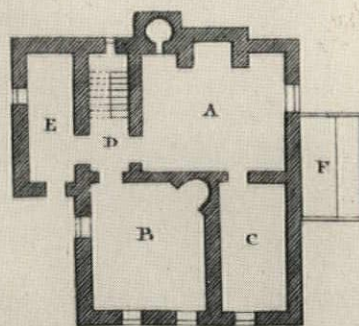
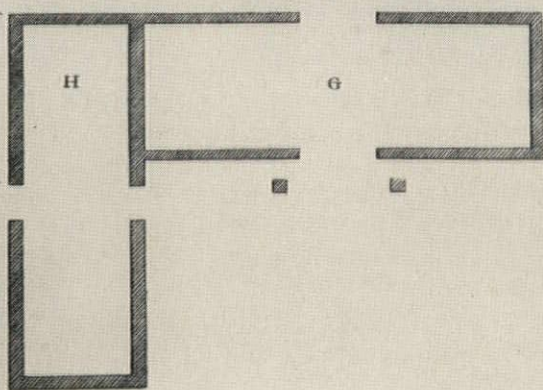
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Facades to place before disagreeable Objects.



A. Kitchen	19.0 - 10.6
B. Parlour	18.0 - 15.0
C. Milkhouse	18.0 - 9.0
D. Brew house	
E. Wash-house	18.0 - 6.6
F. Pig Sty	14.0 - 8.0
G. Barn	53.0 - 18.0
H. Stable or Cow house	49.0 - 15.0



3. The Object supposed as shewn by the acult line.



FOREWORD

The modern planning theory, unfortunately still practiced today, aims at the crystallization of all the diverse functions into separate entities and their isolation from each other. The synthesis is subsequently achieved by linking all the elements with a network of communication lines, mostly fast-speed auto routes. This amalgam is wishfully called a city. The trouble is that what we have here is a synthetic city, not in the older meaning of the word but in its newer version—an *ersatz*. An urban area planned according to this theory is a dismembered and gutted organism; it is a sick non-city.

The syndrome is by now evident all over the world. I noticed this on my recent visit to several European cities. After the wartime hiatus, Europeans are building at a feverish pace and what they build has much in common. Except for a few buildings in the older built-up sections, most of the new construction is on the peripheries.

Take for instance Marly-les-Grandes-Terres near Paris, which is a large complex of identical and undistinguished residential blocks arranged in a pattern that creates a series of rather loosely defined greens. There are no streets, no squares, no axes, no changes in scale, none of the traditional devices that made the older towns interesting and stimulating. A less inspiring complex of buildings and spaces would be difficult to imagine. The non-housing part consists of a small-scale shopping center (it happens to be very well designed), which also serves as a sort of miniature downtown. All one can call such an accumulation of buildings is not a new town but a housing development, in spite of its size (population 6000) and the inclusion of elements other than residential. A road loops around this verdant environment, so fortunately one can quickly drive around it and then head back to the less hygienic but much more human older French towns. There must be something seriously wrong when a visitor who came to admire an urban area claimed by many to be a worthy illustration of modern city planning is that anxious to get away from it.

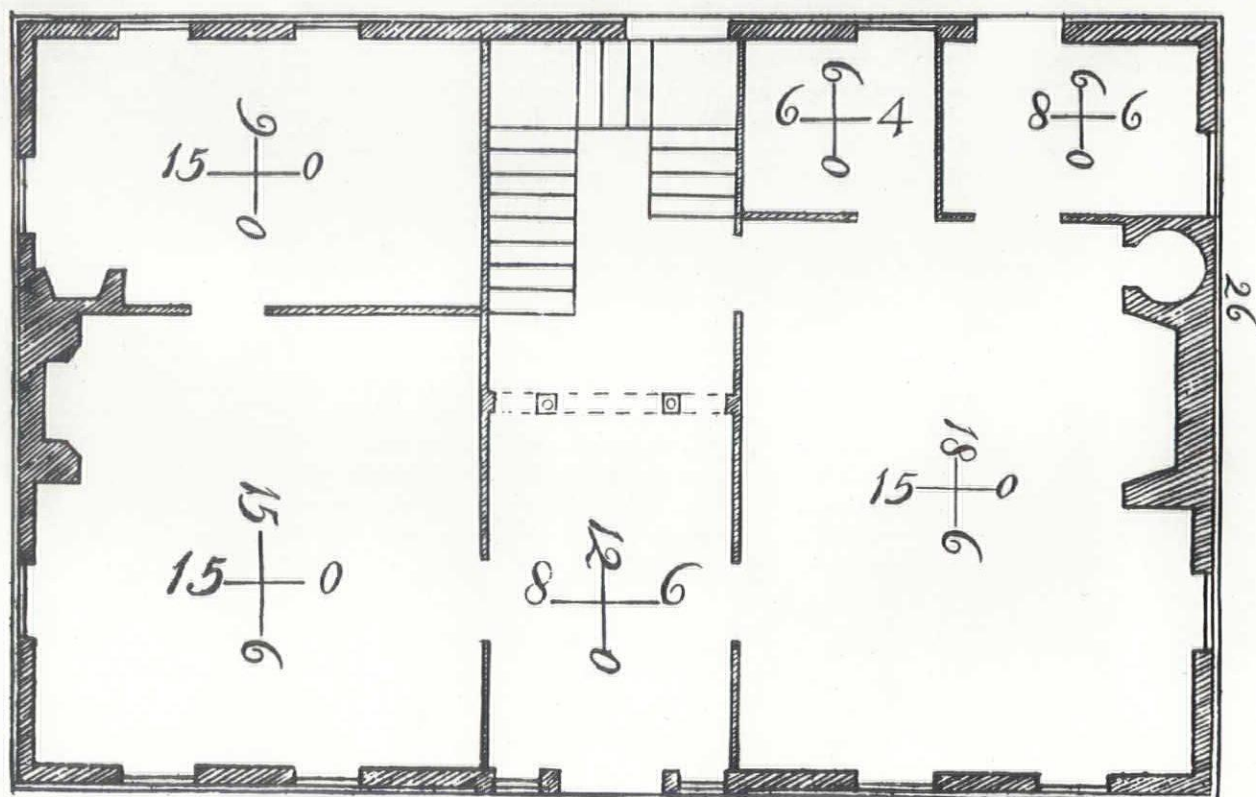
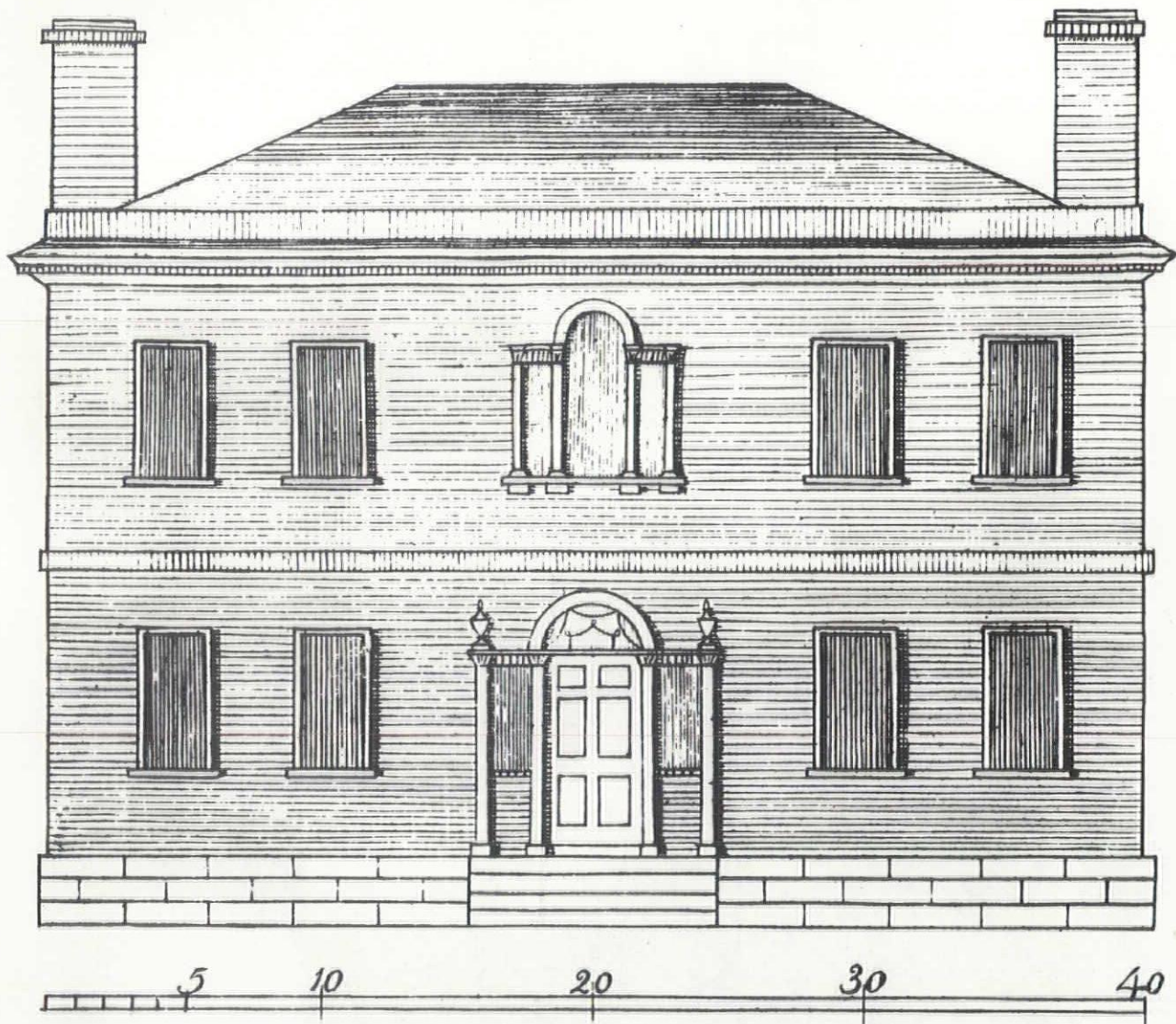
Marly-les-Grandes-Terres is only one example. There are others throughout Europe and, of course, many home-grown specimens in the U.S. Perhaps the only real difference is that in the U.S. there is usually no place to escape to, unless it be unspoiled countryside.

For we too do not build cities any longer. Instead we build centers—cultural centers, government centers, medical centers, civic centers, shopping centers, amusement centers—all kinds of centers. We also build industrial parks and the inevitable housing projects. People are supposed to live in projects and work in parks. Whenever they want to do something else they go to centers, which usually means that they drive. So we build large parking lots ("open areas") that meander through the parks and projects, and even larger parking lots that surround the centers. To get from parking lot to parking lot we build freeways, expressways, throughways—all sorts of ways. Also all sorts of passes—overpasses, underpasses, bypasses. I am afraid that the result of all this is only more and more impasses.

Two months ago, I wrote on this page that modern architecture is now entering a period of maturing and that a new era of greatness is likely to come about. What I did not say at the time is that the architects' efforts might be largely wasted unless a solution to the urban problem is found. A valid modern urban form has to be discovered; otherwise we might end up with great buildings but no great cities.

In this issue we show several individual houses located in rural or semi-rural environments. Houses are often important architectural statements. They are also fun to design and fun to live in. But they are not urban buildings and play no part in the urban controversy. ■

Jan C Rowan



HOUSES: The art of combining forms

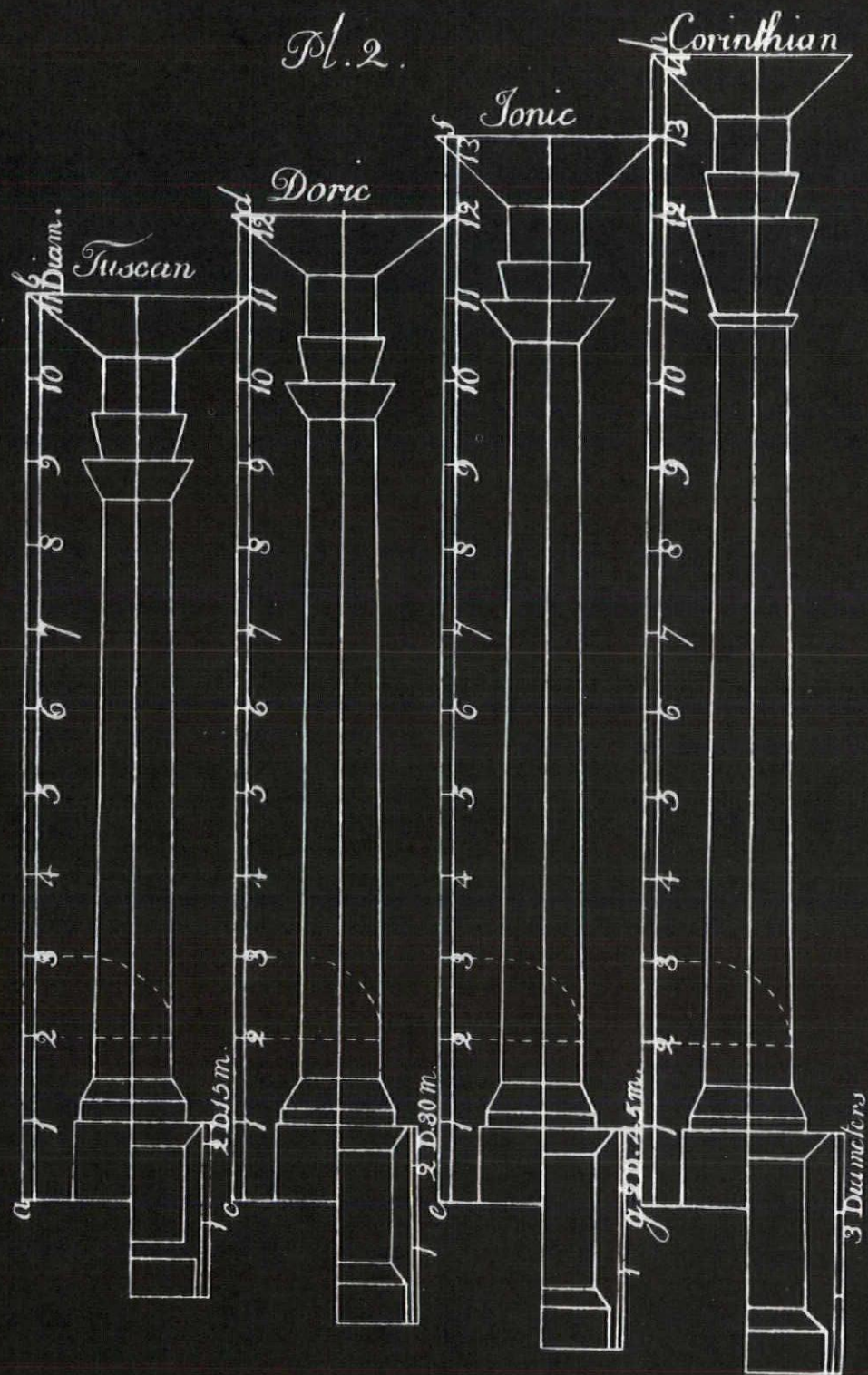
The struggle for a valid contemporary architectural expression has never been as intense or as unresolved as it is today. In previous eras, architectural forms were rigidly defined, each form having developed logically from those of the preceding period. However, with the coming of the Industrial Revolution—its new materials, new construction methods, the new process of urbanization, and radically changing political patterns that encouraged maximum freedom of individual expression—reliance on tradition was invalidated for the architect as for everyone else. Speaking of the architectural problems of that period, and summing up our current dilemma as well, one 19th-Century critic complained that “in the whole range of architectural literature it is nowhere stated how the work of combining forms is to be carried on.” He foresaw the difficulties that have multiplied even since his time, stating that “there is no school in existence which teaches the proper use of old forms or a possible development of new forms” and noted with regret that “each man is to govern himself in this matter as he pleases, working for grand effects, striking effects, palatial effects, homely effects, or grotesque effects. . . . Architects change their forms and combinations of forms from day to day, in order to make up by novelty what is lacking in truth; and thus architecture has ceased to be an art, and has become a pastime.”

Admitting that the problem of “formgiving” has grown more complex and that today there is little evidence of a unified architectural direction, it is important to remember that this has not always been so. In this country, for example, carpenters and emerging young architects of the 18th Century *did* have an architectural literature that stated how the work of combining forms was to be carried on. The prototype of a Country House (*facing page*) from Asher Benjamin’s *The Country Builder’s Assistant* was not invented overnight, but was the culmination of centuries of gradual architectural development in the Anglo-Saxon tradition. In this first American manual on house building, published in 1797 at Greenfield, Massachusetts, Benjamin presents, according to the subtitle of the book, “A collection of New Designs of Carpentry and Architecture which will be particularly useful to Country Workmen in general.” He included: “Illustrations of frontispieces, chimney pieces, Tuscan, Doric, Ionic and Corinthian orders, with their bases, capitals and entablatures (p. 134): Architraves for Doors, Windows & Chimneys: Cornices, Base, and Surbase Mouldings for Rooms: Doors and Sashes with their Mouldings: The Construction of Stairs with their Ramp and Twist Rails (p. 135): Plan, Elevation and one Section of a Meetinghouse, with the Pulpit at large: Plans and Elevations of Houses: the best method of finding the length, and backing of hip rafters: Also the tracing of Groins, Angle Brackets, Circular Soffits in Circular Walls & etc.”

Little was left to the imagination of the “Country Workmen” who, in the spirit of the time, followed Benjamin’s prototypes religiously. However, what was done was of a form whose proportions and lines had been perfected over many years. We owe much of our fine architectural heritage to the students of Asher Benjamin and their respectful and disciplined execution of his prototypes.

Benjamin’s guides were the English manuals of the period, as, for example, *The Gentleman and Farmer’s Architect* by T. Lightoler, and *The Country Gentleman’s Architect* by J. Miller, both published in London in 1764 and 1787 respectively. With the exception of the designs for three cottages by J. Miller (p. 137), these farmhouses and villas (pp. 136, 137) are much more elaborate than those in the American manual, as they were primarily intended for “country gentlemen” and not their more humble American cousins. Already in these English examples one detects a tendency toward “form for form’s

Text continued on page 138.



"The proportioning of Tuscan, Doric, Ionic, and Corinthian Orders," from Asher Benjamin's *The Country Builder's Assistant*, Greenfield, Massachusetts, 1797.

Pl. 21.

Fig. 1.

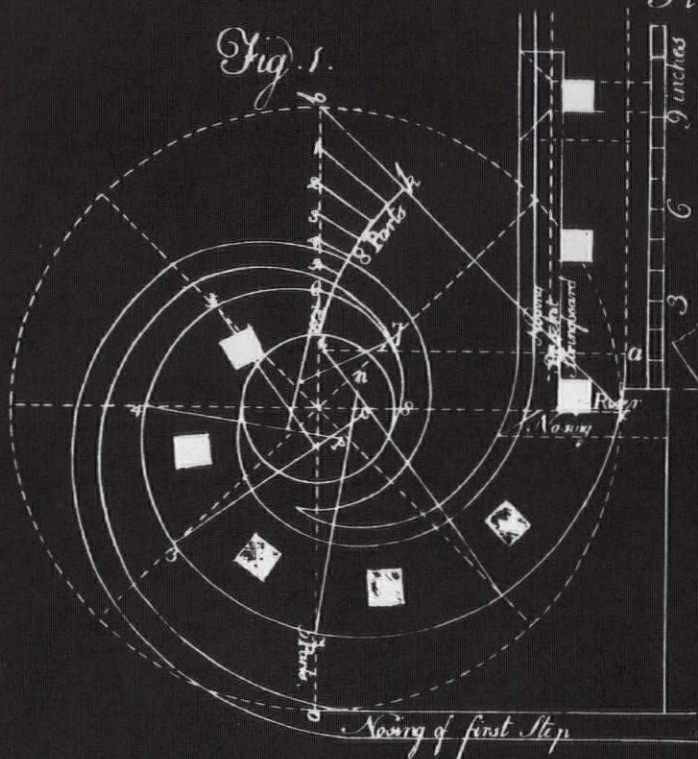


Fig. 2.

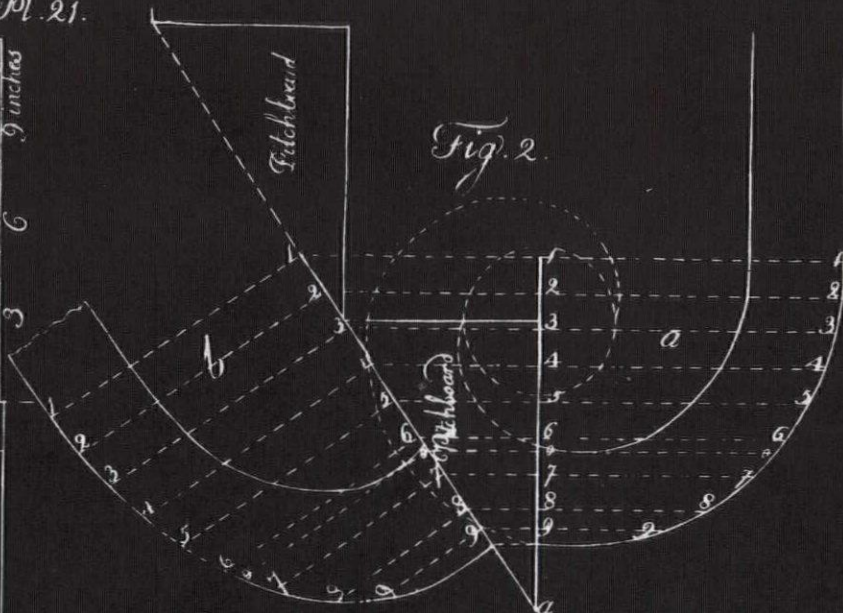
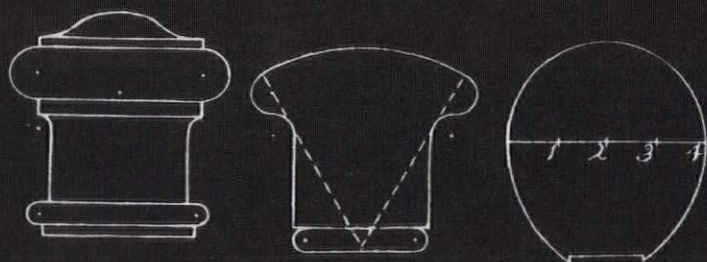
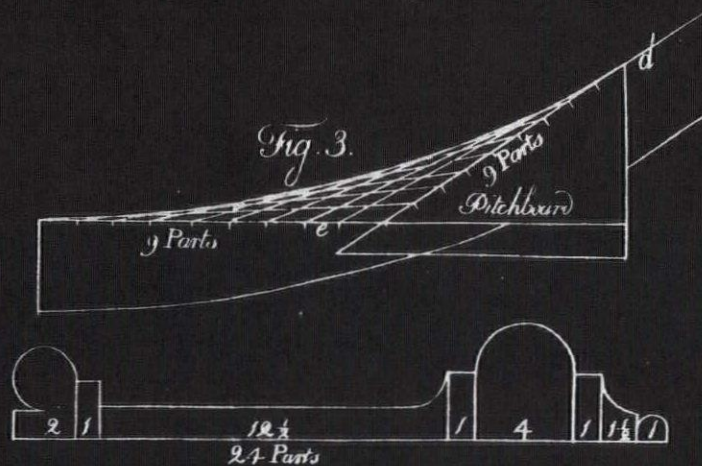
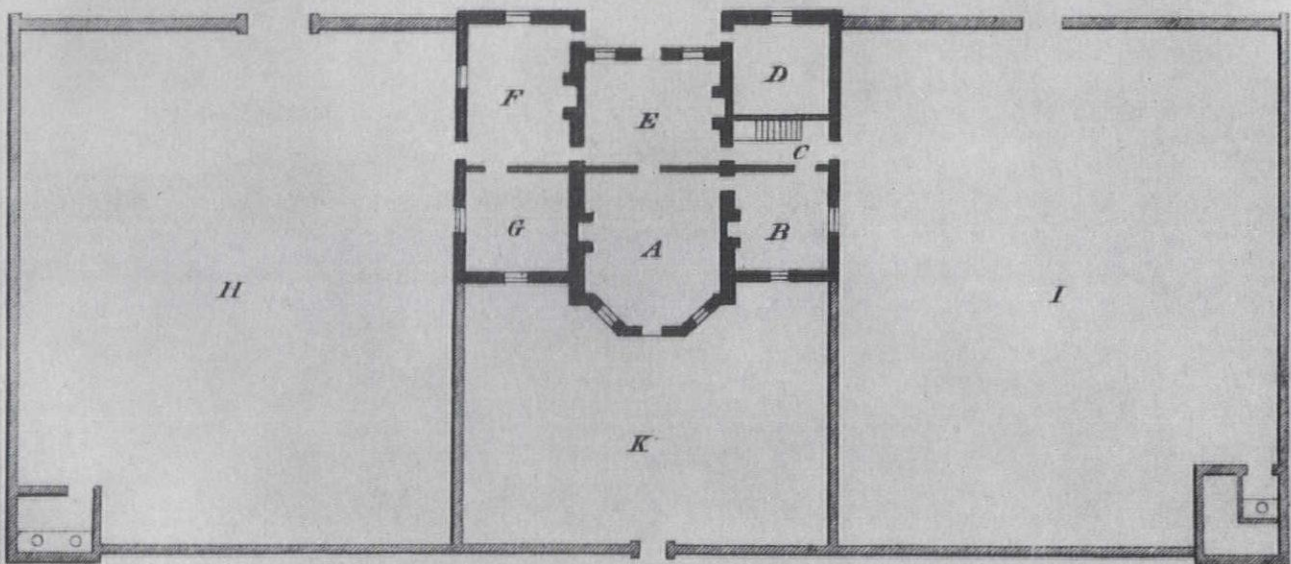
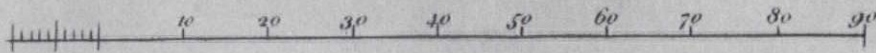
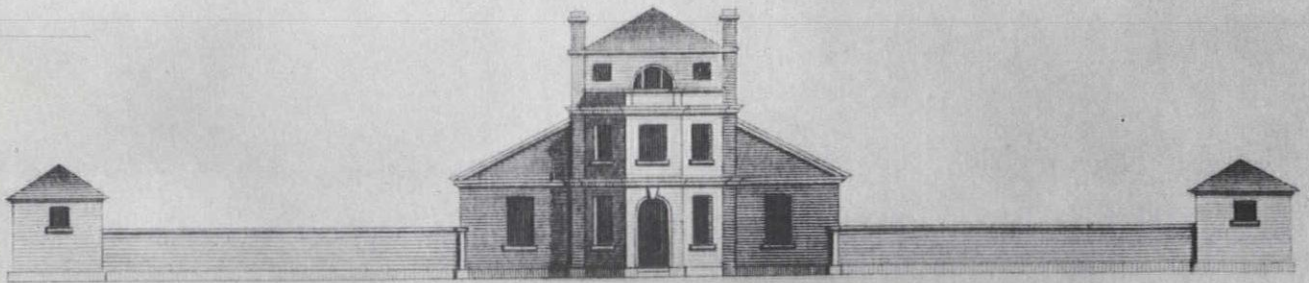


Fig. 3.



"The Plan and Scrole of the Twist Rail for a Staircase" from Asher Benjamin's The Country Builder's Assistant, Greenfield, Massachusetts, 1797.

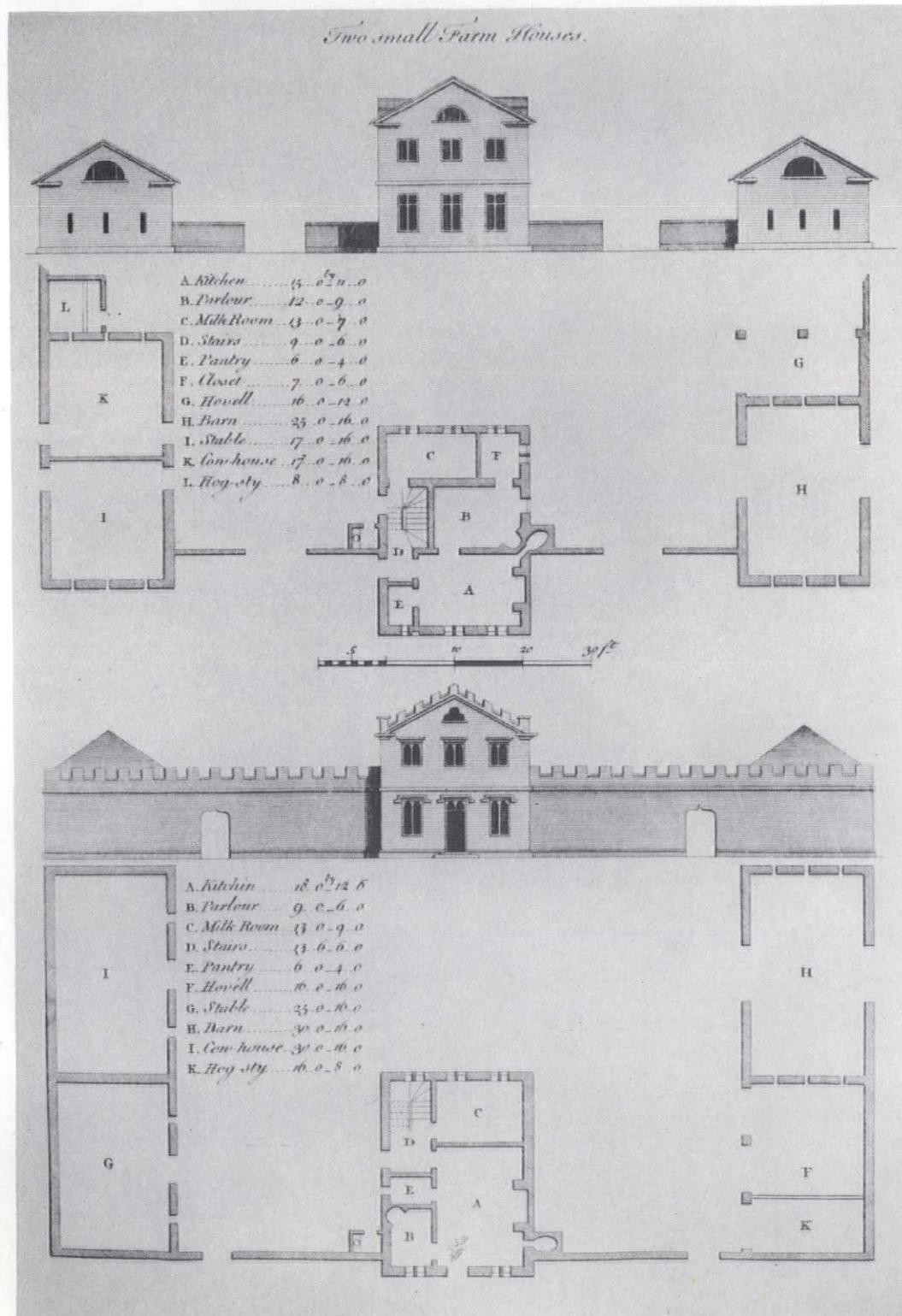
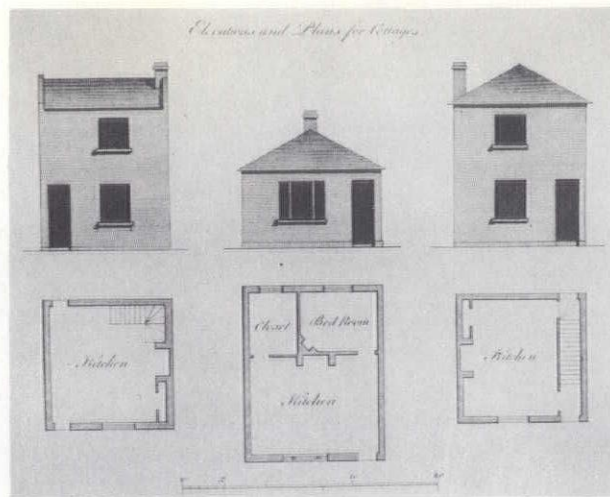
Elevation and Plan for a small Villa.



*A Great Parlour.
B Library or Dressing Room.
C Staircase.
D Dairy.
E Hall or dining Parlour.*

*F Kitchen.
G Back Kitchen.
H Kitchen Yard.
I Garden.
K Court Yard.*

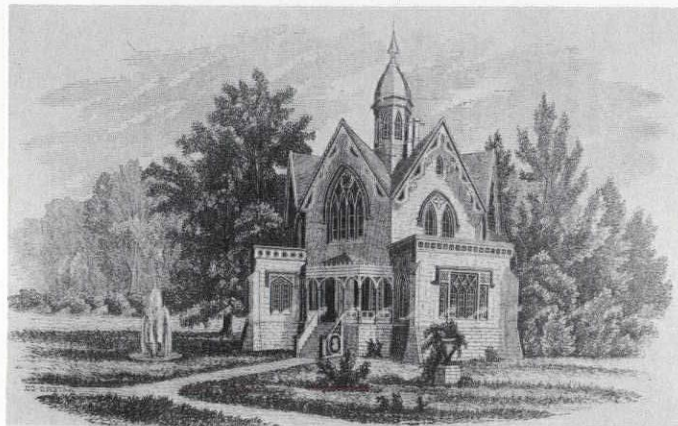
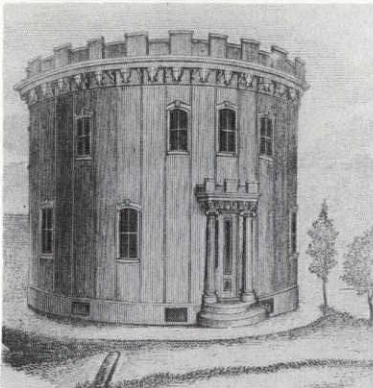
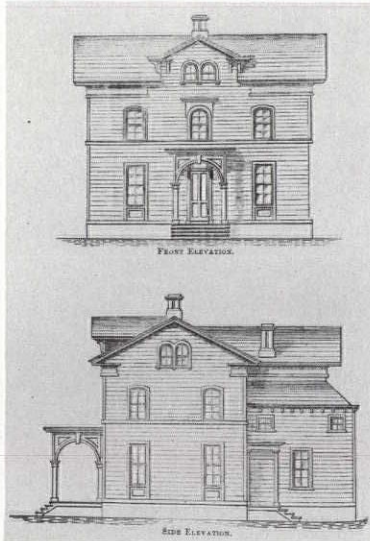
"Elevation and Plan for a small Villa" (above) and "Elevations and Plans for Cottages" (facing page, top) from *The Country Gentleman's Architect*, London, 1787; designs by J. Miller, Architect. "Two small Farm Houses" (facing page, bottom) from *The Gentleman and Farmer's Architect*, London, 1764; designs by T. Lightoler, Architect.



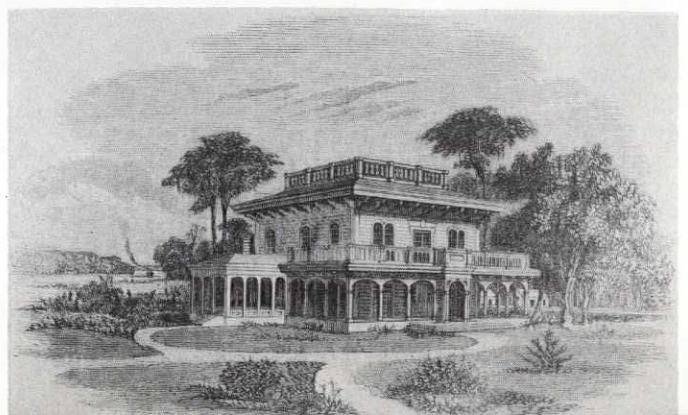
sake"; a departure from the strict discipline of the classical form. With Lightoler's now amusing proposal of "façades to place before disagreeable objects," (p. 130) architecture was well on its way to becoming a pastime.

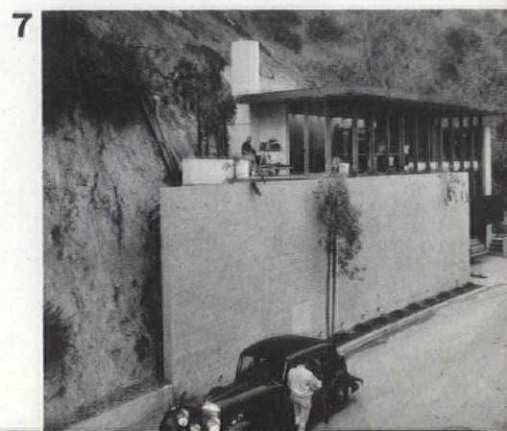
The publication in 1859 of *The House: A Pocket Manual of Rural Architecture*, by Daniel Harrison Jacques, and similar books directed mainly at the general public, finds U.S. architecture a mere collection of fashionable forms. It is indicative that Jacques, a non-architect (incidentally, also the author of such other books as *How to Write*, *How to Talk*, *How to Behave*, *How to do Business*, *The Garden*, *The Farm*, *Domestic Animals*, *The Right Word in the Right Place*) became the advisor on "How to Build Country Houses and Out Buildings." Jacques traces the origin of the house from the tent to the castle and also attempts to answer the question of indigenous American form. "Thus far," he says, "we have been content to build in every style, ancient and modern, and most of all, in NO style; covering the whole face of the country with incongruous and unsightly structures." However, the author notes a year-by-year improvement that "will go on; the modifications which our climates and modes of life suggest in existing styles will assume definite, and artistic, and permanent shape, and the new American style or styles will receive their birth. In the meantime, we must borrow and modify as best we may." Jacques offers a plethora of house possibilities—Grecian temples, Italian villas, Swiss chalets, Flemish halls, Gothic cottages, including an octagonal and even a circular house—"as our little book is made for everybody."

But the architect today confronts an ever-increasing literature, modern travel and communications, and myriad other influences and distractions, even beyond those that prevailed a hundred years ago. These factors cannot and must not be ignored, yet only a very disciplined architect can be exposed to them and still preserve unity and purpose in his work. The architects who designed the seven houses shown on the following pages, have, in our opinion, acted with skill, restraint, and self-discipline in working out their form or combinations of form: Marquis & Stoller in their composition of four related forms (1); Raymond & Rado in maintaining a classical discipline throughout (2); Wisniewski in developing a sympathetic structural vocabulary within the context of the site (3); Johansen in his skillful repetition of like forms (4); Hoag in contrasting the angular with the rounded (5); Moore in creating light and spatial interest within a deceptively simple exterior form (6); and Maston in his concept of man-made versus natural form (7).



"Two elevations of a Country Parsonage"; "A circular House"; "An Octagon Villa"; and "A Southern House" (top to bottom) from *The House: A Pocket Manual of Rural Architecture* by Daniel Harrison Jacques; designs by F. E. Graef, Architect, New York, 1859. Illustrations of historical material: Courtesy Avery Library, Columbia University, New York.







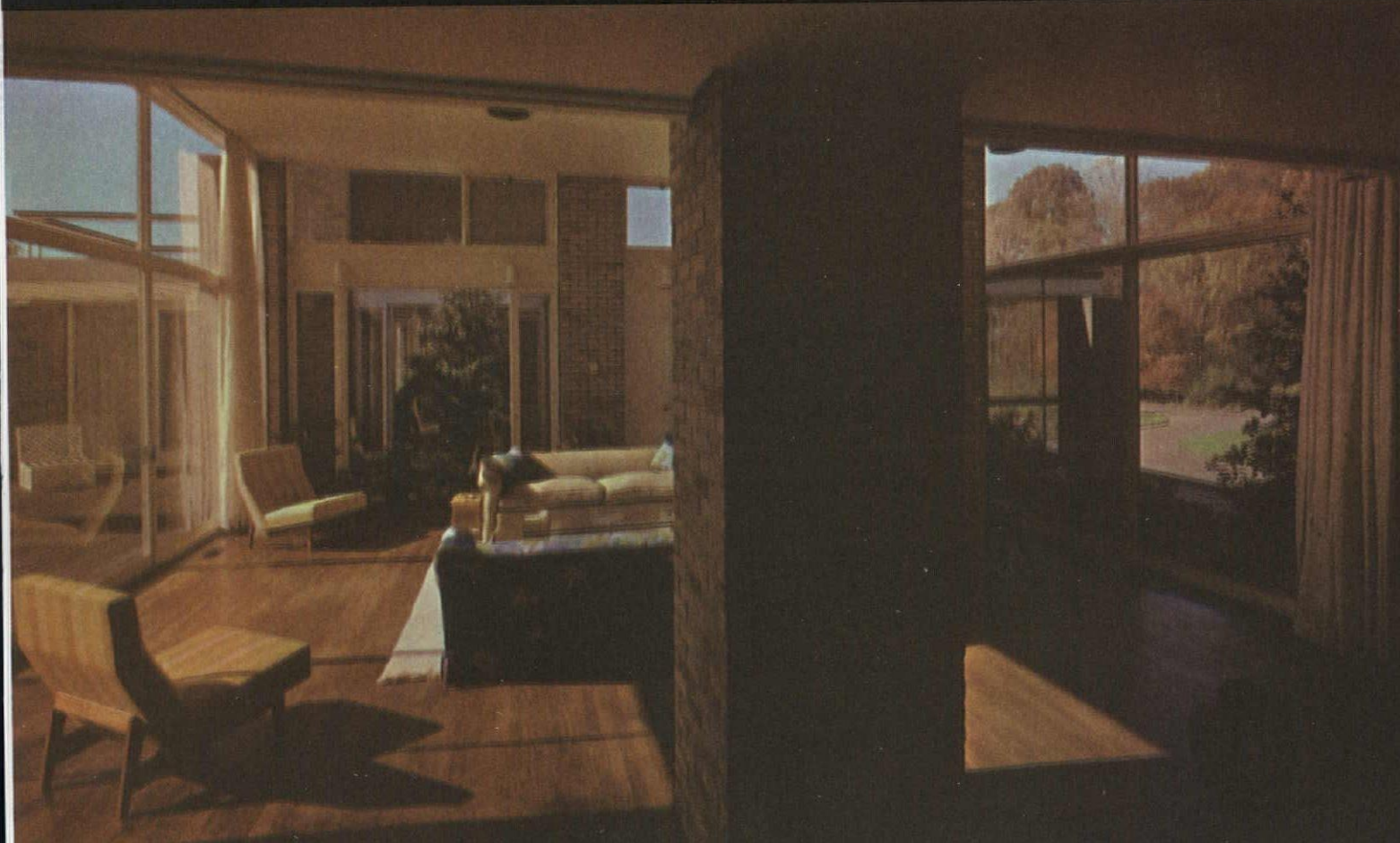
1 Residence, Mill Valley, California
Marquis & Stoller, Architects





3 Summer Cottage, Martha's Vineyard, Massachusetts
Davis, Brody & Wisniewski, Architects

4 The Tidewater House, South Norwalk, Connecticut
John MacL. Johansen, Architect



5 Residence, Santa Ana, California
Paul Sterling Hoag, Architect





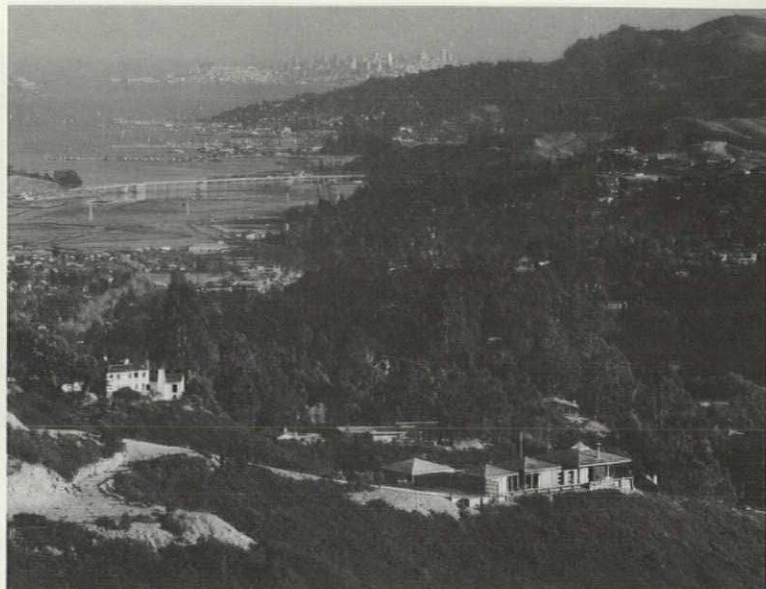
7 Residence, Los Angeles, California
Carl Maston, Architect



"Architecture is the masterly, correct and magnificent play of masses brought together in light. Our eyes are made to see forms in light; light and shade reveal these forms; cubes, cones, spheres, cylinders or pyramids are the great primary forms which light reveals to advantage." LE CORBUSIER

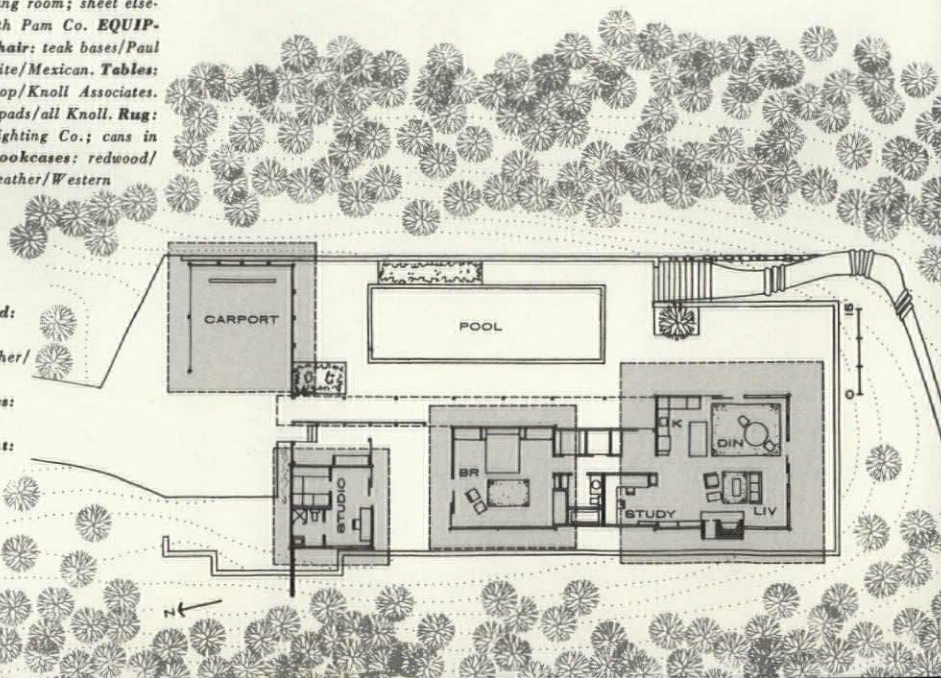
1 Residence, Mill Valley, California Marquis & Stoller, Architects

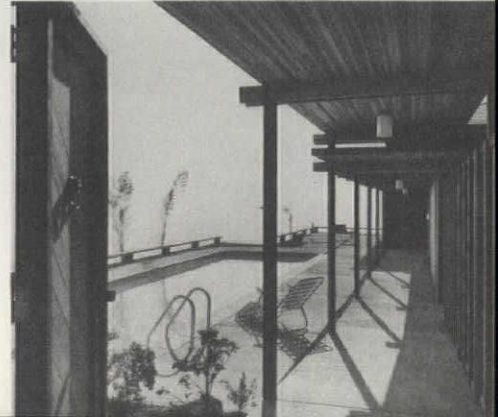
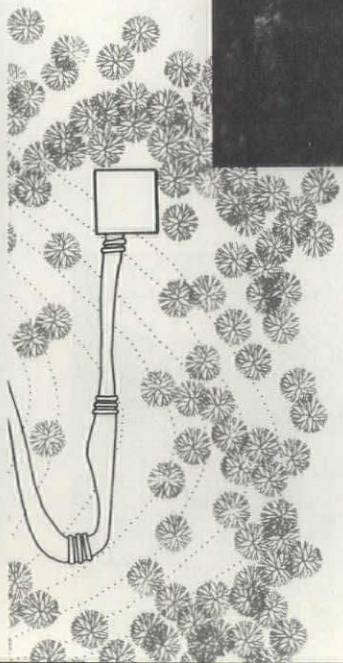
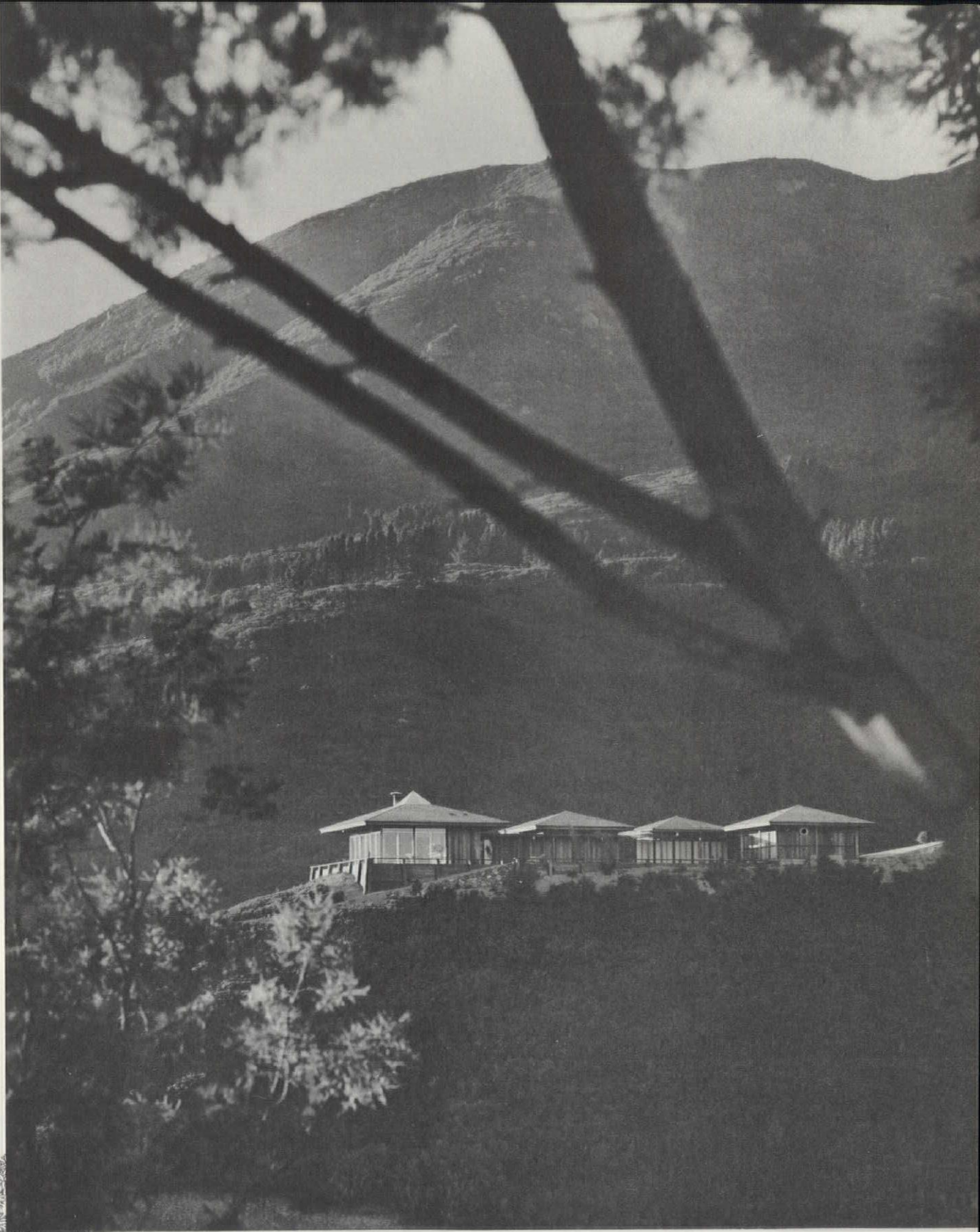
Form and the combining of related forms was of more than ordinary importance in the design of this house because of its unusual location at the end of a steep, descending approach road. The fact that the house would first be seen from above, influenced not only the plan solution but particularly the composition of the roofscape. Taking into consideration also the site and program requirements, the decentralized "form" of this house is unusually appropriate in an aesthetic as well as a practical sense. An isolated ridge in Mill Valley, overlooking San Francisco, forms the site of this building. The owners envisioned the house as a place to retreat to after a busy day—a kind of Shangri La—where they could pursue their hobbies of pottery, photography, writing, and swimming. Four "houses," all of them square in plan and topped with pyramidal roofs, make up the "village compound." The first is a carport; the second houses a ceramic shop, photography darkroom, and utility room; the third contains a bedroom; the fourth and dominant one is devoted to kitchen, living/dining room. A covered walk links all four of the units and provides at the same time a poolside, covered terrace. Wide overhangs and the redwood retaining wall, not unlike the medieval encircling wall, emphasize the village quality and provide a sense of shelter and protection—an important consideration on the exposed site.

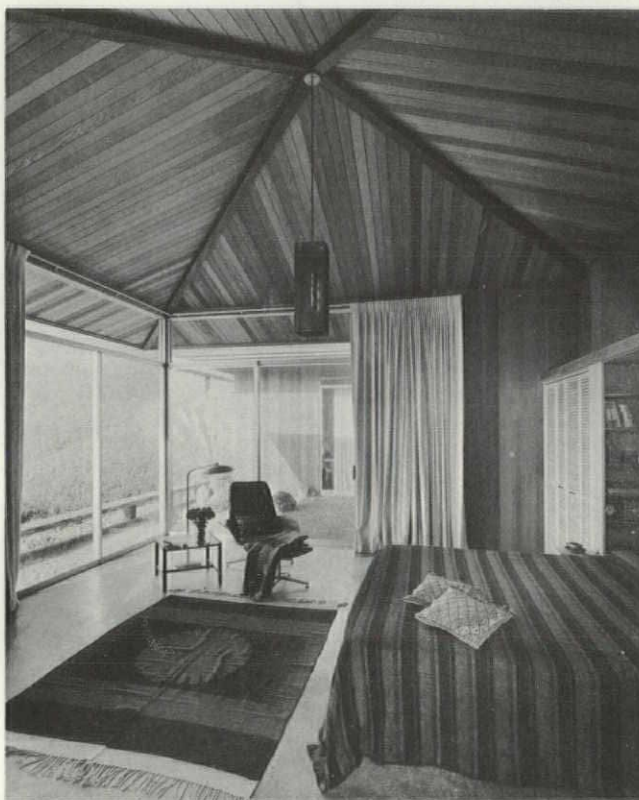


First impression of the house is a birds'-eye view, focusing particular attention on the composition of the roof. Loosening of the building complex into a village-like compound helped to adapt the structure more sympathetically to its site, assisted in creating visual interest when observed from the high vantage point, and solved the manifold plan requirements. Redwood, in its natural state, is the predominant building material.

STRUCTURE: Floors: 4" concrete slab. Walls: vertical redwood boards on wood frame. Roof: glue-laminated hip beams, wood joists, cedar shingles for pyramidal roof; laminated wood deck for flat roof. Ceilings: redwood boards/natural. Partitions: 3/8" x 4" vertical redwood boards or gypsum board on studs. Windows: extruded aluminum/Marshall Aluminum Products, Inc.; plate glass in living room; sheet elsewhere. Skylights: pyramidal in living room; dome in hall/both Pam Co. **EQUIPMENT:** radiant heating. **LIVING-DINING ROOM:** Sofa, armchair: teak bases/Paul Bolthar design/Frem; upholstery/gray wool. Rug: black, gray, white/Mexican. Tables: teak/Frederik Lunning. Dining table: white pedestal/walnut top/Knoll Associates. Dining chairs: white plastic armchairs/charcoal naugahyde seat pads/all Knoll. Rug: Dutch Coil matting. Lighting: downlights on terrace/Boyd Lighting Co.; cans in skylight/Gross Wood Co./all black painted metal. **STUDY:** Bookcases: redwood/custom. Desks: red birch/custom. Desk chairs: walnut, black leather/Western Contract. Hanging lights: black cones/Svend Wohler Imports. **KITCHEN:** Cabinetwork: red birch/custom; black steel support/Unistrut; doors/Masonite. Counters, backsplash: gray ceramic tile/Romany Spartan. Sink: Ziegler Harris Co. Range: Waste King. Refrigerator: General Electric. Barbecue: Goodwin Co. Exhaust fans: Trade Wind. Exhaust hood: stainless steel/Barholow Co./custom. Lighting: black painted metal/hanging/Boyd Lighting Co. Bar stools: walnut, black leather/Western Contract. **BEDROOM:** Rug: red and black/Mexican Indian. Bedspread: blue stripes/light, dark/India. Draperies: white homespun/unbleached. Chair, ottoman: Ply Craft. Hanging lamp: bronze/Gross Wood Co. Bathroom equipment: American Standard. **ASSOCIATES:** Structural Engineer: Eric Elssesser. Landscape Architect: Robert Graves. **PHOTOS** (including color): Karl H. Riek.







Within the house, the architects have consciously attempted to introduce varied types of spaces. The study (above), directly off the living room, is dark and cavelike in comparison to the brightly lit and spacious living room (facing page, bottom; below; and color photo #1). The bedroom (left) partially sheltered, partially open, is a simple, complete unit in itself, defined by its own pyramidal roof, though appropriately without skylight. This space is 18'-6" square in plan, with a ceiling height of 10'-6" at the window line. The roof extends 4' beyond this line in all four directions. Interior wall and ceiling surfaces and most of the architect-designed, built-in furnishings are of redwood.





Kitchen (left), living and dining area (below) are all contained within the largest of the four "house" units, measuring 24' x 24'. Its pyramidal roof is topped by a plastic skylight, also pyramidal in shape, though of a steeper slope than the 4 to 12 pitch of the shingle roof. To resist the horizontal thrust of the roof load, $\frac{7}{8}$ " tie rods have been installed at the perimeter wall. Diagonal bracing and shear walls provide lateral stiffness.



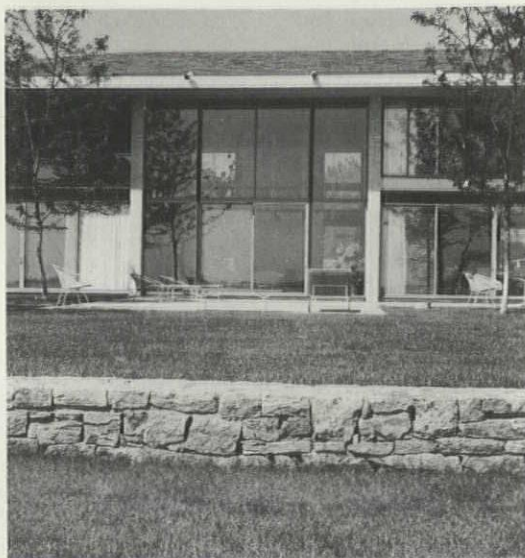
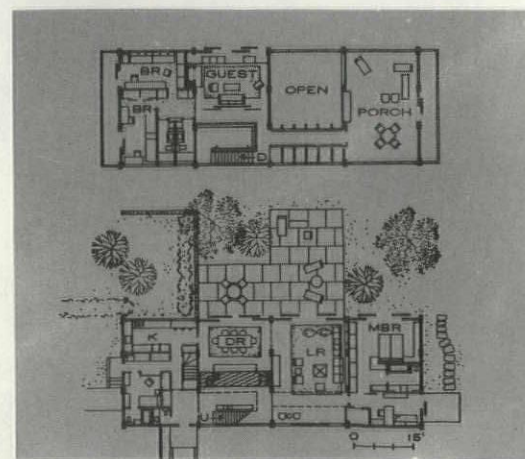


PHOTO: L. L. RADO



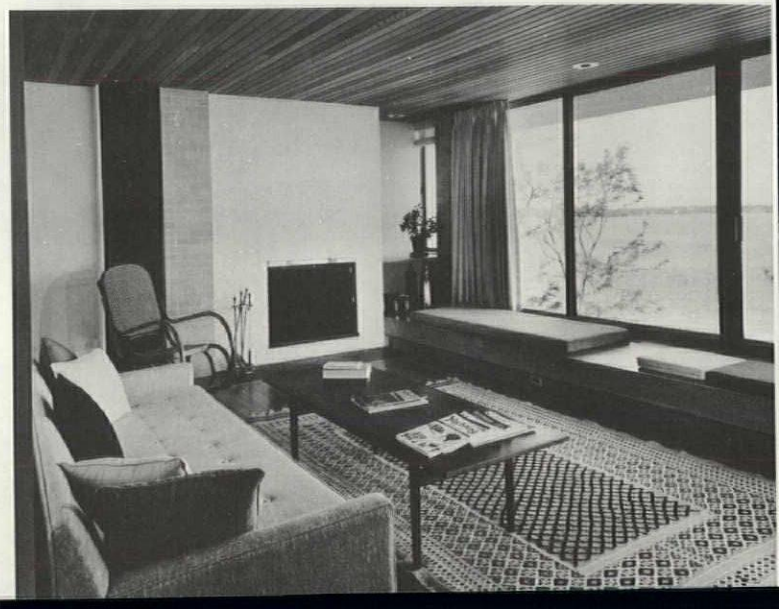
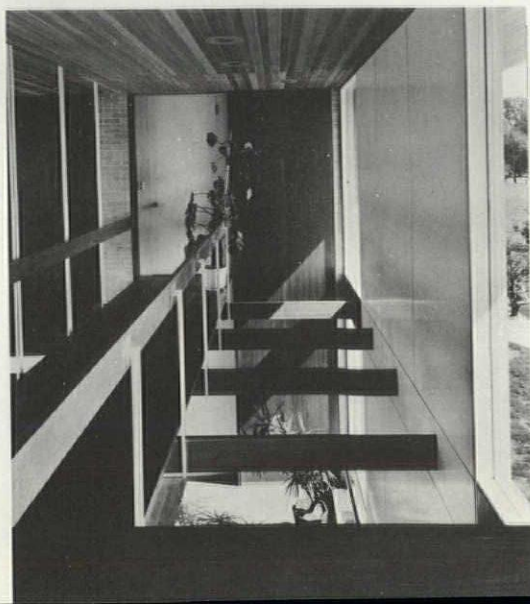
2 Residence, Manursing Island, Rye, New York Raymond & Rado, Architects

"Architects change their forms and combinations of forms from day to day in order to make up by novelty what is lacking in Truth," complained the critic of *Artistic Country Seats* in surveying the architecture of the 1880's. Today, in another period of architectural transition, this is again a prevalent criticism. One of the few architectural firms that have disregarded the current race for "novelty" and have instead devoted their efforts toward improvement and refinement of contemporary architecture, are the designers of this house. It was their specific objective "to demonstrate the maturity of today's architectural idiom by subjecting it to a classical discipline" through the establishment of a "clearly defined regular structure, articulated detailing, and consistent use of materials." In accordance with these principles, the structure is simple, purposely understated, a "unified volume in repose." But within this disciplined classical concept, the architects wished to achieve "a free, dynamic flow of space within the structure itself and outward." This "flow of space," particularly apparent in the two central bays, also interacts with the outside spaces—the entry garden on one side, Long Island Sound on the other. Though vertical, horizontal, and even diagonal elements are juxtaposed in this main living space, the discipline of the structural module is clearly felt, and the brick piers serve as the strong unifying force. Seen from the outside, these pronounced vertical elements also unify the facades, where several materials such as glass, enameled asbestos board, and vertical siding have been combined. The same "classical discipline" has been applied to the selection and design of interior furnishings, carrying the theme to its logical conclusion.

STRUCTURE: *Frame:* exposed brick piers/12" x 16"/two stories high/spaced 20 ft in one direction, 10 ft in the other; steel girders span 20 ft direction; wood joists between steel girders. *Walls:* cedar siding. *Roof:* wood; slate covered/Rising & Nelson; soffit: T&G cedar boards; cornice painted white. *Windows:* aluminum sliding, steel casements/painted dark gray/Arcadia; Thermopane/gray glass/Hope's Windows; skylights/fiberglass mesh screens/Libbey-Owens-Ford. **EQUIPMENT:** summer-winter air conditioning/forced-air oil heater/Lennox. **ENTRY:** *Floor:* black slate. **LIVING ROOM:** *Floor:* oak. *Walls:* walnut plywood; white Formica. *Ceiling:* T&G cedar boards. *Lighting:* recessed downlights/Century Lighting; wall brackets/painted white/Harry Gitlin. *Carpet:* white wool/Moroccan handmade/Ernest Treganowan. *Sofa:* Cumberland Furniture Corp.; upholstery/Haitian cotton/white/Jack Lenor Larsen; cushions/white, yellow, blue, black/India silk/Far Eastern Fabrics. *Coffee table:* stainless steel/glass/Cumberland Furniture. *Barcelona chairs:* natural calfskin/Knoll Associates. *Large diamond chairs:* white plastic coated frames/blue wool upholstery/Knoll. *Bench:* teak/Edgewood Furniture Co. *Cushions:* yellow/upholstery/Jack Lenor Larsen. *Sideboard:* teak/architect-designed/custom-made. **DINING ROOM:** *Walls:* plastic laminate/white/Formica. *Ceiling:* plaster board/white. *Carpet:* blue/V'Soske. *Table:* stainless steel/travertine/architect-designed/Edgewood Furniture. *Chairs:* black steel/natural leather/Laverne. *Draperies:* white/silk/Far Eastern Fabrics. *Drapery hardware:* Grant. **DOWNSTAIRS BEDROOM:** *Carpet:* white wool/Treganowan. *Draperies:* white silk/Far Eastern Fabrics. *Vertical blinds:* white/Holland Shade Co. *Chest of drawers, bedside table:* architect-designed/Charnin Builders. *Lamp:* chrome/Nessen. **UPSTAIRS SITTING ROOM:** *Flooring, window bench:* oak. *Draperies:* Fibraltin/Herman Miller. *Sofa:* convertible/Design Previews. *Sofa upholstery:* natural linen/Rowen. *Coffee table:* teak/Helikon Furniture. **UPSTAIRS BEDROOM:** *Carpet:* blue-green/Treganowan. *Chest of drawers:* Knoll. *Draperies:* Belgian linen, Fibra print/Knoll. *Chairs:* Bentwood/Stendig. *Chair upholstery:* Rowen. **TERRACE:** *diamond chairs/light blue seat pads; chaise/red upholstery; tables/all Knoll Associates. Chair, ottoman: Mayhew-Copley, Ltd. HARDWARE:* lock sets/Russell-Erwin; hinges/Stanley Works; on cabinets/Grant, Knap & Vogt. **ASSOCIATES:** Project Manager: Howard L. Bonington. Structural Engineer: Paul Weidlinger. Mechanical Engineer: Henry J. Campbell, Jr. Landscape Consultant: Kaneji Domoto. **PHOTOS** (including color): Alexandre Georges.



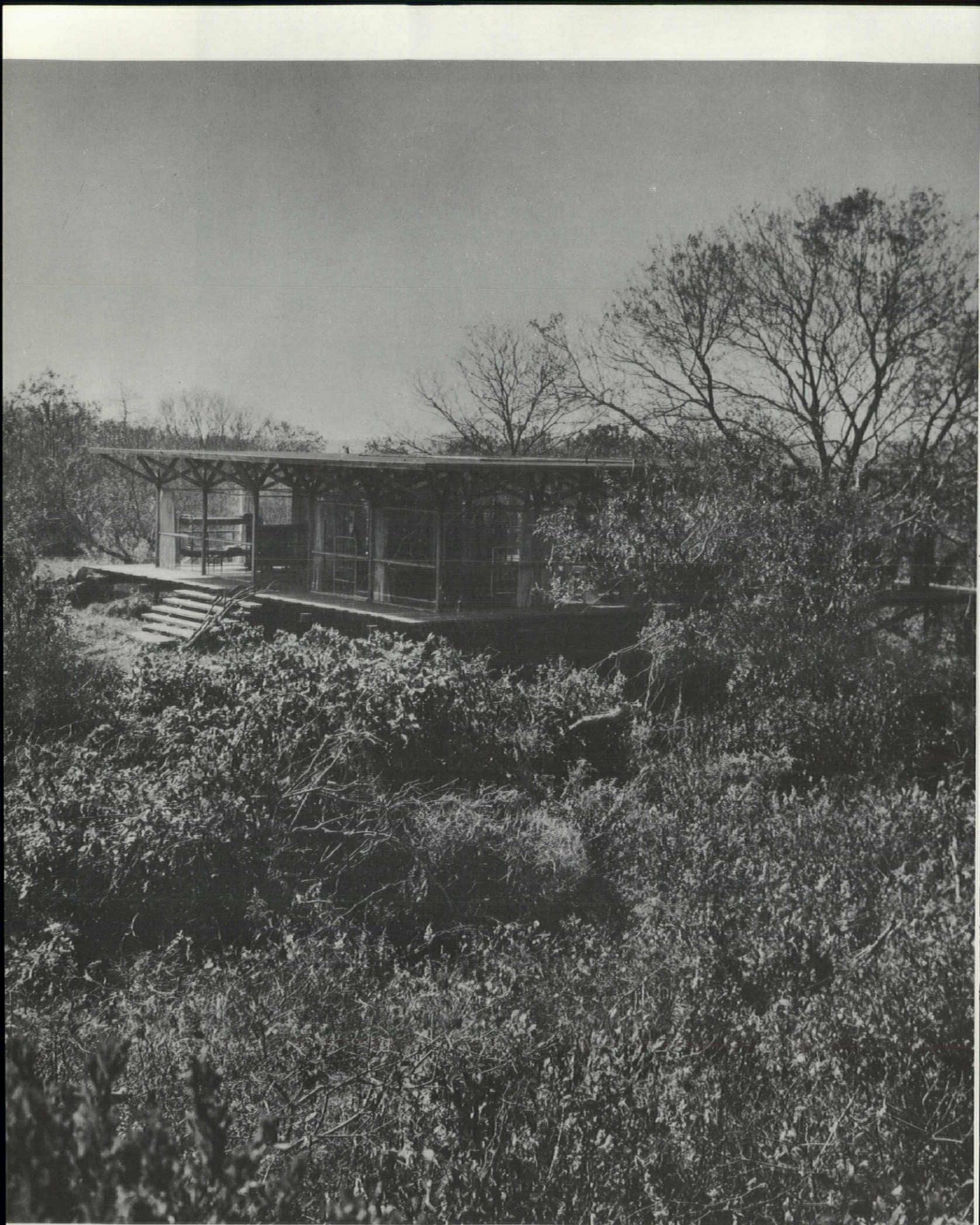
Within this classically disciplined structure, space flows freely through the interior and outward.





Stairhall (facing page, top), bridge to sunporch, upper sitting room/guest room (facing page, bottom), dining room (above) and living room (right) are all part of one large 30 ft x 40 ft space two stories in height. In this space the natural materials, in the form of brick piers, wood panels, slate and oak flooring, are contrasted with white plastic laminate wall panels, white wool carpeting, and curtains. Here, as throughout the house, meticulous craftsmanship—the result of careful detailing and close supervision on the site and in the fabricating shops—is apparent.





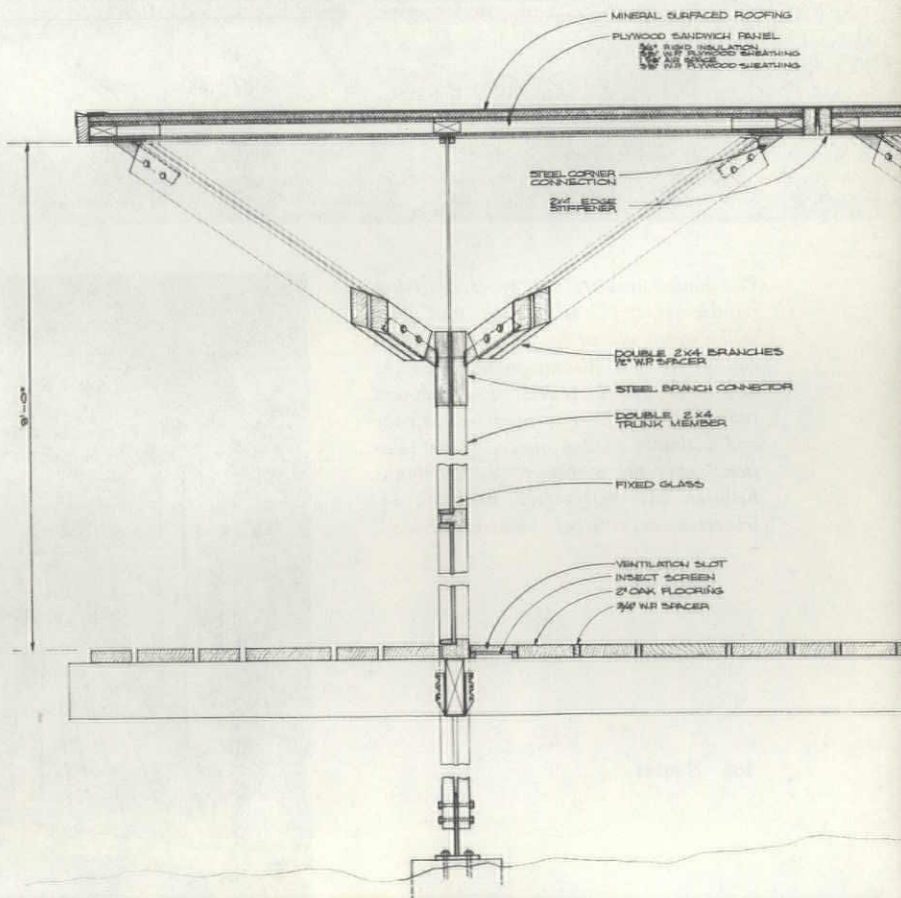
3 Summer Cottage, Martha's Vineyard, Massachusetts Davis, Brody & Wisniewski, Architects

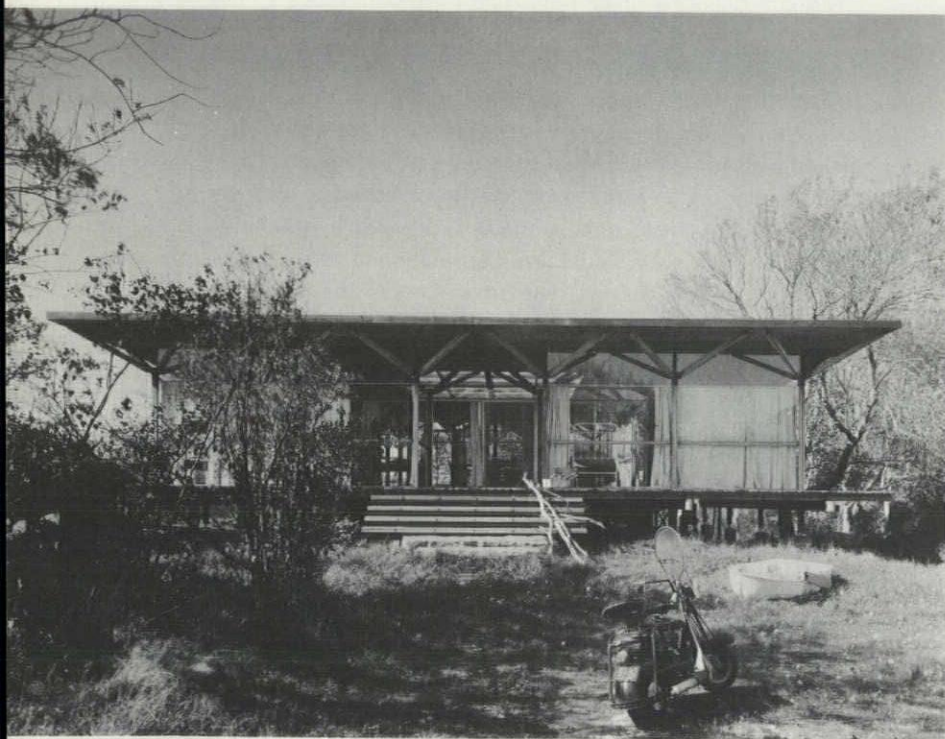
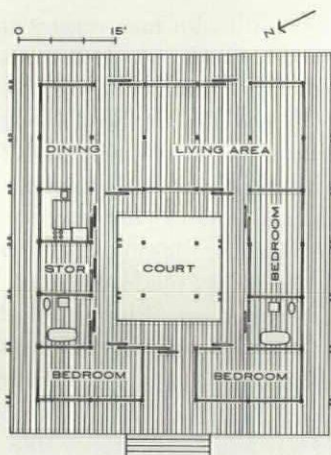
The natural setting—a hill with lush vegetation, wild fern, grape and cherry, and mature trees of all varieties—clearly influenced the design of this summer cottage for C. Wisniewski. It was the architect's original design intention (see p. 134, JANUARY 1961 P/A) to keep some of this lush growth in the center of the house and at the same time to provide wide decks for viewing in all four directions. It was to be a "platform house," which, like a tree house, would blend into the landscape and become part of it. Architectural form, in this instance, was to subordinate itself to the setting. To give the building the desired lightness and transparency, the architect devised a structural system composed of wood umbrellas (*diagram below*). For convenience and economy, these were prefabricated by the architect himself in a New York carpenter shop and later erected on the site. (The



erection sequence will be published in next month's P/A.) The tree-like shape of the umbrellas, the choice of wood as the only structural material, and the use of glass for exterior and interior walls—all tend to fuse structure with landscape. In keeping with its unpretentiousness, the cottage is furnished with pieces, culled from attics and basements. Light and privacy are controlled by means of curtains. Screens have been kept out of sight as much as possible by screening the top of the garden court and the underside of the building, by providing narrow ventilation slots in the floor, and by keeping exterior screen doors to a minimum of three.

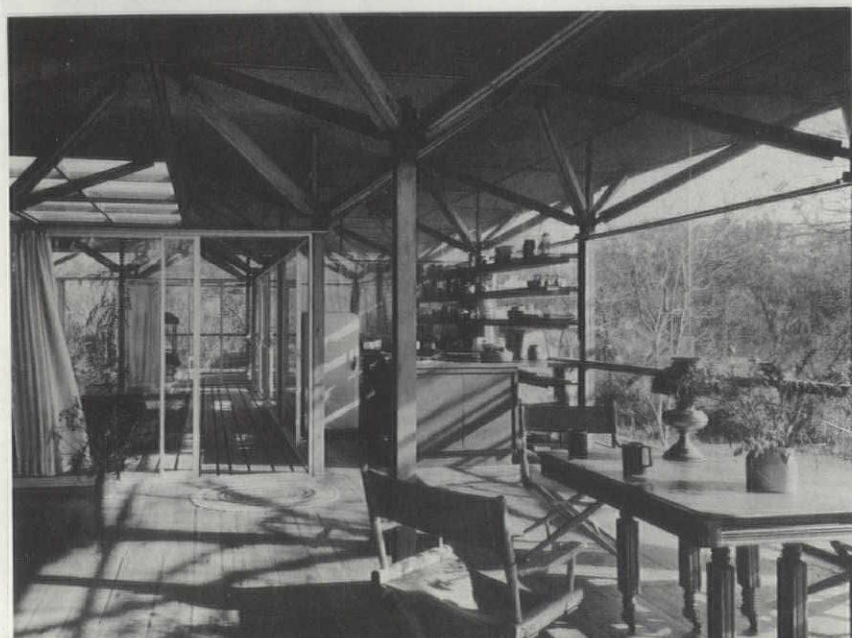
STRUCTURE: concrete piers/wood umbrellas: double 2/4s with steel connectors for trunks and branches; plywood sandwich panels with 1" rigid insulation and mineral surfaced roofing. **Floor:** 2" oak planking/random width. **Walls:** 7/32" glass crystal. **Doors:** sliding glass/Lenart. **INTERIOR:** Draperies: white/sheer; off-white cotton; denim; duck; ticking. **Drapery Hardware:** Grant. **PHOTOS:** David Hirsch; color, and photos pp. 160-161, Ikuyo Tagawa.

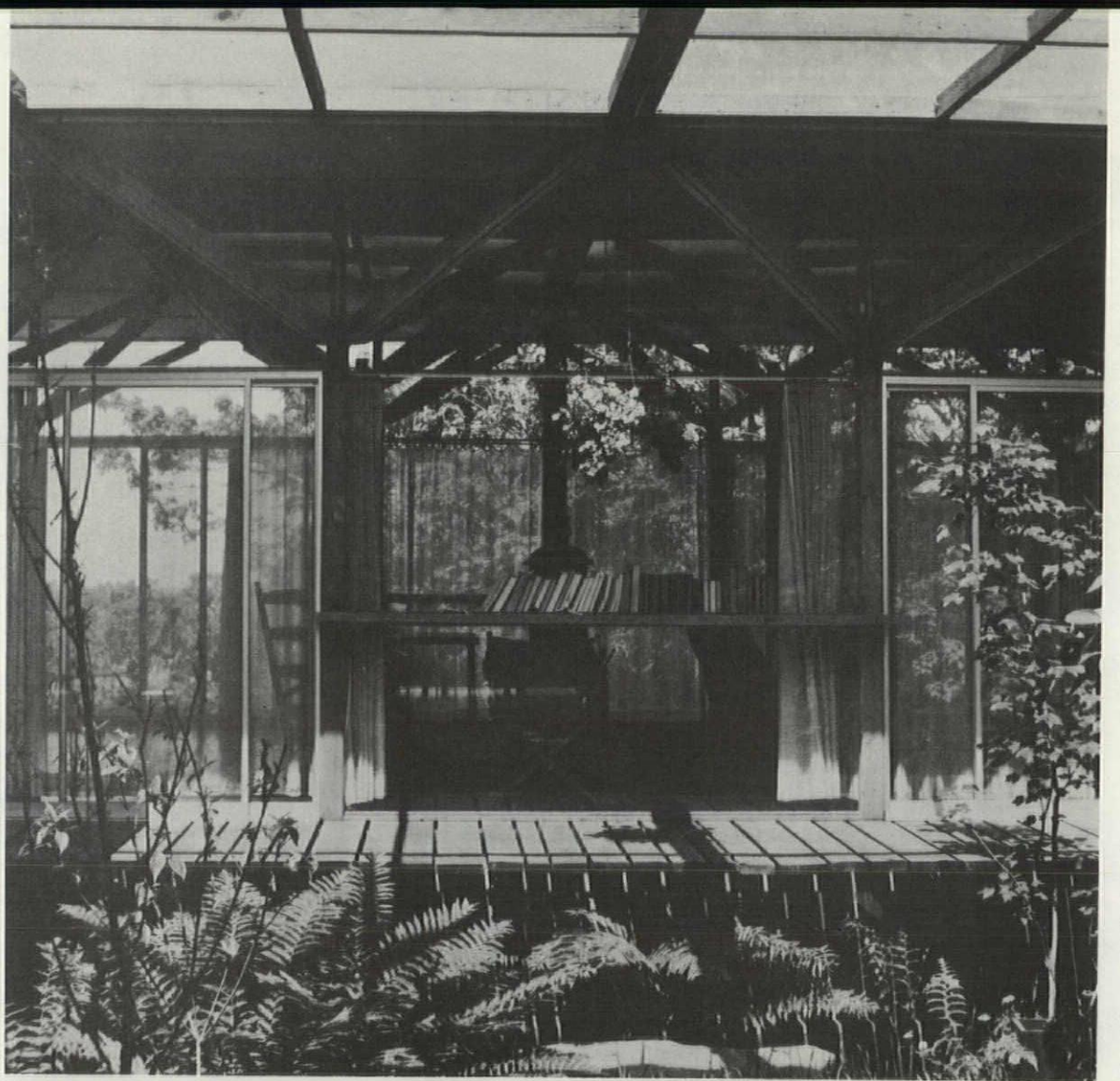




The house answers two types of living requirements: (1) wide decks and glass walls open all areas of the vacation cottage to the distant views; (2) its interior court, intended as a common room for the family, provides privacy and intimate garden space. "This solution," says the architect, "is a balance between the extroverted and the introverted aspects of summer living."





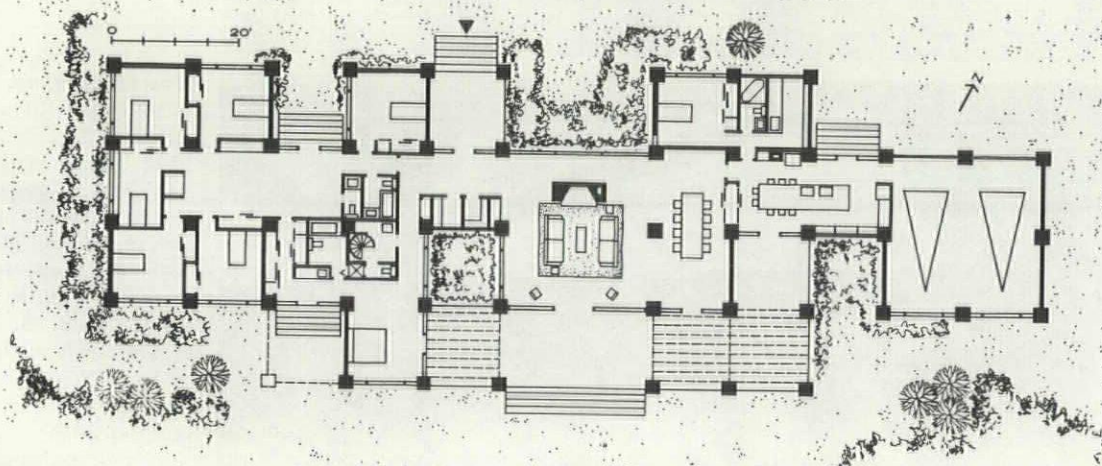




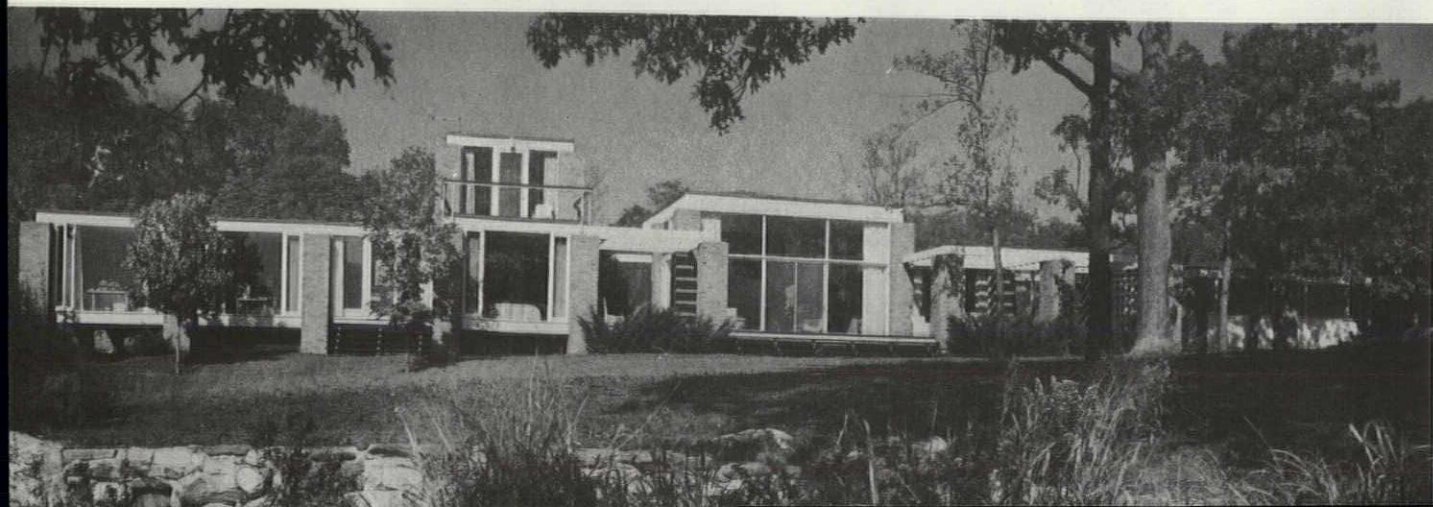
The floor platform was put in place after erection of the umbrellas. Random-width oak floor planks have been laid with $\frac{3}{4}$ -in. spaces to make up for irregularities in the wood. At the decks, these spaces were left open; inside, they have been filled with pine strips. All of the rooms are in units or in multiples of the 8 ft x 8 ft roof section. The living room (facing page, bottom) is made up of ten such umbrella sections, taking up one entire side of the house. A stone fireplace, originally intended for one end wall, was not installed, since its heaviness was felt to be out of character with the light umbrella structure. Instead, the room is heated by a cast-iron stove, which required no extra foundation support. At a future date, the architect intends to add a separate stone structure with fireplace, to provide an interior space of an entirely different and contrasting nature. A utility shed, using the umbrella vocabulary, will also be added.

4 The Tidewater House, South Norwalk, Connecticut John MacL. Johansen, Architect

The architect has repeated a single form to compose this large house, which is located on Long Island Sound. Sturdy, buff-colored brick piers, laid out on a 12-ft module, define square bays that are otherwise walled in glass and wood siding. A flat roof, which is set back to the center line of the piers, gives the bays the appearance of cubes. These are the component forms of the building. Because of flooding during the hurricane season, the floor platform of the "Tidewater House" is set at 9 ft above mean high water; it is anchored to a rocky knoll at the garage but elevated over the lower ground at the other end. Although the layout of the piers is modular and almost symmetrical, the building is irregular in plan. Some of the bays are enclosed; others are devoted to open terraces and entryways. In several bays, the platform is cut away and the space used for planting. The irregularity of the plan is also extended vertically: the main living space has a higher ceiling, and a single bay on an upper level provides a crow's-nest study. The house has three zones, each with a separate entry: an area for the five children and nurse; the main living space and parents' suite; and a service area with room for a live-in cook. A spine 12-bays long provides a central circulation route. The piers are strong visual elements both outside and inside the house and are intended to give the effect of living in a pergola. After the house was finished, another bay, enlarging the master bedroom, was added, as can be seen in the photo on the facing page.



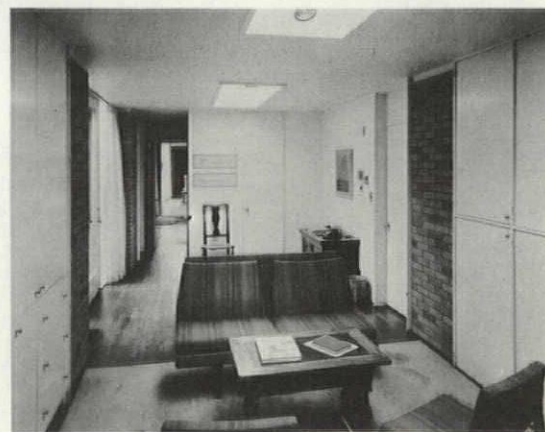
STRUCTURE: brick-faced concrete piers/ on 12 ft module. **Floors:** floor platform elevated; wood joists/plywood fascia. **Walls:** glass, wood siding. **Roof:** wood joists/plywood fascia; steel beams over living room; built-up roofing. **Sliding glass doors:** Arcadia. **Windows:** Hope's. **LIVING ROOM:** Carpet: white wool. **Sofa upholstery:** pale yellow; floral print/blue, moss, mustard. **Side chairs:** walnut bases/Jens Risom; striped upholstery/golds, yellows. **Draperies:** white. **Lighting:** downlight cans/white painted/Harry Gitlin. **ASSOCIATE:** Landscape Architect: James Fanning. **PHOTOS:** Norman R. C. McGrath; color, and photo below, Robert Stahman.

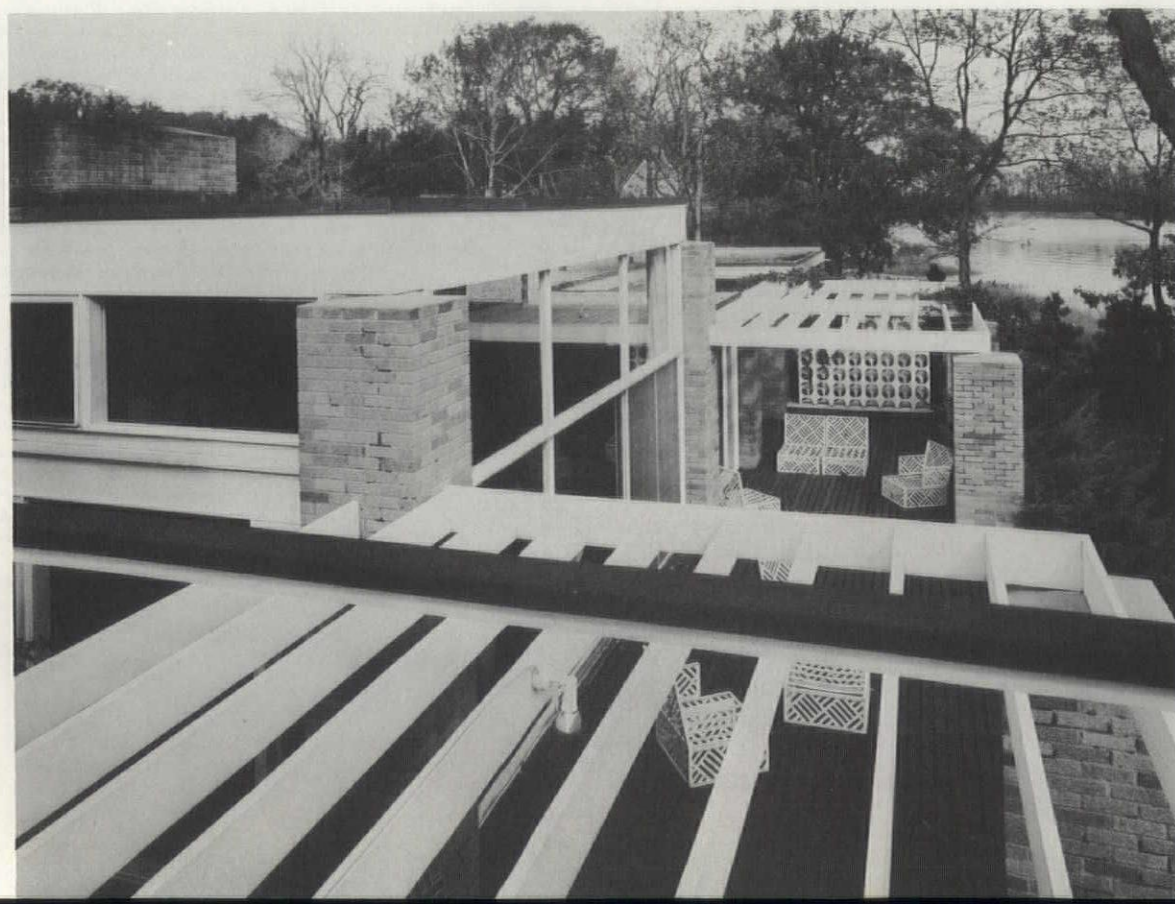
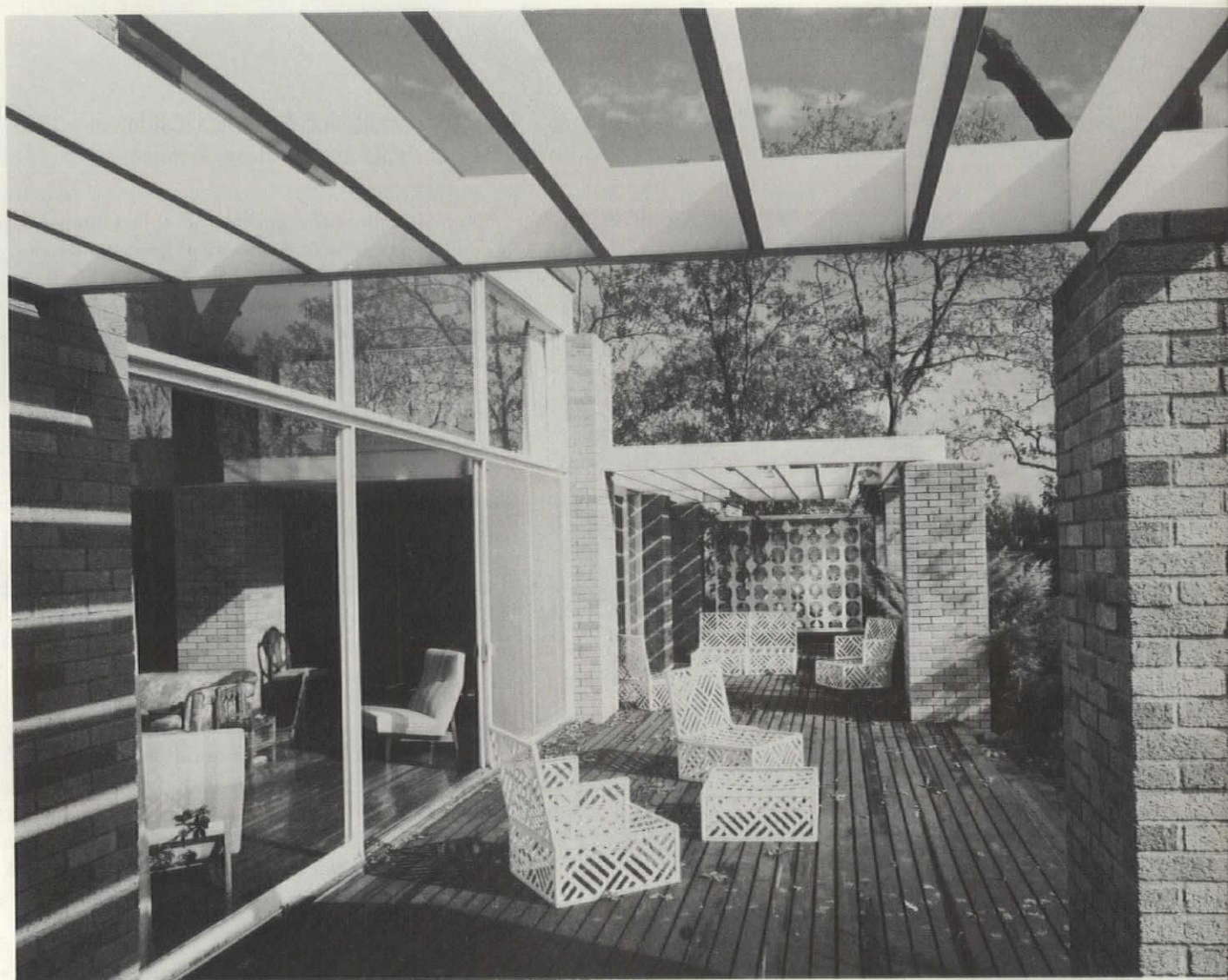




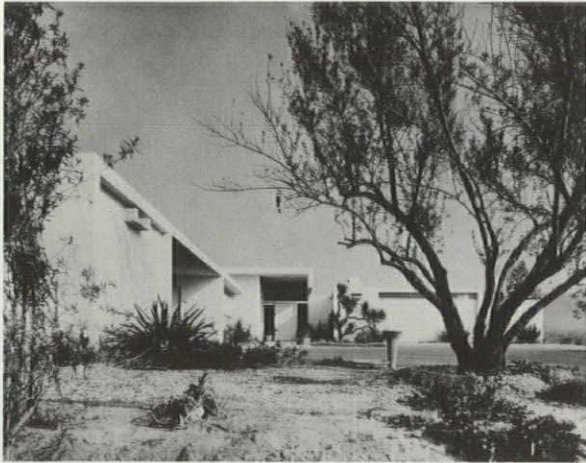


On the interior, the piers are visually strongest where bays are combined to provide flowing spaces. The children's living room (below) shows the use of two adjoining bays as a single room. The pergola effect is most apparent in the living-dining space (above and photos left). The living room is two bays square; the 12-ft ceiling is spanned with steel beams. Glass walls on the front and rear of the room and clerestory windows on the sides that adjoin the 8-ft-high bays allow splashes of sunlight in the room at all times of day. The column between living and dining room is left free standing. Outside, white wood trellises over terraces (facing page) state the pergola theme explicitly.



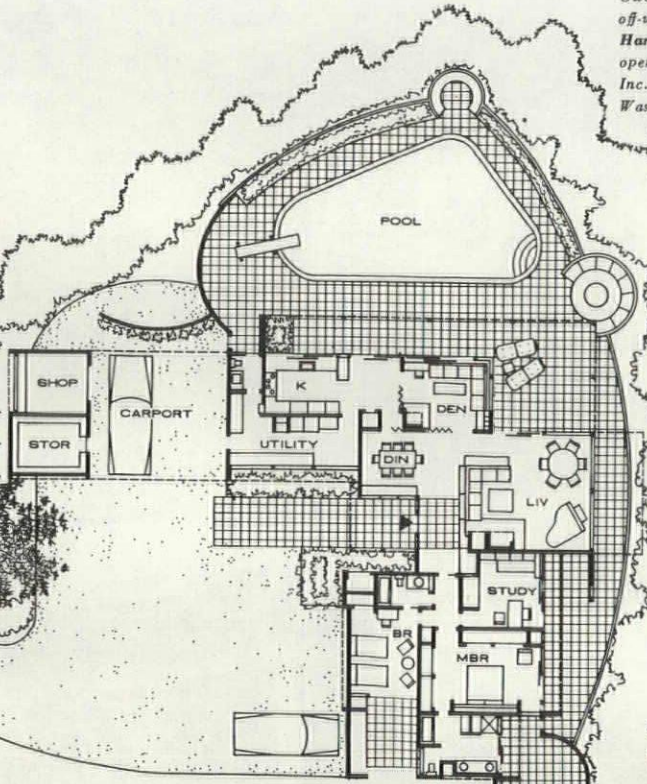


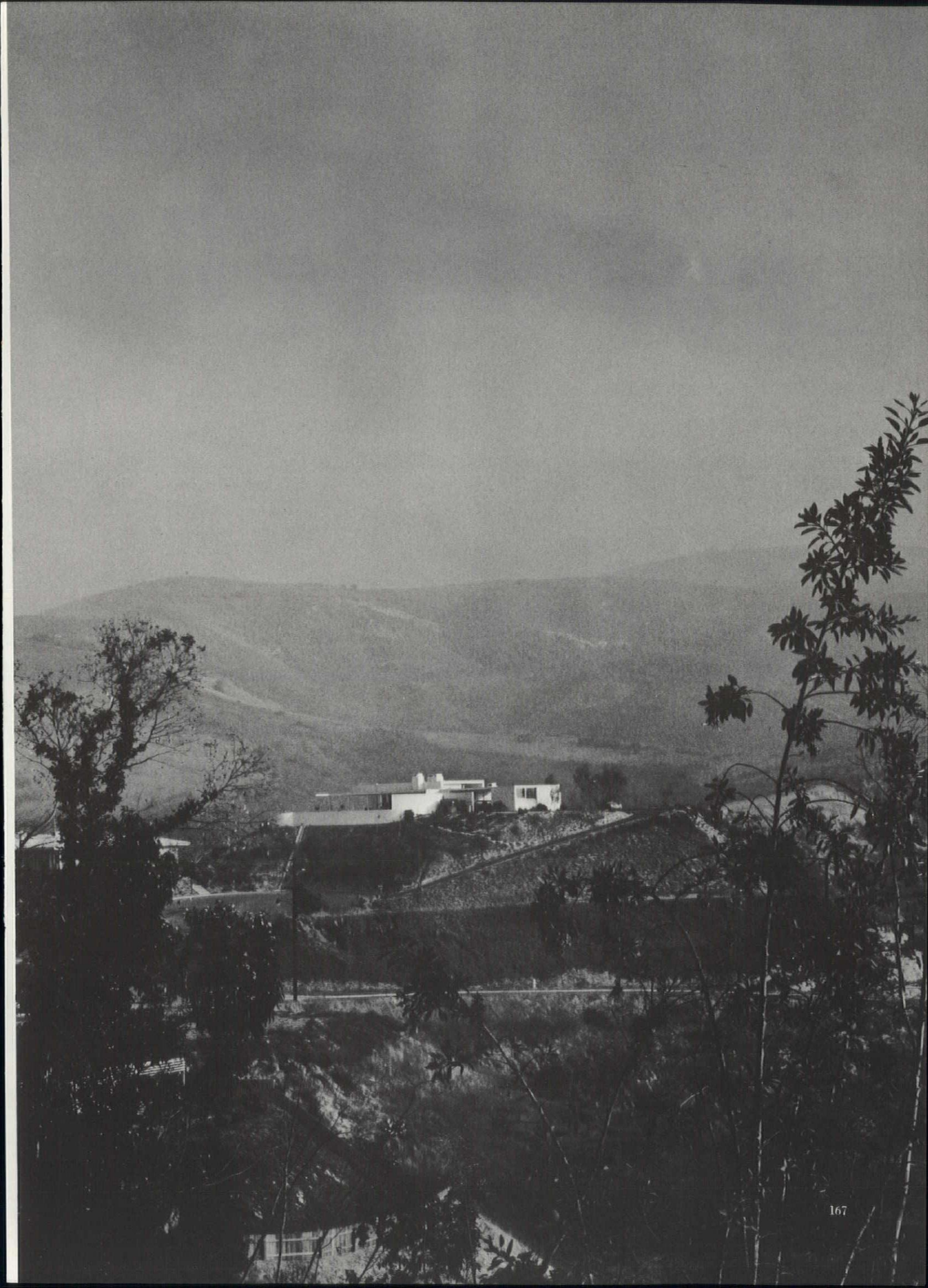
5 Residence, Santa Ana, California Paul Sterling Hoag, Architect

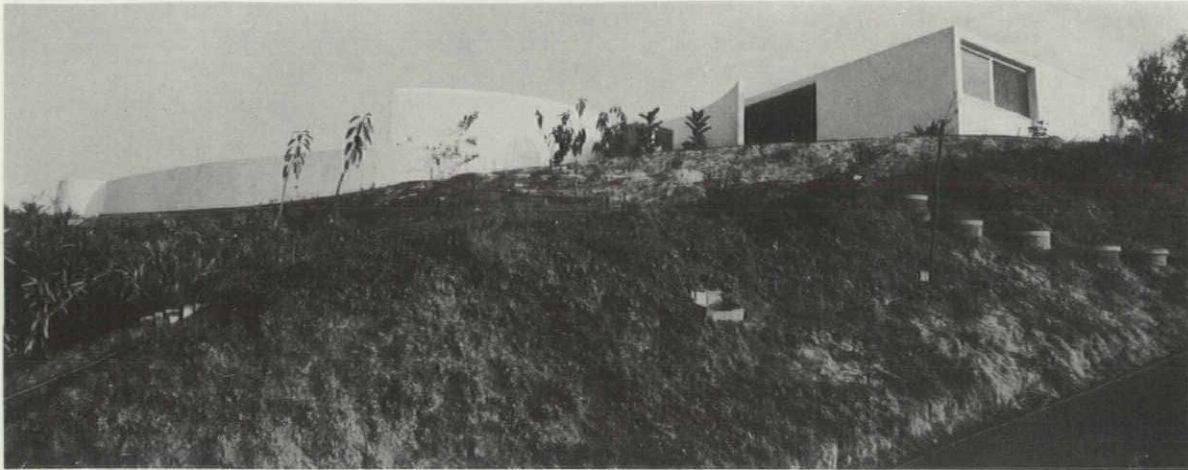


Counterpoint is the keynote of this hilltop house, which commands unobstructed views of immense reaches of rangeland. "Exposure to heat and 75 mph winds suggested a powerful and heavy structural aesthetic," the architect notes, yet it was important not to impair the views. Two basically rectangular wings perpendicular to one another are linked by a rectangular, free-flowing living-dining-entry space. This space is set forward on the terrace and walled with glass. A shear wall that provides lateral bracing to the southeast corner of the living room is placed outside so as not to obstruct the view; it is pierced by a rectangular opening. The higher-ceilinged living space is roofed by an inverted "U," the legs of which are box beams designed to support long overhangs. The "U" motif is repeated in chimney caps and rain spouts. Strip windows and louvered panels reiterate the rectangular theme. On the terrace side of the house, curved lines are introduced "as a frank counterpoint to the rectangularity." Hoag states that, in each house he designs, he seeks to express the unique personalities of the clients. "I am especially happy," he says, "when clients tell me they like few of my houses other than their own." In this case, the owner is a nuclear scientist who desires "order"; but both husband and wife have "the Chopin-lover's craving for the dramatic" and both are gregarious. Hoag feels that the contrapuntal use of forms expresses these traits.

STRUCTURE: Floors: reinforced concrete slab. Walls: wood frame/3/4" plywood on both sides of wood studs; nailed 2" o.c.; bolted to heavy steel anchors buried in extra heavy footings; stucco finish/off-white/Portland Cement. Roof: beams: wood; over living room/built-up beams/4 x 6 top and bottom chord members and double plywood webs; steel for special load conditions/Kaiser; surface: built-up roofing/Owens-Corning Fiberglas Co. Ceiling, Interior Walls: sand finished gypsum plaster/off-white. Doors: birch slab/Weldwood/U.S. Plywood/enamelled/off-white/DuPont. Hardware: lock sets/Schlage Lock Co.; concealed hinges/Soss Mfg. Co.; hold-openers/Glynn-Johnson Co. Windows: sliding aluminum/Marshall Aluminum Products, Inc.; glass/plate, sheet/Libbey-Owens-Ford; powder room skylight/dome/plexiglas/Wasco Products. **EQUIPMENT:** Heating: gas-fired forced air furnace/Day and Night Co. Air Conditioning: gas fired/Day and Night Co. **LIVING-DINING ROOM:** Carpet: beige/nylon/cut-pile. Lighting: downlights/pinhole, louvered, eyeball swivel/brushed aluminum/Marvin Mfg. Co.; Luxtrol dimmers/Superior Electric Co. Draperies: casement/off-white. Sideboard: walnut/white Formica top/chrome steel legs/architect-design/custom. Dining table, chairs: oil finished walnut/beige wool tweed/Danish. Banquette: walnut/architect-design; light brown upholstery. Coffee table: cork top/beige/birch legs/owner-designed and built. Game table: walnut. Chairs: leather backs/linen seats/beige; walnut legs. DEN: Bookcase cabinets: doors/Masonite/enamelled off-white. Coffee table: birch/natural/owner-design. **UTILITY ROOM:** Cabinets: natural birch; overhead doors/chalk blue, persimmon, white. Counters: white Formica. **MASTER BEDROOM:** Bed: plywood platform/walnut frame fastened to floor/architect-design/custom. Lighting batten: pine painted off-white/strip light/Lumiline. Drapery hardware: Kirsch. **KITCHEN:** Folding door: walnut/Pella/Rolscreen Co. Flooring: sheet vinyl/beige/Tessera/Armstrong Cork Co. Counters: white Formica. Dishwasher: Hotpoint. Refrigerator, freezer: Chambers. Range, oven: Thermador. Hood, fan: Trade-Wind. **TERRACE:** Planters: Architectural Pottery. **ASSOCIATE:** Structural Engineer: John E. Mackel. **PHOTOS** (including color): Julius Shulman; exceptions noted.







PHOTOS THIS AND FACING PAGE, EXCEPT AS NOTED: PAUL STERLING HOAG



PHOTO: JULIUS SHULMAN

On the entry side of the house (left), all the forms are rectangular. The continuous roof line of the perpendicular wings, interrupted only by the inverted "U" roofing the living space, is emphasized by narrow clerestory windows. Parts of the facade are set back so that the inverted "U" motif reads in the wall elevation also. The guest patio (two photos bottom left) is screened by a rectangular wall. The view from the driveway (above) reveals the counterpoint of the curved terrace walls: a high, curved wall sheltering the carport braces a curved windscreen for the pool. The garden off the master bath is enclosed by a high, circular wall (below), which is pierced by rectangular louvered panels.

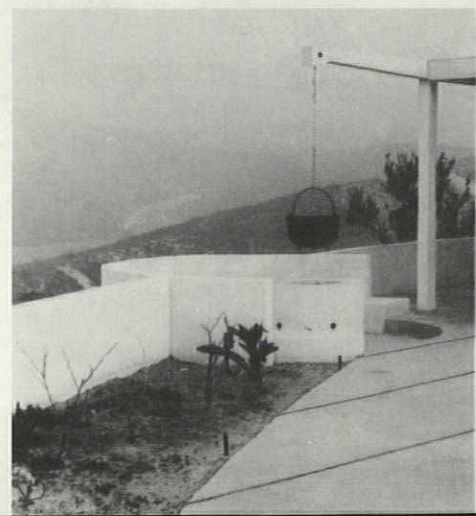
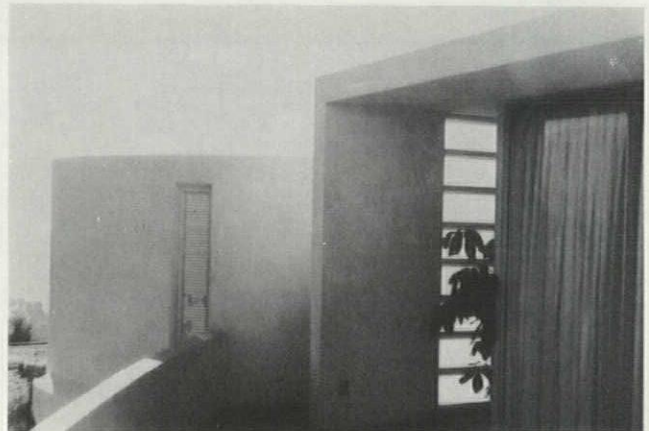




PHOTO: RICHARD FISH

From the southeast (above), the unusual combination of round and rectangular forms shows at its most eclectic. The rectangular bedroom wing, the pierced shear wall, and the projecting roof of the living room contrast markedly with the high circular enclosure of the garden off the master bath and with the low wall of the terrace. This wall describes a wide arc between the garden enclosure and the circular wall of a bench around a barbecue pit (right and below). There is another similar bench at the north end of the terrace. From these vantage points and from the "lanai," which is sheltered by a post and beam structure, the views over the rangeland are expansive. The gently rolling horizon reads as a freehand line drawn between the two juxtaposed geometric compositions.

PHOTO: JULIUS SHULMAN





The living-dining-entry space (this page) is designed to accommodate small conversation groups (left) and dinner parties (left, below) as well as larger gatherings for musical events, such as string quartet performances and the playing of taped concerts by musician friends (bottom). The stereo speakers have been set in the higher space provided by the box beams of the roof (bottom). The den (below), which overlooks the lanai and pool, can be closed off to form a separate, more intimate space. Most of the furnishings of the house are rectangular; the prominent pieces adjacent to the glass walls are curvilinear and recall the forms of the terrace wall.

PHOTO: RICHARD FISH

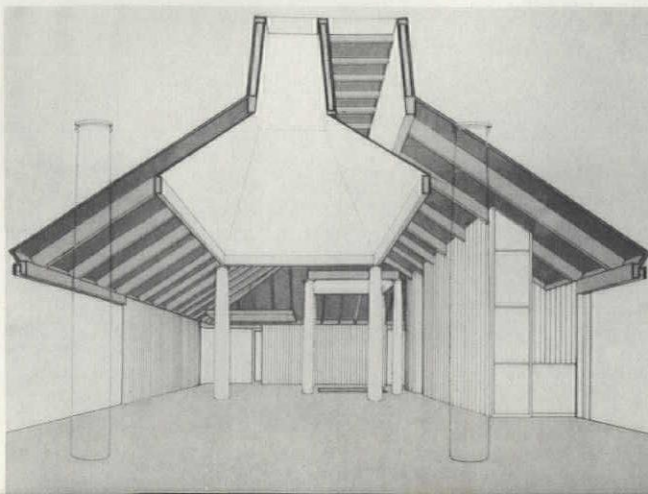


6 Residence, Orinda, California Charles W. Moore, Architect

The exterior of the architect's own house shows so simple and unassuming a combination of forms that one might wonder about discussing it in the context of "The Art of Combining Forms." Outside, there is little to suggest the surprises on the interior. Inside, the house is a single space, which has remarkable variety as well as unity of form. Within this space are two pyramidal elements, referred to as domes by the architect; each rests on four Tuscan columns, which were salvaged from a demolition. These solid fir columns, which also help to support the roof (see SELECTED DETAIL, p. 180), define two squares—a living area under the larger dome and a sunken tub under the smaller. Because these two squares are placed off center of the square floor plan, the smaller dome leans in toward the middle to reach the rectangular skylight that runs along the ridge; the larger dome leans to one end of the skylight. The domes, then, are asymmetrical restatements of the roof form. Around and between the domes, the space is open, extending to the dark-stained underside of the roof. Like inverted funnels, the white domes focus light onto the areas they define. "During the day," Moore observes, "patches of light move across the space, and one's sense of position around the columns and under the domes shifts in a way that continues to seem important." In the 1962 P/A Design Awards Program, in which this house won a Citation, one juror remarked that the interior was more akin to stage setting than to architecture. The spatial and lighting effects are, in fact, similar to stage techniques and reminiscent of those employed in baroque architecture, with which this house has much in common.



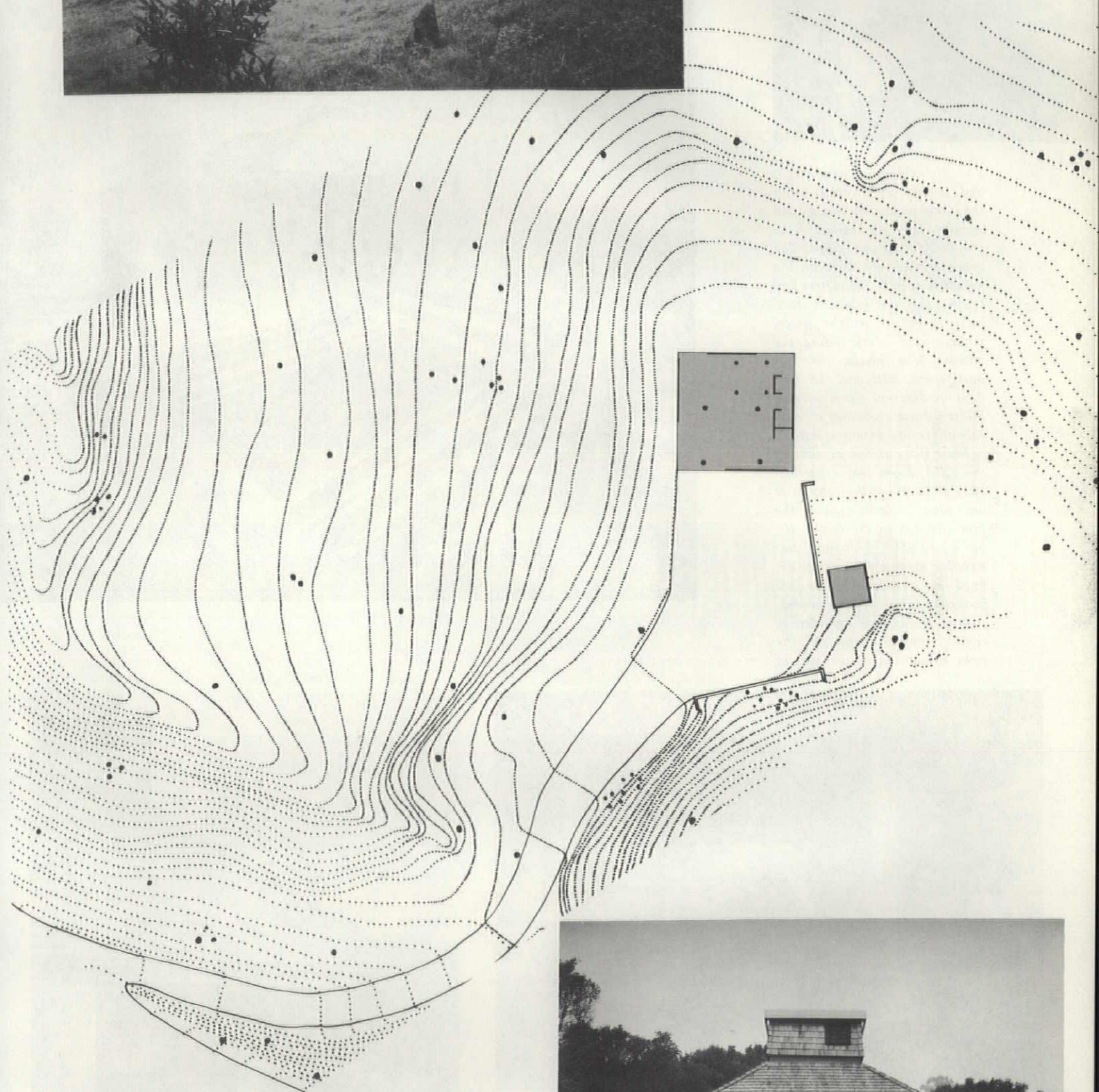
STRUCTURE: Floors: concrete/Kaiser; brick/gray-brown/Pt. Richmond. Walls: Exterior: plywood/Texture 1-11/DFPA; painted white. Interior: 1/2" D. F. plywood/painted/soft green, pale gold/Lucite/DuPont. Roof: Wood tuscan columns support 4 x 10 beams, which carry roof of 2 x 6 rafters and 1/4" plywood; longitudinal truss in upper roof portion holds rafters not in contact with 4 x 10 beams/Douglas Fir; surfacing/cedar shingles. Skylight: plexiglas sheets slightly bowed and caulked. Ceilings: plywood/dark brown stain; white domes; fascia/painted electric blue. Windows: sliding on barn-door tracks/clear glass/3/8"/Libbey-Owens-Ford. Doors: Exterior: same as windows; also solid plywood/painted light gray. Interior: hollow core/light gray. **EQUIPMENT:** Heating: overhead/electric/Wesix; portable/Thermador. Water heater: Westinghouse. Bathroom: American Standard. Kitchen: sink/stainless steel/Elkay; range top/stainless steel/O'Keeffe & Merritt. **CABINET-WORK:** 1/2" plywood/painted gold. **LIGHTING:** behind fascia/incandescent/10 w bulbs 1 ft apart; Luxo lamps. **FURNITURE FABRICS:** Sectional seating: teak/gray striped wool/Danish; goat skin throw. Rug: black-brown, white/Mexican. **Safari chairs:** wood, leather/natural/Kaare Klint design. **Dining chairs:** teak/black leather/Wegner design. **PHOTOS** (including color): Morley Baer.



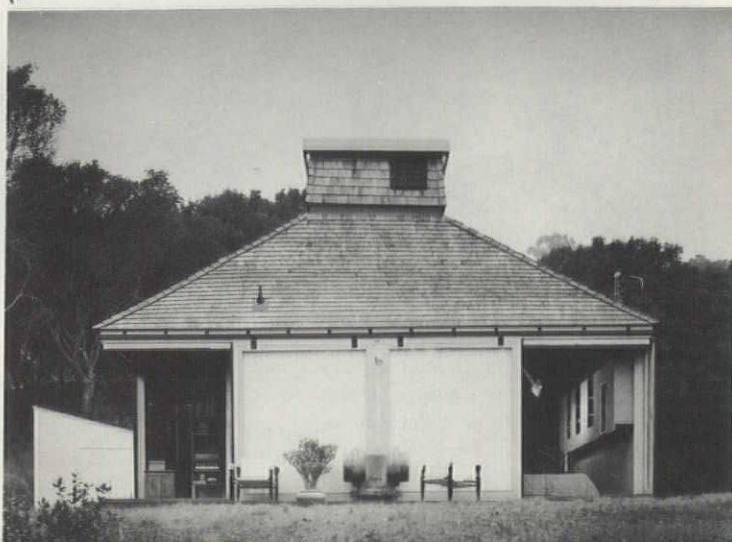




No two facades of this square house are identical, owing to the rectangular skylight and the disposition of walls and of solid and glass doors, which slide on barn door tracks. Yet the house is so foursquare that several molds for waterworks equipment, used as exterior sculptures, seem almost free form by contrast.



The roof of a small shed on the entrance side (facing page and above) vigorously opposes the pitch of the house roof adjacent (right). The site is a glen filled with ferns and oaks and bay trees.

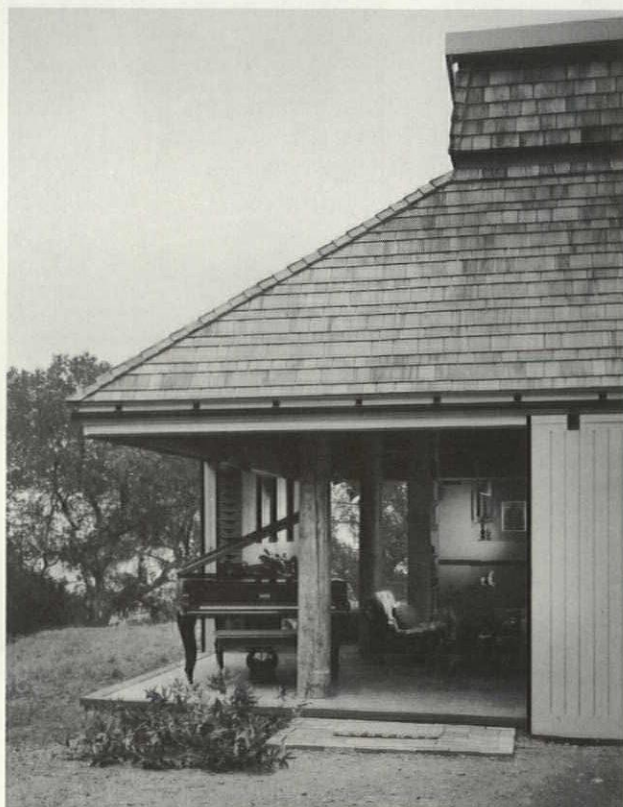


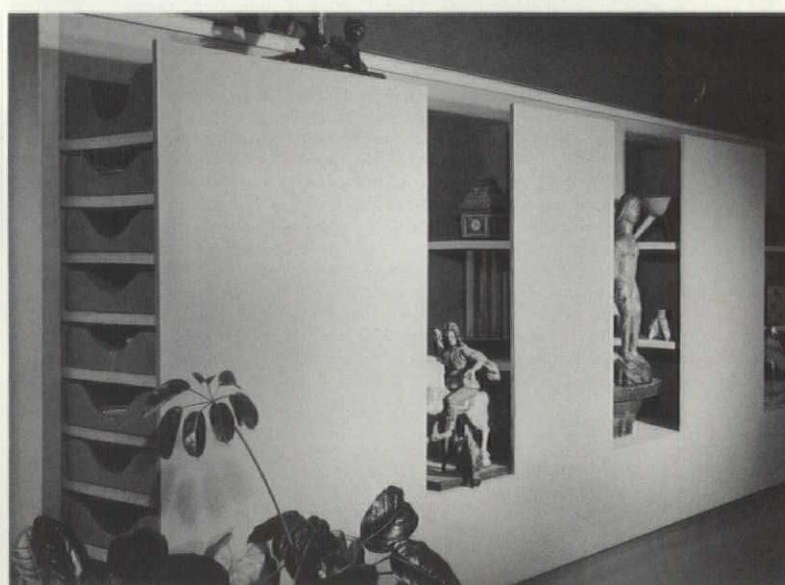
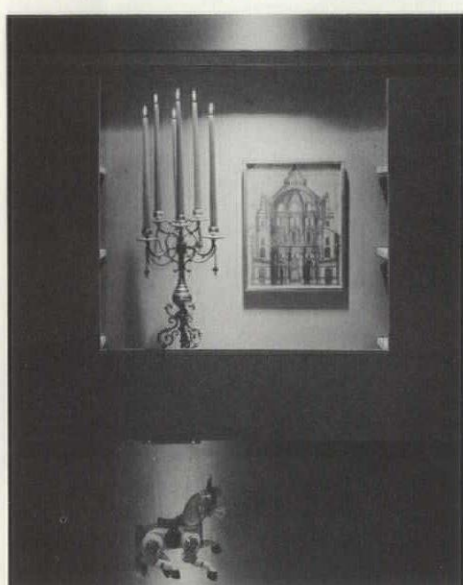


The living-dining area (right and below) is focused under the larger dome; the shower and sunken tub are beneath the smaller (facing page, top). The space around and between the domes is open to the rafters and to the skylight (above). Sunlight moves across the space, picking up the dark ceiling, the vibrant blue fascia, the soft putty-green walls, and the dark floor at different times of day. Sliding doors open half of each side of the house (below, right); because there are no overhangs, the out-of-doors seems particularly close. Since the interior is one open, volatile space, the first addition to the house will be a secluded bedroom; two sleeping areas are presently defined by a tall, ochre-painted bookcase (above). The impression of elegance is intended to come from the space and the light rather than from special



details or finish. The furnishings and the decorative details are highly picturesque. Mauve and magenta paint is used on the capitals of the columns. A wall for storage also provides shadow-box display niches (facing page, bottom photos).

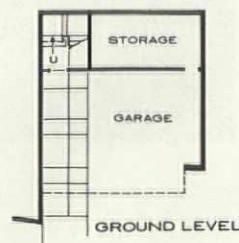
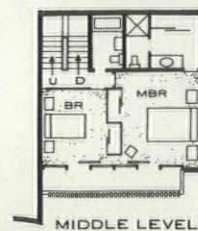
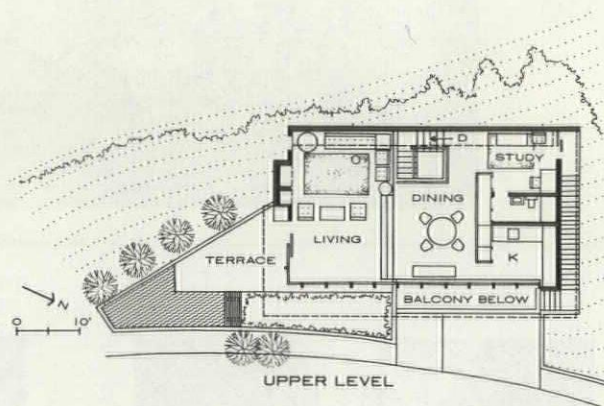
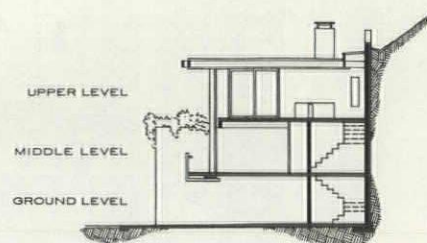
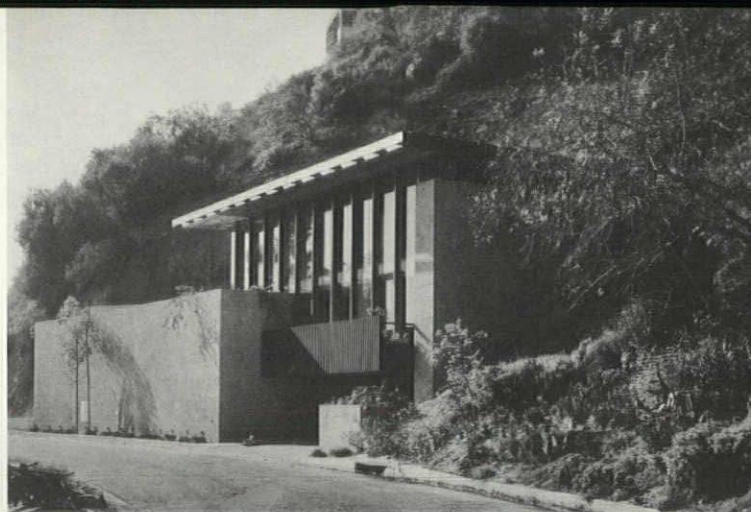




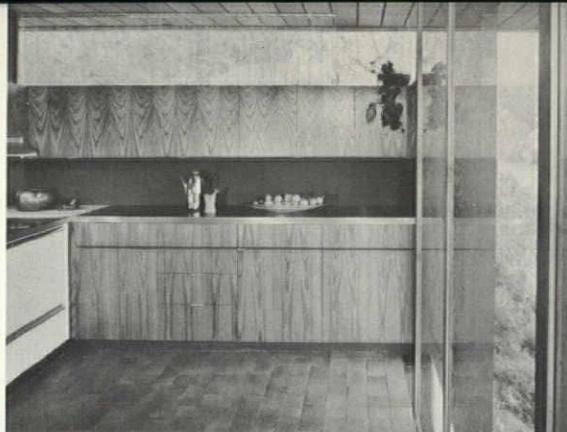
7 Residence, Los Angeles, California Carl Maston, Architect

A consideration of the forms in this design must go beyond the composition of the house to include the relation of the structure and its site. The property borders an access road and rises up a steep hillside, which looks out over Los Angeles. In designing the building, the architect rejected both site leveling and building on stilts, which are common practices in the vicinity, and resolved to maintain the quality of the terrain and to effect a relationship between the house and site that would not be artificial. The building is set into the hillside, occupying a space that was excavated. The structure is of concrete poured in forms of 1" x 6" horizontal boards. Its front and side walls were sandblasted to expose the aggregate; those walls not sandblasted were acid-stained off-white. The side walls and floor slabs buttress the rear wall, so that the entire structure serves, both functionally and visually, as a retaining wall to the slope. Landscaping was minimal, since ground covers and trees were not disturbed. Within this concept of the house as a retaining wall, the building is designed as a "townhouse" for a professional couple who also wanted the privacy of their terrace and pool. The forms of the house expresses a vertical circulation pattern, which is analogous to urban houses, in the three-story end over the garage. The upper level, which comprises a living-dining area, studio, and kitchen, is a horizontal space that opens onto a terrace, pool, and small garden. The inverted "L" form of the glass-and-wood house front is visually complemented by a rectangular concrete wall that retains the pool and terrace.

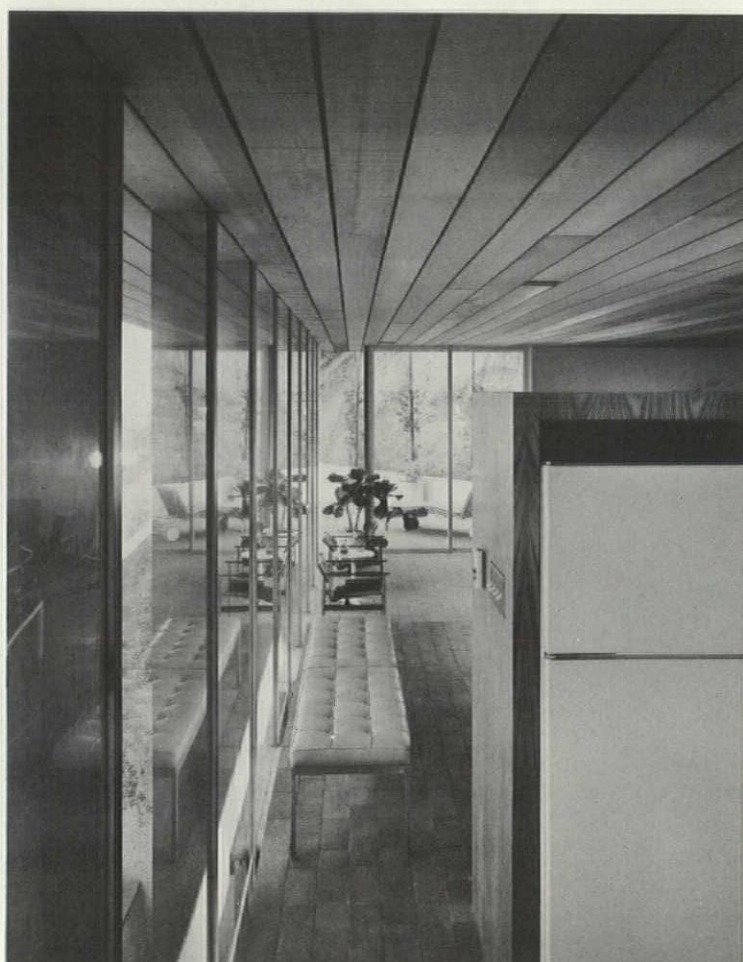
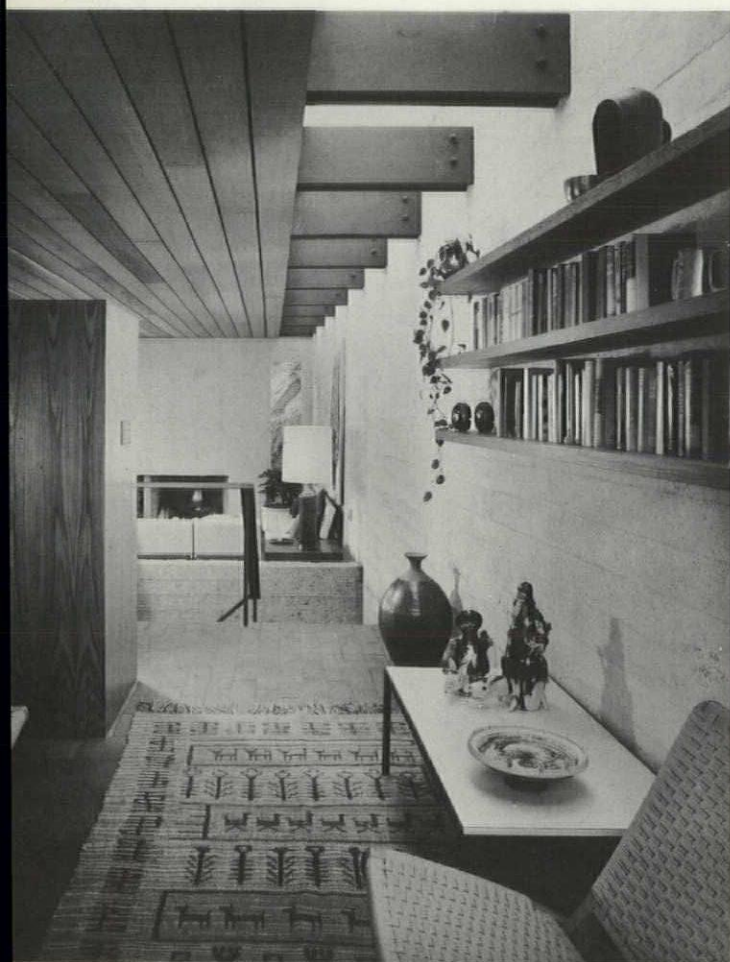
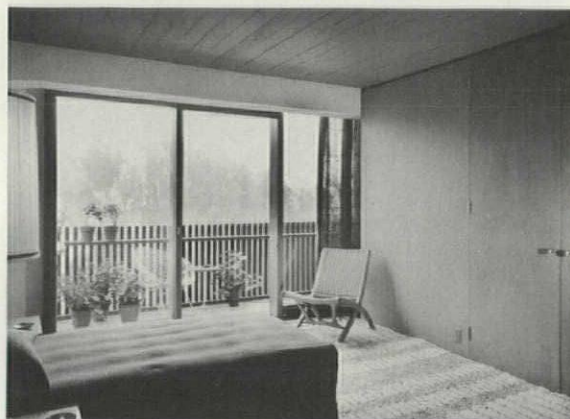
STRUCTURE: concrete/poured in place; walls and floor slabs buttress each other; exterior walls sandblasted to expose aggregate. **Roof:** paired 2 x 12 joists bolted to spacer; built-up roofing; projecting redwood fascia. **LIVING-DINING ROOM:** Floor: flint acid brick/dark brown/Gladding McBean/laid without mortar over electric radiant heating coils/General Electric. **Walls:** concrete/poured in forms of 1" x 6" horizontal boards/sandblasted, acid stained/white; redwood mullions/3/4" glass/crystal. **Doors:** sliding aluminum/Arcadia. **Ceiling:** redwood boards/1" x 8" resawn/spaced 1/2" apart; attached to 1/2" insulating board/black/Celotex; skylight/plastic/Chemo-Glas Co. **Lighting:** downlights/recessed/Century Lighting Co.; indirect strip in rear skylight/Prudential. **Carpet:** beige, black wool/Decorative Carpets Inc. **Sofas:** black frame/tufted white wool/Knoll Associates; pillows: off-white, moss green, bright red, deep blue. **Side chairs:** steel bases/blue wool upholstery/Knoll. **Side table:** chrome steel trestle base/glass top/Knoll. **Armchairs:** steel/natural leather/black leather/Knoll. **Planters:** Architectural Pottery. **Dining table:** white pedestal/white cremo marble/Knoll. **Dining chairs:** white/dark yellow upholstery/Knoll. **Bench:** chrome steel/natural calfskin/tufted/Knoll. **Storage wall/Partition:** teak plywood/U.S. Plywood. **STUDIO:** Rug: ochre, black wool/Decorative Carpets Inc. **Table:** black metal base/white Formica top/Knoll. **KITCHEN:** Window: glass louver/used horizontally/Louvre-Leader. **Cabinetwork:** teak plywood/U.S. Plywood/custom. **Counters, backsplash:** stainless steel. **Equipment:** General Electric. **MASTER BEDROOM:** Carpeting: bronze. **Ceiling:** concrete painted burnt orange. **Doors:** hollow core/Ostling. **Hardware:** lock sets/stainless steel/Schlage. **Cabinetwork:** teak plywood. **ASSOCIATES:** Interior Designers: Kennigott-Brossmer. **PHOTOS** (including color): Julius Shulman.



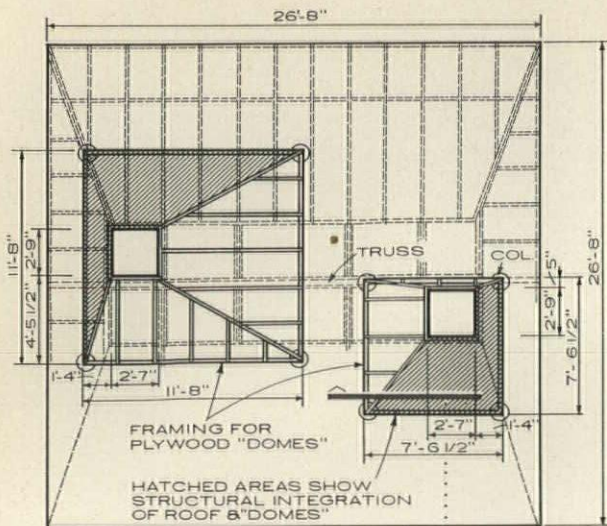




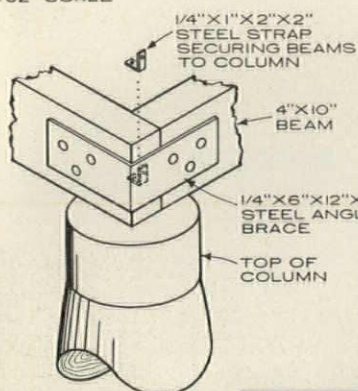
On the interior, the upper level is an open-plan space that extends from the living area, rises several steps to the dining area (above and facing page), and flows around a teak cabinet divider into a studio (below) and into the kitchen on the other side (above, right, and bottom, right). The divider is low enough so that the plane of the ceiling can be seen in entirety; redwood ceiling boards are spaced apart to reveal black insulation, which provides both decorative and acoustical benefits. A skylight along the rear wall (below) balances the daylight from the glass front wall. On the middle level, the master bedroom (right) and guest bedroom open onto a balcony.



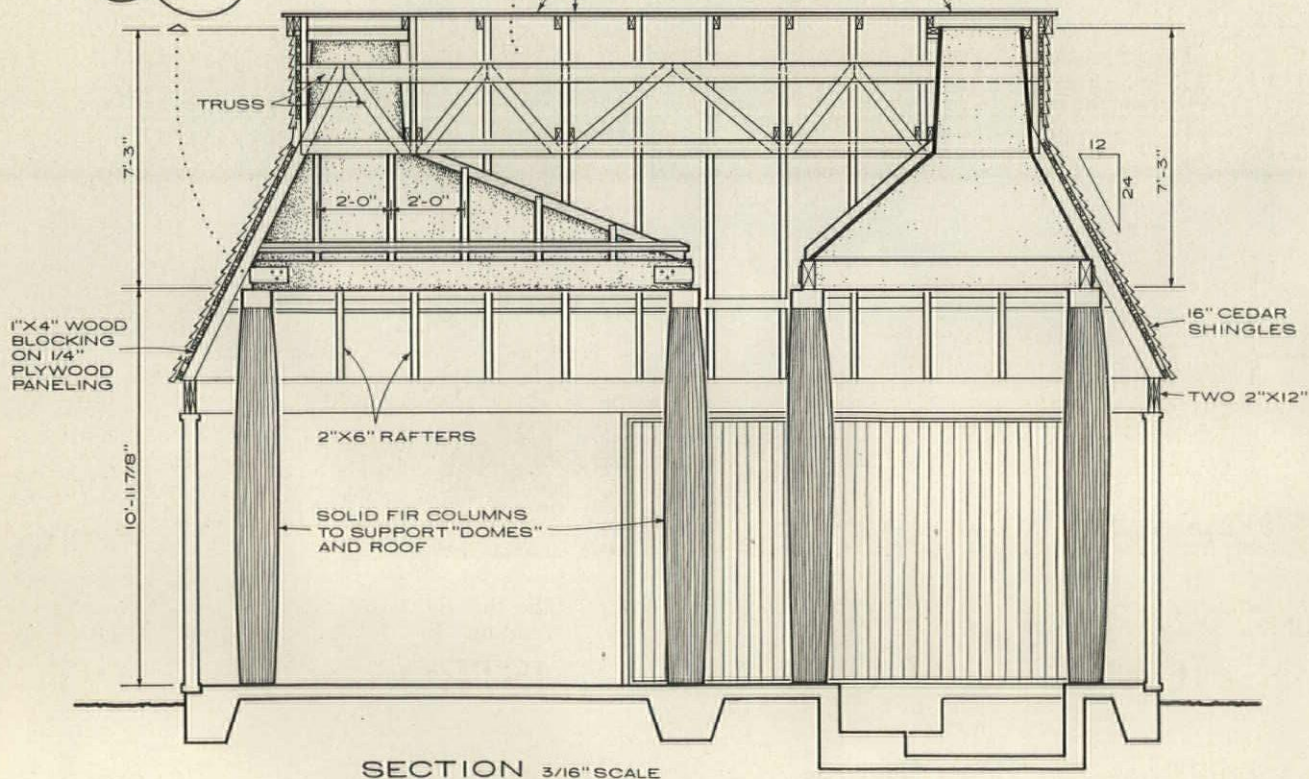
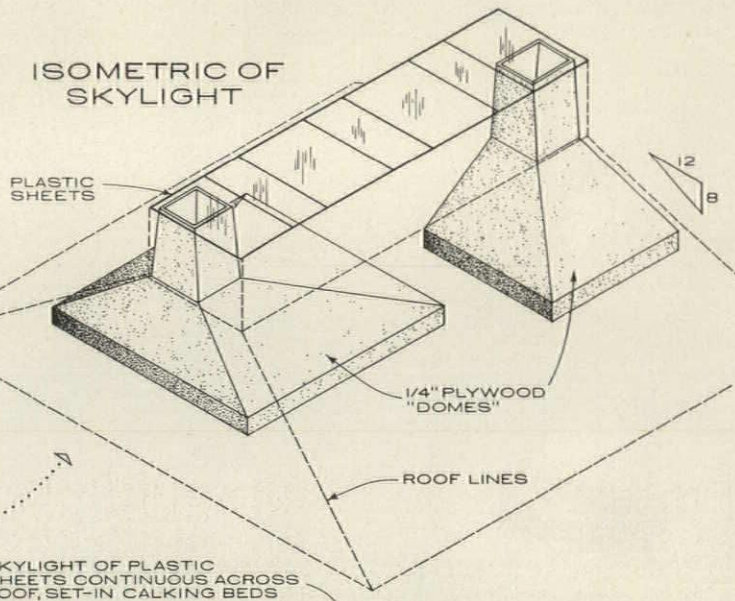




ROOF FRAMING PLAN
3/32" SCALE

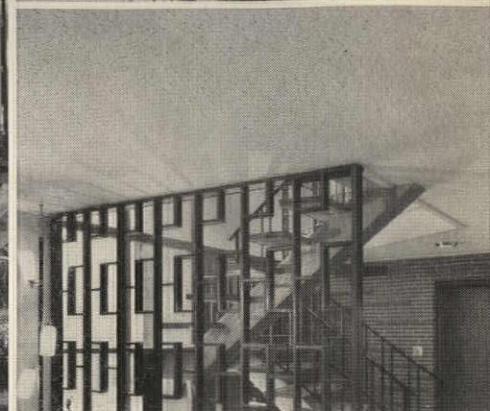


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BY JUDGE BERNARD TOMSON AND
NORMAN COPLAN

P/A's legal team discusses the importance of clearly providing in the construction contract that responsibility for ascertaining subsurface conditions shall be that of the contractor.

One of the more troublesome aspects of construction, which often engenders disputes or litigation, relates to subsurface conditions that differ from those anticipated. In a typical situation, boring data or other information does not adequately reflect the conditions that are actually found upon excavation, causing the contractor unexpected work and expense. The contractor then claims for extra compensation, the right to which is disputed. To avoid such disputes, the construction contract should clearly fix the responsibility for ascertaining subsurface conditions.

The United States Supreme Court has stated that, where a contractor undertakes to construct a project for a particular fee, "he will not be excused or become entitled to additional compensation because unforeseen difficulties are encountered." Thus, stated the Court, "one who undertakes to erect a structure upon a particular site assumes ordinarily the risk of subsidence of the soil. But if the contractor is bound to build according to plans and specifications prepared by the owner, the contractor will not be responsible for the consequences of defects in the plans and specifications" (*U.S. v. Spearin*, 248 U.S. 132).

Consequently, the judicial decisions relating to subsurface conditions fall generally into two types. In one type, subsurface information and data is considered as included in the plans and specifications; therefore, any difference between actual conditions and the information furnished is the responsibility of the owner. In the other type of case, it is found that the contractor was required to ascertain soil and subsurface conditions before bidding or entering into the

contract, and any difference between actual conditions and data secured is his responsibility. The difficulty, however, lies in interpreting the construction contract to determine into which class a particular fact situation falls.

For example, in one case (*Niewenhouse Company, Inc. v. The State of New York*, 248 App. Div., 658), the contractor had entered into an agreement to construct 25 buildings for the State of New York in accordance with plans and specifications prepared by the State. The contract provided that the contractor "shall be held to have visited the site prior to the submission of his proposal for the work, and to have made all necessary investigations and measurements, and to have appraised the conditions under which the work is to be executed." The contractor, however, had made no borings or tests to determine subsurface conditions. Upon commencing construction, the contractor discovered that at footing levels the soil was found to be water-bearing and soft, and unfit to support the structures, requiring ditching, draining, and drying of the soil before the foundations could be laid. Such a condition was unusual and unexpected. The Court concluded, however, that since the contractor saw fit to make his bid without resort to borings or other tests, he would be required to perform the unanticipated work without extra compensation.

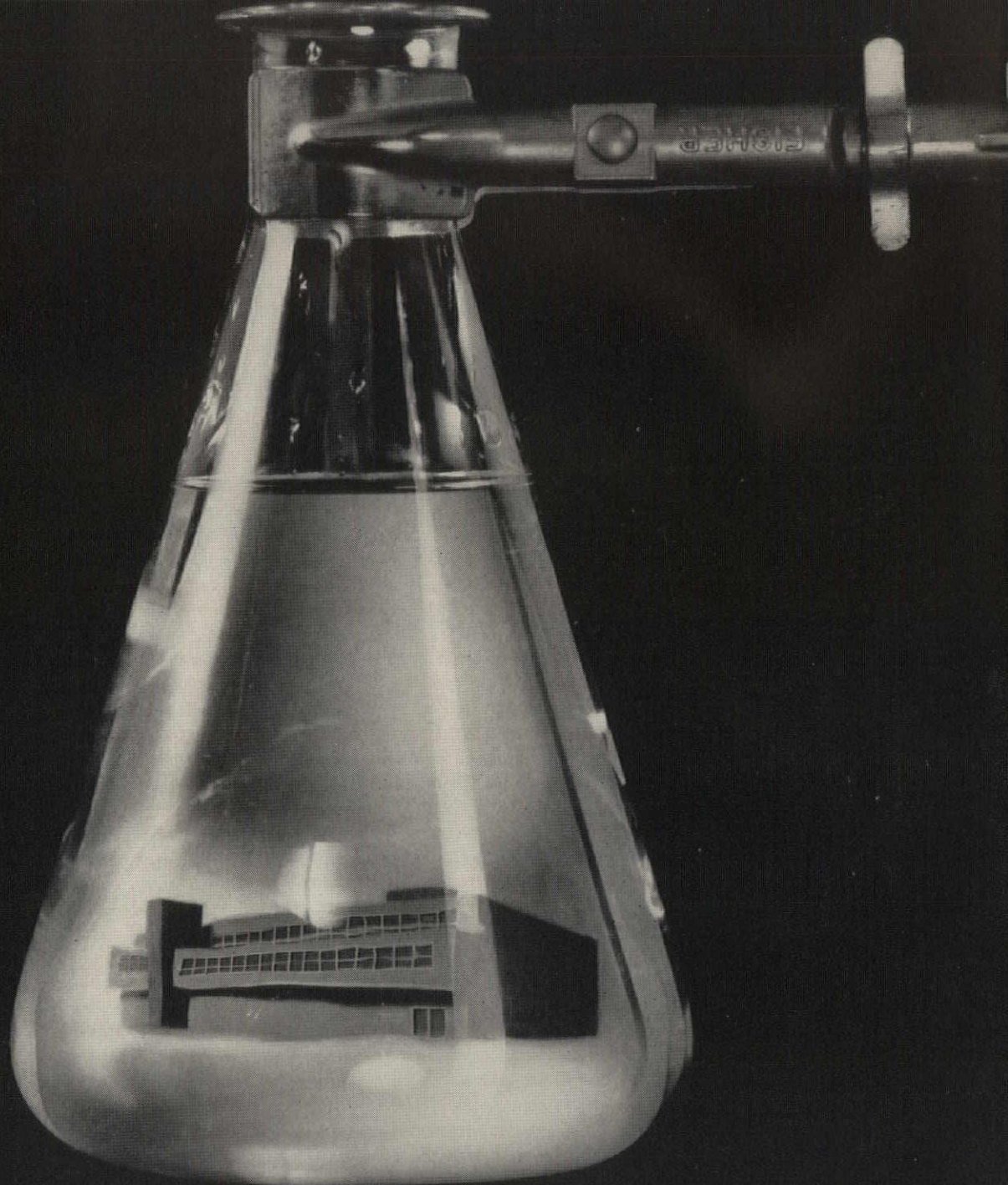
However, the opposite result was reached in another case involving the State of New York (*Gauldwell-Wingate Co. v. State of New York*, 276 N.Y. 365). In this case, the State had awarded two separate contracts, one for excavation and foundation work and one for the erection of the superstructure. The superstructure contractor could not commence his work until the foundation was complete. The excavating contractor was delayed because of unexpected subsurface conditions, and, as a consequence, the superstructure contractor made claim against the owner for extra compensation for delay which he was caused to sustain. The State defended against this claim on

Contract Provision for Subsurface Conditions

the ground that the superstructure contractor was required to make borings to discover the nature of the subsoil pursuant to a contractual provision which obligated the contractor to visit the site and to apprise himself of the "conditions under which the work of the contract is to be executed." The Court, however, ruled in favor of the contractor, holding that it would be unreasonable to require a contractor, whose work only commenced when the foundations were completed, to make soundings and borings to discover whether the plans and specifications of the owner regarding the foundation were accurate or not.

Similarly, in the United States Supreme Court decision referred to above, a contractor was deemed not responsible for extra work due to the unanticipated bursting of a sewer, under provisions of the construction contract requiring the contractor to examine the site, to check the plans, and to assume responsibility for the work until completion and acceptance. The Court held that the plans and specifications of the owner, which describe the correct dimensions and location of the sewer "imported a warranty that if the specifications were complied with, the sewer would be adequate. . . . The obligation to examine the site did not impose upon him the duty of determining, at his peril, whether the sewer specifically prescribed by the government would be adequate."

It would seem clear that a claim for extra compensation for unanticipated subsurface conditions can only be safely avoided by not only clearly providing in the construction contract that the responsibility for ascertaining subsurface conditions shall be that of the contractor, but also that information or data furnished or secured by the owner in this respect shall not be deemed part of the plans and specifications. Any boring data or any other information relating to the subsurface conditions furnished to the contractor should be expressly designated as not included in the construction contract itself.



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Objectives of CSI

BY HAROLD J. ROSEN

The challenge to the CSI to resolve contradictory claims of manufacturers and associations concerning materials and methods is discussed by the Chief Specifications Writer, Kelly & Gruzen, Architects-Engineers.

Since the Construction Specification Institute is holding its annual convention this month, the time is appropriate for it to reconsider some of the basic purposes involved in the founding of the organization. According to the CSI Certificate of Incorporation, one of the objectives of the organization is "to conduct studies and technical research, including the testing of supplies, materials, and products made or used, or capable of being made or used, in the construction and allied industries."

The challenge to CSI on this issue is underscored by the continually conflicting statements issued by manufacturers on the one hand and associations on the other concerning the relative quality and reliability of various materials and methods of construction. The individual architect or engineer certainly does not have either the resources or the necessary funds to perform tests on every new product or assembly of materials that would permit him to evaluate claims made by manufacturers' representatives. Furthermore, the architect, engineer, or specifications writer is at the mercy of the courts if he specifies materials or methods that do not perform satisfactorily: The courts have held that: (1) the architect or engineer is responsible for the proper selection and application of materials, as well as for adequate research; and (2) that reliance on advertising material of a manufacturer does not necessarily protect the architect.

The legal counsel of the New York Chapter of the AIA, Nathan Walker, has suggested that the CSI should: (1) test materials; (2) provide a storehouse of authoritative information on materials; and (3) retain a rotating panel of experts to consider the quality and suitability of materials. If such a system were adopted, the architect or engineer would be on safer ground, since his selection of materials would be based on the combined opinion of his colleagues. In court, his opinion could thus be reinforced by the Institute's panel of professional experts, who exercised their best judgment.

Earlier this year, a major manufacturer of building materials announced he would no longer issue bonds on built-up roofs employing coal-tar pitch as bitumen. The action was based on what the company reported was an unusually high incidence of repairs on coal-tar pitch roofs applied since 1950. This statement is contrary to the equally strong representations by the manufacturers of the built-up roofing.

In his book, *Materials for Architecture* (Reinhold) Caleb Hornbostel makes the following statement (page 506): "Coal-tar pitch can withstand sunlight, water, cold, and heat better than asphalt and is therefore used more extensively than asphalt for built-up roofs. . . . Since coal-tar products are the most stable of the bitumens, they are used for similar purposes as asphalt products but where greater durability and protection are desired."

In a situation such as this, when the architect or engineer is confronted with directly contradictory points of view, what is he to do? Surely there is scientific evidence available that could be analyzed by a panel of experts; or an

investigation could be made to settle this particular controversy. The architect or engineer cannot undertake such investigations on his own. The CSI, on the other hand, has the means (as stated in its Certificate of Incorporation) "to gather, compile, and analyze statistics and information relating to or useful in the conduct of such activities."

In March 1962, this column reported on the controversy between the Gypsum Association and the Metal Lath Association concerning the use of gypsum and metal lath. The Gypsum Association found that gypsum lath usually provides a higher degree of resistance to plaster cracking than does metal lath, particularly when strengths of base-coat plaster are in the lower range. The Metal Lath Association, on the other hand, contended that certain judgments and assumptions in the Gypsum Association's report were unwarranted, and concluded that the latter's findings contained unsupported, contradictory, and unsubstantiated statements.

What organization other than the CSI is in a position to be arbiter in such a case? What organization in the building industry is better qualified than CSI to initiate an impartial investigation of materials and methods of installation? Whose Certificate of Incorporation states that its purpose is "to engage in research and study in any and all problems and aspects of specifications writing; to establish and maintain the Institute as a clearing house of unbiased technical information on specifications for the fabrication and installation of construction materials and equipment"?

If CSI is to fulfill its primary role, so carefully stated by its founders in its Certificate of Incorporation, then it must take a stand.



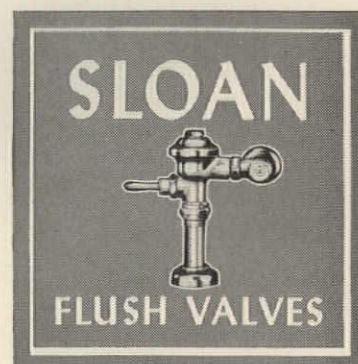
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Lead Wall Reduces Noise

BY WILLIAM J. MCGUINNESS

Effectiveness of using lead in constructing partitions to reduce disturbing sounds between offices in modern buildings is discussed by the Chairman, Department of Structural Design, School of Architecture, Pratt Institute.

The Consolidated Mining and Smelting Company of Canada, Limited, (Cominco Metals), has made many interesting and effective uses of its metal products in its new head office. The new headquarters, which includes administrative area, general offices, and product display, occupies the top stories of the new building designed by Greenspoon, Freedlander & Dunn, and Skidmore, Owings & Merrill, Associated Architects, with interiors designed by Knoll International of Canada, Limited.

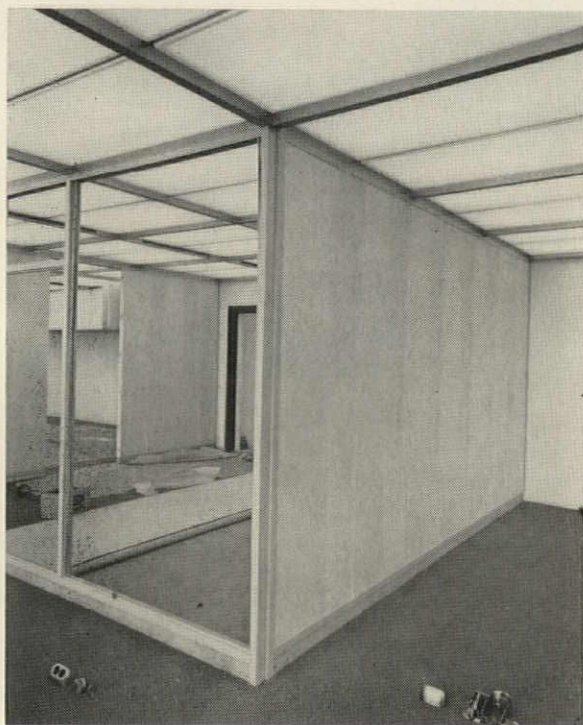
The office photograph shows four of the numerous uses of Cominco metal products: (1) Ceiling grid supporting the translucent lighting panels is made of a zinc alloy. (2) Floor outlets for

power and telephones consist of zinc die castings. (3) Framing members that receive the office partitions have a porcelain-enamel surface. The enamel contains 35 per cent lead oxide, which permits a lower firing temperature, thereby eliminating frame warping. (4) Office partition has a $\frac{1}{8}$ "-thick lead core.

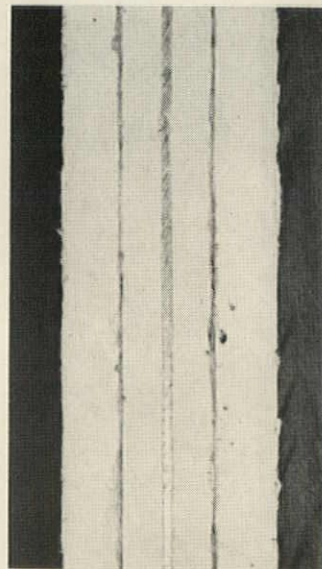
In modern buildings, office partitions should be thin, light, and easily rearranged. Most important, the partitions should be acoustically resistant to the transmission of sounds from one office to another. It is possible, of course, to raise the ambient sound intensity level of the quieter office so that overheard conversations are not intelligible. This, however, is sometimes annoying to the occupant of the quiet office. About two years ago, studies were made by the Lead Industries Association on the effectiveness of lead in combination with other materials to provide barriers against sounds that would be disturbing to people in moderately noisy offices. These reductions, approximately 33, 38,

and 44 db, were achieved by using $\frac{1}{8}$ ", $\frac{1}{8}$ ", and $\frac{1}{4}$ " lead cores respectively in constructing the walls.

The walls at Cominco provided a 38 to 40 db loss in the middle range of frequency using only a $\frac{1}{8}$ " sheet of lead, which previously had been credited with about 33 db. After calculations and tests had been made, the metal was adapted to the United States Gypsum Company's "Vaughn Wall." This wall (*shown*) consists of a lead core enclosed between two sets of double-gypsum layers. Trial studies were made with both $\frac{1}{8}$ " and $\frac{1}{8}$ " lead sheets. Since the $\frac{1}{8}$ " lead core improved the sound reduction by only 3 or 4 db, Cominco decided to use the lighter and more economical $\frac{1}{8}$ " core. It proved satisfactory for the enclosures of "quiet" offices, though not for "very quiet" offices. The sound-reducing qualities of the chosen partition are about equal to those of an 8" brick wall or of a wood-stud partition covered on both sides by metal lath and three coats of plaster.



PHOTOS: B & I PHOTOGRAPHY

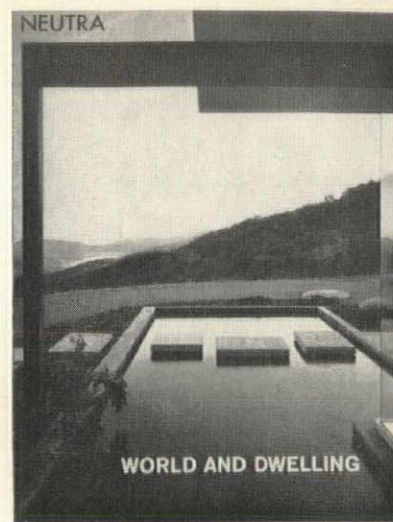
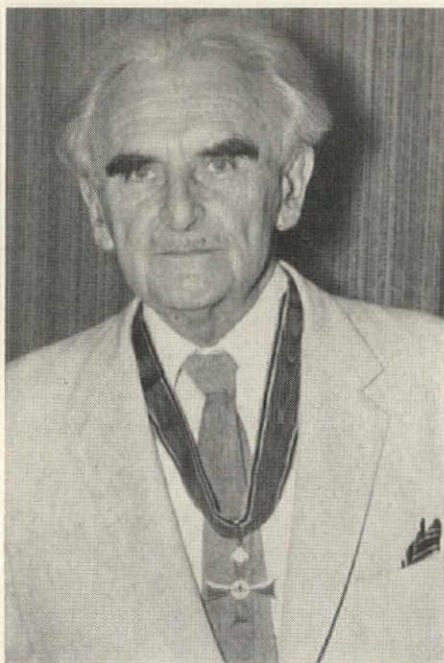


Office partition, $1\frac{1}{8}$ " thick provides a 38-to-40 decibel sound reduction. Core of $\frac{1}{8}$ " lead is flanked on each side by $\frac{7}{8}$ " and $\frac{3}{8}$ " layers of gypsum board.

Doors are to open...



RUSSWIN



Neutra: The Man and His Work

BY JEFFREY ELLIS ARONIN

LIFE AND SHAPE by Richard Neutra. Published by Appleton-Century-Crofts, 60 E. 42 St., New York 17, N.Y. (1962, 374 pp., illus. \$7.95).

WORLD AND DWELLING by Richard Neutra. Published by Universe Books, Inc., 381 Fourth Ave., New York 16, N.Y. (1962, 160 pp., illus. \$15). Reviewer is a New York architect and author.

At three score and ten years of age, Richard Neutra has done it again. We have from him lots of new houses, and lots of new writings. Richard Neutra, in fact, is almost as prolific in his writing as in his architecture. Two new books in English are amongst several others by or about him published this past year in diverse languages. One reveals his thoughts; the other his many buildings.

Of the two, *Life and Shape* is perhaps the more appealing. It shows what makes the man tick—his grasp of life and its full meaning to him. I liked it because in recent years I have gotten to know Neutra as he reacts in many environments—at his home, at Tom Creighton's home, and at my home; in taxis, in cars, and in subways; during our radio chats, during lectures, and during conventions.

How did life shape him: or, how did he shape life? This book is his

autobiography, and what a revealing one it is.

As I know Neutra, he never misses an opportunity. What a befitting inscription he has chosen for his prologue:

"Life is so short—you may miss the boat. Or: life is too short—why bother? To bother or not to bother, that is the question."

His Vienna childhood was a vivid one, with recollections so real that if he had shaped his youthful years to make good reading for us now, he could not have done better. He describes his boyish pranks of slipping "illicitly, without a ticket" into his parents' concert box. I could not help thinking that he derived similar satisfaction in riding with me in the New York subways, perhaps for nostalgia over his early days in America or perhaps to save a few dollars on his taxi fare; for he is a good businessman even to this day.

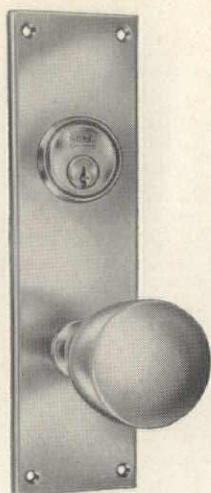
He also reveals his noble goals—that the architectural profession should have a missionary attitude, built on objective criteria, to change the status of the profession in society and in the eyes of the world. His own eyes, he says, are "unequal as to vision." A very vital part of his make-up, they produced a specific trait in his character. One was farsighted and one was good on detail, so his mind "similarly swung back and forth—oscil-

lated, so to speak, between an attempt at total comprehension, an integrated over-all view, and the minute perfectionism of near-sightedness." When the Neutras visited my parents' Long Island home last year, we drove them to Garden City to examine, at midnight, the progress of his new library. "Why," I asked, "do you study buildings at night?" He said, "Then I get total comprehension; I do not get lost in detail."

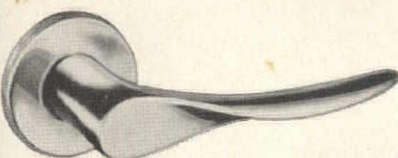
An architect, says Neutra, is a diagnostician who fits symptoms into a comprehensive picture—as a therapist, prognosticator, and consultant to his client on matters that may affect a whole lifetime. To be good, he must inspire confidence. To achieve this, he must have been an apprentice to a master. He has to experience situations himself.

Neutra himself has been in many unusual situations. In 1914, at the start of the war, cadet Neutra commanded at the Adriatic the only horse-drawn field gun—70 mm with 27 projectiles—with orders to defend the shore against the combined English-French Mediterranean fleet; the ships merely dropped anchor and ignored him. Another colorful war experience he was involved in occurred as he was being marched off to jail by the military police. A girl whom he did not know "threw herself, wailing and with tears streaming, right in front of the two soldiers who were escorting

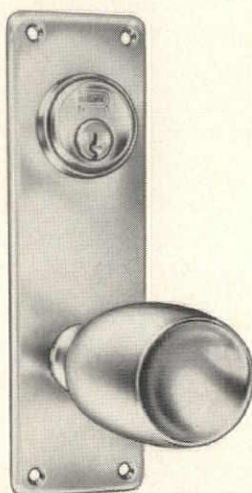
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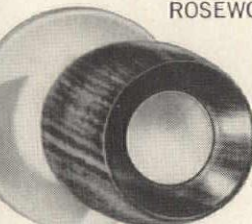
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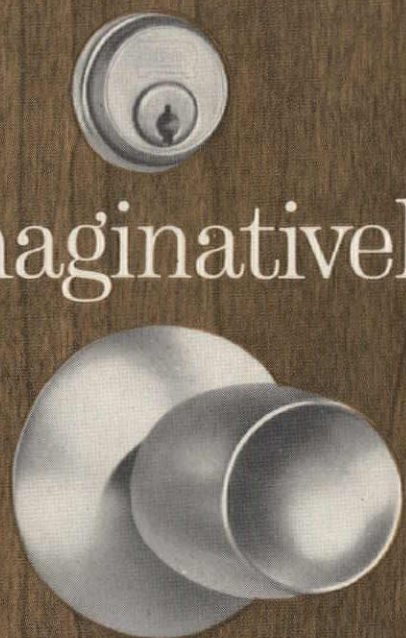


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me with fixed bayonets to the straw mats of the jail. . . . It was a heartrending scene, like one that might have taken place before the execution of her beloved."

His love affairs are all recorded in this book. When he met his charming Swiss wife, Dione, he had long hair. Her family "thought it strange that I had not had a haircut for a long while. Of course, they did not know that I was long of hair because short of cash."

Neutra undoubtedly has found much comfort in a happy marriage. His wife is always with him. Once, in Texas, when he was lecturing, she gave the students a companion course—"How to pick your wife to become a good architect," to which she added an advanced course—"How to train your wife after you have selected her."

Neutra was intimately associated with many of the great architects of this century, and he tells of his feelings about Eric Mendelsohn, his Berlin boss; Adolf Loos, in the slums of Manhattan; Frank Lloyd Wright (it "was just like suddenly seeing the unicorn or some other fairytale figure"); and Louis Sullivan at 63, a pauper.

These are all priceless impressions of the greats of the past. But I particularly like the one about Loos, who was, like Sullivan, in bad financial straits, and who received—after some time—the gratitude of a satisfied client in the following form:

"Others of my friends who have built their houses with fine architects, I should say twenty-five years ago, have written them off, amortized them, and many of them are now building a house in a new style. My own house is still good. My wife and I, and in fact all who love us, think it shows no date or loss in refreshing our souls and aiding our life, just as it did in the beginning.

"I believe I am saving a new architect's fee, and I think it is only fair to pay you for it after twenty-five years once again. I apologize because it is not much in current money, and thank you for having tried so hard to understand what is in us and what may best last around us."

Neutra writes: "Adolf Loos treasured the letter and the check—he never cashed it."

And then there are the stories of his own students—Harwell Hamilton Harris, Gregory Ain, Raphael Soriano, and Victor Gruen—and of the formation of his 1927 house, from which all his other designs evolved, "to service with contemporary means organic life-needs." Our space, says Neutra, "is always the interplay between our organic endowment and the stimulating circumstances surrounding us. Even if we have ceased to be conscious observers, we still richly respond. Clear consciousness is only a tiny part of our organic life."

World and Dwelling exemplifies the result of Neutra's vast thinking. It is a collection of 21 new houses—19 from California, one from Connecticut, and one from Tennessee—plus a panorama of the world around the human dwelling, identified as education, recreation, assembly, and "common experiencing." His chapters on being companionable and busy, and on the wider planning necessary for survival, say that man must occasionally fly away from his nest; other writings stress the importance of form and light as design factors.

The photographs in this book are excellent, with the one reservation that there are no people in them. Yet Neutra has told me that in his houses only the occupants change, and maybe it is just as well they are not shown; for his architecture has remained as fresh as it was when he first set foot on American soil 40 years ago. He is indeed at home with a home. "I am," says Neutra, "happy and grateful about wide vistas, insights opened, and the heartwarming experiences and thanks gained from building for individuals."



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Panorama of a Life's Work

THE DRAWINGS OF FRANK LLOYD WRIGHT by Arthur Drexler. Published for the Museum of Modern Art by Horizon Press, Inc., 156 Fifth Ave., New York 10, N. Y. (1962, 320 pp., illus. \$15)

To accompany a recent exhibition of the original drawings of Frank Lloyd Wright at the Museum of Modern Art, the director of its Department of Architecture and Design has written this book. The exciting exhibition showed the panorama

of the architect's work in a lifetime's span of beautiful drawings. Arthur Drexler's volume carries on this spirit faithfully.

The book contains many drawings not heretofore published, as well as many varied projects. Of particular interest are some schemes of buildings shown in their developing stages. As examples there are nine versions of the Guggenheim Museum, showing its evolution to the final design; several schemes for the St. Mark's-in-the-Bouwerie project de-

signed for New York City in 1929, later adapted for apartment houses in Chicago and Washington, and finally used as a concept for the Price Tower built in 1956 in Bartlesville, Oklahoma; also eight schemes for a planetarium. Some absorbing detail drawings of stained glass, sculpture, furniture, screens, etc., are reproduced—all done by the hand of the master. The book ends with three projects of the Taliesin Associated Architects.

The question of how these drawings evolved is often asked. Apprentices would lay out several perspectives under Wright's direction, and after making his choice, he would carry on from there. Wright spent huge amounts of time rendering his drawings, and this is borne out by the unvarying consistency of his exquisite pencil style. He was not at home with watercolor or tempera, and scorned the professional renderer.

There is a lack of dates on the plates which the reader may regret. For purposes of reproduction, many of the drawings had to be cropped, thereby losing both date and signature, the famous "FLW" in the red square. When the originals are viewed it may be noted that more than one date often appears. This confusion came about during the time that Henry-Russell Hitchcock was preparing his *In the Nature of Materials* in 1938 at Taliesin. FLW changed numerous dates while working with Hitchcock to suit his own recollection at the moment. Later, Hitchcock added dates that he considered more accurate, resulting in an interesting confusion.

In 1959, the finest book in full color on FLW was published by Horizon Press at \$35. As are most other hard-cover Wright books, this one is now out of print. Drexler's *The Drawings of Frank Lloyd Wright*, in black and white, surely takes next place, and if it takes the usual Wrightian course, will all too soon be unavailable.

EDGAR A. TAFEL
Architect
New York, N. Y.

Concerning the Urban Future

METROPOLIS 1985: NEW YORK METROPOLITAN REGION STUDY, VOLUME 9 by Raymond Vernon. Published by Harvard University Press, 79 Garden St., Cambridge 38, Mass. (1960, 252 pp. \$5)

THE FUTURE METROPOLIS edited by Kevin Lynch and Lloyd Rodwin. Published by George Braziller, Inc., 215 Park Ave. South, New York 3, N.Y. (1961, 253 pp. \$5)

THE FUTURE OF OUR CITIES by Robert A. Fitterman. Published by Doubleday &



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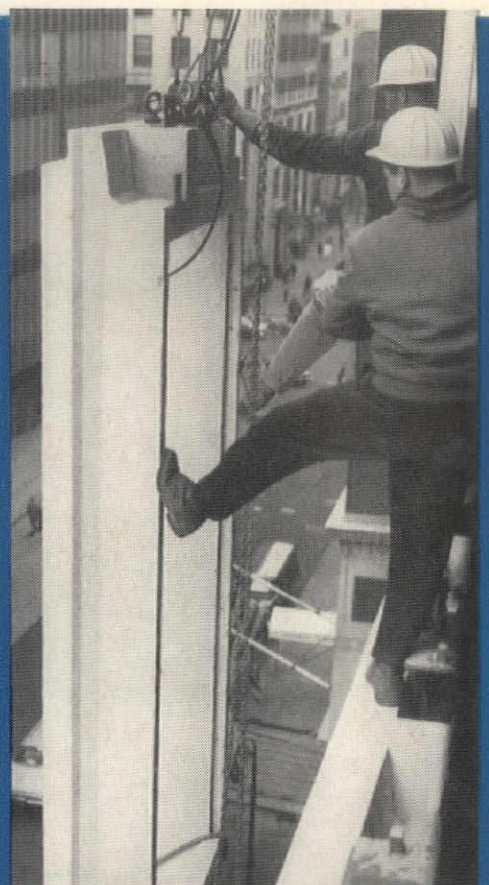
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Co., Inc., 575 Madison Ave., New York 22, N.Y. (1961, 360 pp., illus. \$4.95)

These three volumes have in common a concern with the urban future, but they differ widely in the types of concern they express. All three, however, represent interesting additions to the growing library of material on urban problems.

Metropolis 1985 is the culminating volume of the New York Metropolitan Region Study, a five-year survey and analysis of the future prospects of the nation's largest urban complex. The study was directed by Raymond Vernon for the Harvard Graduate School of Public Administration and the New York Regional Plan Association, and was financed largely by the Ford and Rockefeller Foundations.

The fantastic complexity of the New York region's past, present, and future are examined in this volume, which is a worthy climax to a major contribution to the study of cities. An over-all pattern of regional growth at the metropolitan periphery, with stability or decline in the central city, is the major theme among a wide variety of movement patterns. Based on Vernon's forecasts, the coming quarter-century will see changes to equal those of New York's dynamic past. As in previous volumes of the Study, there is something of a foredoomed quality to the projections, an attitude that many planners feel should be replaced by a more positive approach to guiding the coming changes, rather than merely acceding to them.

In the Winter 1961 issue of *Daedalus*, the book-size Journal of the American Academy of Arts and Sciences, MIT's Lloyd Rodwin and Kevin Lynch assembled a series of challenging articles on metropolitan change. The dozen articles are by sociologists, historians, planners, economists, and artists.

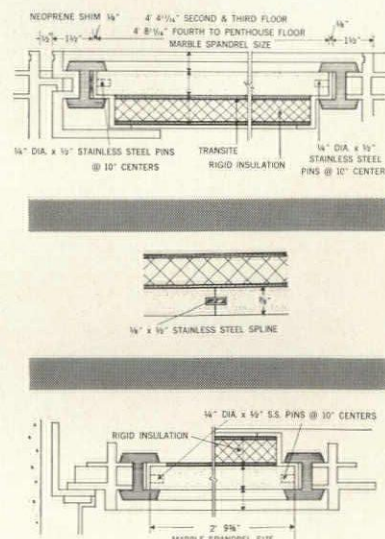
Especially interesting in *The Future Metropolis*—now published in book form by George Braziller, Inc.—is Aaron Fleisher's article on the influence of technology on urban form, in which he considers some of the technical requirements for a city of 50 million persons, a phenomenon which we may well see within 50 years. His basic conclusion: nothing that we can't handle with a bit of ingenuity. Oscar Handlin, writing on the changing social system of the modern city, questions seriously whether the striking changes that have occurred from the 19th to the 20th Century have, on balance, increased the capacity for creative action and free decisions. Both Kevin Lynch, examining the essential pattern



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batics to make our buildings look timely instead of timeless. Coventry Cathedral is an example of this kind of thinking in the design of churches; super-highway schemes for cities, an example in city planning; fall-out shelters for human survival, in national planning.

Modern Church Architecture is a picture-book with thoughtful introductory or descriptive essays written in some cases by the authors, in others by the clergy. Since the attempt was to show a limited number of buildings and yet illustrate a variety of Christian cults, the choice was difficult and not always successful. Forty buildings are shown, sixteen from foreign countries. There are seventeen examples of Catholic churches, of which only three are from the U.S. If Le Corbusier's La Tourette had been included (it surely should have been), the disproportion would have been greater. What a commentary on the low level of American Roman Catholic architecture.

Most of the photos shown are familiar to the student of religious architecture, but it is helpful to have them in a single volume.

PERCIVAL GOODMAN
Architect
New York, N.Y.

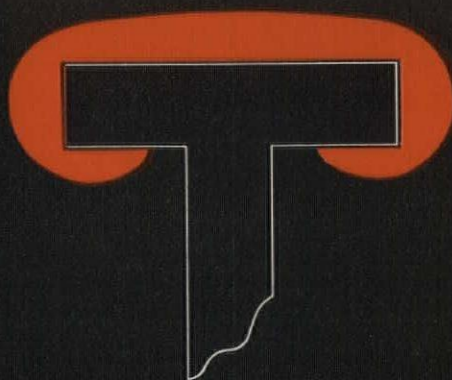
A Living Community

NEW YORK'S FIRST SUBURB: OLD BROOKLYN HEIGHTS (INCLUDING DETAILED ANALYSES OF 619 CENTURY-OLD HOUSES) by *Clay Lancaster*. Published by Charles E. Tuttle Co., Inc., Rutland, Vt. (1961, 183 pp., illus. \$6)

This remarkable neighborhood, which has retained its intimate 19th-Century quality in the very shadow of Wall Street's towers, is constantly threatened by ill-considered change. Private interests have tried to exploit its charm by swallowing up chunks of its limited area for apartment houses; public agencies have nibbled away at it for the parks, expressways, and municipal offices that politicians equate with progress.

In his preface to the book, the author states that he undertook the work "to make available to Heights dwellers and others reliable data on the older houses in this neighborhood, not merely to satisfy . . . curiosity . . . but with the hope of stimulating a deep-seated interest and regard for the standards of craftsmanship found in the old buildings that will be conducive to the preservation of them."

After an informative introductory discussion of the physical development of the area and the "Parade of Period Styles" (one of which is "Modern"), the



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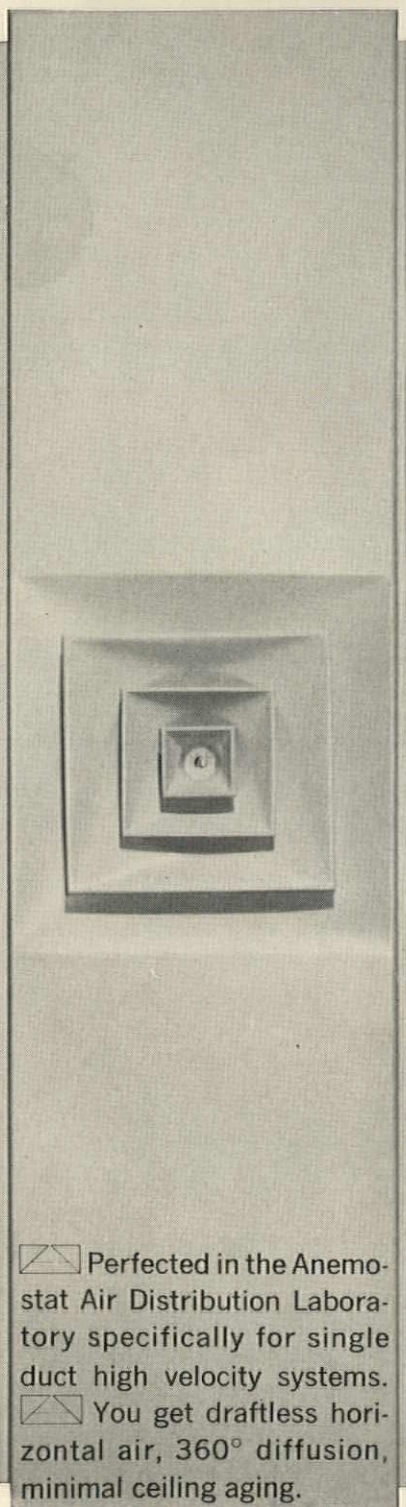
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book settles down to a brick-by-brick description of the 619 houses in the area known to have been built before the Civil War. The discussion has a value beyond the limited scope of the book as an exposition of the subtle variations attainable within the relatively fixed form of the townhouse. The illustrations are of excellent quality, but unfortunately cover only a small fraction of the material analyzed; the book demands on-the-spot observation to make it completely intelligible.

The exclusively historical viewpoint robs the book of much of its potential value. There is very little discussion of the Heights as a living community. Its unique character depends on more than the mere architectural excellence of its old houses. A rich interweaving of buildings of many eras, styles, and types distinguishes it from more homogeneous residential districts such as Beacon Hill in Boston. The integrity of this fabric depends to a large extent on trees, window-boxes, heavy drapery or café curtains, pedigreed dogs, old flowered hats, and tweed jackets.

This survey of "New York's First Suburb" could have been greatly enhanced by giving more attention to New York's Pleasantest Present-Day Urban Neighborhood.


J.M.D.

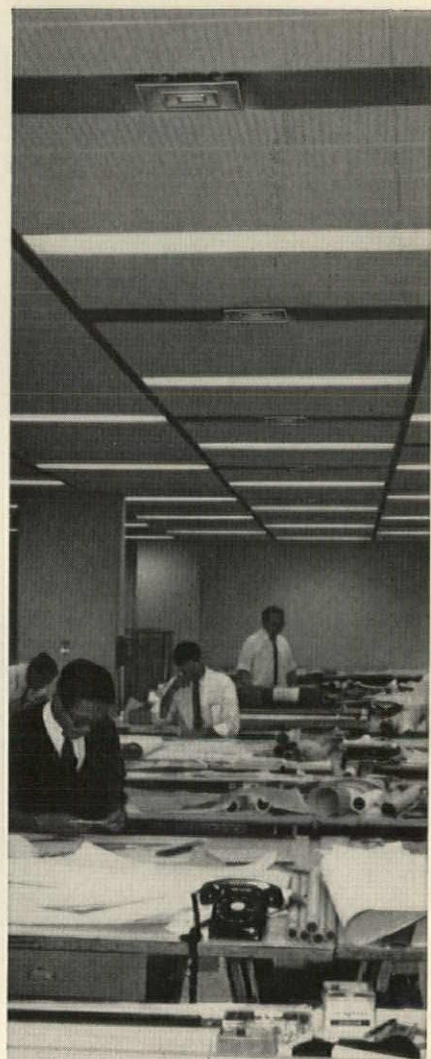
The Proper Purgative



SHAKER FURNITURE: THE CRAFTSMANSHIP OF AN AMERICAN COMMUNAL SECT, by Edward Deming Andrews and Faith Andrews. Photographs by William F. Winter. Published by Dover Publications, Inc., 180 Varick St., New York 14, N.Y. (1961, 133 pp., illus., \$2 paper-bound).


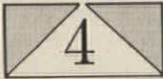
The continued availability of this definitive tract, which first appeared in 1937, is a fact that architects should be reminded of. Indeed, in this period of sometimes unprincipled design, many architects might well prescribe themselves the proper purgative of perusing this book once a month. The cultural background of the Shakers is analyzed, the essential character of the furniture discussed, the biographies of the craftsmen noted, and Shaker houses and shops are described. The text is a bit heavy, but the facts are there.

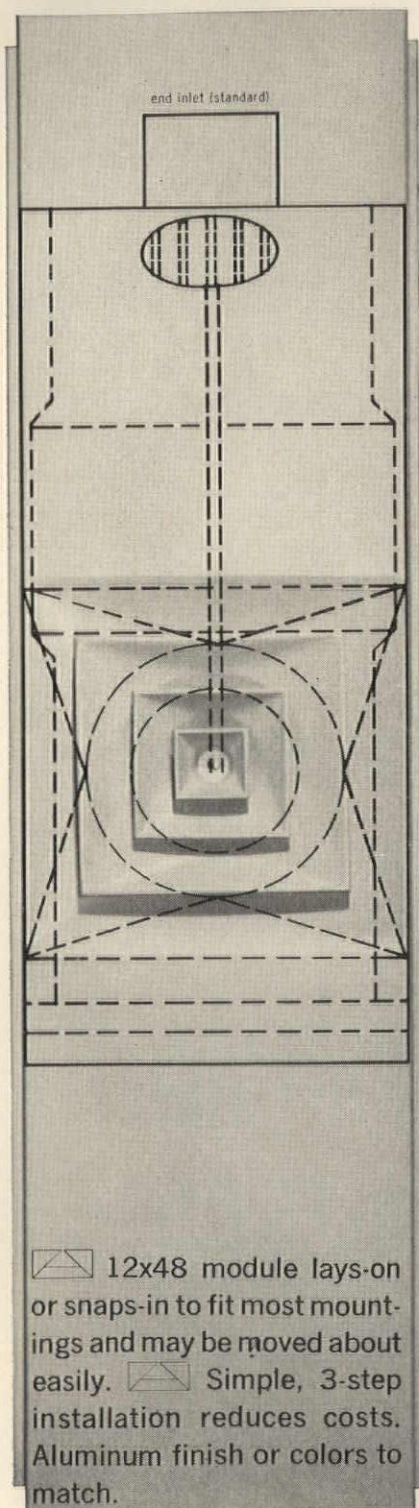
The Shaker sect, which flourished in the 19th Century, chiefly in New York and New England, believed in celibacy, community of goods, and separation from the world; their craftsmen, therefore, produced work of stylistic purity,

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uniformity, and unadorned simplicity. The plates show furniture from the extensive collection of the authors; the furniture is arranged in vignettes and settings in several refurbished rooms of a house built in 1806 in the Shaker community of New Lebanon, New York. The illustrations are fully described; appendices give further details of the chair and clock industry and information on how the Shakers made their paints and finishes. The authors quote a dictum of William Morris, a 19th-Century craftsman who, although not a Shaker, was similarly minded: "[By an] accumulation of useless things not only are beautiful things kept out, but the very sense of beauty is perpetually dulled and ground away!"

C.R.S.

Present State of Spec Writing

SPECIFICATIONS (SECOND EDITION) by H. Griffith Edwards. Published by D. Van Nostrand Co., Inc., 120 Alexander St., Princeton, N.J. (1961, 372 pp., illus. \$8)

Specifications writing is a task that many architects dread. Their reluctance to tackle this necessary adjunct of design is coupled with a paucity of specifications-writing courses in most schools of architecture.

In the area of textbooks, too, there are few competent and authoritative primers. Edwards' second edition, updating his previous endeavor of 1953, is a very useful tool in an otherwise uncharted sea.

This new edition has tried to keep pace with the ever-changing myriad of new materials being introduced on the market by incorporating the latest product innovations in paints, plastics, and other materials. Two chapters on site development are new — "Asphalt Paving" and "Lawns and Planting."

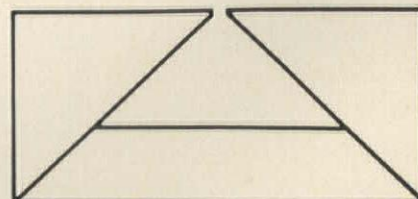
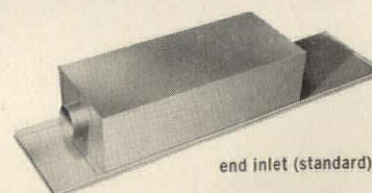
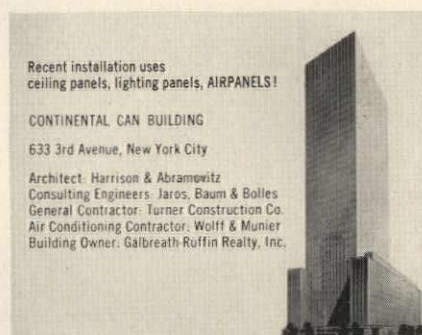
The text covering the technical trades is written generally around those construction trades that are normally encountered in non-fireproof structures.

Unfortunately, the approach and concept of texts on specifications writing is still tied to the elementary courses offered in schools of architecture. Until such time as serious consideration is given by architectural schools to an increased scope in the curriculum of specifications writing to prepare the student properly for the practical side of architecture, we cannot hope to see a comprehensive textbook on specifications writing.

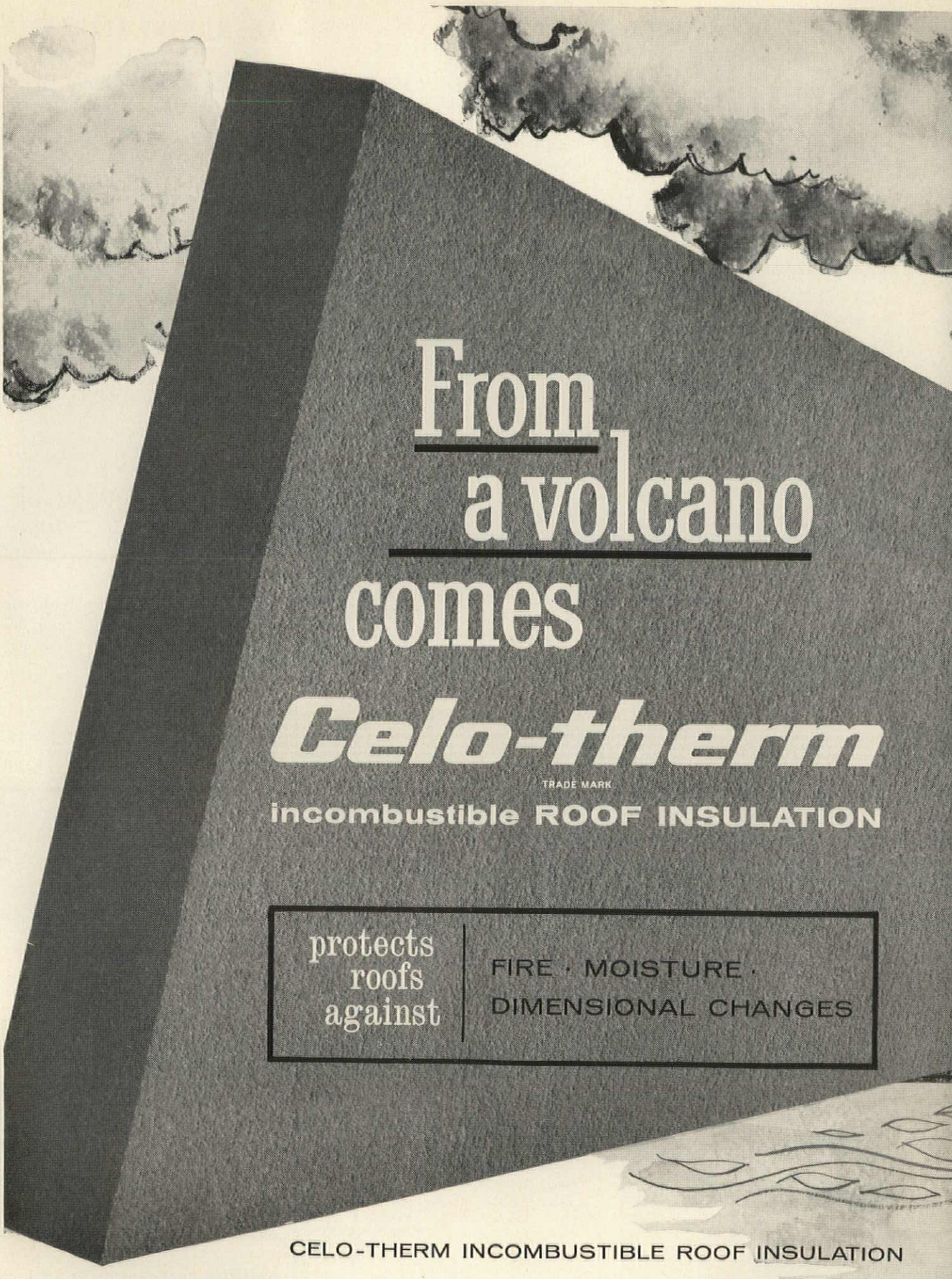
HAROLD J. ROSEN
 Chief Specifications Writer
 Kelly & Gruzen, Architects-Engineers
 New York, N.Y.

Continued on page 212

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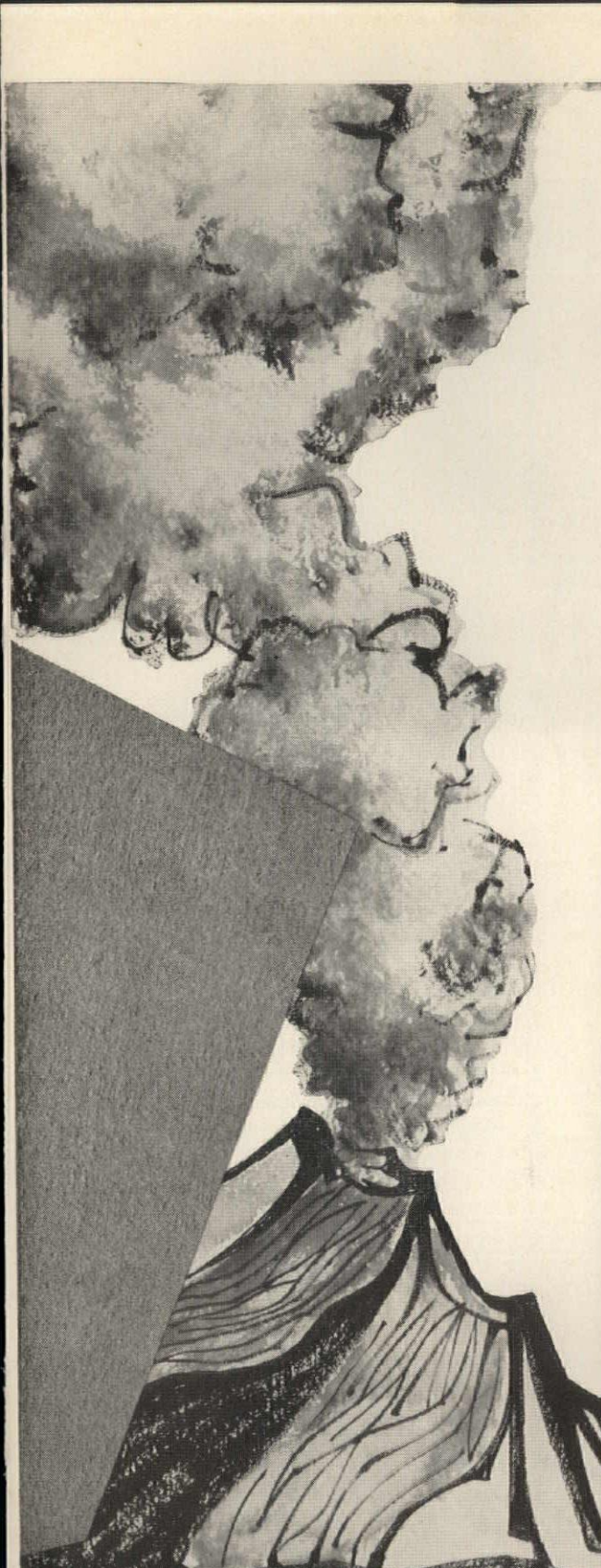
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Toward Responsible Design

ARCHITECTURAL LIGHTING GRAPHICS by John E. Flynn and Samuel M. Mills. Published by Reinhold Publishing Corp., 430 Park Ave., New York 22, N.Y. (1962, 222 pp., illus. \$16.50)

The architectural world should welcome any book written by those who believe that "the use of light is an inseparable part of the architectural conception," and who point out that "in a well-integrated space, he [the occupant] is not even aware of the lighting or the mechanics of light production. He is conscious only of the over-all architectural environment, and he judges the space in relation to the total needs of the activity he is performing."

Although most architects agree with these objectives, few are able to achieve them, and far too many completely abdicate their responsibility to engineers who have quite different objectives.

In *Architectural Lighting Graphics*, the authors, Flynn and Mills, architects and former associates at the General Electric lighting laboratories, have produced a book which they intend to be "a survey of practice and techniques in a form that will foster further development and imaginative use by the creative designer." The scope of the book is described in the introduction as follows:

"In order to facilitate the communication of ideas, and to provide the realistic appraisal of the varied factors involved, the material is organized into two parts. The first section is illustrated with photographs, sketches, and diagrams and is intended to provide an outline of the many facets of light and lighting design. The second section is more specific and is intended to provide detailed information to guide the designer in achieving specific design objectives. This latter material is organized in data sheet form."

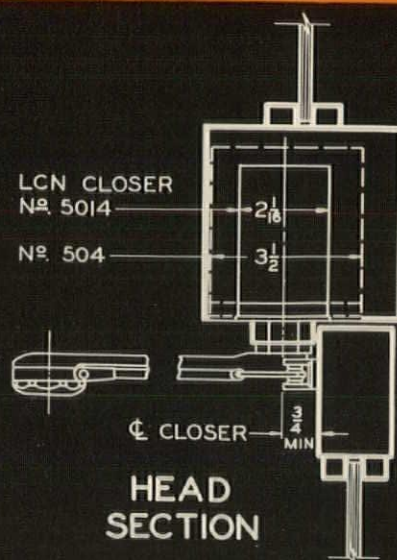
I found the second section to be the more valuable. The title, *Architectural Lighting Graphics*, seems appropriate, for this volume fills a long-felt need for a compilation of data on lighting materials (lamps, sockets, reflecting and diffusing materials, fixtures, etc.) and lighting systems.

All who participate in lighting design for buildings can benefit from this section. For those not involved in the final detailing and specifications, this consolidated data will replace the need for a shelfful of pamphlets and catalogs. Those creating the final design and specifications will find this book a good framework around which to organize additional data, analysis, and catalog material.

Some parts of the first section of the book are excellent, particularly those on color of light and exterior lighting. In my opinion, however, this section in total falls short of achieving the stated objectives. A careful reader will find, scattered throughout, various statements that touch on many aspects of the design problem. Unfortunately, however, the authors failed to make a concise and forceful statement or supply enough background data to enable designer and client to make their own professional judgments of illumination levels based on weighing the factors of task, brightness balance, reflected glare, daylight distribution, and technical feasibility in relation to other elements of a total environment, within the economics of each particular building.

In fact, the authors fall back on the suggestion that designers accept "published lighting standards . . . a

Continued on page 216



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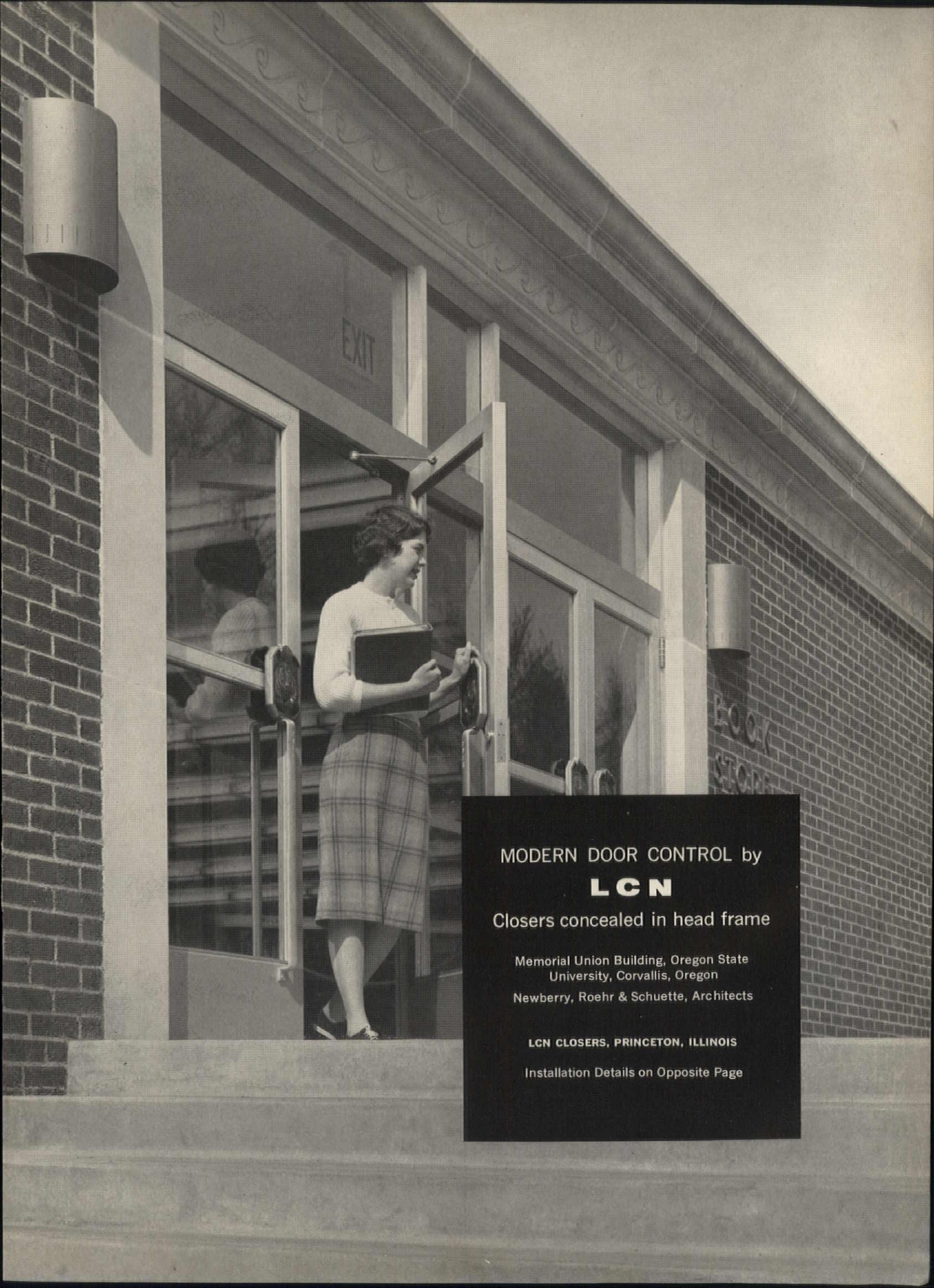
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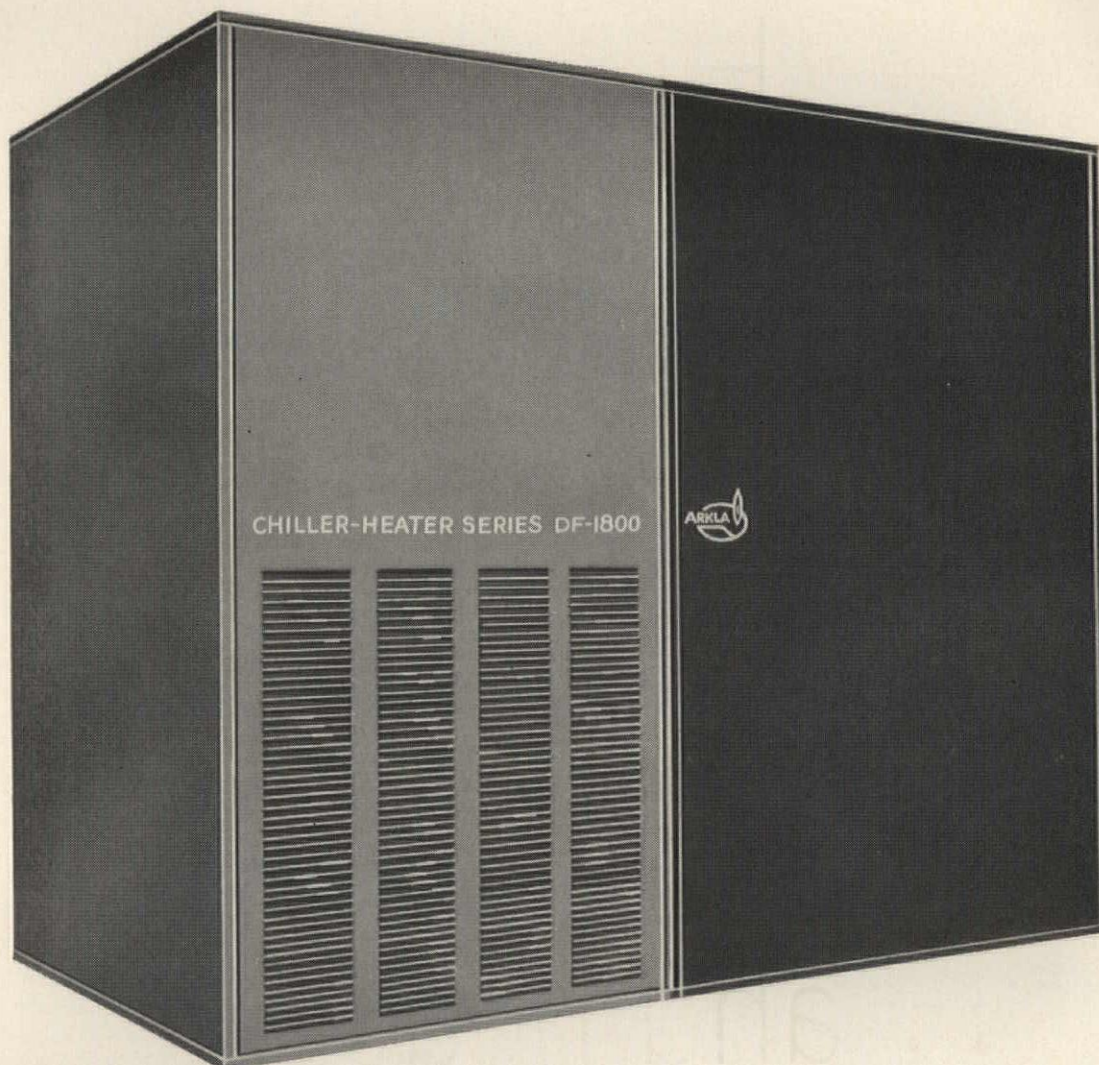
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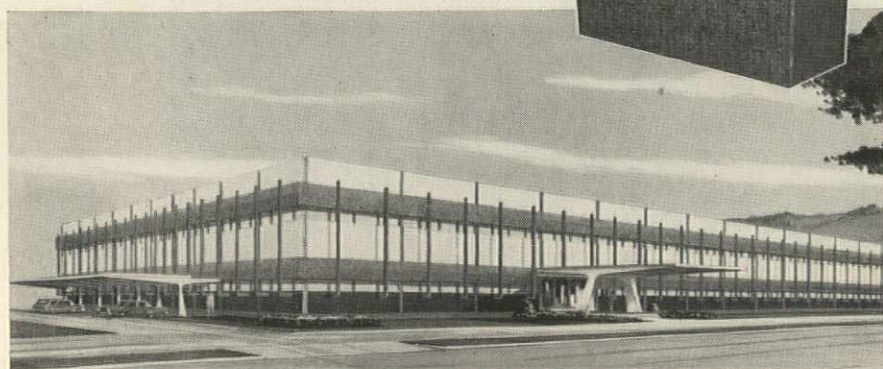
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Continued from page 212

compromise between optimum conditions indicated by research and limitations imposed by economic (industry evaluation) and technical restrictions."

Similarly, in their collection of photographs, they have presented without comment far too many examples of overdone, busy, indecisive, and inappropriate lighting designs, which seem to me far from the authors' own definition of "well-integrated spaces."

In these two respects, I believe the authors have failed to pull their argument together into the forceful statement it could have been, and thus have failed to provide what is so desperately needed: namely, a guide to thoughtful programming and well-grounded positive design—a guide that will help educate the architect to feel enough confidence in his understanding of light that he *will* take on the design responsibility.

In a similar vein, I hope that in later editions the data sheet sections will include more evaluation of the materials and systems listed; and that the authors will make a greater effort to show where and how to modify the standard fixture spacings and patterns, which, if accepted, largely insure dominance and disruption by the lighting equipment.

Despite its shortcomings, *Architectural Lighting Graphics* is probably the most useful lighting book for architects now available. Engineers, too, will find it convenient as a reference and as an aid in communicating with their clients. I hope that later editions will be more positively oriented towards achieving better design as well.

WILLIAM M. C. LAM
Consultant, Coordination of Lighting and Architecture
Cambridge, Mass.

The Sun Sometimes Sets

NEW BUILDINGS IN THE COMMONWEALTH, edited by J.M. Richards. Published by Frederick A. Praeger, Inc., 64 University Place, New York 3, N.Y. (1962, 240 pp., illus. \$14.50)

In 1959 and 1960, *The Architectural Review* published two issues devoted largely to the new architecture in the British Commonwealth. *New Buildings in the Commonwealth* collects the contents of those two issues in book form, giving an interesting picture of what is occurring architecturally in many parts of the world, from Canada to Fiji.

Houses are generally the freshest type of building in the three largest dominions: Canada, Australia, and New Zealand. (The book is in two sections: "The Larger Dominions" and "The Tropical Territories.") Office buildings seem no

better and no worse than those in the United States, which is not much of a compliment. Exceptions are in Canada: the BC Electrical Board in Vancouver, by Thompson, Berwick & Pratt, whose diminishing corridor scheme anticipated Ponti's for the Pirelli Building; and several Miesian low-rise buildings by John B. Parkin Associates (this was before Pei's Place Ville Marie). In Australia, it is amusing to see the Academy of Science Building in Canberra, by Grounds, Romberg & Boyd, which antedated Harrison & Abramovitz's original proposal for the N.Y. World's Fair "theme" building by a significant period.

In the tropical territories there is, of course, a predilection for solar shades and sun screens, but none of the modern examples seem to exhibit the *architectural* approach of Louis I. Kahn's U.S. Embassy in Luanda. There is wide use of blades, fins, screens, and overhangs, but all of these seem to be pasted on regulation north-of-the-Equator buildings rather than seriously thought out as part of the integral design and structure.

A major complaint about this book as documentation is the omission of dates for the buildings.

J.T.B., Jr.

Documentary on Discrimination

BUT NOT NEXT DOOR: AN ACCOUNT OF THE DEERFIELD CASE AND INTEGRATION, by Harry M. and David H. Rosen. Foreword by Sen. Jacob K. Javits. Published by Ivan Obolensky, Inc., 341 E. 62 St., New York 21, N.Y. (1962, 175 pp. \$3.95).

This is an account of what happened in Deerfield, Illinois, when Progress Development Corporation, a subsidiary of Modern Community Developers (whose president is the well-known Morris Milgram) attempted to build a group of one-family houses—open to limited and controlled Negro occupancy—in an all-white neighborhood.

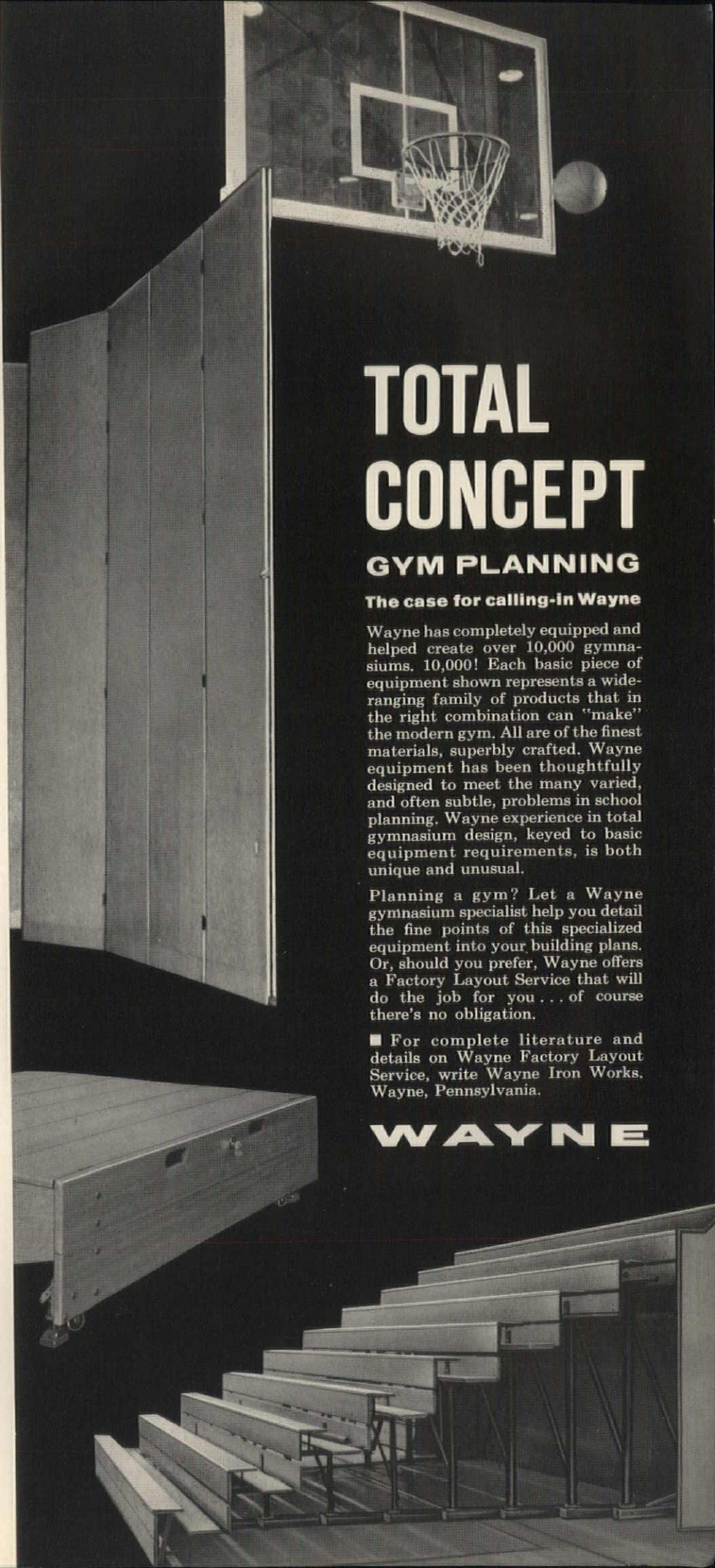
Based on interviews, court records, newspaper stories, and the first-hand experiences of the authors, the account is cast in the form of a narrative which is carried forward by the actions and attitudes of three fictionalized resident families. The authors explain how the proposed Floral Park and Pear Tree subdivisions are blocked by a town vote to use the land for park purposes, a decision accompanied by strong protestations denying any racial discrimination.

Unfortunately, numerous lapses in the proofreading of the text do not convince

Continued on page 222

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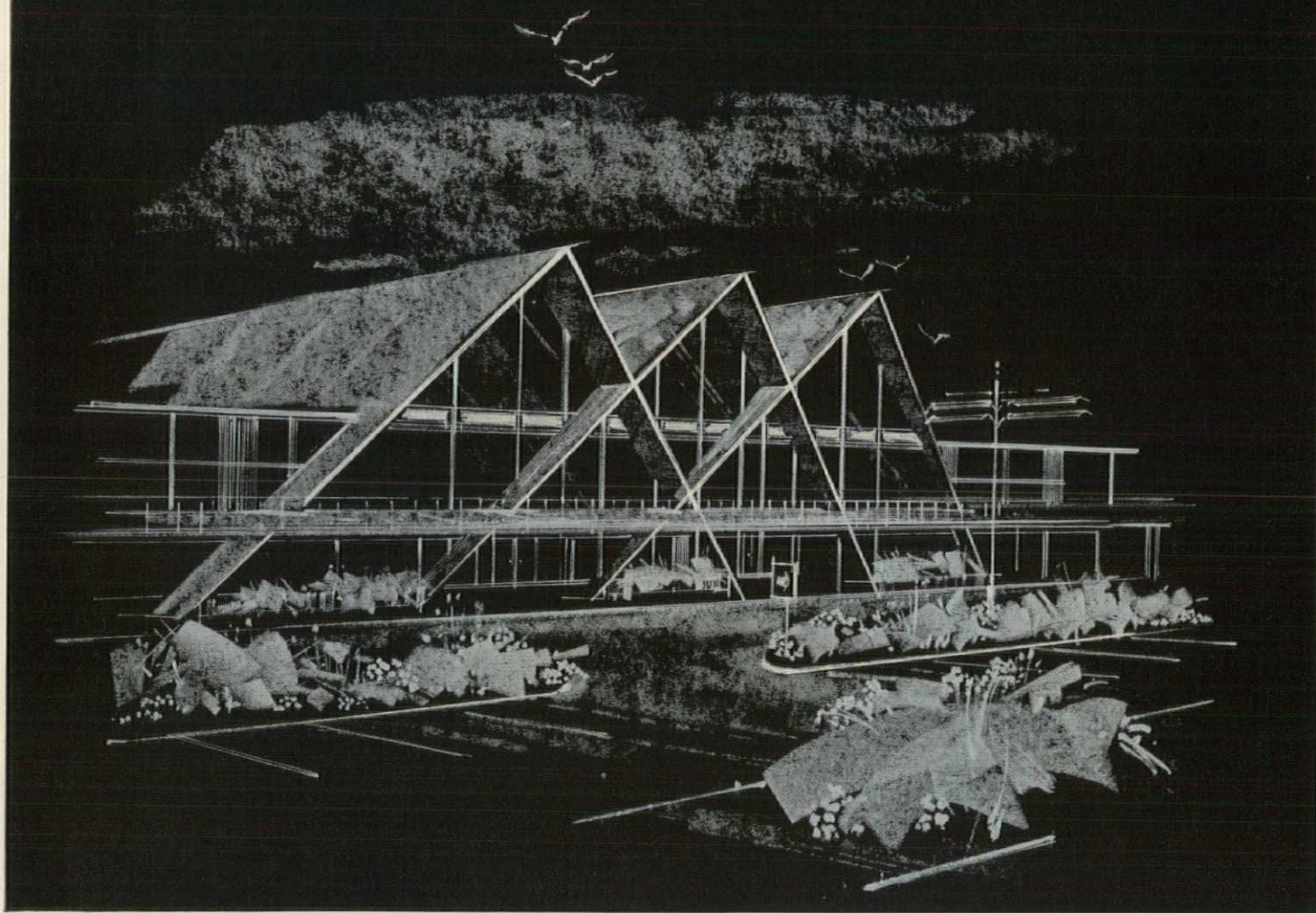
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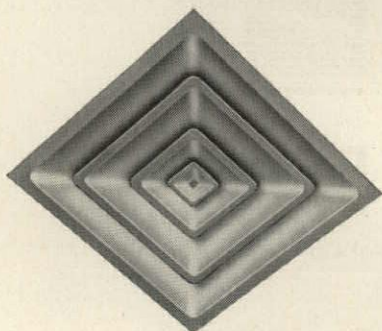
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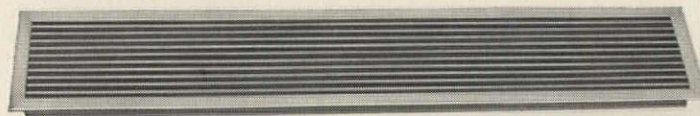
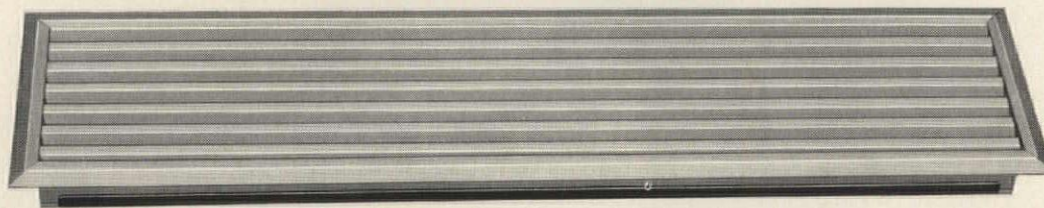
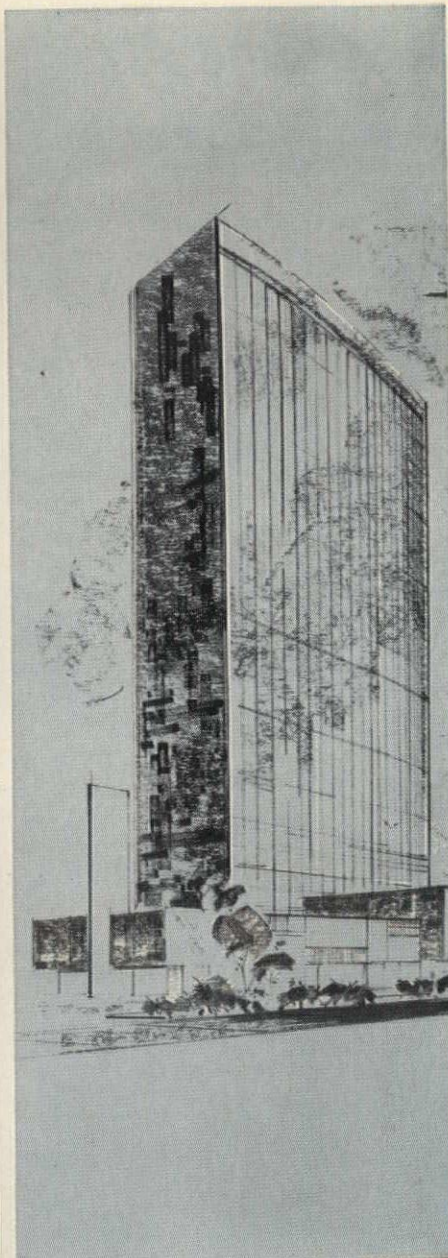
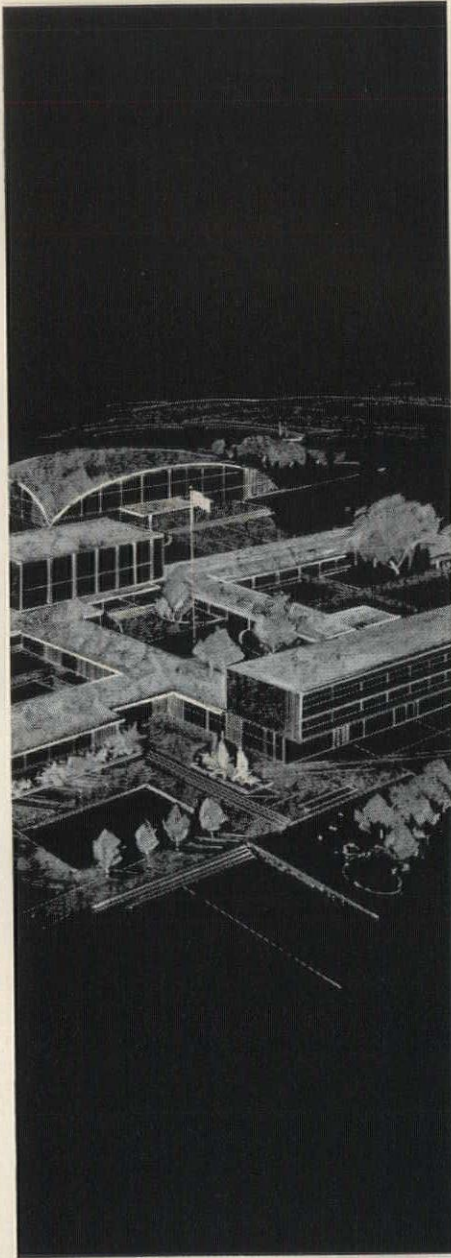
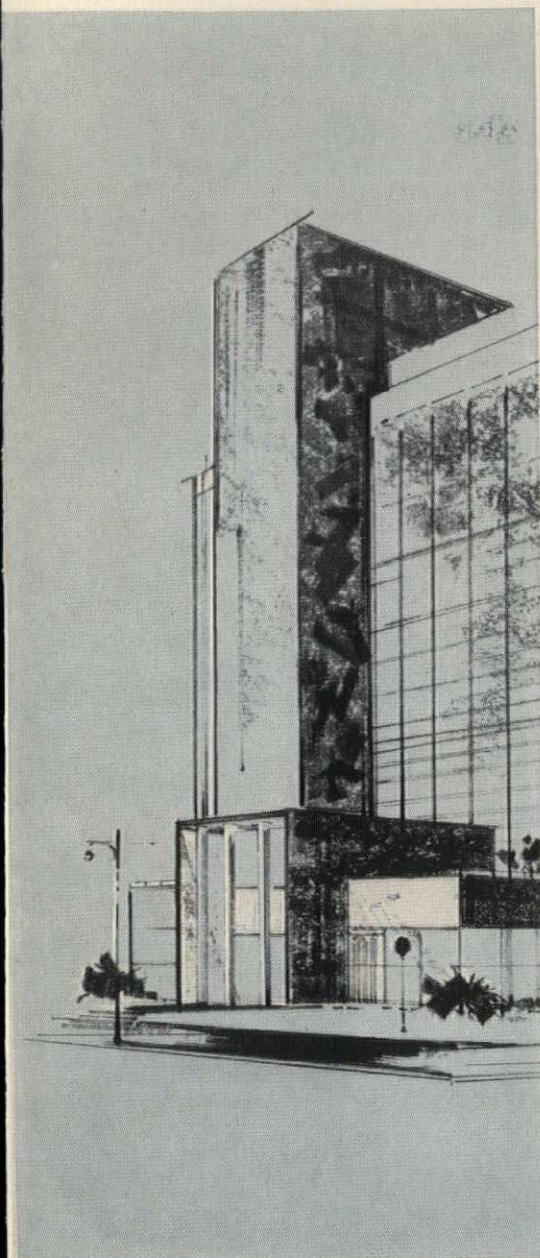
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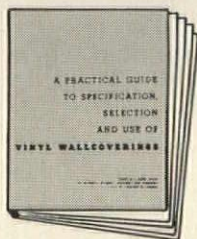
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Continued from page 217

one that the book was as carefully put together as it might have been. Nevertheless, it does capture the tense atmosphere pervading this Chicago suburb in its hour of trial, and is a highly readable and useful documentary.

Harry and David Rosen are brothers pursuing careers in social work. The David Rosen family has lived in Deerfield for the last five years. Although the book presents both sides of the story, the sympathies of its authors are plainly evident, and are presented with biting irony, immediately evident from the title. The net effect of the authors' crusading spirit is much more commanding than the assertion, found on the dust-jacket, that they have assembled a disinterested and totally objective case-study.

ROBERT G. DYCK
Associate, R. C. Weinberg & Associates
Architects and City Planners
New York, N.Y.

Panorama of a Lost Way of Life

LES PAVILLONS: FRENCH PAVILIONS OF THE 18TH CENTURY, by Cyril Connolly. Photographs by Jerome Zerbe. Published by The Macmillan Co., 60 Fifth Ave., New York 11, N.Y. (1962, 212 pp. illus. \$15)

"I suppose the truly modern equivalent of one of these Follies would be a Mediterranean beach house or a hide-out in the Arizona desert by Frank Lloyd Wright or Mies van der Rohe. The original occupants of the pavilions were not retired people or week-enders and although bent on pleasure they had only four relaxations—conversation, making love, hunting, and play." If one writes in this fashion about the 18th Century French nobility, one has to add, as Cyril Connolly does, that they did these things superbly well. One also needs to be prepared for a hostile reaction. Since the period does not enjoy the best of reputations today.

It is unfortunate that the lighter architecture of prerevolutionary France—the pavillons to which the nobility retreated from the stuffiness of the court—has often been dismissed as being frivolous and overly cute. The one exception to this has been the Petit Trianon, and even its architect, A. J. Gabriel, has been accused of simply adapting ideas imported from England.

The real difficulty in discussing the 18th Century and its architecture lies in the fact that the 20th Century has tended to judge rather than to understand the 18th Century. The Industrial Revolution has created a gap between the two peri-

ods that is rarely ever bridged. The 18th Century in France was an age of artistic and intellectual brilliance in which manners were vital. The pavillons are this age translated into stone. They can only be understood if taken in context with the people who created them.

Les Pavillons is not a book on architecture, except insofar as it contains photos of buildings. It is a panorama of a lost way of life. A masterful introduction brings the men and women of the 18th Century alive and a series of superb photographs shows their retreats. There are no measured drawings, no details, no bibliography; there are not even captions for the individual photographs. They are not needed. All they would recapture is the dead shell and not the living entity of the 18th Century. The book will have two attractions for architects. First, it is a pleasure to look at and a delight to read; second, it highlights the extent to which architecture can at times give visible expression to social climate.

FREDERICK HERMAN
Architect
Norfolk, Va.

Excellent Composite Picture

PROCEEDINGS OF THE WESTERN CONFERENCES ON PRESTRESSED-CONCRETE BUILDINGS, edited by T.Y. Lin and J.W. Kelly. Published by Gordon & Breach, 150 Fifth Ave., New York 11, N.Y. (1962, 322 pp., illus., \$12.50)

The 50 or so papers in this collection were presented at two conferences on prestressed-concrete buildings held in California during November 1960. The editors have grouped papers on related topics, with the accompanying figures and illustrations, under 11 main headings. These might well have been reduced to 6: planning and design, prestressed-concrete members, fire resistance, inspection and maintenance, building codes, and economics.

Many of these papers are contributions to panel discussions and are correspondingly brief. Some are unnecessarily rhetorical, and, perhaps inevitably, there is a great deal of repetition. Nevertheless, an excellent composite picture of the present architectural and engineering status of prestressed concrete does eventually emerge.

It is clear that there are now certain areas where prestressed concrete is the natural choice (for precast piles and lift slabs, for example); and others where the secondary advantages—long spans, crack-free construction, quick erection,



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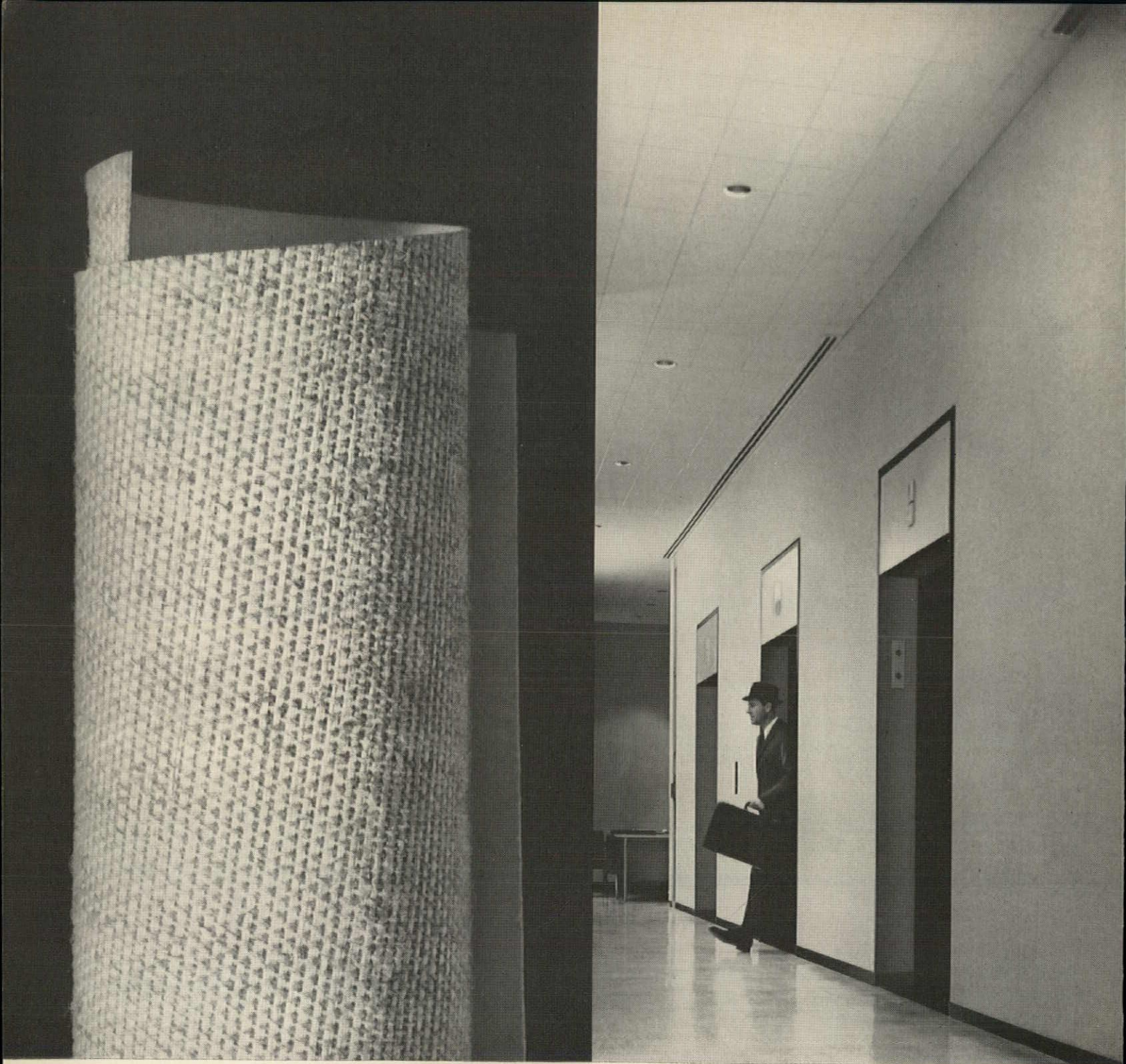
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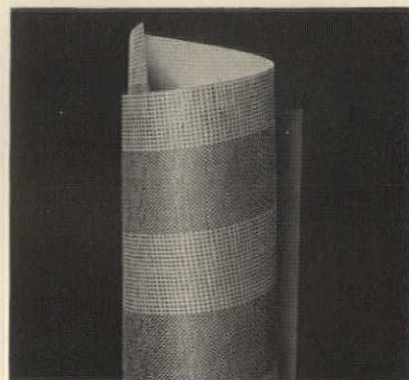
superior finish, elimination of fireproofing, etc.—may offset a possibly unfavorable initial cost. Its competitiveness as a framing system for floors and roofs largely depends on the use of standard sections—in this country, single and double tees, I-beams, columns, cored slabs, and wall panels—and this may sometimes lead to friction between architects seeking greater variety and manufacturers trying to hold down costs. The industry's representatives at these conferences stoutly maintained their readiness to cast any reasonable member the architect might propose, but they did not neglect to point out the heavy price that must be paid for even minor changes such as a variation in web width. Fortunately, the neat detailing of the Burlingame High School by Reid, Rockwell, Banwell & Tarics, and Frank Lloyd Wright's original design for the Marin County Center (both illustrated) indicate what can be done even with a limited range of standard sections.

Apart from some interesting proposals by Myron Goldsmith of SOM (Chicago), there is little concerning the more imaginative uses of prestressed concrete or its application to less conventional structures. The emphasis lies heavily on precast-pretensioned construction and on the building types for which it is best suited—warehouses, shopping centers, bowling alleys, parking garages, gymnasias, etc. There are a number of clear and factual accounts of the planning and design of buildings of this kind, most of them located on the West Coast. The information relating to comparative costs should be particularly useful. The papers presented by the manufacturers' representatives are frank and straightforward accounts of the "facts of life" in the prestressed-concrete industry.

With the exception of the Norton Building in Seattle (which has steel columns and girders) and a few smaller structures, the only multistory projects described are an interesting parking-garage system designed by the Rockwin Prestressed Concrete Corporation, and a series of high-rise buildings constructed in Hawaii, where, it is claimed, precast-prestressed concrete structural components "can now be placed in the hands of the builder at prices considerably lower than other types of structural members of equivalent strength."

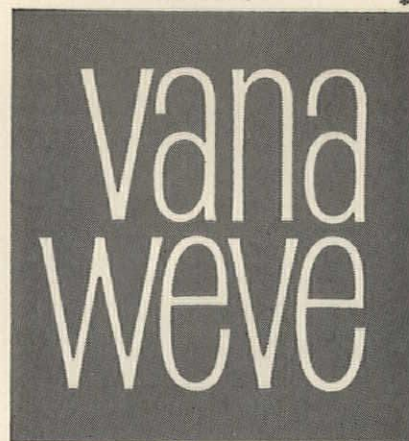
The papers relating to the question of a building code for prestressed concrete are forthright, sensible, and illuminating. Some of the pitfalls connected with precast-prestressed concrete construction are

Continued on page 230



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Low-riser, wide-tread stairways make going from one level to another easier at the Peninsula Volunteers' Retirement Apartments. Together with the overhanging roof, they also demonstrate some of wood's self-supporting capabilities.

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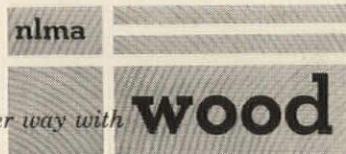


Partially tree-shaded shingled siding, balcony, roof overhang, and fence show wood's natural ability to belong in the 30-unit Peninsula Volunteers' Retirement Apartments. Architect: Skidmore, Owings & Merrill.

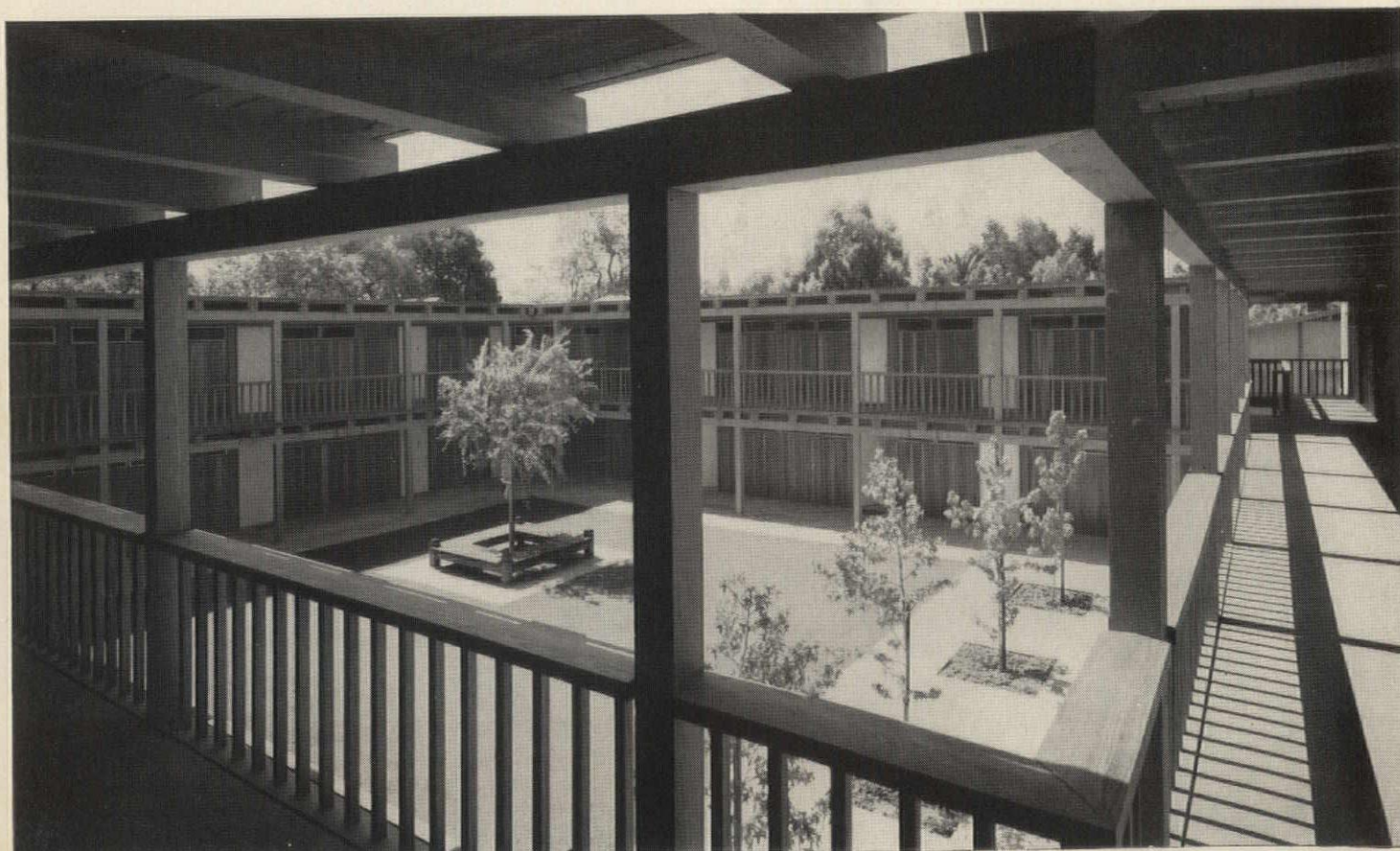
Wood makes retiring comfortable in a multiple dwelling . . . just by being all around in siding, stairways, and on balconies overhead. Its freedom of design permits economies in both individual interiors and large, friendly exteriors. Wood's inherent durability provides years of use with little wear . . . its compatibility with other materials promises decades of beauty.

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A continuous balcony and patio below use exposed wood framing to surround an open-air quadrangle, and add to the outdoor serenity of the Peninsula Volunteers' Retirement Apartments in Menlo Park, California.

Would your client like living in a steel-framed house?

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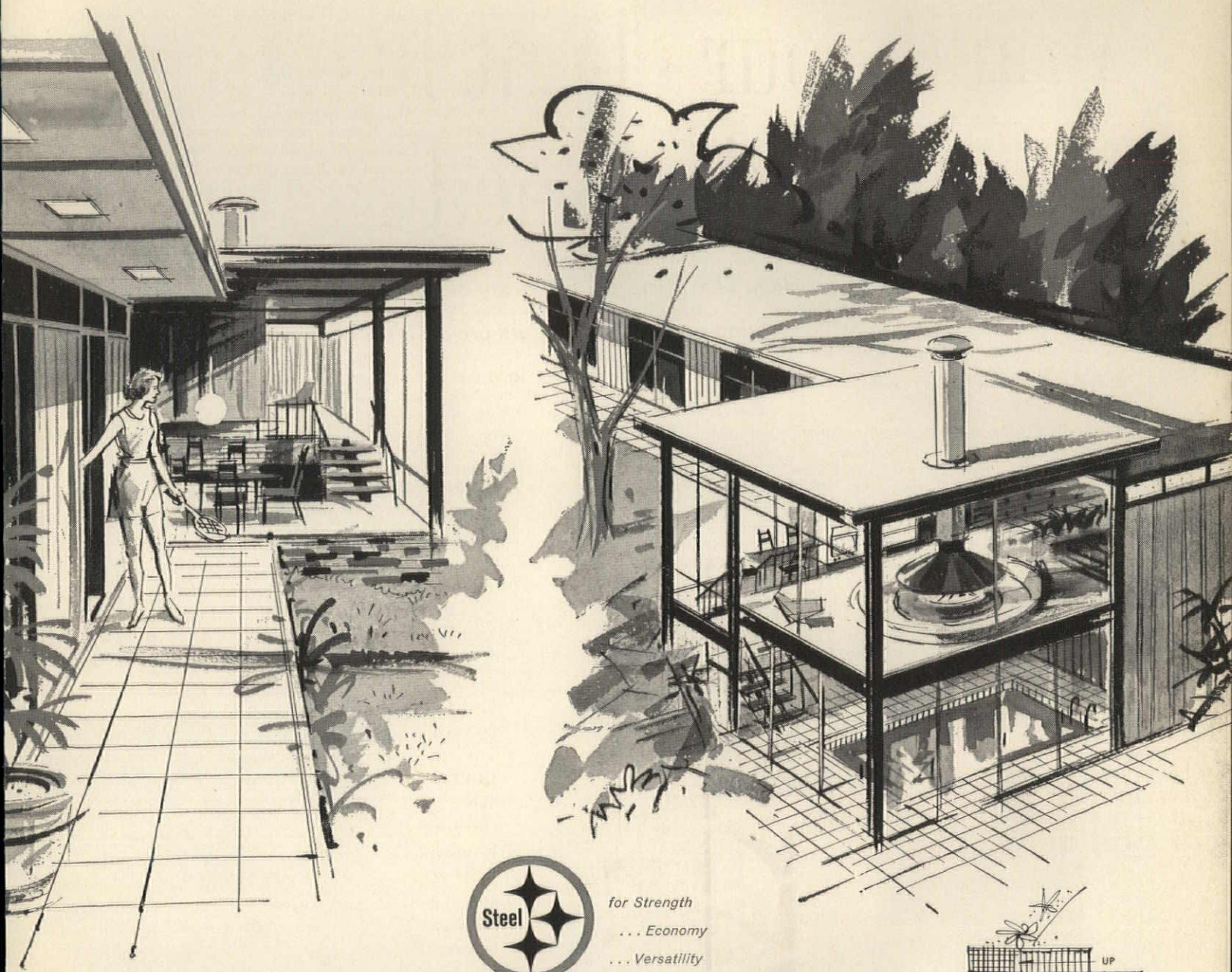


STEEL PERMITS FREEDOM OF DESIGN. The limitations of other materials disappear when you design with steel. It's just right for contemporary architecture. It allows big, open areas, 30, 40 or more feet wide without any interior supports whatsoever. Steel framing also permits flexible interiors, often with movable partitions instead of fixed walls. Steel-framed houses can easily be expanded to meet future family needs, too. And you can design generous overhangs outside for sunshade effects, for patios, or covered walkways.

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PROBLEM SITES. With steel you can build on the side of a steep hill, or on top of rock formations. You can even build *over* the terrain—elevating the house on steel stilts. This makes "impossible" sites usable. Such lots can often be bought at bargain prices, and save on grading, too. And if the "problem" site is rugged but attractive, its natural beauty needn't be bulldozed away. Save the trees, the shrubs, the rocks.

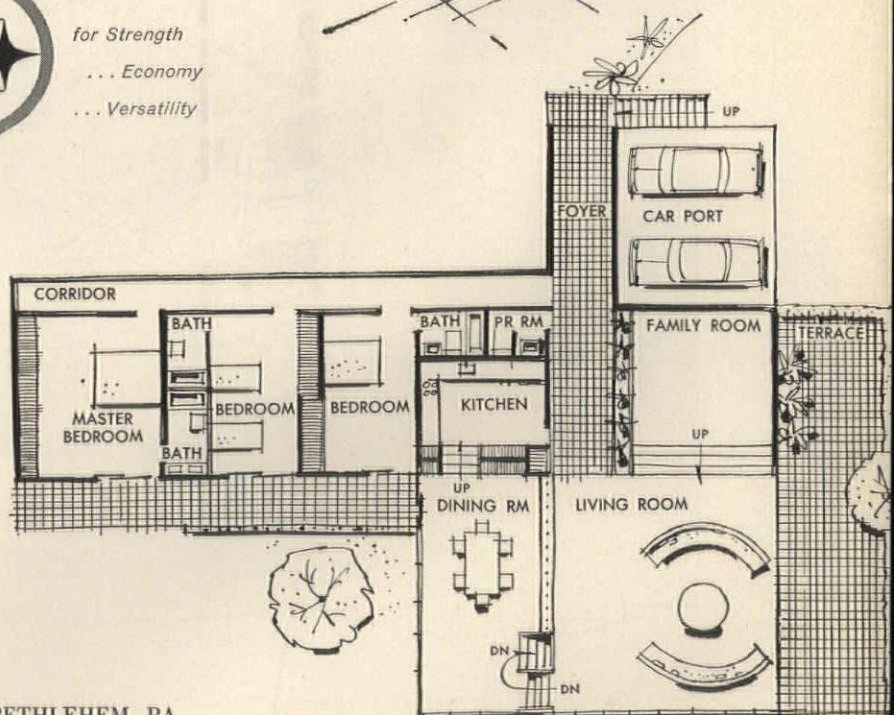
HOW ABOUT THE COST? With "problem" sites, steel commonly *saves* clients money. But even on level lots a steel-framed house need not cost a penny more than any other.



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BETHLEHEM STEEL

Continued from page 225

pointed out by Harry A. Detmer of the Sacramento District, U.S. Corps of Engineers, and Edward K. Rice of T.Y. Lin & Associates.

Thus, in spite of its repetitiousness and the variable quality of its numerous contributions, the book contains a great deal of practical and up-to-date information on prestressed concrete that should prove particularly helpful to architects and engineers who may still hesitate to employ this versatile new technique.

THOMAS E. BURTON
Structural Engineer
East Hampton, Long Island, N.Y.

OTHER BOOKS TO BE NOTED

Charsada: A Metropolis of the North-West Frontier. Mortimer Wheeler. Oxford University Press, 417 Fifth Ave., New York 16, N.Y., 1963. 142 pp., illus. \$14.50

Results of the 1958 exploration (by the government of Pakistan) of the impressive ancient mounds at Charsada, a site located along the northwest frontier of the Indian subcontinent.

Design With Climate. Victor Olgyay. Princeton University Press, Princeton, N.J., 1963. 190 pp., illus. \$15

To be reviewed.

Fundamental Theory of Structures. D. Allan Firmage. John Wiley & Sons, Inc., 440 Park Ave. South, New York 16, N.Y., 1963. 334 pp., illus. \$8.50

Textbook on basic principles of structural engineering, for the student who has already taken courses in statics, dynamics, and strength of materials. Since primary purpose was to develop fundamental theories and procedures, the analysis of very specialized structures has been avoided for the most part.

The Greek Stones Speak. Paul MacKen-drick. St. Martin's Press, Inc., 175 Fifth Ave., New York, N.Y., 1962. 470 pp., illus. \$7.50

To be reviewed.

Hong Kong. Martin Hurlimann. The Viking Press, 625 Madison Ave., New York 22, N.Y., 1963. 140 pp., illus. \$8.50

A photographic record of the changing face of this colony, with a text that discusses its past, present, and future. Author is an architectural historian as well as photographer, and author of many books on the cities and architecture of Europe and Asia.

Housing and Income. Margaret G. Reid. University of Chicago Press, 5750 Ellis Ave., Chicago 37, Ill., 1962. 500 pp. \$7.50

Detailed study of the relation of housing values and rents to income, in which a number of widely held notions are refuted. Author is professor emeritus of economics, University of Chicago.

Man and the Modern City. Geen, Lowe, and Walker, Editors. University of Pittsburgh Press, Pittsburgh 13, Pa., 1963. 134 pp., paperback. \$1.25

To be reviewed.

Mexican Interiors. Verna Cook Shipway and Warren Shipway. Architectural Book Publishing Co., Inc., New York, 1963. Distributed by Hastings House Publishers Inc., 151 E. 50 St., New York 22, N.Y. 257 pp., illus. \$12.95

To be reviewed.

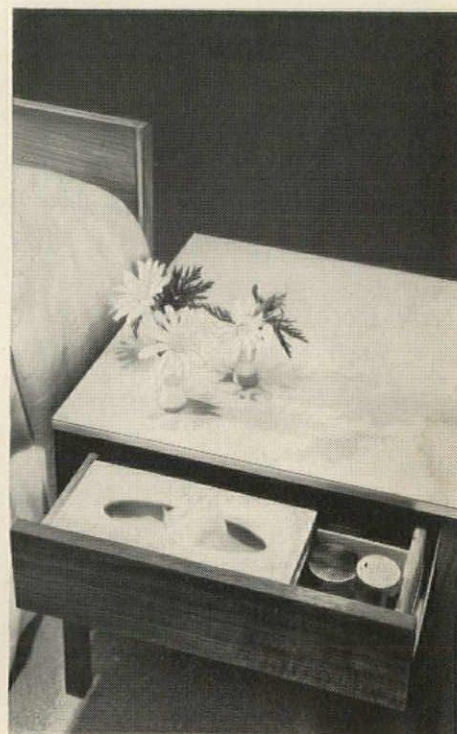
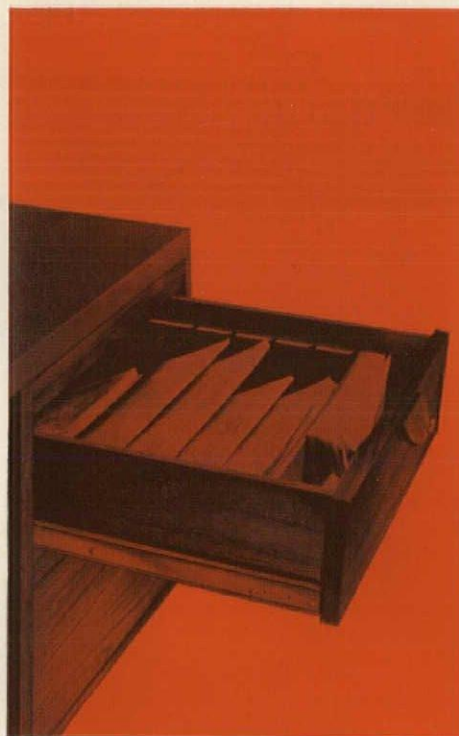
Modern Architectural Detailing. Edited by Konrad Gatz. Translated by Thomas E. Burton. Reinhold Publishing Corp., 430 Park Ave., New York 22, N.Y., 1963. 300 pp., illus. \$16.50

To be reviewed.

New Campuses for Old: A Case Study of Four Colleges that Moved. S. B. Zisman and Catherine H. Powell. Educational Facilities Laboratories, Inc., 477 Madison Ave., New York 22, N.Y., 1962. 20 pp., illus.

Report on four colleges—Colby, Goucher, Harpur, and Trinity University that moved to new sites rather than try to survive and expand in cramped downtown quarters. EFL contends that such "drastic remedies often make sense" despite the many difficulties involved. Guidelines are proposed for colleges considering a move. Approaches to master planning, the transition plan, scheduling of construction, and other aspects of the move are outlined.

The Notebooks and Drawings of Louis



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I. Kahn. Edited and designed by Richard Saul Wurman and Eugene Feldman. Falcon Press, Philadelphia, Pa., 1962. Distributed by George Wittenborn & Co., 1018 Madison Ave., New York 21, N.Y. 100 pp., illus. \$14.50
To be reviewed.

Office Buildings. Jürgen Joedicke. Frederick A. Praeger, Inc., 64 University Place, New York 3, N.Y., 1962. 220 pp., illus. \$15
To be reviewed.

The Place of the Ideal Community in Urban Planning. Thomas A. Reiner. The University of Pennsylvania Press, 3436 Walnut St., Philadelphia 4, Pa., 1963. 194 pp., illus. \$8.50
To be reviewed.

Practical Tables for Building Construction. Norman Foster. McGraw-Hill Book Co., Inc., 330 W. 42 St., New York 36, N.Y., 1963. 241 pp., illus. \$7.50

A pocket-size digest of data used in the building trades—conversion tables, earthwork computations, quantities for concrete, coursing and bonds for masonry, room areas for paint, lumber tables, piping, steel and iron, etc. Author has had 30 years experience as construction estimator, consultant, and contractor.

The Progressives and the Slums: Tenement House Reform in New York City 1890-1917. Roy Lubove. Forewords by Samuel P. Hays and Philip S. Broughton. University of Pittsburgh Press, Pittsburgh 13, Pa., 1963. 284 pp. \$6
To be reviewed.

Rumania: Painted Churches of Moldavia. (UNESCO World Art Series). Georges Oprea. New York Graphic Society, Greenwich, Conn., by arrangement with UNESCO, 1963. 18 pp., plus 32 plates. \$18

To be reviewed.

The Sculpture of Ancient Mexico. Paul Westheim. Trans. by Ursula Bernhard. Anchor Books, Doubleday & Co., Inc., Garden City, N.Y., 1963. 69 pp., illus., (paperbound). \$1.45

Ninety-six photos on the remarkable sculpture of pre-Hispanic Mexico, with a brief text in English and Spanish.

A Short History of Japanese Architecture. A. L. Sadler. Charles E. Tuttle Co., Rutland, Vt., 1963. 262 pp., illus. \$7.50

To be reviewed.

Standard Plumbing Engineering Design. Louis S. Nielsen. McGraw-Hill Book Co., Inc., 330 W. 42 St., New York 36, N.Y., 1963. 302 pp., illus. \$11.75

Modern engineering design of plumbing systems for buildings of all occupancy classifications. Author is a professional engineer specializing in plumbing and piping systems design, and is an authority on plumbing codes and research.

The Urban Villagers: Group and Class in the Life of Italian-Americans. Herbert J. Gans. The Free Press of Glencoe, A Div. of Macmillan Co., 60 Fifth Ave., New York 11, N.Y., 1962. 367 pp. \$7

To be reviewed.

NOTICES

New Addresses

FLAMBERT AND FLAMBERT, Food Service Consultants and Designers, World Trade Center, San Francisco 11, Calif.

RAYMOND & MAY ASSOCIATES, Consultants in Planning and Urban Renewal, 11 Holland Ave., White Plains, N.Y.

ALFRED D. REID ASSOCIATES, Architects, The Investment Building, Suite 1212-1221, 239 Fourth Ave., Pittsburgh 22, Pa.

New Firms

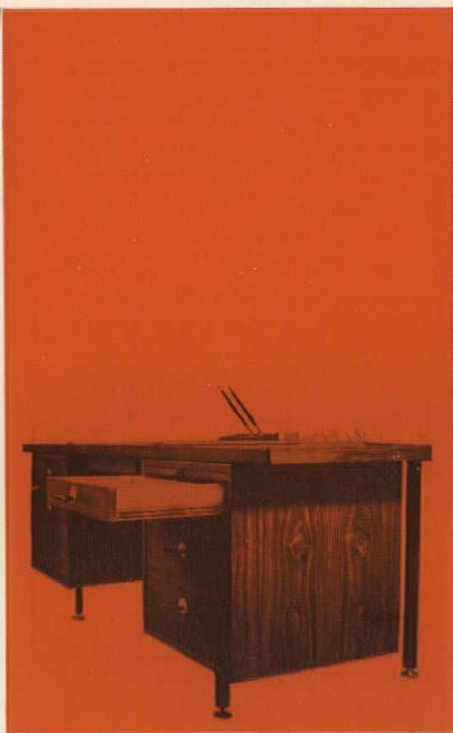
HOWARD WILLIAMS ASSOCIATES, Designers, 919 Third Ave., New York 22, N.Y.

New Partners, Associates

ALFRED H. BERR, JR., Architect, joined the firm of ARNOLD A. PETERSON CO., Architects, Cleveland, Ohio.

WILLIAM M. FENTON, JAMES A. STANGE, joined the firm of DAVIS & WILSON, Architects & Engineers, Lincoln, Nebr.

VICTOR GRUEN ASSOCIATES, Planners, Architects and Engineers, appointed new Associates: HAROLD MARKS, Chief of Traffic and Transportation Division;

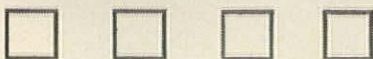


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MARION SAMPLER, Graphics Designer; JOSEPH HOLGATE, Head of Civil Engineering Division; HOWARD WOLFBURG, Head of Mechanical Engineering Division; JERRY POLLAK, MICHAEL SAVOIA, promoted to Associates in the firm's New York Office.

Elections, Appointments

WALTER W. CASE, Architect and Designer, named Director of Design in firm of HAGMAN & MEYER, Los Angeles and Menlo Park, Calif.

WALTER V. COLEMAN, named Vice-President and Director of Engineering; TIMOTHY P. COFFEY, appointed Assistant to the President and elected a Member of the Board of Directors in firm of WICTON-ABBOTT CORPORATION, Industrial Engineers and Constructors, Plainfield, N.J.

VINCENT J. CRAMPTON, appointed Executive Assistant in firm of HARLEY, ELLINGTON, COWIN AND STIRTON, INC., Architects and Engineers, Detroit, Mich.

LEON DELLER, appointed Chief Designer; CHAUNCEY W. RILEY, appointed Director of Administration in firm of CHARLES LUCKMAN ASSOCIATES, Planning, Architecture, Engineering, New York and Los Angeles.

JAMES E. GIBSON, appointed Director of Architecture in firm of HARLEY, ELLINGTON, COWIN AND STIRTON, INC., Architects and Engineers.

HAROLD D. HAUF, appointed Director of Architecture; RICHARD C. NIBLACK, elected a Vice-President in firm of CHARLES LUCKMAN ASSOCIATES, Architects.

CHARLES LUCKMAN, JR., appointed Director of Client Relations of PETE SUMMERS, INC., Los Angeles, Calif.

PAUL MCCOBB, Industrial Designer, has been retained as a Consultant by THE GOODYEAR TIRE & RUBBER COMPANY.

LEON GORDON MILLER AND ASSOCIATES, INC., Industrial Designers, appointed Design Consultants to THE MOSAIC TILE COMPANY.

MARIAN MORTON, appointed National Design Co-ordinator in firm of JACK LENOR LARSEN, INC.

LAWSON S. MOSELEY, JR., appointed Manager of Montgomery, Ala., office; WILLIAM G. RITCHIE, appointed Manager of Washington, D.C., office, in firm of SANDERS & THOMAS, INC., Consultants and Engineers.

JAMES E. TAYLOR, appointed General Sales Manager for Universal Atlas Cement Division of UNITED STATES STEEL CORPORATION.

Name Changes

FLEWELLING AND MOODY, Architecture-Engineering-Industrial Planning, 766

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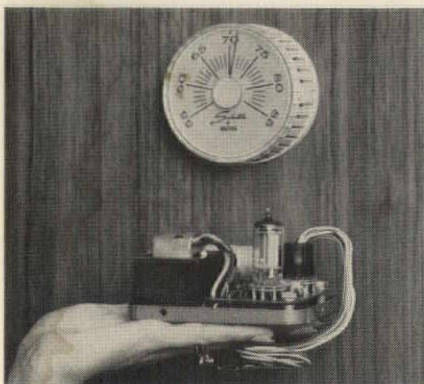
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Colorado Blvd., Los Angeles 41, Calif.
Formerly FLEWELLING, MOODY & HORN.

EDWIN WILLIAM DE COSSY, FRANK DODD WINDER, made Partners in firm of OFFICE OF DOUGLAS ORR, DE COSSY, WINDER AND ASSOCIATES, Architects, 111 Whitney Ave., New Haven, Conn. Formerly DOUGLAS WILLIAM ORR, Architect.

PARKER, KENSLE & PARKER, Architects & Engineers, 1227 W. Temple St., Los Angeles 26, Calif. Formerly PARKER & PARKER, Architects & Engineers.

SCHREIBER, LITTLE AND ASSOCIATES, Architects, 352 E. High St., Springfield, Ohio. Formerly LETHLY, SCHREIBER AND ASSOCIATES. MARLAY W. LETHLY has retired.

CARL DEMAS, made Partner in firm of SUER, LIVINGSTON AND DEMAS, Architects-Planners, 207 Architects Bldg., Philadelphia 3, Pa. Formerly MARVIN D. SUER AND WALTER R. LIVINGSTON, JR., Architects.

JOSEPH T. WILSON, Architect, 1240 W. Bayaud, Denver, and Masonic Bldg., Alamosa, Colo. Formerly WILSON & WESTGAARD, Architects.

P/A Congratulates . . .

JOHN W. BRUCE, JR., named President and General Manager of LARSEN PRODUCTS CORP., Bethesda, Md.

JOSEPH E. MORAN, appointed General Manager, Mining and Mineral Products Division; DEOTIS L. MARLETT, assumes responsibility for Real Estate Operations, Mining and Mineral Products Division; RICHARD S. FUNK, assumes new post of Product Manager, Perma Products, in firm of GREAT LAKES CARBON CORP.

WILLIAM M. NORTH, elected President of the Tile Council of America.

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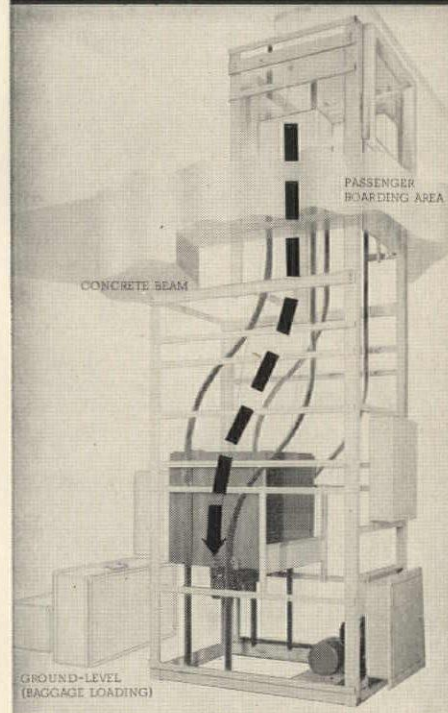
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ARCHITECT—AIA. New York registration, NCARB processing, European and U.S. degrees, languages. 41, married, family. Long experience at leading office with wide variety of projects. Especially skilled in project development, site and urban planning. Desire

responsible position, preferably with association/partnership, with architectural, planning or consulting firm. Box #566, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Registered New Jersey, by examination, 13 years diversified experience including 4 years operating own office. Desires challenging position with an opportunity to help small or medium sized firm and myself to grow. Fully qualified to assist principal in all phases of professional service. Willing to relocate. Box #567, PROGRESSIVE ARCHITECTURE.

ARCHITECT—37, capable designer and draftsman. European background. Wishes to work in a progressive office. Northeast location preferred. Resume upon request. Box #568, PROGRESSIVE ARCHITECTURE.

ARCHITECT-DESIGNER—British trained. Six years Canadian experience. Last 3 years and presently head of design in contemporary medium sized Canadian office. Wishes to relocate, preferably to U.S., Detroit area. British and Canadian registrations. 32, married with family. Resume available. Box #569, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL DRAFTSMAN—29, single, sober, with minimum experience will appreciate permanent work in an honest office that will train where necessary. Will work hard, start at beginners pay, relocate anywhere. Resume and photo upon request. Box #570, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL ILLUSTRATOR—Age 37, ten years experience rendering small homes to college layouts—major medium opaque case-in. Photo samples and resume upon request. Desire position as full time delineator. Box #571, PROGRESSIVE ARCHITECTURE.

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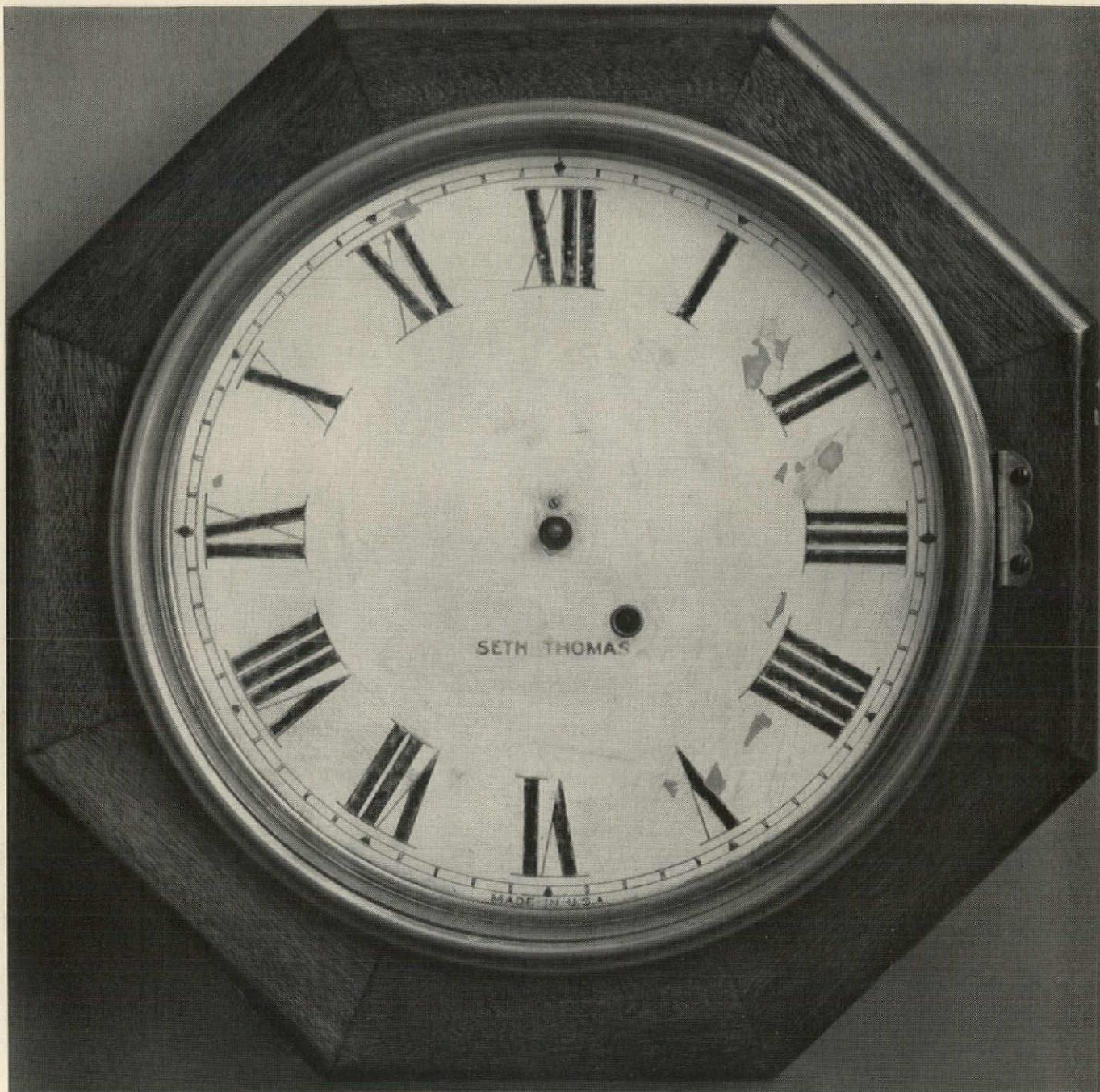
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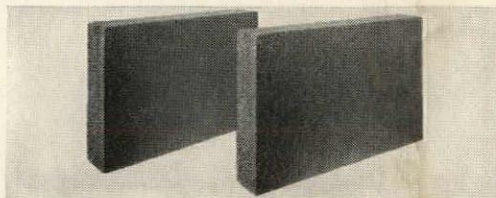
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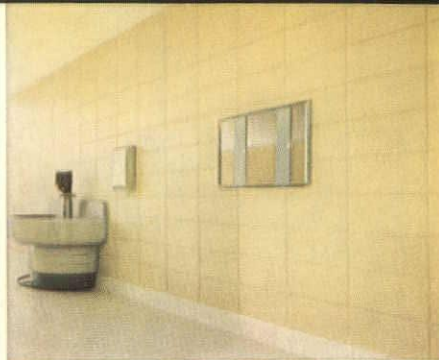
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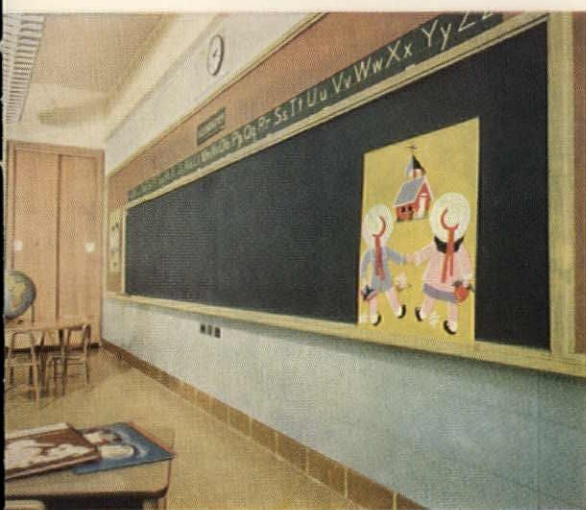
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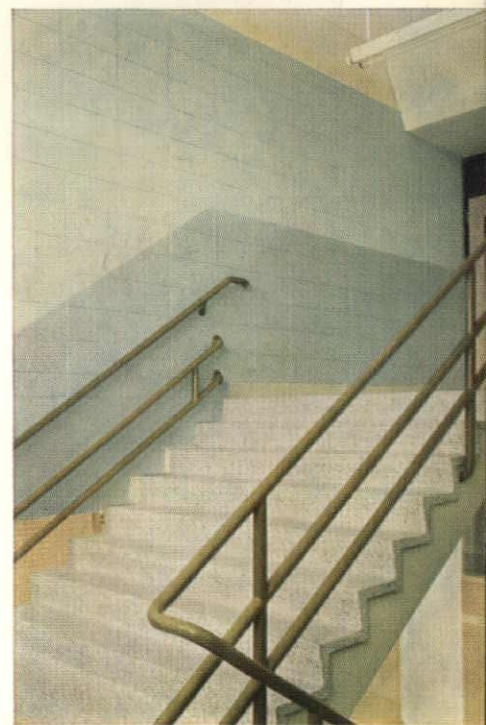
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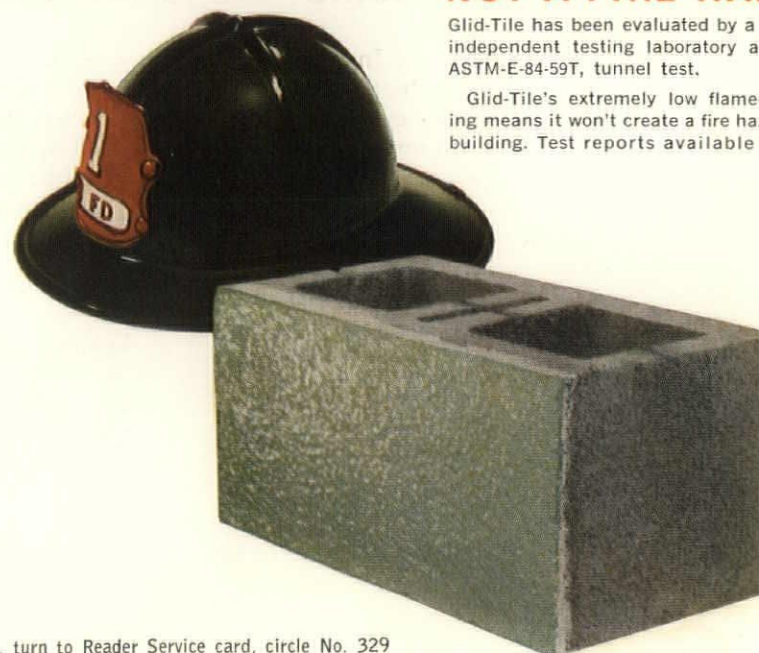


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