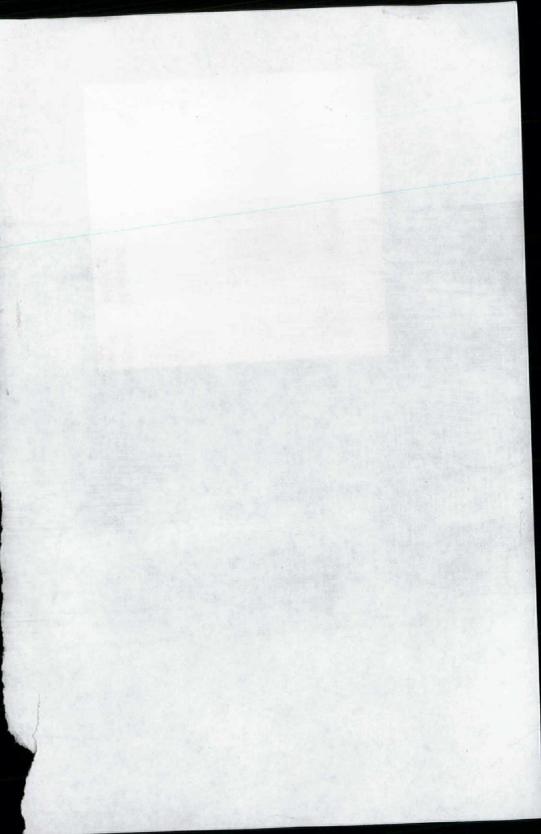
PA-1962-07





111

10

Juness ...

乾

Colors: V-B16 Verona White with cork accents

Vina Lux & M Series

#### unique floor beauty that won't "walk off". . .

... because the distinctive color-chip pattern is distributed through the full thickness of the tile. 800 Series in Vina-Lux vinyl asbestos tile retains its beauty and pattern under the heaviest concentrations of traffic ... delivers so much more value and performance than surface patterns ... yet costs no more. Specify Vina-Lux 800 Series, for installation over concrete — above, on or below grade, or over wood or plywood subfloors. Consult Sweet's Catalog — or let us send you samples, color charts and detailed architectural specifications. Azrock Floor Products Division, Uvalde Rock Asphalt Company, 524A Frost Building, San Antonio.

Magnified view shows pattern distribution through full thickness of tile. Available in 1/8", 3/32", 1/16" gauges.

> Visit us at ARA Convention Exhibit No. 21

another fine floor by AZROCK

For more information, turn to Reader Service card, circle No. 329



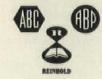
#### The World's Largest Architectural Circulation

- 63 NEWS REPORT (For Full Contents, See Page 63) New Yorkers win Boston City Hall competition . . . AISC award winners announced . . . Saarinen's TWA Terminal opens . . . ANNOUNCEMENT OF TENTH ANNUAL P/A DESIGN AWARDS PROGRAM.
- 116 EDITORIAL FEATURES (For Full Contents, See Page 115)

P/A examines the architecture of leisure: Richard Dober's introduction traces the development of recreational facilities in the U.S. Presentations of seven facilities follow: a private pool by Lawrence Halprin; a private golf course in Toronto: Paul Rudolph's Yacht and Country Club in Florida; a swim club in the heart of Philadelphia; an airport in Switzerland that doubles as a resort; a cultural center in Berlin; and a soccer stadium for Mexico City by Candela . . . IDD surveys changes in design of kitchen equipment and planning . . . An analysis of common law copyright as it applies to the architect . . . M&M presents a small office building utilizing plastics and epoxy glues directly in building construction . . . Method for constructing unusual shapes without use of conventional formwork.

- 172 MECHANICAL ENGINEERING CRITIQUE: School Building Isolates Jet Noise By William J. McGuinness
- 174 SPECIFICATIONS CLINIC: Safeguarding Product Specs By Harold J. Rosen
- 176 IT'S THE LAW: Liability for Negligent Performance By Bernard Tomson and Norman Coplan
- 178 VIEWS
- 182 BOOK REVIEWS: A Genuinely Great Critic
- 226 JOBS AND MEN
- 228 DIRECTORY OF PRODUCT ADVERTISERS
- 230 P.S.: The Question of Quality

PROGRESSIVE ARCHITECTURE published monthly by REINHOLD PUBLISHING CORPORATION, 430 Park Avenue, New York 22, N. Y. Ralph W. Reinhold, Chairman of the Board; Philip H. Hubbard, President and Treasurer; Kathleen Starke, Secretary and Assistant Treasurer; Donald Hoagland, Merald F. Lue, Fred P. Peters, D. Bradford Wilkin, William P. Winsor, Vice-Presidents. Executive and Editorial offices, 430 Park Avenue, New York 22, N.Y. Subscriptions payable in advance. Publisher reserves the right to refuse non-qualified subscriptions. Subscription prices to those who, by tile, are architects, engineers, specifications writers, estimators, designers or draftsmen, and to Government departments, trade associations, members of the armed forces, architectural schools and students—\$5.00 for one year, \$8.00 for two years, \$10.00 for three years. All others—\$10.00 a year. Above prices are applicable in U. S., U. S. Possessions, and Canada. All practicing architects and engineers outside U. S., U. S. Possessions, and Canada—\$10.00 for one year, \$16.00 for two years, \$20.00 for three years. All others—\$20.00 a year. Single copy—\$1.00; special issues—\$2.00 per copy. Printed by Publishers Printing Company, New York, N.Y. Copyright 1962. Reinhold Publishing Corporation, Trade Mark Reg. All rights reserved. Indexed in Art Index, Architectural Index. Second-class postage paid at New York, N.Y.





The Drake-Oak Brook Hotel at Oak Brook, Chicago's giant new shopping plaza in the western suburbs. Architects: Walton and Walton, A.I.A. and Shaw, Metz & Assoc., A.I.A. Interiors: Robert Steffel, A.I.D.

#### A new design for the new Drake-by The Jack Denst Designs

Air wall room dividers at Chicago's fashionable new Drake-Oak Brook Hotel will be smartly styled with eight-foot oriental trees custom-designed and silk screen printed

on Shiki silk textured vinyl. For information regarding our custom design service, write...







For more information, turn to Reader Service card, circle No. 336

The Anemostat<sup>®</sup> CLD can combine high capacity and high temperature differentials. That's why one CLD will sometimes do the job of two ordinary outlets - in less space! You can use a CLD on one or both sides of a troffer use both units for supply, or combine supply and return. And you always get true horizontal air distribution. That means no down-drafts at all. That means comfortable people.

Diffuser/Troffer Combination MAXIMUM FLEXIBILITY OPTIMUM LIGHT OUTPUT MINIMUM CEILING SPACE The Anemostat<sup>®</sup> CLD Diffuser is concealed on the side of a light troffer with an insulating air space between. Supply air can't get into the troffer. Lamp temperature remains constant. Results: stable light output with clean, bright illumination, no color shift. Anemostat makes the diffusers, other leading manufacturers make the troffers. See your Anemostat Representative for details.

ANEMOSTAT CORPORATION OF AMERICA SCRANTON, PENNSYLVANIA A SUBSIDIARY OF

DYNAMICS CORPORATION OF AMERICA



@1962 ANENDSTAT CORPORATION OF AMERICA

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

## weathertight prismatic wall unit

... universal in its application for outdoor lighting of Commercial, Institutional and Industrial Buildings

150 – 200 W. DESIGNER STYLED • EVERLASTING CAST ALUMINUM QUALITY, CORROSION RESISTANT, SATIN FINISH • ENCLOSED AND GASKETED FOR WEATHERTIGHT, VAPORTIGHT, BUG-TIGHT OPERATION • INTEGRAL CAST HINGE • HEAT RESISTANT, HIGH IMPACT, CORNING PYREX® ASYMMETRIC PRISMATIC REFRACTOR • AVAILABLE WITH OR WITHOUT INTEGRAL CAST ALUMINUM PROTECTIVE GUARD.

### the mcPhilben way . . .

... the original design of a highly efficient luminaire combined with Quality construction and enduring finish... resulting in a new visual experience. "DELTA-7" exterior wall bracket

is the newest expression of one half a century of

mcPhilben devotion to Superior Craftsmanship and unique, tasteful design. This meticulous attention to detail that must satisfy leading Architects and Engineers everywhere is what we call . . . the mcPhilben way.

See this yourself . . . contact your mcPhilben Representative or write to us for complete specification data,





For more information, turn to Reader Service card, circle No. 365

JULY 1962 P/A



Model 1016 EDA, one of the 1000 SERIES models chosen for The Upjohn Company's new general office building at Kalamazoo, Mich.

styled for the buildings you design ... IT'S 1000 SERIES BY GF.

With its crisp, all-flush surfaces and pleasing proportions, this architect-styled beauty goes hand-inglove with today's smart business interiors. There are models to satisfy every business need in a variety of finishes and top materials. You can see 1000 Series at your nearby GF branch or dealer showroom. Or write Dept. PA-19 for a color brochure. The General Fireproofing Company, Youngstown 1, Ohio. For more information, turn to Reader Service card, circle No. 344

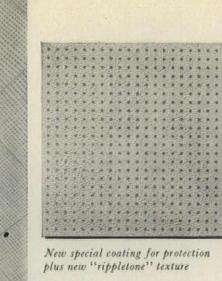


## Gold Bond gives you a moisture-resistant



## way with ceilings ...

REAL





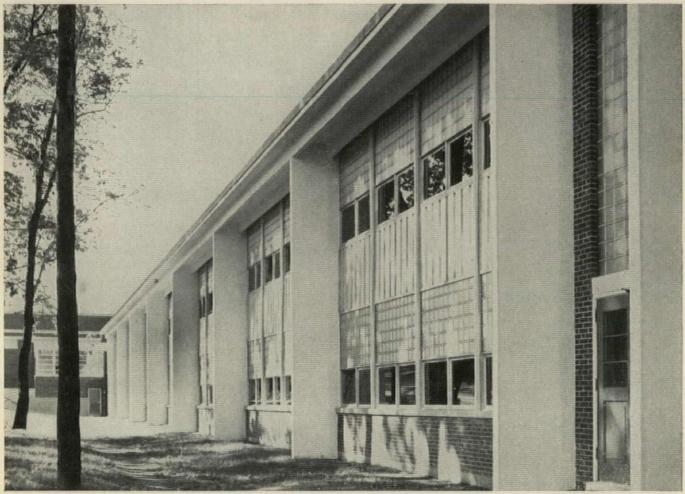
New membrane backing reduces sound by diaphragmatic action

Asbestibel Perforated Asbestos — a way to design moisture out, beauty in. Guaranteed not to shrink, warp or sag, even in above-average humidity areas. And when the panels are backed with mineral wool pads (in various thicknesses), you get a wide range of sound-absorbing coefficiencies. New features have been added: 1. Perforated Asbestos Panels with a lowcost membrane backing that reduces sound by diaphragmatic action. 2. New special coating for surface protection makes cleaning easier and faster. 3. A new "rippletone" texture for

heightened visual interest. For even more ways with ceilings, call your Gold Bond<sup>®</sup> Representative. National Gypsum Company, Buffalo 13, N.Y.



## new PRESTRESSED GONGRETE junior high school at Laconia, N. H., gets high marks for economy, safety, attractiveness



The advantages which make prestressed concrete outstanding for any kind of building made it top-of-the-class selection for construction of Laconia's fine new Junior High School. Prestressed earned highest rating in the following important subjects: fireproofness, durability, economy and ease of construction, spaciousness, pleasing architectural design, and lowest possible maintenance costs.

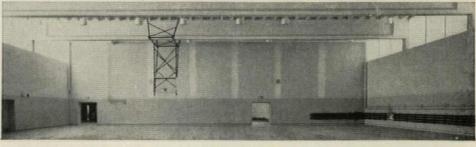
Where building a school is concerned, there is naturally a particular insistence on safety. That this should be met without "loss of marks" in the other subjects shown is indeed an achievement. For any kind of building you may now be planning—school, plant or warehouse, office building, bridge, aircraft hangar, motel or apartment, to name just a few—it will pay you to give first consideration to prestressed concrete.

Roebling, first and foremost in the continuing development of prestressed concrete in this country, can put at your disposal a wealth of practical experience and design data as well as the names of fabricators nearest you. Roebling also supplies a full range of the finest prestressing wire and strand available. To get *all* the advanNew, attractive Junior High School at Laconia, N. H., has entirely fireproof prestressed concrete framing, including double tee section roof schools: Kenneth L. Sherman. Architects and Engineers: Alfred T. Granger Associates, Hanover, N. H. General Contractor: Harvey Construction Company, Manchester. Prestressed Concrete Fabricator: Structural Concrete Corporation, Laconia, N. H.

The prestressed concrete girders in the gymnasium section are 95 feet in length and weigh 35 tons each, allowing a large, column-free activity area. The school is also the first in the New England area to be constructed with an all precast, prestressed concrete frame.

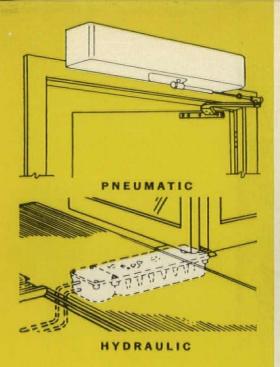
tages of prestressed concrete construction, be sure to call or write Roebling's Construction Materials Division, Trenton 2, New Jersey.

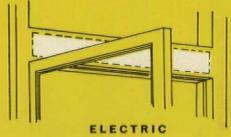
ROEBLING Branch Offices in Principal Cities John A. Roebling's Sons Division The Colorado Fuel and Iron Corporation



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

JULY 1962 P/A





## NOW CHOOSE FROM

#### 3 STANLEY MAGIC-DOOR OPERATORS

In selecting the right automatic door operator for your needs, it's important to remember that all doors and all operating conditions are <u>not</u> the same; each installation requires proper selection and application of power and control. That's why Stanley manufactures not just one but <u>three</u> distinct types of operators: MAGIC-DOOR Hydraulic and Pneumatic Operators with the power and control features needed to handle the heaviest doors under the most severe operating conditions . . and now the new MAGIC-DOOR Electric Operator that teams Stanley quality with exceptional economy. When you choose from the complete Stanley line, you can always be sure of the finest for any application!

SEND FOR YOUR FREE COPY OF FOLDER M67B giving specifications on all Stanley MAGIC-DOOR Operators and details on a variety of commercial, industrial, retail and institutional applications.



TALL, DARK ... and HANDSOME with STANLEY HINGES



#### STANLEY BB601\* Hinges Used on Heavy Panel Doors In Public Service Building

Durability **and** the modern, trim look were required of the hinges for these heavy panel doors that form a storage wall in the auditorium of the Public Service Company's new building in Denver. Specified: the BB601\* Extra Heavy Weight model in Stanley's new series of "Slimline" Design 3-knuckle Full Jeweled Ball Bearing Hinges. Five 5" x 8" hinges were used on each of the 1 <sup>3</sup>/<sub>4</sub>" solid teak panel doors measuring 4' wide and 12' high.

Other types of Stanley quality hinges, including the regular weight "Slimline" BB600, were also specified for this modern steel and granite office building.

For information on Stanley quality hinges, or assistance with a specific application, write to: Stanley Hardware, Division of The Stanley Works, Dept. G, 78 Lake Street, New Britain, Connecticut.

\*Patent Pending

A MERICA BUILDS BETTER AND LIVES BETTER WITH STANLEY This famous trademark distinguishes over 20,000 quality products of The Stanley Works, New Britain, Conn.—hand tools • power tools • builders hardware • industrial hardware • drapery hardware • automatic door controls • aluminum windows. • stampings • springs • coatings • strip steel • steel strapping — made in 24 plants in the United States, Canada, England, Germany and Italy. CANADIAN PLANTS: HAMILTON. ONTARIO, AND ROXTON POND, P.Q.

BUILDING: PUBLIC SERVICE COMPANY Denver, Colorado ARCHITECTS: Berne, Muchow, Baum & Polivnick, A.I.A. CONTRACTOR: Meade & Mount Construction Company



Atlanta Merchandise Mart Building, Atlanta, Ga. Architects: Edwards & Portman, AlA, Atlanta. Contractor: Ben Massell Enterprises (Consolidated Realty Investments, Inc..) Atlanta. Structural Engineer: Jack K. Wilborn, Atlanta. Precast Concrete Panel Manufacturer: "Mo-Sai" by The Mabie-Bell Company, Greensboro, N. C

#### EDWARDS & PORTMAN, AIA,

**selected reinforced precast white concrete** for the curtain walls of this 23-story skyscraper, largest commercial building in the Southeast. The 2,000 1<sup>1/2</sup>-ton sandwich panels were made with ATLAS WHITE portland cement and exposed quartz aggregate ... with fins of finer quartz to create changing shadow patterns as the sun moves across the Georgia sky. Averaging 5' 7<sup>1/2</sup>" by 11' 3<sup>1/2</sup>", the interlocking panels are welded to steel angles and bolted to the concrete framework. In cross section, the panels have 1<sup>1/4</sup>" of white concrete, 1<sup>1/2</sup>" of rigid insulation, and another 1<sup>1/4</sup>" of concrete. I More architects are recognizing the structural as well as the decorative qualities of precast concrete. It can be cast in many sizes, shapes, colors and textures. I For specific details, consult your local precast concrete manufacturer. For

literature, write Universal Atlas, 100 Park Avenue., New York 17, N. Y.



Universal Atlas Cement Division of United States Steel

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

JULY 1962 P/A

# AETNAMALLE ECUITABLE

EQUITABLE BUILDING, NEW YORK. ARCHITECTS: SKIDMORE, OWINGS & MERRILL GENERAL CONTRACTOR: TURNER CONSTRUCTION COMPANY PARTITIONING: AETNAWALL, MANUFACTURED AND INSTALLED BY AETNA STEEL PRODUCTS CORPORATION.





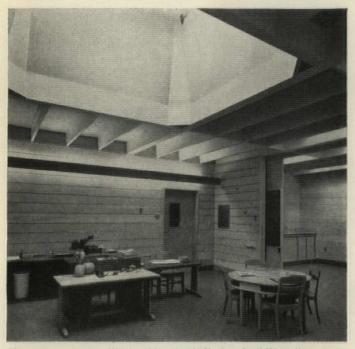
#### THIS IS THE LARGEST SINGLE-TENANT, OWNER-OCCUPIED OFFICE BUILDING IN THE WORLD AND IT HAS 6.6 MILES OF AETNAWALL PARTITIONING IN IT

WRITE FOR NEW AETNAWALL CATALOG. AETNA STEEL PRODUCTS CORPORATION, 730 FIFTH AVENUE, NEW YORK 19, N. Y For more information, turn to Reader Service card, circle No. 322



A continuous counter of wood with overhead cove lighting efficiently takes the place of desks. Planked walls, tongue-and-groove ceiling with exposed supports facilitate maintenance—a job performed by students, teachers, and parents in this unique progressive school.

## For schools with flexibility to grow use WOOD...and your imagination

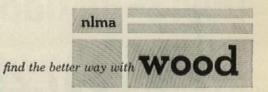


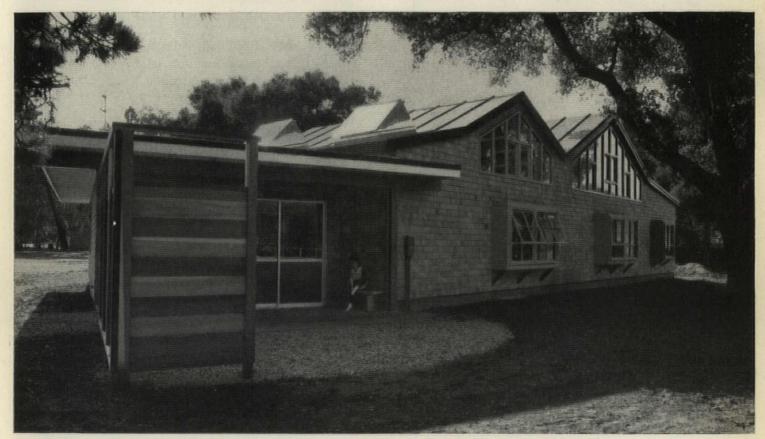
No two rooms are alike in this school. Design flexibility allows unusual freedom with sliding wood walls that open into a lab, close to make a blackboard. Bright interiors are maintained with sizable skylights.

New schools of thought are reflected in a progressive school of wood. In any design, the adaptability and economy of wood permit continuous alterations with ease, superior structural qualities within uncompromising community budgets.

The familiarity of wood creates a comfortable environment for learning. Its inherent strength is proved in sweeping laminated beams, sturdy supporting posts, and many other remarkable forms that are solely, solidly wood's. Its acoustical characteristics help contain the sounds of a cheer-ridden gymnasium, maintain the silence for study under the same roof. Wood, too, has a natural capacity to insulate, the ability to endure through decades of class reunions. For more information on designing schools with wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION Wood Information Center, 1619 Massachusetts Ave., N.W., Washington 6, D.C.





Tree-shaded, this shingle-sided school of wood suits its site naturally. Overhanging laminated beams, an extended multitoned panel-and-post entranceway, a twin-peaked, wood-sheathed roof with generous skylights—all permit greater economies, home-like qualities in the Peninsula School, Menlo Park, Calif. Gillis & Forell, architect and structural engineer.

## **TERRAZZO** floors—in 688 classrooms save school system \$37,262 per year ----

Henrico County, Virginia has specified monolithic Terrazzo floors *throughout* all schools built or planned since 1957. Savings in manpower and materials in floor cleaning and maintenance are exceeding original estimates. Here is a comparison made by Mr. George R. Grubbs, Custodial Supervisor for the school system:

#### Typical 30-classroom elementary school

Asphalt tile—annual cost of cleaning and maintenance \$4,505.00 Terrazzo—annual cost of cleaning and maintenance 2,880.00 Annual savings with Terrazzo \$1,625.00 per school or 54.16 per classroom

688 classrooms in Henrico's campus-plan schools will be floored with Terrazzo when present construction is completed. Annual savings in maintenance and cleaning total \$37,262.08. At this rate, declares Mr. Grubbs, the higher original installation cost of Terrazzo ( $30\phi$  per sq. ft. more than the next best floor) will be justified in just a few years.

These savings are based on cleaning and routine maintenance only. Repairs and replacement are not included. County officials state that in 8 or 10 years, when asphalt tile would have to be replaced, savings with Terrazzo will be sharply increased.

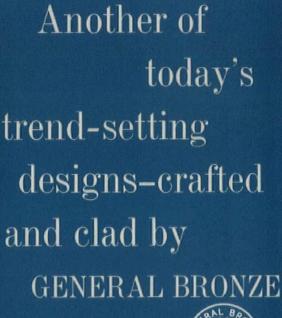
The benefits of Terrazzo have been more than economic. Teachers and students are pleased with floor comfort and beauty—beauty that will never be marred by indentations made by women's spike heels. Skillfully engineered acoustical ceilings keep noise at or below the usual classroom level.

Technical Data Brochure upon request. Field representatives available for consultation. Catalogued in Sweet's

Member Producers' Council

THE NATIONAL TERRAZZO AND MOSAIC ASSOCIATION

N.A.D.A. Building, 2000 K St., N.W., Washington, D.C.





NIAGARA POWER PROJECT'S STAIN-LESS TOWERS SHOW GB'S SKILL WITH PATTERNED CURTAIN WALLS



These monumental intake gate structures are new landmarks on the Niagara River. The functional severity of the two 100-foot towers has been softened and humanized by brilliant stainless steel curtain wall envelopes, accentuated by black enameled aluminum columns. The structures were designed by Uhl, Hall and Rich—Engineers and Architects for the N.Y. State Power Authority. Contractor: Merritt-Chapman & Scott Corp.

In these unusual towers, many recurring problems in curtain wall treatment were amplified. Corrosive atmospheres were present. Harsh reflections and "oilcanning" in the all-metal facades had to be avoided with extreme care. Maintenance had to be held to a minimum. General Bronze helped solve these problems by applying the skills of a half-century in architectural metalwork... 16 years in curtain wall construction.

For information or assistance on your own design problems, consult your Sweet's files . . . call in the General Bronze representative nearest you . . . or write to: GENERAL BRONZE CORPORATION, Garden City, New York. • Sales Office: 100 Park Avenue, New York, New York.

PERMATITE DIVISION—Custom-built Windows, Curtain Walls, Architectural Metal Work and Revolving Doors. ALWINTITE DIVISION—Stock-size Aluminum Windows and Doors. BRACH MFG. CO. DIVISION—Radio, Television and Electronic Equipment. STEEL WELDMENTS, INC. DIVISION—Custom Fabrication in Steel and Iron.

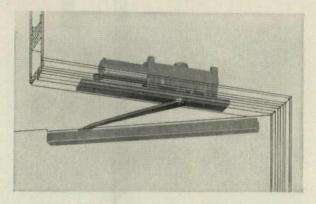
For more information, turn to Reader Service card, circle No. 343

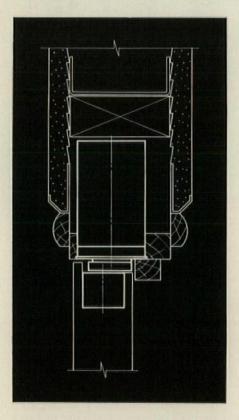
## Announcing LCN's New, Compact Overhead Concealed Door Closer SERIES 2000

For some time architects have wanted an overhead concealed closer big enough to handle medium and large doors, yet small enough to fit into a very limited space. The desire is natural; fulfillment has been difficult.

#### Door Control Machinery Must Be Rugged To Perform Well in Hard Service

For several years LCN has been developing and testing a new series of closers concealed in the head frame with track in top of door. They resemble former LCN types, but employ interior design factors which cut drastically the space requirement for the closer. They are now being introduced.





#### Series 2000 Closers Are Practical in Size and Cost

LCN's new door closers are lower in cost and take much less room overhead than the preceding 200 series. They fit into relatively thin partition walls and structural members. They are but 35/8"high and 21/6" wide. With door closed the arm is entirely hidden, yet in most cases no cut in the frame stop is required. The door may open 180°, and is preferably hung on butts, of which the largest suitable size is  $5" \ge 5"$ .

These closers are fully hydraulic (as are all LCNs) with adjustable back-check to restrain violent opening of the door. Closing and latching speeds are separately adjustable, with the spring also adjustable. Operation is remarkably uniform, winter and summer, thanks to a highly stable LCN hydraulic fluid.

#### **High Grade Materials Used Throughout**

Although compact in design, the 2000 series door closers are made for heavy duty and long service. Here quality is largely hidden. Springs are made of the finest heat treated alloy spring steel, and should outlast the closers. Cylinders are of high strength, wear resistant iron. Parts subjected to greatest wear are of hardened alloy steel. The track roller has a sealed ball bearing and a silent Nylon tire.

#### Send for Special Folder on 2000 Series

For further details, with door capacities and installation drawings, we invite you to write for Folder 2000.

#### LCN CLOSERS, PRINCETON, ILLINOIS

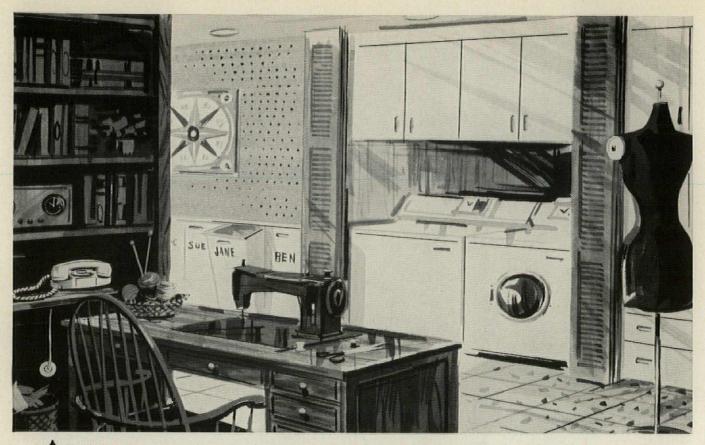
Canada: LCN Closers of Canada, Ltd., P.O. Box 100, Port Credit, Ontario

JULY 1962 P/A

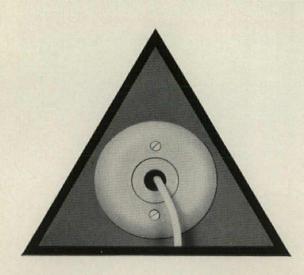


## LCN's New, Compact Overhead Concealed Door Closer SERIES 2000

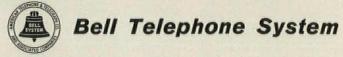
LCN CLOSERS, PRINCETON, ILLINOIS See Opposite Page for Brief Description



The Princess phone enhances the sewing nook in this recreation-utility area. For help in telephoneplanning your homes, call your local Bell Telephone Business Office. See Sweet's Light Construction File, 11c/Be, for other residential telephone installation ideas.



**DESIGN** for telephone convenience. Specify built-in telephone outlets and wiring concealed within walls. You provide for a family's future telephone needs, protect interior beauty of homes...you make homes more livable, more salable.



For more information, turn to Reader Service card, circle No. 324

CALIFORNIA REDWOOD INVITES GUESTS to stay at this charming resort hotel. The natural warmth of redwood harmonizes with the attractive setting to say, "A place as wonderful to look at as it is to stay in". Other practical reasons for specifying CRA Certified Kiln Dried redwood are found in its exceptional durability and easy, economical maintenance. Redwood is more than a naturally beautiful wood—it is a sound investment. Write Department A-12 for your copy of "The Architect's Redwood File".

> A joint venture of the offices of Eugene Weston, Jr., F. A. I. A and of Frederick Liebhardt and Eugene Weston III, A. I. A.

CRA

All the wonderful warmth of wood is best expressed in redwood

## Architect makes decorative use of Revere Copper in functional



Unique roof drainage system accomplished with copper-covered gutters; stepped-down roof faced with copper combination fascia and gravel stop.

The Pasadena Community Church is a striking example of how an edifice can be functional as well as architecturally attractive.

In creating this design, the architect had to consider: 1-Seating 2,200 people on one floor without benefit of balconies, and at the same time maintaining good acoustics. 2-Protecting the glass window wall. 3-Carrying away the run-off from the roof. 4-Breaking up the roof line so that it could be more readily installed, and without making a single, large plane area that would be monotonous in appearance.

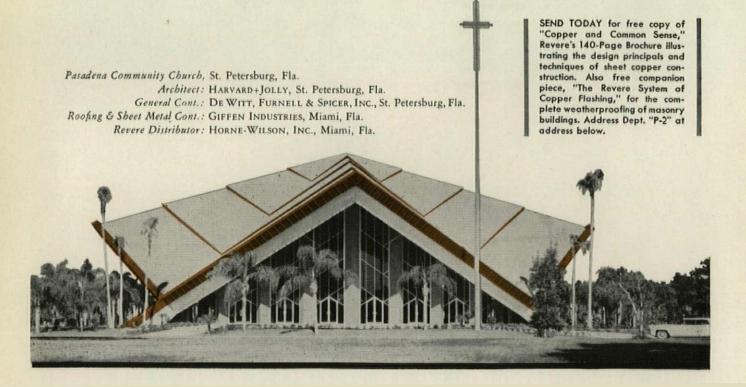
The roof construction shown makes the inside of the structure almost perfect, acoustically. Bringing the roof out to an 18' overhang shields the tremendous expanse of glass. The stepdown or shingle effect was brought about by the use of Revere Copper face flashing. This enabled the contractor to work on the roof in sections and also gave a "truer" roof, breaking up the roof silhouette against the sky into an interesting pattern.

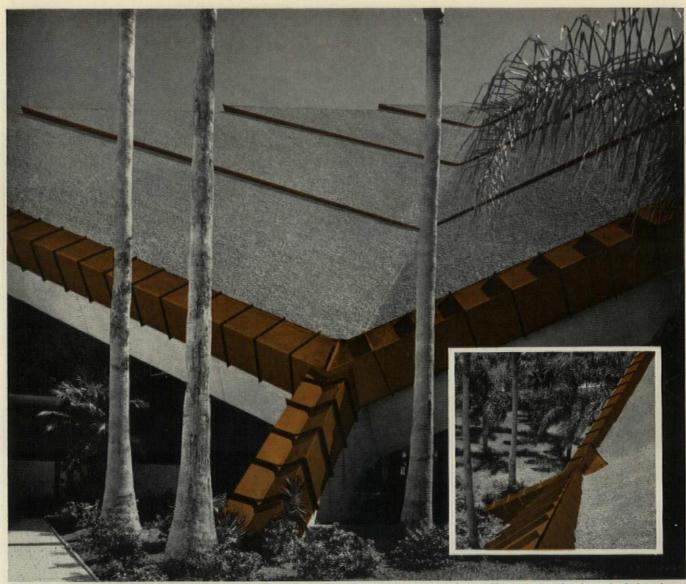
The problem of roof run-off was handled by continuing the fascia border design, in the form of copper-covered gutters running into a pool, in which semi-tropical plants are arranged. How this was accomplished is shown in the various photos on the opposite page.

"Design with copper in mind" is no idle catch-phrase. The daring architects of today are doing just that . . . more and more, and, as you can see, with most striking effects. You'll find copper doubly effective when you wish to combine utility with beauty.

The manner in which copper is applied in this structure is typical of its easy workability, its practically unlimited possibilities in design. This "Metal of the Centuries" is as modern in its construction possibilities as today's newest materials.

Revere's Technical Advisory Service will be glad to help you in creating the unusual with copper and its alloys. Get in touch with the Revere Office nearest you today.





ONE OF THE copper-covered gutters which take care of roof run-off and direct the water into pool (see below). This gutter is a closed trough which is also an extension of the fascia. Note holes in standing seam to take care of water. 12,000 lbs. of Revere 16 oz. Cold Rolled Copper were used on this structure.



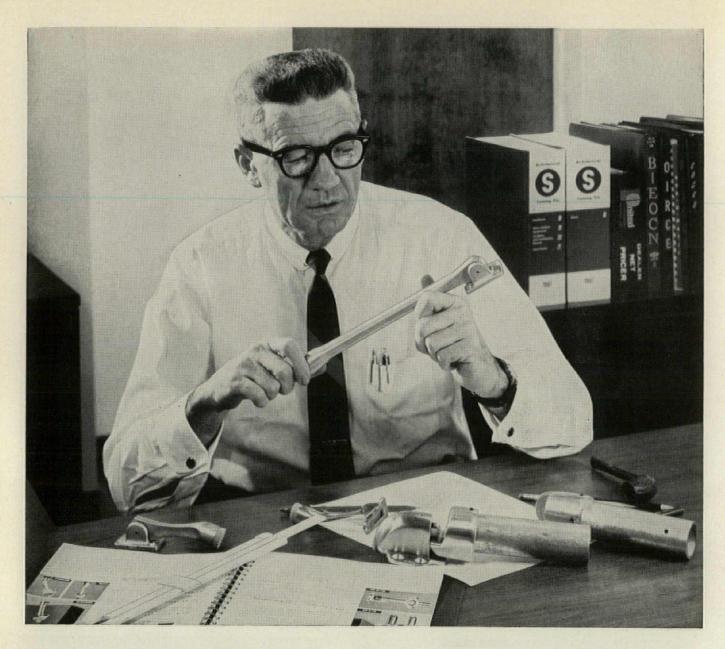
FACE FLASHING of Revere Sheet Copper also acts as gravel stop on steppeddown roof panels. This design permitted contractor to work on roof in sections.



REVERE COPPER AND BRASS INCORPORATED Dennded by Paul Revere in 1801 Executive Offices: 230 Park Ave., New York 17, N.Y. Mills: Rome, N.Y.; Baltimore, Md.; Chicago and Clinton, Illi; Detroit, Mich.; Los Anseles, Rivertide and Sants Ana, Calif.; New Bedged and Plymouth, Mass.; Brooklyn, N.Y.; Newport, Arks; F.C. Calboum, Neb. Sales Offices in Principal Chices. Distributors Everywhere

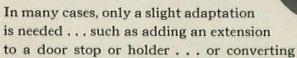


FASCIA was prefabricated in the sheet metal contractor's shop in 4' sections with a 2" standing seam.



### when standard hardware doesn't meet the need... this man knows where to get ENGINEERED ADAPTATIONS

Where a job situation requires unusual application or function . . . this man knows he can go beyond his catalog. He knows he can turn to door control specialists for custom-engineered hardware made to meet his special problem.



a floor model for head jamb application. At other times a radical innovation is indicated.

Beginning with the contribution of his local Glynn-Johnson representativebacked by administrative, engineering and manufacturing cooperation — this man expects and gets the help he needs

from GJ service.



GLYNN · JOHNSON CORPORATION/4422 no. ravenswood avenue · chicago 40, illinois

## Now...infinite modular variation with standard ceiling grid members.

#### Eastern's new exposed Modular-Grid suspension system incorporates three revolutionary features which make it the most

significant recent advance in acoustical grid construction: (1) greatest variety of flange widths ever offered at standard prices, compatible within the same module, (2) double-web design for greater strength and rigidity, and (3) cam-action end clips which literally make tee members a snap to install at any point. Modular-Grid thus provides the structural support needed for wider spacing ... allows exact overhead repetition of partition or mullion design ... offers virtually unlimited design flexibility without paying premium prices for custom members. For complete details write Eastern today. Also see Sweets 11b/Ea.

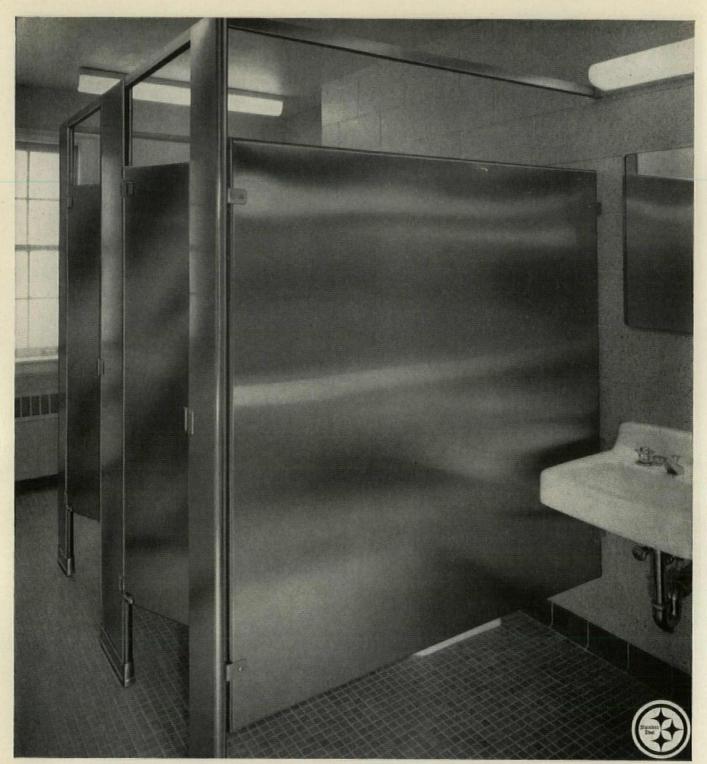
Large variety of standard flange widths. ALL HEIGHTS 134"



REFLECTED CEILING PLAN



JULY 1962 P/A



Installation: Ventura School for Girls, R. B. Bradford, Director, Department of Public Works, State of California. State Architect: Anson Boyd. General Contractors: C. K.-F-M, San Diego, California.

### **Nickel Stainless Steel never stops showing off**

How come? Because it's so easy to keep clean. These toilet partitions – made by the Ferrometal Division of Milwaukee Stamping Co.—are a good example. They're made of nickel stainless steel and will keep this washroom bright and pleasant looking for the life of the building with just a minimum of maintenance.

In addition to being easy to take care of, nickel stainless

steel also takes good care of itself. It doesn't chip. It fights off corrosion, and it doesn't stain adjacent materials. In short, nickel stainless steel is the ideal metal for interiors that need good looks, strength and durability. Try it. And for more information, write to The International Nickel Company, Inc., 67 Wall Street, New York 5, N. Y

#### INCO NICKEL MAKES STAINLESS STEEL PERFORM BETTER LONGER

The best designs are more exciting in concrete

### "Space Frame" house of concrete is assembled in 4 days from precast units

Out of the 1961 Horizon Homes Program comes this imaginative new design. The "Space Frame" house is all concrete. It is based on 16- x 16-foot modules that can be individually roofed, walled and floored. Only 6 standard sizes of precast concrete beams and panels are used.

Scores of floor plans are possible, with complete flexibility of living space. Modules can be grouped in any number, and in any arrangement of rooms, courts, terraces and gardens.

Each house can be distinctive, yet the ready-made concrete components permit fast construction schedules along with moderate over-all costs. Today, concrete offers architects unlimited opportunities for new concepts in home design. Plan to enter the Concrete Industries Horizon Homes Program.

Broad entrance terrace, formed by one of the basic "Space Frame" units. Floor is of 2' x 16' precast

PORTLAND CEMENT ASSOCIATION

concrete panels.

A national organization to improve and extend the uses of concrete

JULY 1962 P/A



Award-winning house from Concrete Industries 1961 Horizon Homes Program. Architect: Robert Damora,

Bedford Village, N.Y.



## **CUSTOM TAILORING** is an Extra Kohler Service

For example—back at the factory this man is pre-fitting a battery of urinals for the Sagamore Junior High School in Holtsville, L. I., New York.

This is regular operating procedure at Kohler Co.

He sets up the urinals—matching and leveling them. The seam covers are ground and fitted to the urinals. Each urinal and seam cover is then numbered in sequence to simplify installation. Kohler custom tailoring has solved the installation problems—assures a perfect on-the-job fit.

It's just one of the ways Kohler helps your plans get off the drawing board into your building—with a saving of time and installation costs.

Attention to detail and a fetish about quality are an everyday part of our operation. We like to think they're some of the reasons the name "Kohler" turns up so often in specifications.

#### KOHLER OF KOHLER

Kohler Co., Established 1873, Kohler, Wisconsin

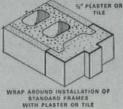
ENAMELED IRON AND VITREOUS CHINA PLUMBING FIXTURES + ALL-BRASS FITTINGS + ELECTRIC PLANTS + AIR-COOLED ENGINES + PRECISION CONTROLS

# The finest name in... METAL DOORS and FRAMES

Another suggestion from the Steelcraft Architectural Detail File.



TANDARD 4" HEADS TO DOORS TO MEET BORDARD 4" OF ONE TANDARD 4" HEADS TO DOORS TO MEET MODULAR REQUIREMENTS



ANCHOS PO

TH STANDAR

FOR ROUGH BUCKS

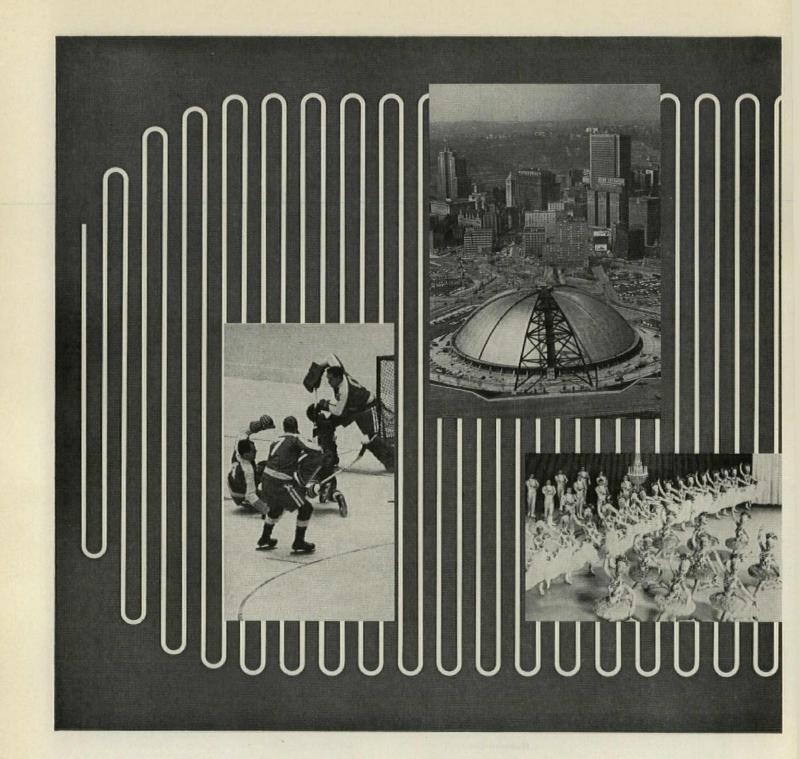
G FRAMES

Honeycomb core – A Steelcraft development that provides new strength! A honeycomb core is permanently bonded to two layers of steel... deadens sound, adds ruggedness.

Steelcraft's Indianapolis distributor, William Hanley, AHC, Central Indiana Hardware Co., discussing frame details and versatility with Werner Lesser, Chief Engineer, The Steelcraft Manufacturing Co. Steelcraft offers unmatched versatility with frames for all types of masonry construction, stocked locally in an endless variety of jamb depths and sizes . . . all designed to fit every Steelcraft door. Call your Steelcraft distributor for professional assistance in locally coordinating hardware, approval drawings and schedules for all of your metal doors and frame problems.

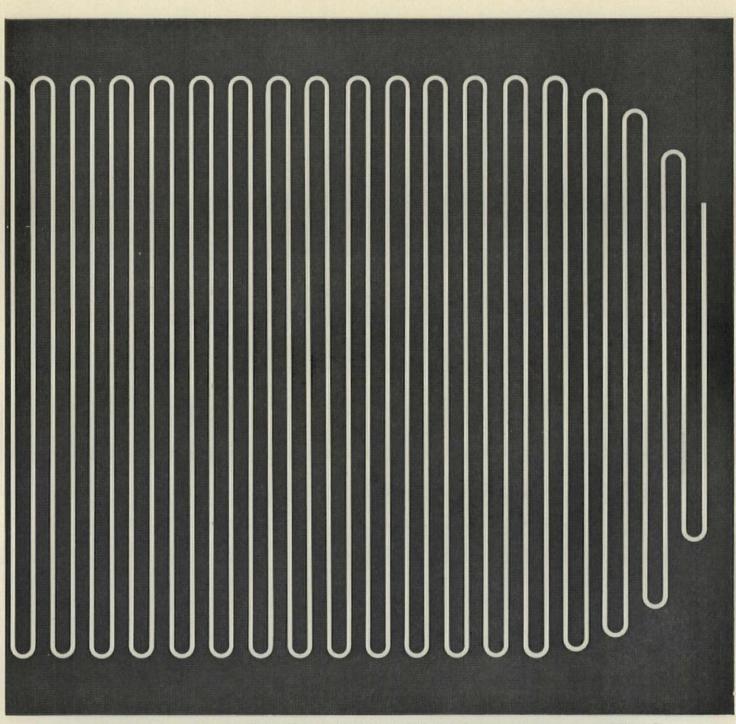
#### THE STEELCRAFT MANUFACTURING COMPANY 9017 Blue Ash Road, Cincinnati 42, Ohio





11½ miles of steel pipe ... and every inch has to be right Pittsburgh's gleaming new Auditorium, with its movable Stainless Steel roof, is now open. The world famous Ice Capades were the first attraction, and professional hockey returned to the city to cavort on the Auditorium's ice rink, which has some 11½ miles of USS National Pipe underneath.

For quick freezing of the ice, temperatures will go down around  $-42^{\circ}$ F., although specifications called for a temperature of "only"  $-16^{\circ}$ F. The system uses a calcium chloride brine solution with 1.25 specific gravity, and it is a 25.9% solution. The steel pipe used in the coils was  $1\frac{1}{4}$ " standard and extra strong; the reverse header pipe



Architect: Mitchell & Ritchey, Pittsburgh, Pa. Mechanical Contractor: Limbach Company, Pittsburgh, Pa. Supply House: Grane Supply Company, Pittsburgh, Pa.

consisted of over 600 feet of 4" through 10" pipe.

In a big commercial operation like this, the pipe has to be dependable or the show doesn't go on. That's one good reason they specified USS National Pipe. If you need top-quality steel pipe for ice skating rinks, snow melting and radiantheating installations, or for any type of building or industrial application, be sure you get USS National Pipe. For further information, or assistance with any pipe problem, write National Tube Division, United States Steel, 525 William Penn Place, Pittsburgh 30, Pennsylvania. USS and National are registered trademarks.

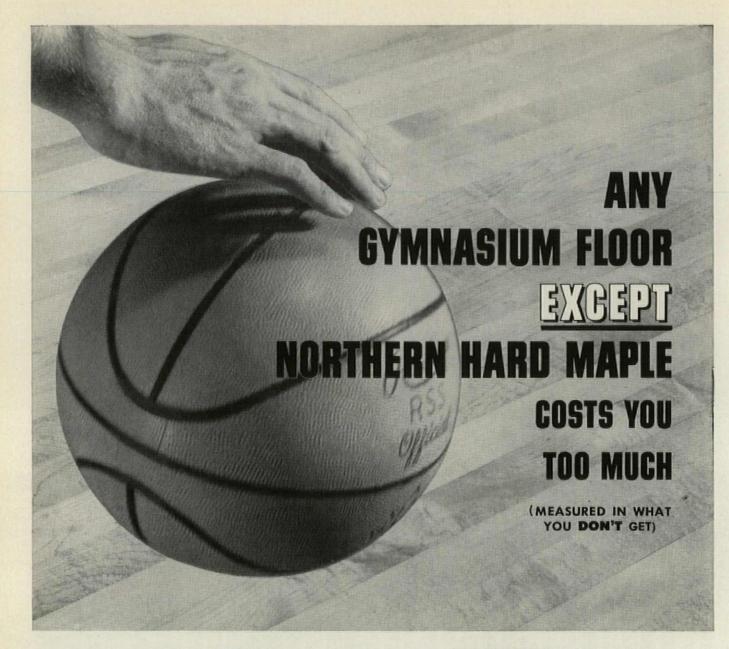


#### National Tube Division of United States Steel

Columbia-Geneva Steel Division, San Francisco, Pacific Coast Distributors United States Steel Export Company, New York



This mark tells you a product is made of modern, dependable Steel.



The facts of life about gymnasium floors are: any floor which CAN'T deliver everything a properly laid floor of Northern Hard Maple DOES deliver is inadequate.

Physical education authorities—coaches—in overwhelming majority, declare a good gymnasium floor must be smooth, non-chipping, non-splintering, non-abrasive, bright, tight, tough, with true resilience to fight off dents, scuffs and scars. Maintenance must be simple, quick, economical, effective. And all these values should endure for the life of the building. That describes a well-laid floor of genuine Northern Hard Maple (acer saccharum).

Carrying the 65-year-old MFMA millmark, this superb flooring guarantees scrupulous wood selection, scientific drying, precision milling, rigid inspection and grading. To insure the final essential, your own prudence must take over. Make sure your floor is laid by men who have honest pride in their skill and reputation. Such craftsmen are not usually the very lowest bidders (nor yet the highest). But the work they do, and the floor you get, is always a bargain.

> In strip, block and patterned types, for nailing, clamping or laying in mastic. WRITE for new list of finishing systems and products MFMA-endorsed.



Suite 583 • 35 East Wacker Drive • Chicago 1, III.

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

## These U/L ratings prove you get more than just durable beauty with VICRTEX<sup>®</sup> V.E.F.<sup>\*</sup> wallcoverings



(UL) and Gov't. tests verify these important fire retardant findings:

ANTI FLAME-SPREAD CHARACTERISTICS

K LOW SMOKE TOXICITY

\* LOW SMOKE DENSITY

Here is proof positive that beauty and fire safety factors can be com-bined in a wallcovering! In test after test VICRTEX V.E.F. Vinyl Wallcoverings were subject to the world's most stringent fire resistance trials. The results conclusively prove VICRTEX V.E.F. Vinyl Wallcoverings meet the highest specifications in fire safety standards!

All Vicrtex safety characteristics have been tested and verified by U/L, the U.S. Bureau of Standards . . . Federal, State and City Governments . . . independent testing laboratories

and private industry. Write today for complete data con-tained in Vicrtex Fire Hazard Classification Guide & Specification Summary as well as samples, prices.

#### L. E. CARPENTER & CO. Empire State Building, New York 1

Z.º

LOngacre 4-0080 • Mills: Wharton, N.J. For more information, circle No. 332

vinyl electron-ically fused

TER & CO.

## Only With Monolithic REINFORCED CONCRETE Can You Be This Creative

The formative limitations of many construction materials make *this* type of structure practically impossible except with monolithic reinforced concrete. Monolithic reinforced concrete has no limitations in creative application. That's why architects utilize the superior advantages of this versatile construction material for contemporary buildings as well as more conventional structures.

On your next project, design with greater freedom-design for monolithic reinforced concrete.





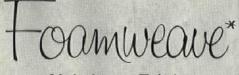


Concrete Reinforcing Steel Institute 38 South Dearborn Street Chicago 3, Illinois

For more information, turn to Reader Service card, circle No. 333

JULY 1962 P/A

#### INTRODUCING



Upholstery Fabrics and Wall Coverings

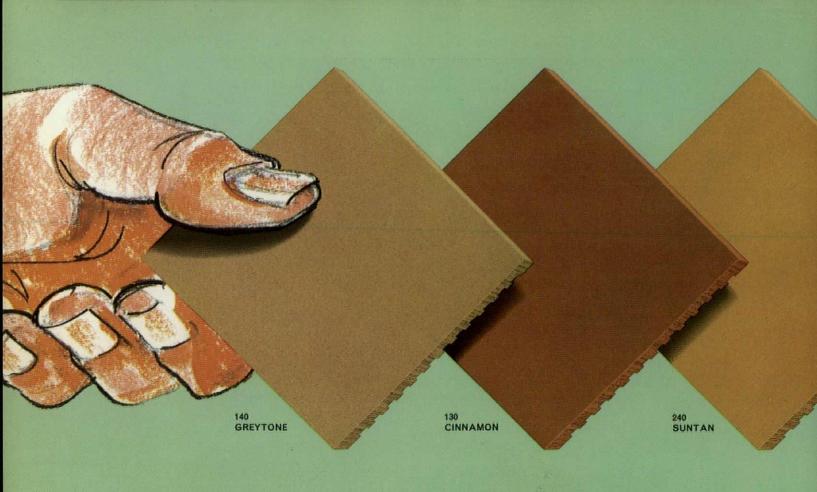
> chamelot in beautiful tricot-knitted nylon! Foam-lined suede, the first of many new ideas in upholstery and wall coverings to come to you from FOAMWEAVE. The fiber is one hundred percent nylon for beauty, ease of care and durability. Lined with urethane foam for extra luxury, and the fabric breathes for added comfort. Most FOAMWEAVE fabrics are also yours in insulating and acoustical wall coverings. Write for sources and swatches.

- OAMWEAVE INC., 200 CLIFTON BOULEVARD, CLIFTON, NEW JERSEY

\*TRADE MARK OF FOAMWEAVE, INC.

°

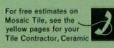
BY MASTERCRAFT OF GRAND



The Quarry Tile with the most in color selection and coast-to-coast service ...



Special forms of Carlyle Quarry Tile serve special requirements admirably.





Irregular rippled texture gives excellent traction and a distinctively dif-ferent appearance.



Abrasive sufface Abrasive aggregate im-pregnated in the sufface gives non-slip traction at stairs and other problem spots.



CHEROKEE PATTERNS Of the same materials as regular quary tile, in special cushion-edge shapes. Gives hand-crafted appearance.

Golf Club Tile takes the wear in a prominent shopping plaza.



Vitreous Navajo Quarry Tile cuts work in a school kitchen.



160 ORIENTAL\*

150 EGYPTIAN

110 NAVAJO\*

250 BLUEGRASS GREEN

170 RUSSET

If there is an "all-purpose" tile, this is it. And the designer can do so many fine things with it. Floors that are charming . . . and built to take a beating, indoors or out. Solid colors, flashed colors or patterns that combine different colors. All with per square foot economy.

For full-size high-fidelity printed sample sheets of all Carlyle colors, ask your Mosaic Representative or write us.



#### THE CARLYLE TILE COMPANY, **IRONTON, OHIO**

These colors made in Ironton, Ohio. Colors differ West of the Rockies.

\*Vitreous



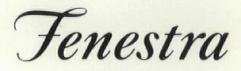
MOSAIC A subsidiary of The Mosaic Tile Company

Reinhold announces the publication of THE ARCHITEC-TURE OF MONUMENTS: The Franklin D. Roosevelt Memorial Competition by Thomas H. Creighton, editor of Progressive Architecture. A critical commentary that considers the entire question of competitions, how they are judged, and whether or not they produce significant results. Available now at \$6.95. 350 illustrations include reproductions of models, plans, and drawings of more than 300 of the 600 entries in this controversial competition.

	30 Days' Examination!						
	D BOOK DIVISION, Dept. M-120						
Pleas The Frankl the followin	se send me a copy of THE ARCHITECTURE OF MONUMENTS: in D. Roosevelt Memorial Competition for 30 days' examination under ing terms:						
	□ \$6.95 enclosed (Reinhold pays all delivery charges)						
	□ Bill me (plus delivery charges)						
PRINT NAME							
HOME ADDRE	SS						
CITY	ZONE STATE						
C	! Enclose total payment with order and Reinhold pays regular delivery charges. Same ge guaranteed. Please add sales tax on Ohio, Pennsylvania, and New York City orders.						

watertight building (because steel expands at half the rate of aluminum, greatly simplifying sealing). Fenestra steel curtainwall can also be capped with aluminum, porcelainized aluminum, or stainless steel. c... Shear walls take lateral loads. Spacing may be as long as 120 feet. No other structural element is needed. With this revolutionary type of construction, the designer can, for the first time, build irregular shapes economically using the shear walls for partition walls. You get these extra economies: design time is reduced and on-the-job labor costs are cut. In fact, the entire shell can be engineered, fabricated, and erected by one responsible source-Fenestra Incorporated.

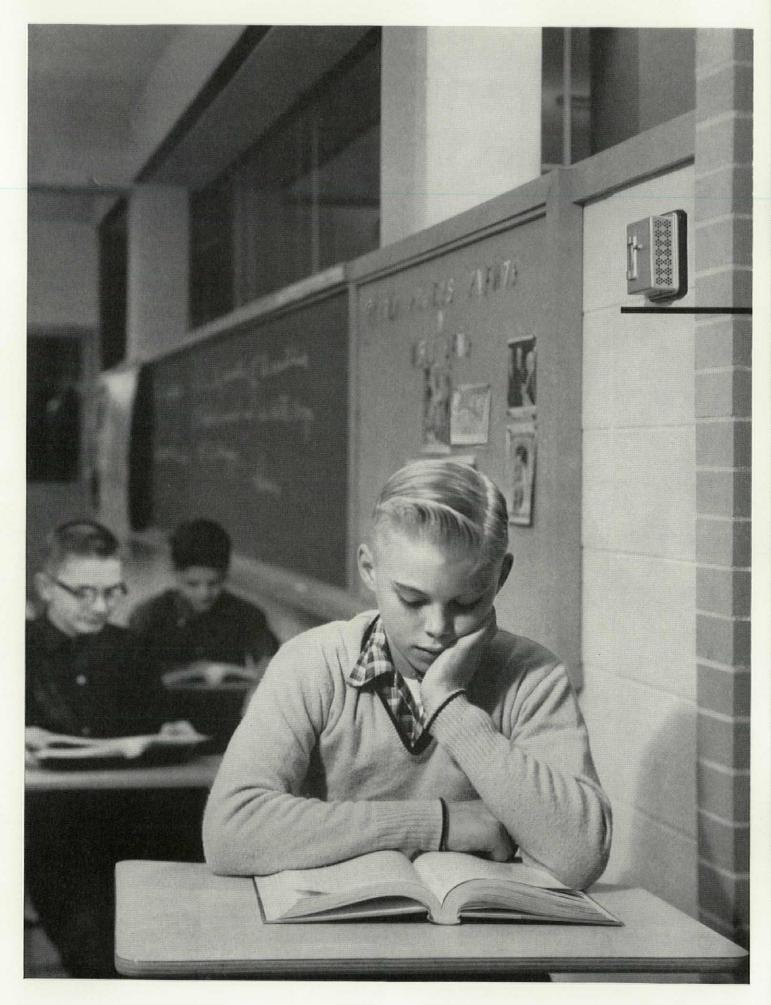
Look into this new structural system. Call your Fenestra representative (he's in the Yellow Pages), see Sweet's File Catalogue 3b/Fe, or write to: Fenestra Incorporated, Dept. PA-72, 220 Delaware Ave., Buffalo 2, N. Y.



INCORPORATED STEEL CURTAINWALL SYSTEMS • CELLULAR STEEL ROOFS, FLOORS, WALLS • METAL DOORS • GUARD SCREENS

For more information, circle No. 340





### THERMOSTATS

## BELONG ON THE WALL

... because they sense the *true* room temperature out in the room where the students are.

... because they respond faster to room temperature changes.

... because they are accessible and can be easily read and adjusted to suit any activity.

... because they can't be fooled by window down-drafts, air leakage, or cold air off the floor, as often happens to thermostats mounted inside unit ventilators.

... because they result in fewer complaints and calls for help from teachers.

... because they are so simple to switch from "night" to "day" comfort levels — an essential feature for after-hours heating economy.

... because they allow fast, economical early-morning warm-up without overheating.

... because, when installed by Johnson, they are part of a control system that will outperform, outlast, and, over the life of the building, cost less than any other type of control.

When it comes to your temperature control system, you'll be time and money ahead to rely on the organization which has installed more school thermostats than the rest of the control industry combined . . . Johnson Service Company, Milwaukee 1, Wisconsin. 110 Direct Branch Offices.



DESIGN . MANUFACTURE . INSTALLATION . SINCE 1885

## IN DESIGNING ONE-STORY BUILDINGS

#### **Get Pin-Point**

Zone Control

#### of

#### **Heating and Cooling**

Every Atmos-Pak roof-mounted heating and/or cooling unit is a complete and completely autonomous system. This makes it possible to design and to enjoy precise zoning and control of interior "weather."

Atmos-Pak is a roof-mounted, low-silhouette, prefabricated heating and/or cooling system specifically engineered for large one-story buildings. It has innumerable advantages for shopping centers, supermarkets, discount houses, bowling alleys, schools, post offices, churches, and industrial buildings. The only interior fitting is an inconspicuous, although good-looking, diffuser, integral with the unit. The onepiece apparatus can be delivered and in operation the same day. Optional colors and housing designs.

Dispensing with boiler and apparatus rooms, Atmos-Pak saves space. Pre-fabrications reduces on-site installation to three quick connections. The supply and return air distribution chambers do away with ductwork. Air-cooling makes water-towers, evaporative condensers, miles of pipe, and other appurtenances unnecessary.

The 50 standard Atmos-Pak models range in individual cooling capacity from 5 to 35 tons. As many units as are needed to add up to the total requirements, are installed. Heating capacity provided as required.

Specify Atmos-Pak for the assurance of problem-free comfort. Write for additional information.

ATMOS-PAK, INC., 88 North Highland Avenue, Ossining, N. Y. Pioneer, Designer, and Manufacturer of Roof-Mounted Heating and/or Cooling Systems.

'There's always room on top for the original low silhouette



Patent No. 2886955

ATMOS-PAK, Inc. 88 North Highland Avenue Ossining, N.Y.

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

For more information, turn to Reader Service card, circle No. 328





DRAWING WITH PEN AND INK, REVISED EDITION by ARTHUR GUP-TILL. Here is a complete revision of Guptill's famous work on pen and ink drawing. Step-by-step instructions plus hundreds of detailed drawings guide the reader through the beginning and advanced techniques of pen and brush. Includes almost a hundred examples of ink drawings by famous artists such as Searle, Topolski, Dufy, Legrand, Kley, Raleigh and others. April 1961, 8¼ x 10¼, 160 pages, fully illustrated, \$8.95

PENCIL DRAWING STEP-BY-STEP by ARTHUR GUPTILL. Through a series of progressively arranged chapters, every one a definite lesson, the reader is advanced another natural step toward his ultimate goal. Information on needed materials; practice in line and tone; light, shade and shadow; textures; construction; testing; transferring; rendering in line and tone; composition; spontaneity and speed; still life; interiors and furniture; landscape; trees, water, fog, skies, and snow; and the living subject are all included. 144 pages, 8¼ x 10¼, 121 black and white drawings and 2 color plates, \$7,95

PENCIL TECHNIQUES IN MODERN DESIGN by WILLIAM W. ATKIN, RANIERO CORBELLETTI and VINCENT R. FIORE. A complete study of modern pencil design methods including fine line, pencil painting and broad stroke and how they can be used in architectural forms, perspective and rendering. 128 pages, 9 x 12, 250 illustrations. \$8.25

**PENCIL BROADSIDES (Enlarged Edition)** by TED KAUTZKY. This enlarged edition of Kautzky's original work adds a portfolio of his drawings never published before. Detailed lessons explain the broad stroke pencil technique and its application to the expressions of architectural and landscape forms and textures. 64 pages, 9 x 12, 23 illustrations. \$5.50

**PENCIL PICTURES** by TED KAUTZKY. Deals with creating pictures in pencil from subject matter found in nature. Landscapes of the seashore, farming, country, mountains and woodlands are illustrated and analyzed. 31 magnificent plates are reproduced by lithography, 9 x 12, \$5.50

ARCHITECTURAL PRESENTATION IN OPAQUE WATERCOLOR by CHRISTIAN E. CHOATE. A logical rather than an imitative approach to the subject fully spells out the fundamentals and advanced techniques of architectural illustrations in color. The book teaches by making clear the various approaches to illustrative processes in place of merely supplying examples to follow. Over 200 black and white illustrations and 16 pages in full color accompany the text. 1961, 160 pages. \$12.50

HOW TO USE CREATIVE PERSPECTIVE by ERNEST W. WATSON. Each of 20 chapters covers a particular phase of drawing followed by analyses of perspective as used (and often violated) by America's top illustrators. 160 pages, 8½ x 10½, 350 illustrations. \$7.95

COURSE IN PENCIL SKETCHING BOOK ONE: Buildings and Streets by ERNEST W. WATSON. Detailed step-by-step instructions and priceless demonstrations by the dean of this country's art teachers. 63 pages, 7% x 10%, over 100 illustrations. \$2.95

BOOK TWO: Trees and Landscapes. 60 pages, 7<sup>3</sup>/<sub>4</sub> x 10<sup>1</sup>/<sub>2</sub>, over 70 illustrations and photographs. \$2,95

BOOK THREE: Boots and Harbors. 60 pages, 7% x 10% , over 75 drawings and photographs. 2.95

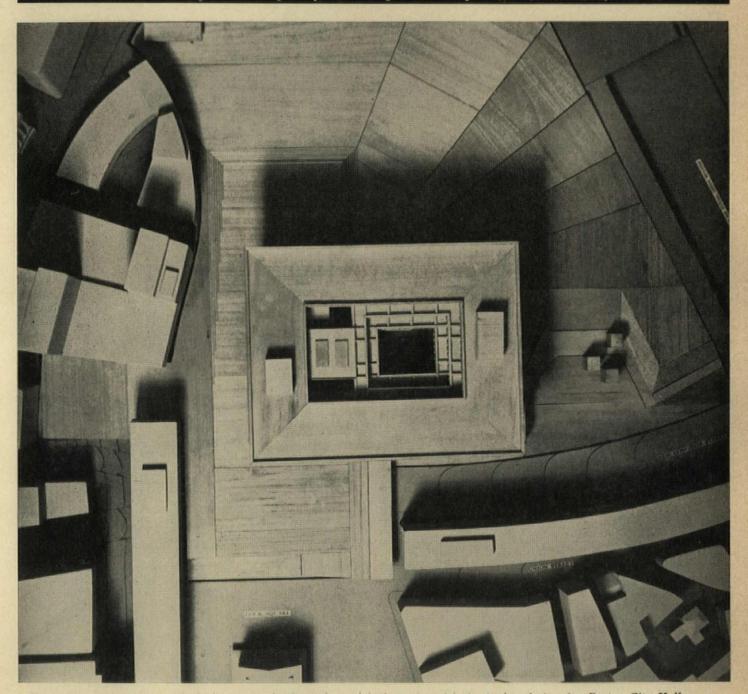
IO DAY FREE TRIAL OFFER

Mail	This	Coupon	T	oday
------	------	--------	---	------

DEPT. M-127, 430 Park Ave., New York 2, N. Y.
Send me the book(s) I have indicated below for 10 days' Free Trial under the following terms: Purchase price enclosed (Reinhold pays postage) Bill me (plus postage) Bill company
NAME
ADDRESS
CITY & ZONESTATE
SAVE MONEY: Enclose payment with order and Reinhold pays all shipping costs. Same return privilege. Please add 3% sales tax on N.Y.C. orders. Do not enclose cash!



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



Impressive, monumental city square is shown in aerial view of model of winning design for Boston City Hall.

- 65 NEW YORKERS WIN BOSTON COMPETITION
- 66 AISC LAUDS FINE DESIGN IN STEEL
- 68 PRO AND CON ON THE TWA TERMINAL
- 70 ANNOUNCING 10th P/A DESIGN AWARDS
- 74 PERSONALITIES: BUSH-BROWN, MOORE
- 77 BAPTISTS BUILD IN THE ROUND
- 82 LONDON PROJECT USES CHELAZZI IDEAS
- 86 WASHINGTON/FINANCIAL NEWS
- 89 PRODUCTS: AN INTEGRATED SYSTEM
- 94 MANUFACTURERS' DATA

# IS HE REALLLY indispensable?

Take the choicest baking apples, quality flour, butter, sugar and spices—then ask a five-year-old child to bake a pie. Result? Chaos!

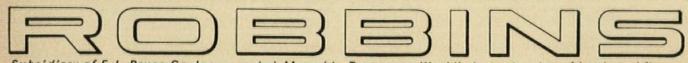
What's missing? The indispensable ingredient—craftsmanship that comes from thorough training and years of experience. The same ingredient so vitally important to proper installation of quality hardwood flooring. No matter how superior the basic materials, mediocre workmanship results in a sub-standard finished product. Even the most carefully selected hardwood flooring needs the expert touch of a master craftsman to be properly installed as a Robbins floor.

You owe it to your client and your professional reputa-

tion to insist on superior flooring installed by a quality contractor. And when you specify a Robbins hardwood floor system, you're assured of both!

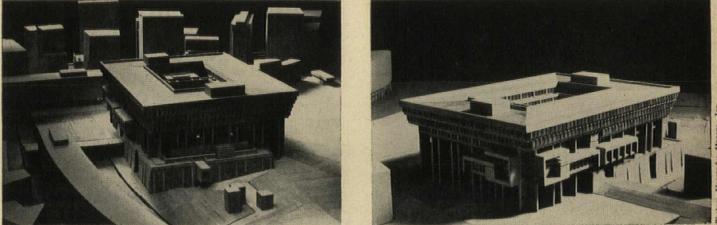
Robbins — manufacturer of Ironbound<sup>®</sup> Continuous Strip<sup>®</sup>, PermaCushion<sup>®</sup> and Powerlock<sup>®</sup> floor systems authorizes installation only by experienced contractors with reputations for high standards and business competence. These standards of excellence make possible the Robbins guarantee—countersigned by the installer—that insures quality materials and expert installation.

There's a franchised Robbins installer near you. For his name, write Robbins Flooring Company, Reed City, Michigan. Attn: Dept PA-762.



Subsidiary of E. L. Bruce Co. Incorporated, Memphis, Tennessee. World's largest maker of hardwood floors.



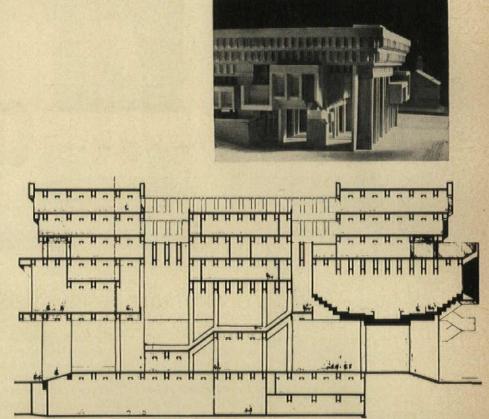


## Boston City Hall: Chandigarh on Scollay Square

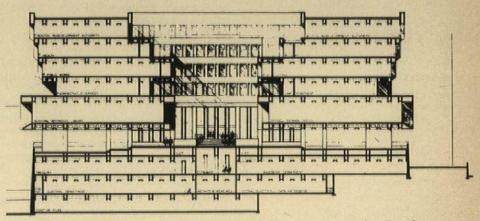
BOSTON, MASS. The team of New Yorkers who won the competition for the design of Boston's City Hall-Gerhard M. Kallmann, Noel M. McKinnell, and Edward F. Knowles-created a proposal that is likely to be talked about and argued for some time to come. It is a quite complicated design that will eventuate in a building of simple, segregated masses. It is, at first glance, a somewhat forbidding monument, which has as one of its main intents the inviting of public appreciation and participation. It is one of the strongest individual statements to come along in quite a while, yet one which will act, in the jury's words, as a "keystone between the historic past and the brilliant future which is to come."

According to the architects, the building is organized in three elements: public areas occupy the base, administrative offices the top, and hung in between are the ceremonial spaces. The City Hall is approached across the new city square and over a series of terraces that rise to the brick-faced "mound" form of the public access area. The roof of this mound is a "stepped terrain" by means of which the visitor reaches the central court containing a major sculpture. The administrative levels are planned in tiers stepping back from this court as they ascend. The ceremonial elements are marked by hooded window devices. From the great interior hall, the visitor can realize all of the major elements of the building.

Structure of the building is based on a system of 3-ft-square, cast-inplace concrete columns and precast concrete vierendeel trusses 5 ft deep. The dimensions of the system are on a columnar grid of 15 ft and 30 ft by 30 ft. Cantilevered tiers of the administrative and ceremonial levels are constructed of floor-to-floor high concrete trusses.



Section shows Mayor's office (left) and Council Chamber (right) below office floors



Center section shows central court circled by stepping-back office floors.



Print al al Chindree



8







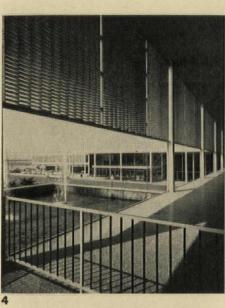


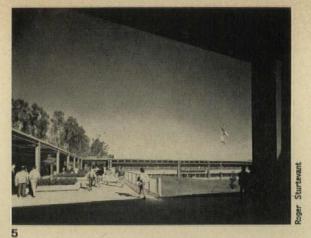
NOTABLE DESIGNS USING STEEL CITED BY AISC

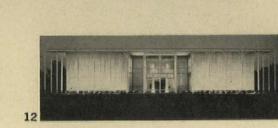
NEW YORK, N.Y. Architectural Awards of Excellence for aesthetic use of steel "in a dimension beyond its use as a basic structural frame" have been presented by the American Institute of Steel Construction to 13 architectural firms for the designs of 14 buildings. Jury for the program included Robert W. Cutler, Skidmore, Owings & Merrill, New York; George Edson Danforth, Director, Department of Architecture and City Planning, Illinois Institute of Technology; John T. Grisdale, Carroll, Grisdale & Van Alen, Philadelphia; William J. LeMessurier. William J. LeMessurier & Associates, Consulting Engineers, Boston; and Julian Whittlesey, Whittlesey & Con-klin, New York. These jurors also served as critics at the PROGRESSIVE ARCHITECTURE-AISC Workshop Critique on Steel in the Terrace Room of the Plaza Hotel in New York the 14th and 15th of June. All the AISC awards carry equal weight.

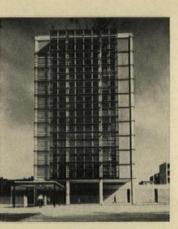
STAR BIR AND ALLEMIN

THE AWARD WINNERS: The Mc-Allen State Bank of McAllen, Texas, by Cowell & Neuhaus of Houston (1) was commended as "an excellent example of straighforward steel construction." Structural Engineer was Harold B. Horton. "As clean and logically designed as a piece of machinery" was the encomium earned by Mitchell & Ritchey's Pittsburgh Public Auditorium (2). Ammann & Whitney was structural engineer for the structure, which was also complimented for the great cantilever supporting its roof leaves. Careful detailing of steel for the compatible use of other materials in the Drill House, West Orange, N.J., won an award for Davis, Brody & Wisniewski (3). Wiesenfeld, Hayward & Leon was structural consultant for the house, which was fully presented in the MAY 1962 P/A. Murray-Jones-Murray of Tulsa won an award for the airport terminal building in their home town (4). The jury admired the









10

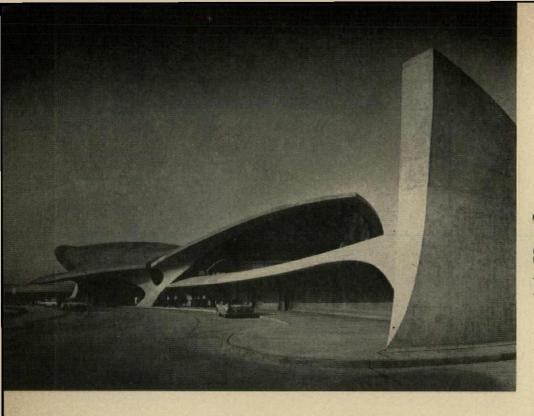




building's plan and its "excellent use of steel for framing." Structural engi-neer was David R. Graham & Associates. Plan, siting, and superior use and expression of steel won an award for Reid, Rockwell, Banwell & Tarics's Aragon High School in San Mateo, Calif. (5). Notable are the steel Vierendeel trusses used in gymnasia and little theater. A "motor age" church (6), permitting 600 cars to park within sight of the minister and tune in the services through individual listening devices, brought an award for Richard J. Neutra & Associates and Structural Engineer Eugene Birnbaum. Skidmore, Owings & Merrill achieved an "excellent expression in the architecture of the space frame" in its design for the general offices of the Upjohn Company (7), according to the jury. A Standard Oil service station for Los Angeles International Airport (8) was described as a "logical solution for a steel roof" and "par-

ticularly attractive from the air." Charles Luckman Associates was Coordinating Architect, with Welton Becket & Associates and Paul R. Williams & Associates; Structural Engineers: Richard R. Bradshaw, Inc., and S. B. Barnes & Associates. An example of high-rise steel construction that the jury felt "speaks steel-you can feel it" garnered acclaim for Gateway Number Four in Pittsburgh (9) by Harrison & Abramovitz, with Structural Engineer Edwards & Hjorth. Use of steel in a well-design sunshade was among the reasons for the premiation of John Hall Dormitory for Men at Temple University by Nolen & Swinburne (10). Severud-Elstad-Krueger Associates was Structural Engineer. Another award went to Murray-Jones Murray for the design of Sts. Peter and Paul Church in Tulsa (11). "A simple, direct struc-tural system, designed for the industrial age," was the jury's comment.

Netherton, Dollmeyer & Solnok did the structural engineering. A decorative steel frame and a fine plan attracted the jury to the office building for the Holland Mortgage and Investment Corporation and the Fidelity-Southern Fire Insurance Company in Houston (12). Architect was Neuhaus & Taylor; Structural Engineer, Vogt & Clouse. The tennis pavilion at Princeton University (13) by Ballard, Todd & Snibbe, recently recipient of an AIA Award of Merit, won an AISC award for being "delightfully decorative and fanciful, romantic and playful-in the spirit of the game." Structural Engineer was Peter W. Bruder. Anshen & Allen's International Building in San Francisco (14) was deemed worthy of premiation because of its structural soundness in an earthquake area, its use of 17-ft steel cantilevers, and a "sophisticated" plan. Structural Engineers: Gould & Degenkolb and Robert D. Dewell.



## TWA Spreads Its Wings

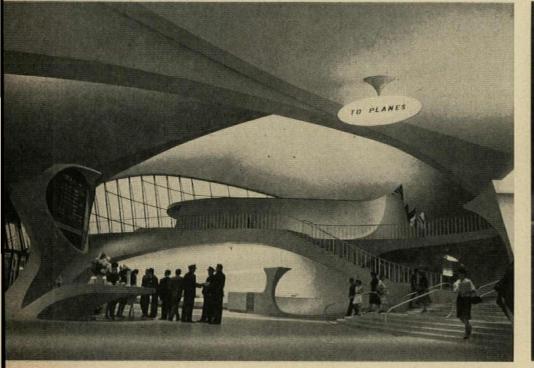
NEW YORK, N.Y. One of the late Eero Saarinen's chefs-d'oeuvre, the TWA Terminal at New York International Airport, opened last month and fast became the cynosure of architectural eyes. As is the case with most significant works of architecture, opinions were varied and discussions rife at luncheons and parties where architects and architectural commentators congregated. P/A records here observations pro and con.

**PRO:** "The architect accomplished in a masterful way the tough task of accommodating within a difficult envelope the numerous requirements of an air terminal. The result is a powerful spatial symphony played without compromise, a sequence of spaces within spaces. The interior elements are used consistently and knowingly to shape and modulate this sequence. Even the delicately textured, white ceramic flooring tile, used not only on the floor but also on most of the vertical surfaces, is a brilliant device employed to subdue the meaning of planes and to accentuate the meaning of spaces."

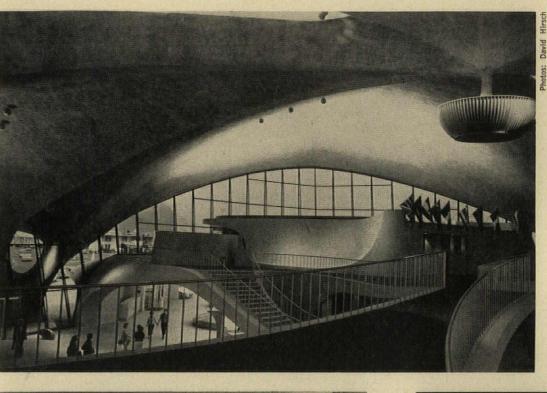
*CON*: "It seems to me that the restlessly obtrusive interiors of the terminal fight with and obscure Saarinen's bold, poised space conception and that this is visually disturbing. The great interior space that could have been created by the four intersecting dome segments does not 'read' because every interior vista is blocked and obscured by strongly sinuous elements. The curved bridge balcony, the winding stairs, the upturning volutes at the bases of the stair, the sculptured eyes that tell flight times, the bracketed ceilings leading to ticketing and baggage-receiving spaces

—all these attract attention to themselves, and prevent one from visually following a vaulted or arched roof element from peak to support. The delicately small-scaled tile floor material creeping up every vertical surface it touches, the dark-ceilinged tunnels leading silhouetted passengers to the planes, the eye-socket windows, all give a surrealist impression on the interior which is in sharp and disturbing contrast to the bold, crudely built concrete forms one sees from the outside."

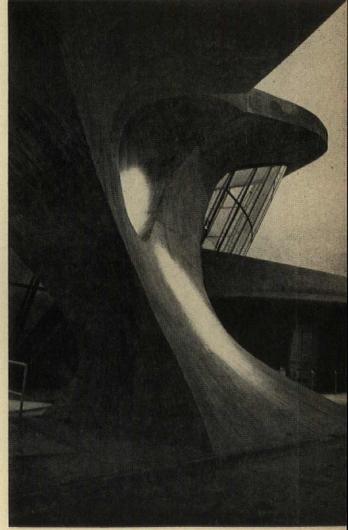
Chacun à son gout.





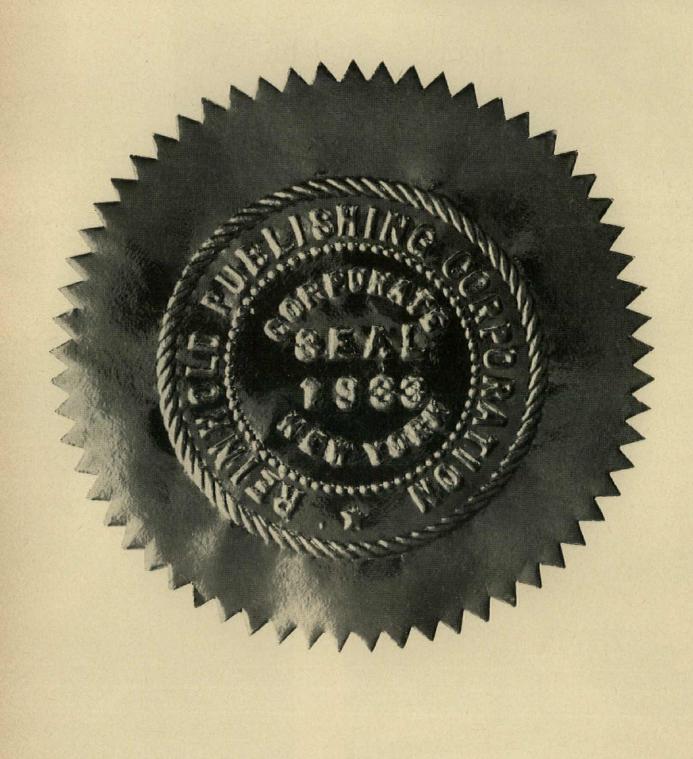






## Reinhold Publishing Corporation's

## ANNUAL P/A



## **DESIGN AWARDS PROGRAM**

## for projects not yet built

**PROGRESSIVE ARCHITECTURE** announces its tenth annual Design Awards Program. Awards will be made to architects and their clients for projects now in the design stage to be built in 1963 in the United States.

**PURPOSE** of the Design Awards Program is to give recognition to good design in the period of design development, rather than after completion, in order to encourage the designers and owners of the projects so honored.

AWARDS will be given by the Jury listed below to the best projects chosen from nine categories—COMMERCE, EDU-CATION, DEFENSE, HEALTH, INDUSTRY, PUBLIC USE, REC-REATION, RESIDENTIAL DESIGN, RELIGION. AWARDS will be on the basis of site use, choice of structural system and materials and methods of construction, solution of the client's program, and over-all design excellence.

FIRST DESIGN AWARD will be given to the one best building submitted. AWARDS and CITATIONS may be given in each of the nine building categories.

FIRST DESIGN AWARD, AWARDS, AND CITATIONS may also be given in Planning and Urban Design. Under this phase of the program, the Jury will consider projects in Urban Redevelopment, Campus Planning, Industrial Park Planning, Recreational Area Planning, etc.

The Jury will assign projects to the various categories, and reserves the right to withhold an AWARD in any category.

JURY will be composed of Robert L. Geddes, Architect, Geddes-Brecher-Qualls-Cunningham, Philadelphia; John MacL. Johansen, Architect, New Canaan, Conn.; Paul M. Rudolph, Architect and Chairman, Department of Architecture, Yale University; Aline B. Saarinen, Architectural Critic and Historian, Eero Saarinen Associates, Hamden, Conn.; and John Skilling, Consulting Engineer, Worthington, Skilling, Helle & Jackson, Seattle, Wash. JUDGMENT will take place in New York during September 1962. Winners of AWARDS and CITATIONS will be notified (confidentially) immediately after the judgment.

ANNOUNCEMENT of the winning projects will be made at a presentation in the home town (if practicable) of the recipient of the First Design Award. Winning projects will be featured in January 1963 P/A. As in the past, P/A will arrange coverage of winning projects in other media, particularly those in the localities of all the AWARD and CITATION winners.

**DEADLINE FOR MAILING** is August 31, 1962. No application blanks are necessary. For each project you submit, simply send:

- 1. Client's name, location, and proper name for project.
- 2. Brief explanation of the program and your solution.
- 3. Description of materials and construction methods used, and the reasons for their use.

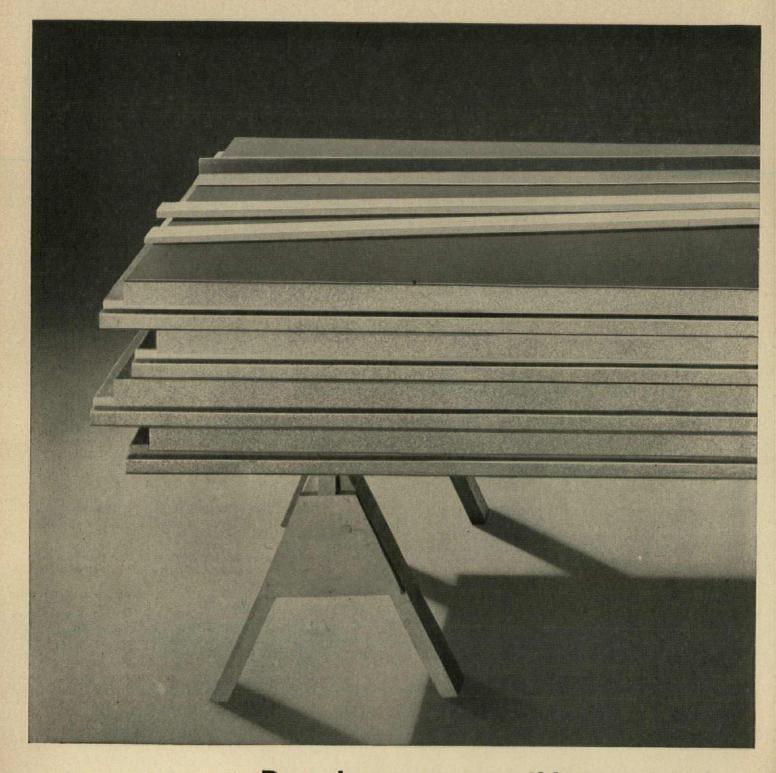
4. Site plan; basic building plans; pertinent sections and details.

5. Perspectives or model photographs. Submit 8" x 10" prints, photostats, or photographs. Original drawings, actual models, or mounted exhibit panels will not be accepted.

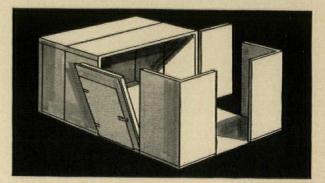
6. A statement that (a) the project is now in the design stage and that construction is anticipated in 1963 and (b) that submission of a project for judgment gives PROGRES-SIVE ARCHITECTURE first rights in the architectural field to publish both the project and the finished building if it receives an Award or Citation.

ADDRESS on or before August 31, 1962, to: Awards Editor, PROGRESSIVE ARCHITECTURE 430 Park Avenue, New York 22, New York

P/A will guard and return all material that is submitted.



## Dow shows you everything you need





#### to build a cold room, now!

It's simpler than designing a brick wall, making cold rooms out of Dow Insulating Panels. In this new system, each "sandwich" of tempered hardboard and *Styrofoam®* brand insulation is structurally integral. Because they come in standard modules *only*, Dow Insulating Panels save on material costs and simplify installation. Styrofoam expanded polystyrene makes them suitable for coolers at 40°F. or sharp freezers down to -40°F. Always dry inside, closed-cell Styrofoam insulation *keeps* its low "K" factor. Permanently. For specifications on Dow Insulating Panels, write us in Midland, c/o Plastics Sales Dept. 1304EB7.

#### THE DOW CHEMICAL COMPANY

Midland, Michigan

#### PERSONALITIES

"Benjamin Disraeli said once that almost everything that is great has been done by youth. Perhaps the trustees had the same thing in mind when they decided to bring **Dr. Albert Bush-Brown** to the School of Design. He will be a valuable addition in the state's academic and cultural spheres." So ran an editorial in the *Providence* 



Sunday Journal upon news of the accesion of 36-year-old Bush-Brown (same age as your News Editor-Good Grief!) to the presidency of Rhode Island School of Design. Associated for the last eight years with MIT, where he was first assistant then associate professor of architecture, teaching architectural theory, criticism, and history, Bush-Brown brings with him an educational background perhaps unique to one who will have to assume administrative and policymaking duties as head of a major design institution. After receiving his A.B. in Philosophy from Princeton, he went on to take a Master of Fine Arts and Ph.D. there in art and archaeology, in addition to spending three years as a fellow at Harvard. Besides his years at MIT, his teaching experience includes a year as instructor in art and archaeology at Princeton and one as assistant professor of art and architecture at Western Reserve. His wide-ranging interests in architecture and planning are well known to the profession, mainly through his formidable schedule of speaking engagements in this country and abroad, and through his prolific writings, especially last year's well-received The Architecture of America: A Social Interpretation (with John E. Burchard). He also produced a slim volume on Louis Sullivan in 1960 for

the George Braziller series on Masters of World Architecture, and has two books in the works: *Theory for Modern Architecture*, due this fall from Atlantic-Little, Brown; and Image of a University: Architecture and Education, of which he has six of eight chapters completed.

We need not fear that his new duties will remove this valuable architectural gadfly from the public arenas, where his kind is so needed. He has said to the architect, "... the responsibilities of the architect for criticism and education do not end with his fellows' work. Too few are using the agencies available to them for educating their communities about town planning and architecture."

Museum of Modern Art has published "Four Walking Tours of Modern Architecture in New York City," by ADA LOUISE HUXTABLE . . . RALPH BRYAN heads the Dallas chapter AIA for the next year . . . New commission for I. M. PEI is the Everson Museum of Art in Syracuse, N.Y.; PIETRO BEL-LUSCHI will be design consultant, and local firm PEDERSON, HUEBER & HARES will be associated . . . The Auguste Perret Prize of UIA went to FELIX CANDELA . . . A. C. FRISK of Iowa was elected president of the Structural Clay Products Institute . . . Brazil's "Cruziero do Sul" award was bestowed on Colonel WILLARD F. ROCKWELL of Rockwell-Standard Corp. and Rockwell Manufacturing Co.

Leadership by youth on the campus seems to be a decided trend these days. Just a year older than Albert Bush-Brown is **Charles W. Moore**, who has succeeded Vernon DeMars as Chairman of the Department of Architecture at the University of Cali-



fornia in Berkeley. The department is part of the ceremoniously named College of Environmental Design, whose Dean is William W. Wurster. Born in Benton Harbor, Michigan, Moore received his B.Arch, from the University of Michigan in 1947, moonlighting the while in the offices of Lewis J. Sarvis and Roger Bailey Associates. After graduation, he moved to California and worked with, among others, Mario Corbett and Joseph Allen Stein. In 1949 he won the George W. Booth Traveling Fellowship from his undergraduate alma mater and toured through Europe and the Near East taking photographs for use in teaching architectural design and history. Getting his pedagogical feet wet as an assistant professor at the University of Utah in 1950-52, Moore began to formulate his philosophy of architectural education. "I had become convinced of the value of architectural history as a core discipline in the teaching of architecture," he says. After a two-year service as a lieutenant in the Corps of Engineers in this country and Korea, he matriculated at Princeton to receive his M.F.A. in architectural design and history in 1956 and his Ph.D. in architecture in 1957. He remained at Princeton, from 1957-59, as an assistant professor of architecture. Settling permanently in California again in 1959 (he had been practicing there in the summers during his Princeton residence), Moore became a senior associate in the firm of Clark & Beuttler and an associate professor of architecture at the University of California. Readers of P/A will remember his design for his own house in Orinda, which won an Award Citation in the 1962 Design Awards Program (pp. 146-149, JANUARY 1962 P/A).

New faculty members at Department of Architecture, University of Notre Dame, are JULIAN E. KULSKI, KEN-NETH A. FEATHERSTONE, and SOLOMON A. LIM . . . JOSEPH DECHIARA of Urban Planning Associates is new assistant professor of planning at Pratt Institute . . . How to get from one place to another seems to be the specialty of BERNARD RUDOFSKY, His recent ex-hibit of "Roads" at the Museum of Modern Art, in which he opened our eyes to the appalling power for good or evil inherent in the concrete arteries that lace our land, is now traveling; so is an earlier show, "Stairs," in which Rudofsky traces their development from the Tower of Babel to the U.S. Air Force Academy.

Sketches by Romino Corbellete



Men's dormitories consist of six three-story units grouped around a central threestory office and lounge building, with total area of 48,094 square feet. They provide a total of 57 four-student housing units, plus apartments for student counselors.

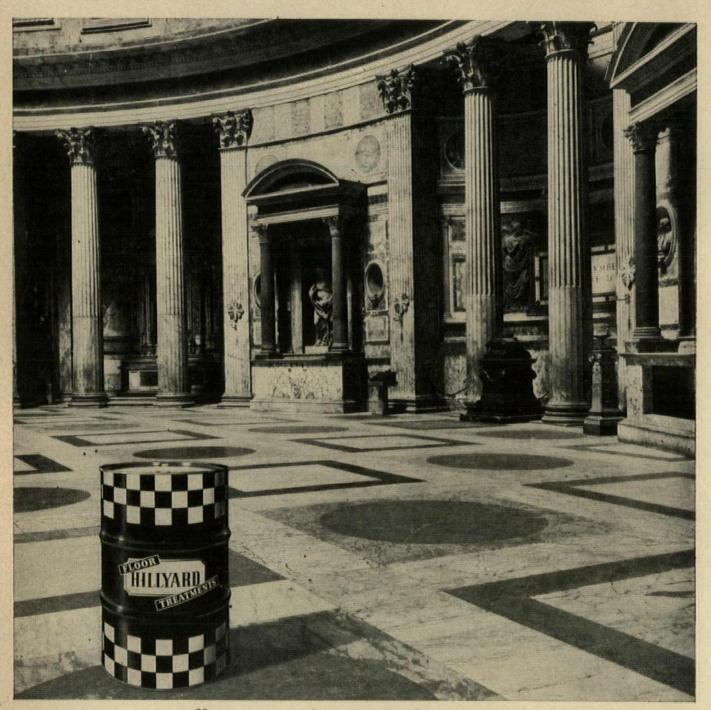
### promising future for students and structure

With the construction of these attractive new dormitory buildings, Central Washington College of Education has taken a long step forward in insuring the kind of pleasant, comfortable surroundings that will encourage its students to their best efforts. I At the same time, abundant care was taken to give the buildings themselves a good start in life. All brick and block were laid up with Lone Star Masonry Cement. Lone Star Portland Cement was used for all concrete requirements. I Lone Star Masonry Cement is the best way to launch any masonry structure on a long and useful career. It combines all the essential ingredients (except sand and water) in just the right proportions . . . makes it easy to get mixes of highest quality and uniformity every time. Lone Star Masonry Cement makes smooth, workable mortars that speed work, save time and labor on the job. I Why not take a lesson from Central Washington College and use Lone Star Masonry Cement on your next job? You'll find it pays off now and for years to come. LONE STAR CEMENT CORPORATION, 100 PARK AVENUE, NEW YORK 17, NEW YORK



Student Housing, CENTRAL WASHINGTON COLLEGE OF EDUCATION, Ellensburg • Architect: Cowan & Paddock, Yakima • General Contractor: Vandivort Construction Company, Wenatchee • Masonry Contractor: Brown & Walker, Yakima • Masonry Cement & Concrete by: Ellensburg Cement Products Company, Ellensburg • All of Washington.





## floor care is an ancient art..

The Pantheon of Agrippa is considered the best-preserved example of ancient Roman architecture, centered around a magnificent floor. Modern architectural triumphs, too, show careful craftsmanship in floors designed for the footsteps of centuries.

Thousands of slaves labored daily to maintain the beauty of these classic floors. Today, HILLYARD'S scientific laboratory-controlled approach to floor care is the perfect overseer for every design executed with products approved by flooring manufacturers.

Your HILLYARD consultant can help you three ways: He provides a complete floor maintenance plan at no cost. He serves as "job captain" during construction, a silent partner to eliminate flooring complaints. He follows through to cut labor costs for owners after take-over...to protect floor life with that dedication-day look.

Refer to A.I.A. Building Products Register for HILLYARD seals, finishes, curing agents, coatings, waxes and cleaners under "Floor Treatments 13.06",

You'll find your HILLYARD consultant's address in Sweet's . . . call collect, write or wire for his free advice.

"On your staff, not your payroll" / PROPRIETARY CHEMISTS SINCE 1907



HILLYARD FLOOR TREATMENTS St. Joseph, Missouri, U.S.A. Passaic, New Jersey San Jose, California









## Baptists Build Circular HQ at Valley Forge

VALLEY FORGE, PA. All national administrative and publishing activities of the American Baptist Convention have been brought together here in a new building by Vincent G. Kling. The Offices are now housed in a circular concrete office structure that gleams whitely against the summer greenery.

Aside from its significance as a Christian symbol of unity, the circular form was chosen as the one most functional for a body whose different agencies and departments must work independently, yet at the same time have a close relationship to each other. The ground floor is two-fifths open to form an arcade extending between the concrete piers. The enclosed portions of this floor contain central lobby, book store, library, and the data processing and accounting department used by all agencies. The second and third floors contain agency offices. Windows on the upper floor have triangular heads to suggest an ecclesiastical feeling in contemporary terms. Fanning out from the office building is the one-story graphic arts and painting building. The arc shape of this structure follows the circumference of the office building.

At the opposite side of the office building is the cafeteria-conference center, which also follows the circumference of the main structure.

A fourth element will join the center —an 80-ft, circular chapel seating 150 that is expected to be the unifying focus of the composition.





Austin Paddock

Creighton, Cowell, Horton



Jones, Holmes, Graham

## Expanding Design Horizons of Steel Discussed

NEW YORK, N.Y. At the Workshop Critique on Steel in Architecture, sponsored by U. S. Steel and conducted by PROGRESSIVE ARCHITECTURE, featuring five of the winners of the AISC Design Awards of Excellence winners (pp. 66–67), the featured luncheon speaker was Austin J. Paddock, Administrative Vice-President of Fabrication and Manufacture of the steel corporation. Illustrating his remarks with scale models of advanced steel designs, Paddock discussed the present and future of design in steel.

"I am not surprised that architects and structural engineers are beginning to exercise their creativity in more radical design concepts, such as geometrical configurations in buildings, single planar cable systems, suspended buildings and load-bearing vertical grid truss walls—all being movements toward greater expression.

"This means that, more than ever, you are hunting better and more versatile materials. You all have definite opinions as to which materials offer you the greatest freedom, and as a group you are perhaps somewhat divided in your views. . . .

"We believe that, if you really are seeking to achieve maximum freedom in your work, the best means to accomplish this is through the proper use of the steels now available to you....

"Recently, construction was begun on a building that will wear its structural steel framework on the outside in the form of a diamond-shaped grid truss wall that will be completely loadbearing. This eliminates spandrel beams and all vertical columns, from the skin of the building to its core....

"To make this design work, no less than five different steels were skillfully blended into the structure. Both of the workhorse carbons obviously were used —A7, for miscellaneous applications, and A36 for about half of the framework. But what is more significant is that substantial portions of the framework will use A441, with its 50,000 psi minimum yield point, and two constructional alloy steels with 100,000 psi.

"This is the first time that standard structural shapes of a 100,000 psi yield strength steel have been used in the framework of a multistory building. The net result is a continuing fine line appeal running from the base to the top of the building.

"Another example comes to mind. Who among us doesn't shudder every time the term 'corrosion' is mentioned? Yet, under controlled circumstances, the whole concept of weathering can be made to work in favor of aesthetics....

"And now, an architect has flown boldly into time-honored taboos and tradition, to design a multi-story building using [an oxidized steel], both unpainted and exposed in the exterior columns and beams. This design will take full advantage of the russet-colored oxidation to blend with the semirural surroundings. . . .

"But what about other forms—hollow structural shapes (round, square and rectangular); wire and wire rope; sheet and strip products; which can be cold or hot formed and coated in many gauges to provide a nearly infinite variety? Cannot the strength levels, corrosion resistance, weldability, formability, and colorability also be taken out of these products and applied freely in architecture to open up vast new horizons in aesthetics?

"Let's take the principles of geometrical configuration in buildings. There has been some suggestion that steel does not offer as much freedom in design here as do other types of material concrete for one.

"Yet, because of its strength-toweight ratio and all its other characteristics, steel properly used will give you almost endless freedom. Indeed, if there are any limitations on freedom, they are found not in the metal itself; they are governed, rather, by the degree of creativity exercised by the architects and structural engineers. . . .

"For instance, a new concept of a fabricated, hollow beam combining stainless and high strength steels has already been exhibited in prototype form for possible use in bridges. Its crosssectional profile resembles an hourglass — another adaptation of the doublycurved surface. The relatively thin gauges of the materials, less than  $\frac{1}{8}$ in., clearly dramatize the additional strength-to-weight factor gained by applying geometrical principles to the already long list of steel behavior patterns.

"Who can say what its architectural potentials might be for beauty, durability, flexibility, and lightness?

"We haven't even touched the subject of wire, which, blended with all kinds of three-dimensional trusses vertical, horizontal or curved — lays open yet another vista for the inquiring, aesthetically-tuned mind. Steel wire—the strongest and lightest of the strong—[is] capable of carrying its own weight over a distance equal to a million times its diameter....

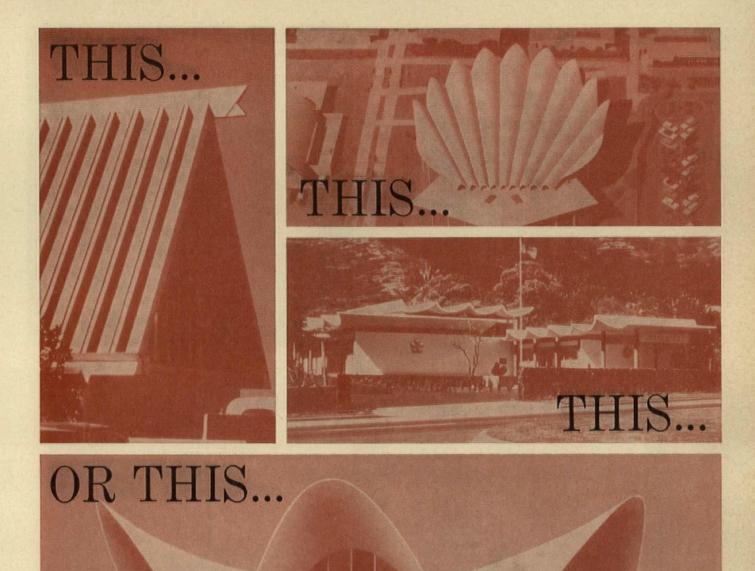
"And we cannot ignore the concept of suspending entire building frames, either through the application of wire, or bars and flat plates made of higher strength steels. One structure, now building in Mexico, is suspended by channels hung from steel trusses cantilevered from its own service core. It is designed to be earthquake-proof and resistant to soil settlement conditions...

"Concepts and more concepts. Take plastic and orthotropic designs. What other material lends itself better to two- and three-dimensional stressing than does steel?

"Where will the coming use of plastic design take us? Although several universities presently are studying its application to multistory buildings, we have barely scratched the surface....

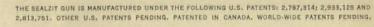
"Do we think we are at the end of the trail—or only at the beginning? I suggest this answer depends on people like us."

An extensive report on the findings of the all-day design seminar will appear in the NOVEMBER 1962 P/A. Watch for it.



## is what Flintkote Monoform roofing system can do!

U.L. APPROVED FOR NEW CONSTRUCTION • Class B for 20 Year Bondable Application

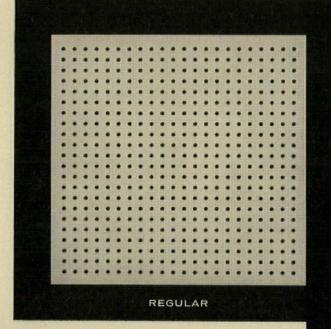


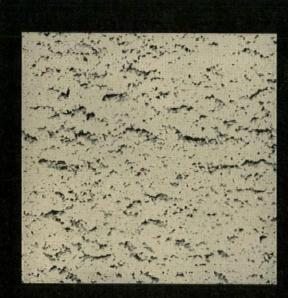


monoform

\*A TRADEMARK OF THE FLINTKOTE COMPANY TU.S. PATENT APPLIED FOR

name				
FIRM		-		
ADDRESS				
CITY	ZONE		STATE.	-
I am an 📋 Architect		Roofer		Contractor



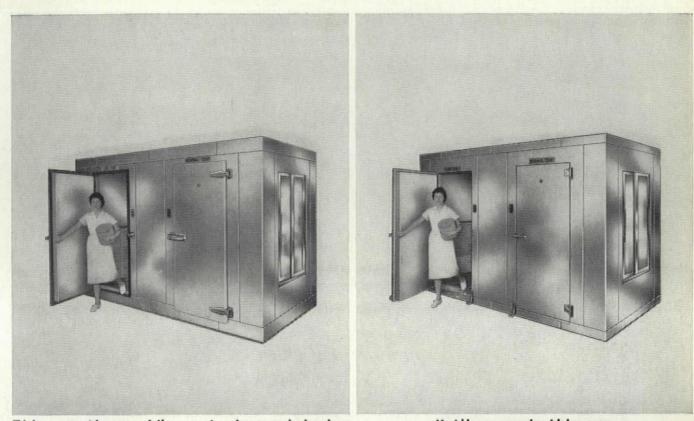


FISSURED

CONSTELLATION

# Beauty that endures...

RANDOM



This was the world's most advanced design.

Until we made this one.

### Bally Walk-in Coolers and Freezers are now made with science's new wonder insulation ... Rigid Urethane "foamed-in-place"

The tremendous advantages of this new insulation represent a major design advancement . . . one that obsoletes all conventional insulated Walk-Ins, both prefabricated and built-ins. ♦ With 97% closed cells it cannot absorb moisture . . . maintains forever peak efficiency, indoors or outdoors ♦ Has double the insulating value . . . Bally 4" urethane equals 8½" of conventional insulation. Standard models ideal for use as minus 30° freezers ♦ Urethane, poured as a liquid, foams in place and while rigidizing binds tenaciously to the metal for great strength. Eliminates need for structural members. Replaces that space with highly efficient insulation ♦ Lightweight urethane and new construction reduce weight to one-third for tremendous freight savings . . . make erection fast and easy ♦ Foamed door is extremely lightweight, to open and close with little effort. Unique magnetic gasket provides positive continuous seal ♦Thinner walls increase usable inside space ♦ Fire-retardant.

Your choice of Aluminum or Galvanized as standard finishes. Sections have Bally's patented Speed-Lok for quick and accurate assembly. Easy to add sections to increase size . . . equally easy to disassemble for relocation. Hermetically sealed refrigeration systems eliminate installation problems . . . drastically reduce service costs.

Write for Free Architect's Fact File, complete with new Specification Guide, descriptive literature and technical booklet.

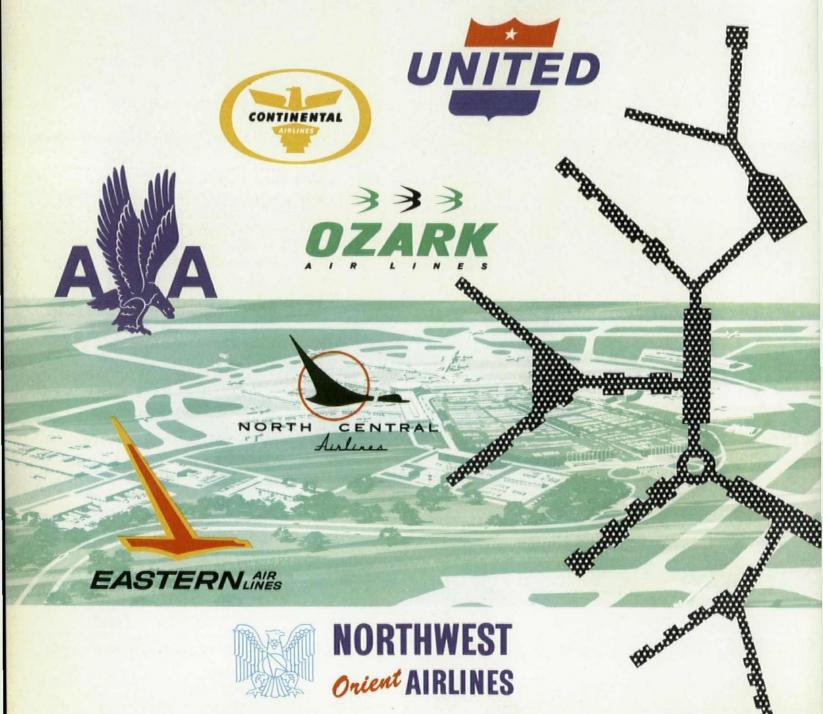


Bally Case and Cooler, Inc. Bally, Pennsylvania



## ...THE TOILET ENCLOSURE INSTALLED BY THE AIRLINES FOR JET-AGE DESIGN AND DEPENDABILITY!

O'Hare International Airport, like many more outstanding jet-age structures, finds Fiat Toilet Enclosures (with "years-ahead" engineering) installed to serve tenants dependably for countless years to come. Major airlines at Chicago's new terminal made Fiat practically their unanimous choice...





FIAT METAL MANUFACTURING COMPANY, INC.

## Goldberg Group on Federal Architecture



The Federal Government has no obligation to be an innovator in architecture; but it has the obligation to avail itself of the finest contemporary architects and architectural thought.

That's the real meat of a surprisingly brief (for Washington) report on "Guiding

Principles for Federal Architecture," finally submitted to the President in June by an *ad hoc* Cabinet committee headed by Labor Secretary Goldberg. Said the committee (as part of a

general report on Federal office space):

"The design of Federal office buildings, particularly those . . . in the capital, must meet a two-fold requirement: . . . efficient and economical facilities . . . visual testimony to the dignity, enterprise, vigor and stability of the . . . Government. . . . "The committee recommends a threepoint architectural policy:

"(1) To provide requisite and adequate facilities in an architectural style and form which is distinguished. . . . Major emphasis should be placed on the choice of designs that embody the finest contemporary architectural thought. Specific attention should be paid to the possibilities of incorporating . . qualities which reflect the regional architectural traditions. . . . Designs [should] adhere to sound construction practice . . . buildings should be economical to build, operate, and maintain, and should be accessible to the handicapped. . . .

"(2) The development of an official style must be avoided.... Design must flow from the architectural profession to the Government, and not vice-versa. ... The advice of distinguished architects ought to, as a rule, be sought prior to award of important design contracts....

"(3) The choice and development of the building site should be considered the first step in the design process.... Special attention should be paid to the general ensemble of streets and public places of which the Federal building will form a part. Where possible, buildings should be located so as to permit generous development of landscape."

Much of the remainder of the report (the committee included Goldberg, Commerce Secretary Hodges, Budget Director David Bell, GSA Administrator Bernard Boutin) is concerned with various proposals for decentralizing Government operations the committee doesn't think much of this idea—and with an elaborate program for the complete rehabilitation of Pennsylvania Avenue in Washington, near the Capitol.

#### Reference

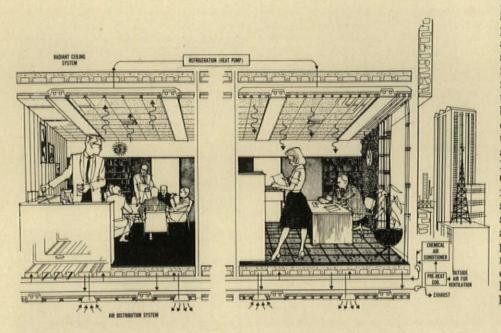
Bookshelf item: "Fall-out Protection for Hospitals," a 28-page study available from the Superintendent of Documents, Washington 25, D.C. Prepared by the U.S. Public Health Service, the booklet says that adequate fall-out protection adds about 4 per cent to the cost of conventional hospital construction.



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

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

#### SYSTEM PROVIDES CONTROLLED ENVIRONMENT



MILWAUKEE, WIS. A new building system has been announced integrating four component systems, which, while not individually new themselves, combine to create an integrated whole.

The system is "Integrated Air Floor," and it consists of Inland Steel's "Cellufloor," radiant ceiling panels, chemical air conditioning, and a standard refrigeration plant. The system takes the four variables affecting physical comfort-temperature of room surfaces, air temperature, relative humidity, and air motion-and blends or controls them to produce a desirable environment. Recommended units for the radiant ceiling panels and the chemical air conditioning are Burgess-Manning Radiant-Acoustical Ceiling System and "Kathabar" units from Midland-Ross Corporation, respectively. The refrigeration plant should be a well-known and dependable make. In addition to providing a pleasant environment, the system significantly reduces the number of disease-producing bacteria in the air. Inland Steel Products, 4101 W. Burnham St., Milwaukee, Wis.

On Free Data Card, Circle 100

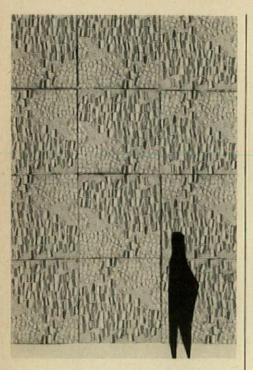
#### PUTTING TOGETHER A GEODESIC DOME





TEMPE, ARIZ. The geodesic dome that recently went up to house the Valley National Bank (Weaver & Drover, Architect) utilized "Huckbolt" fasteners to connect its more than 100 anodized panels. The fasteners were effected easily and quickly by two-man teams using pneumatic tools. The first worker applied the bolt and his confederate added the collar and worked the pneumatic device. (The pneumatic instrument was used in all areas except where clearance was a problem; in these areas, hand tools were used to gain the proper clearance.) The fasteners measure  $\frac{3}{8}$ ", and are said to form a stronger, tighter fit than rivets. Huck Manufacturing Co., 2500 Bellevue, Detroit 7, Mich.

On Free Data Card, Circle 101



#### Architectural Tiles

Handmade architectural tiles impart dimension and texture to walls and dividing partitions. The tiles are  $\frac{1}{2}''$ thick concrete with latex binder, incorporating such imbedded materials as glass, Italian and marble mosaics, marble grits, brass and aluminum strips, and aluminum or bronze rods. Application is with mastic or in a bed of cement. The tiles have good impact and moisture resistance when mounted; may be cleaned with a solution of soap flakes and water. When used on the exterior, tiles are coated with a transparent silicone solution. Designer Pema Browne has a full range of concrete colors and more than 2000 mosaic colors in stock. Special designs can be made at a design fee. Architectural Muraltiles, Inc., c/o Estelle Dodge Associates, Inc., 239 E. 79th St., New York 21, N.Y.

On Free Data Card, Circle 102

#### Colored Weathercoating on Building Panels

New process for coating steel and aluminum — "Bowmanizing" — produces siding and roofing sections that are maintenance-free with a permanent color finish. Roll forming of the panels allow for longer lengths, reducing frequent end-lapping. The process enables precise thicknesses of the coating to be applied in the factory. It is applied in the hot state and does not require long curing periods. Resulting coating gives the panels a permanently colored, leather-grained surface, evenly distributed throughout the panel. Bowman Steel Corp., P. O. Box 2129, Pittsburgh 30, Pa. On Free Data Card, Circle 103

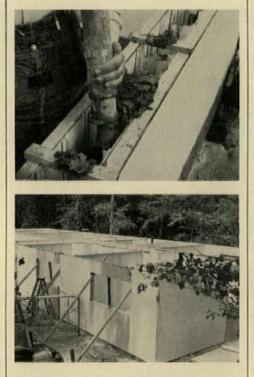
#### No Seams on Top

New palstic laminate for laboratory countertops, unlike conventional materials, can be shaped easily under heat to form top and backsplash from the same sheet. Seams and joints in which moisture and corrosive materials might collect are thus eliminated. The durable, nonporous surface of "Kevinite" provides high chemical resistance over long use. A polyester thermosetting plastic, Kevinite is light in weight, self-extinguishing, has low-glare finish. Swedlow, Inc., 394 N. Meridian Rd., Youngstown, Ohio.

On Free Data Card, Circle 104

#### Noise-Blocking Wall System

A wall system featuring ease of erection, economy, structural solidity, and lack of sound transmission has been announced by a Georgia firm. The system is made up of an interlocking arrangement of aluminum panels 5"



wide with vermiculite aggregate concrete poured into the open space between (which can be either 3" or 5"). The aluminum components are easily cut for doors and windows before the pour. Sound deadening properties of the walls are said to be impressive. Current uses includes tract houses; the system would also lend itself to all sorts of small commercial and industrial construction. Manufacturers Aluminum Products of U.S.A., Inc., 5580 New Peachtree Road, Chamblee, Ga.

On Free Data Card, Circle 105





#### Siding Distinguishes Vacation House

The warm and livable vacation house on Shelter Island at the end of Long Island, designed for himself by Peter Schladermundt, uses contemporary sheathing and siding materials to advantage to recall in modern terms the "New England" feeling of local traditional construction. Exterior is cedar plywood paneling applied to the studs, and interior is pecan charter plywood paneling grooved and lacquer-finished at the factory. A 1"-fiber-glass core was used for insulation. Exterior siding was given two coats of stain to gray it down to a finish resembling local seashore buildings. All flat surfaces in kitchen and bathroom are "Micarta." U.S. Plywood Corp., 55 West 44 St., New York 36, N.Y.

On Free Data Card, Circle 106

#### Surface Retardant for Precast Panels

Precast panel frames for the curtain wall of New York's Banker's Trust Building are now going into place. Designed by Henry Dreyfus (Emery **BUILDING PRODUCTS NEWS from Dow Corning** 

## The enduring beauty of brick



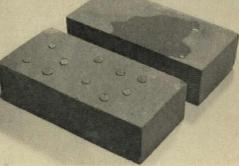
First Methodist Church of The Dunes/Grand Haven, Mich. Architect: Alden B. Dow Inc

### Silaneal<sup>®</sup> preserves it against efflorescence, dirt staining

The mellow charm of the brick specified for this distinguished new church won't be marred by unsightly discoloration from dirt, rain or efflorescence. The architect's assurance: this brick was factory-treated with Silaneal, the sodium siliconate treatment that so effectively helps brick repel water.

Silaneal Preserves Your Concept Light and pastel shades of brick are being specified more than ever before. Many such brick, however, have high suction rates and offer little resistance to water penetration. And water discolors brick by carrying dirt *into* the brick, causing its color to dull and darken; and by leaching water-soluble salts *out* of brick, causing ugly efflorescence. But Silaneal treatment slows and *controls* the absorption rate of even highest suction brick . . . dirt is kept outside, where it's rain-washed away, and efflorescence caused by leaching is minimized.

Walls Go Up Easier, Stay Stronger Brick treated with Silaneal don't require time-consuming soaking at the job site; water absorption rate is *already* controlled. This also permits proper mortar hydration; the fresh mortar dries more slowly, without leaving hairline shrinkage cracks at the brick-mortar interface. Transverse pressure tests—and tests simulating wind-driven rain—have demonstrated repeatedly that wall sections built



Note revealing contrast in water penetration of these two high suction rate brick. Water dropped on Silaneal-treated brick, at left, beads up without penetration. Same amount of water has spread rapidly across untreated brick, will be totally absorbed within seconds.

of Silaneal-treated high suction brick prove stronger and resist leakage better than similar, but untreated, brick.

To Get More Information Wouldn't it be wise to have on hand more detailed information about brick-improving Silaneal treatment? Just write Dow Corning, Dept. 8707, for further data including a list of brick manufacturers who supply Silanealtreated brick.



#### Dow Corning CORPORATION

MIDLAND. MICHIGAN



Roth & Sons, architects for the building), the building will use 1600 of the individual mitered frames. In production at Dextone Company's plant, concrete is placed in specially designed forms previously coated with "Rugasol," a surface retardant. After 18 hours, the frames are lifted out and simultaneously sluiced with water and scrubbed with a fiber brush to remove the top  $\frac{1}{8}$ " mortar which has re-mained plastic through contact with the Rugasol, thereby revealing the hardened buff mortar and exposed quartz aggregate. Sika Chemical Corp., 35 Gregory Ave., Passaic, N.J. On Free Data Card, Circle 107

#### Soundproof Louver Door

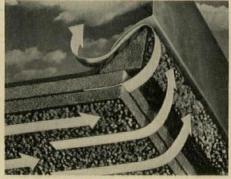
Sound insulation has now been incorporated into louver doors, in the first rated soundproof door with louvers. Pioneer's new sound barrier, when used in their hollow metal doors, reduces sound transmission to 32 db. The door is thus appropriate wherever privacy of speech, exclusion of noise, and flow of free air are required. With the sound-insulating louver door, there is no need for sound-trapped transfer ducts or wall louvers, thus eliminating both additional costs and broken wall surfaces. Pioneer Fireproof Door Co., Div. of Pioneer In-dustries, Inc., P. O. Box 55, Carlstadt, N.J.

On Free Data Card, Circle 108

#### Major Development for Built-Up Roofing

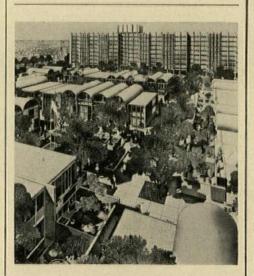
A constant problem in built-up roofing -the effect of trapped air and moisture-is solved by new "Ventsulation" roofing system from Johns-Manville. The system allows air and moisture to ventilate out of a roof assembly both during construction and throughout the life of the roof, thus eliminating blistering, cracking, and prema-

ture failure. Its two basic items are new "Ventsulation Felt" and "Ventsulation," a modified verison of J-M's "Roofinsul." The felt has large mineral granules embedded on its undersurface, to separate the felt from the deck and to provide millions of tiny passages for free motion of air and moisture. Insulation units are kerfed



on all four sides, the kerfs serving to conduct air and moisture to the vent spaces at the roof edge. Ventsulation and Ventsulation Felt can be used alone or in combination. Balance of built-up roofing is installed in regular manner. Johns-Manville, Dept. V-362, 22 E. 40th St., New York 16, N.Y.

On Free Data Card, Circle 109



#### Air Conditioning to Be Piped to Private Homes

For the first time, chilled and heated water for air conditioning will be piped to single-family homes; it will be used in the new River Park Cooperative Homes redevelopment project for Washington, D.C., designed by Charles M. Goodman Associates. A central refrigeration and boiler plant will serve 134 townhouses, as well as 385 units in an 8-story apartment building. Heating and cooling will be furnished by two Carrier 480-ton refrigeration machines and two 392-hp

boilers, to be located in the basement of the high-rise building. Compact fan-coil units will be installed in the basement of each home, and a network of ducts will carry conditioned air to each room in the 2-story homes. Carrier Corp., Carrier Parkway, Syracuse 1, N.Y.

On Free Data Card, Circle 110

#### New Polyester Coating

A new polyester finish has been announced that has significant advantages over conventional polyester coatings in properties, application, and manufacture. Based on tetrahydro-phthalic anhydride, and called "TH-PAA" for short, it gives a brilliant deep gloss immediately upon application, with little or no buffiing. The coating has high impact strength and outstanding resistance to mar, moisture, and stains, making it an excellent protection for furniture and paneling. It dries tack-free at room temperature in several hours. High gloss and durability, plus excellent adhesion to steel and other metals, make it a promising coating for appliances. The wax-free polyester finish can also be used on cement blocks and masonry to give a porcelainized effect. National Aniline is offering its THPAA system as a starting formulation to any and all interested companies. National Aniline Div., Allied Chemical Corp., 40 Rector St., New York 6, N.Y.

On Free Data Card, Circle 111

#### **New Fire Ratings** for Partitions

Two-hour fire resistance ratings have been earned by a load-bearing wood stud partition and a nonload-bearing steel stud partition. The first partition was faced each side with 3%" perforated gypsum lath. On each side, a 1", 2-gauge hexagonal wire mesh was applied using furring nails to hold the mesh about  $\frac{5}{16}''$  away from the lath; gypsum perlite basecoat plaster was applied over the lath. Total thickness including white coat finish was 1" on each side, resulting in an over-all thickness of 63%". The latter partition used  $2\frac{1}{2}''$  hollow steel studs, 16" o.c., with  $\frac{3}{8}''$  perforated gypsum lath clipped to each side of the stud. Gypsum-perlite plaster in a proportion of one to two was applied in two coats and finished in white coat. Thickness of plaster was  $\frac{3}{4}$ " from lath face; total partitions thickness was  $4\frac{3}{4}$ ". Gypsum Association, 201 N. Wells St., Chicago 6, Ill.

On Free Data Card, Circle 112



## Create beautiful kitchen and bathroom interiors with versatile wash-and-wear Marlite paneling

Marlite is the ideal wall and ceiling material for kitchens and bathrooms—new or remodeled. With Marlite, you can give your clients durability, beauty, easy maintenance. The soilproof baked finish of this practical "wear without care" paneling resists heat, moisture, stains, dents. The impervious surface quickly washes clean; stays like new for years. And Marlite means more satisfied clients, yet it saves you time and finishing costs. What's more, the Marlite line of beautiful colors, patterns, and authentic Trendwood reproductions fits any color scheme or decor. And Marlite panels are quickly installed over old walls or new framing to complete your projects sooner. Get full details from your building materials dealer, consult Sweet's File, or write Marlite Division of Masonite Corporation, Dept. 714, Dover, Ohio.



ANOTHER QUALITY PRODUCT OF MASONITE® RESEARCH

MARLITE BRANCH OFFICES AND WAREHOUSES: 204 Permalume Place N.W., Atlanta 18, Georgia • 18 Moulton Street, Cambridge 38, Mass. • 4545 James Place, Melrose Park, Illinois (Chicago) • 8908 Chancellor Row, Dallas 7, Texas • 1657 Powell Street, Emeryville, California (Oakland) • 3050 Leonis Blvd., Los Angeles 58, California • 39 Windsor Avenue, Mineola, L. I. (New York) • 2440 Sixth Avenue So., Seattle 4, Washington

#### AIR/TEMPERATURE

#### Concise Catalog on Heating and Cooling

Specifications and descriptions of 86 heating and air-conditioning products appear in new 8-page folder. Among the units presented are packaged and split-system air-conditioning (both aircooled and water-cooled), heat pumps, furnaces (gas-fired and oil-fired), electric heating, electronic air purifiers, and room air conditioners. Features and data are given in brief for each unit. Literature Dept. 532, Chrysler Airtemp, Div. of Chrysler Corp., 1600 Webster St., Dayton 4, Ohio.

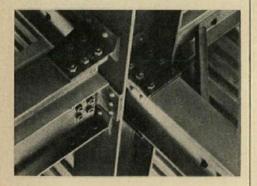
On Free Data Card, Circle 200

#### **Residential Baseboards**

New 12-page catalog on residential baseboards is available. Six new product features are introduced in the booklet; also presented are ratings, dimensions, and details on the complete line. Information is also given on heat-loss calculation, ordering, and installation. Among the redesigned features of the baseboard are a snaplock hanger, a noiseless expansion cradle, and a snap-in damper. Units are now available in lengths of 3', 4' 5', 6', 7', and 8'. Radiant-Ray Radiation, Inc., 464 Hartford Ave., Newington, Conn.

On Free Data Card, Circle 201

#### CONSTRUCTION



#### Structural Reports

First of a series of *Structural Reports* from U. S. Steel is a 14-page discussion of the United of America Building in Chicago, by Shaw, Metz & Associates, the first multi-story building in which one of the new highstrength steels furnished to ASTM A440 was used. Report describes the ways that USS "Man-Ten" (A440) and "Cor-Ten" steels were used in the structure. Economies and other advantages are cited. The detailed structural analysis discusses design loads, allowable steel stresses, assumptions for design, typical column design with combined stresses, typical beam design with stub connection, fabrication and erection. A bibliography is included. United States Steel Corp., 525 William Penn Pl., Pittsbrugh 30, Pa.

On Free Data Card, Circle 202

#### Architectural Aluminum

New 24-page booklet, Architectural Aluminum, summarizes design considerations and engineering data important to architects working with aluminum for structural and decorative uses. Booklet describes aluminum alloys that are particularly suited to varied architectural applications curtain-wall panels, building hardware, windows, louvers, copings and mullions, fasteners, roofing ductwork, and welded members. Properties and finishes are also discussed. Other sections are on design and selection of extrusions, and methods of cleaning and protecting. A specifications outline is included. Metals Div., Olin Mathieson Chemical Corp., 400 Park Ave., New York 22, N.Y.

On Free Data Card, Cidcle 203

#### Short Course in Prestressed Concrete

An 84-page handbook, entitled Fundamentals of Prestressed Concrete Design, has been published by PCI. The book covers the properties of prestressing steel and high-strength concrete, principals of design for flexure and shear, and interpretation of specifications and codes. Several sample problems show step-by-step procedures for both bridge and building design. Authors are Jack R. Janney and Richard C. Elstner, who have also written a previous PCI publication, and who base the new text on experience conducting many short courses in the design of prestressed concrete. Write (enclosing \$3.00) to: Prestressed Concrete Institute, 205 W. Wacker Dr., Chicago 6, Ill.

#### Gypsum Roof Deck

A 14-page illustrated booklet for architects and engineers is available from the national association of gypsum roof deck contractors and suppliers. Entitled *Design Data for Poured Gypsum Roof Deck*, the book-



let gives complete design tables, plus cross-section details on walls, eaves, curbs, ridges, expansion joints, and skylights. Also included are recommendations and specifications. Gypsum Roof Deck Foundation, 1201 Waukegan Rd., Glenview, Ill.

On Free Data Card, Circle 205

#### Watertight Concrete

The Design and Specification of Watertight Concrete, 6 pages, outlines the basic requirements for watertight concrete and describes the role of "Pozzolith" in reducing permeability, shrinkage, bleeding, and segregation. Pozzolith is essentially a water-reducing agent and plasticizer that converts a dry unworkable mix to a cohesive flowable consistency without the use of added water. The result is a strong, durable, structural concrete that is highly resistant to the penetration of water under normal circumstances. Specifications are included. The Master Builders Co., Div. of Martin-Marietta Corp., 2490 Lee Blvd., Cleveland 18, Ohio.

On Free Data Card, Circle 206

#### Getting Down to Nuts and Bolts

A new 32-page edition of *Helpful Hints* on Fastening with Srews, Nuts and Bolts has been published. The booklet covers a broad range of fastening topics—proper fastener selection, torquing, correct bolt loading, tightening limitations, thread selection, factors involved in various joints, fastening in corrosive environments. Diagrams and cutaway drawings illustrate the discussion. Russell, Burdsall & Ward Bolt & Nut Co., 100 Midland Ave., Port Chester, N.Y.

On Free Data Card, Circle 207

#### New Waterproof Sealant

"Compriband," an impentrable waterproofing sealant produced by a patented

process of impregnating polyurethane foam with asphalt, is described in new 4-page brochure. According to the literature, "the four most wanted sealing characteristics are now available in one product." When compressed it becomes an impenetrable waterproof mass; it is compressive for insertion into preformed or existing joints; it bonds positively to contact surfaces when under compression; and its total memory and recovery create constant pressure to fill joint and maintain bond to contact surfaces. Brochure shows typical details. Pacific Sealants, 1491 Daisy Ave., Long Beach 13, Calif.

On Free Data Card, Circle 208



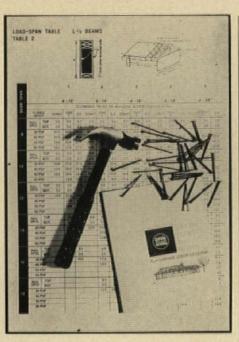
#### **Fully Prestressed Slabs**

Following an 8-year period of research and testing, a new prestressed/precast concrete floor and roof slab has been announced. The fully prestressed units, called "Hi-Stress Flexicore," give longer clear spans and greater loadcarrying capacity than the standard pretensioned Flexicore slab that has been in use for over 20 years. Available in 8" x 16" section and in lengths up to 32', the new slabs will easily accommodate roof loads on a 32' clear span, and floor loads on a 26' clear span. Bulletin L21, 4 pages, gives basic information and shows several installations. Catalog L1, 8 pages, presents the standard Flexicore system and the new Hi-Stress slabs, giving structural details, design data, and specifications. The Flexicore Co., Inc., P.O. Box 825, Dayton 1, Ohio.

On Free Data Card, Circle 209

#### Nailed Box Beams

Nails are the only fasteners needed for on-site fabrication of the 360 box beams detailed in new 24-page manual DFPA developed the series of beams, ranging from 8' to 18' in length, in answer to a demand for beams that do not require glue. The beams are intended for window headers, ridge beams, and garage headers. Manual gives complete details on determining



design load and on fabricating the beams. Douglas Fir Plywood Association. 1119 A St., Tacoma 2, Wash. On Free Data Card, Circle 210

#### **Gasket Samples**

Sample board contains six different "Everlastic" gaskets, designed to meet all sealing requirements — isolating, protecting, cushioning, stress relieving, sealing — in a variety of building applications. Properties and compression data for each material are tabulated on the chart. Williams Seals & Gaskets Div., Williams Equipment & Supply Co., Inc., 486 W. Eight Mile Rd., Hazel Park, Mich.

On Free Data Card, Circle 211

DOORS/WINDOWS

#### **Insulating Glass**

New "Therm - O - Proof" insulating glass is described as "not just another insulating glass [but] a scientifically developed, fully tested insulating unit which will give many years of troublefree service." The product is bonded with "Flex-Seal," which has adhesive qualities such that no metal banding is required to hold the unit together. Thus there can be no metal corrosion that leads to deterioration of the seal. Therm-O-Proof has a 5-year written w a r r a n t y, and is manufactured in standard sizes up to 10,000 sq in. General information and size listings are available in a 12-page bulletin. Thermoproof Glass Co., Subsidiary of Shatterproof Glass Corp., 4815 Cabot Ave., Detroit 10, Mich.

On Free Data Card, Circle 212

#### **Entrance Packages**

Kawneer Entrance Manual, 28 pages, describes the latest in entrance packages utilizing swing or sliding doors; it explains door construction, concealed and regular closers, automatic operators, panic devices, and hardware. Frame and hardware options are defined for the various standard entrances, sliding doors, and "Duty-Rated" packages. Details and specifications are included. Advertising Dept., Kawneer Co., 1105 N. Front St., Niles, Mich.

On Free Data Card, Circle 213



#### Double Dome Redesigned

Bulletin, 4 pages, presents the new and improved "Twin Dome" by Wasco —"the first totally proven dome-within-dome daylighting design." The redesigned skylight is the first daylighting product with both inner and outer domes of shatterproof, weatherable acrylic. Both domes are permanently bonded to an aluminum nailing flange by a new field-tested sealant. Bulletin describes these and other features, shows the results of rigid tests, and pictures a typical installation accom-

# Get 40% greater carrying capacity with Ceco's new "H" series joists

Loading for "J" and "LA" series also increased

You have more design freedom with the new Steel Joist Institute approved "H" series open-web steel joists . . . heavier loads can be carried on greater spans at little additional cost.

High strength alloyed steel, produced in Ceco's own modern mill, is used in the fabrication of Ceco "H" series joists. One happy result is that you can place up to 40% heavier loads on the extreme spans. For example:

at 48 ft, whereas the old 24S8 joist carries only 145 lbs at that span. Or . . .

• a 24H8 joist can carry 207 lbs per lineal ft • the limit load carried by a 24S8 joist on a 40 ft span can now be carried safely by a 24H8 on a 48 ft span.

Carrying capacities of the "J" series and "LA" series joists have been increased up to 10% by use of A36 steel.

Thus, complete design flexibility can be yours by using Ceco open-web steel joist construction. Ceco's "H", "J", and "LA" series joists include 158 standardized types having clear spans up to 96 feet.

And keep in mind the Ceco "plus" advantages which benefit the whole building team: (a) engineering design based on Steel Joist Institute approved load tables and specifications, and (b) the most dependable deliveries from a nearby Ceco manufacturing plant-there are seven, all told, coast to coast.

No wonder more and more architects are specifying Ceco for steel joists!

96

## NEW "H"SERIES JOISTS

50,000 PSI UNIFORM YIELD STRENGTH 30,000 PSI TENSILE WORKING STRESS USING NEW CECO HIGH STRENGTH STEEL

## NEW "J"& "LA" SERIES JOISTS

36,000 PSI MINIMUM YIELD STRENGTH 22,000 PSI TENSILE WORKING STRESS USING A36 STEEL

Bran	id r	new	publ	icatior	IS
Just	fill	out	and	mail	
this	cou	pon			

	10.00
w Steel Joist	
Load Table Manual No. 3009-B	
	-
w Steel Joist Catalog No. 3001-R	

NEV

-			
	-	100	
A	1		
175	Sec. 1	Log I	

CE	CO	Steel	Prod	ucts	Corr	ora	tion
5601	West	26th	Street	• Chi	cago 5	50, Il	linois
Sales	Office	s and 1	Plants in	Princip	pal Citi	es	

steel joists, roof deck, centering + steelforms + reinforcing steel + curtainwalls, windows, screens, doors + steel buildings + galvanized and colored roofing products + metal lath

name	title	
firm		. 44
address		
city		state

For more information, turn to Reader Service card, circle No. 401

CECO

#### PROGRESSIVE ARCHITECTURE NEWS REPORT

July 1962

On Free Data Card, Circle 214

**Industry Standard** for Aluminum Screens

On Free Data Card, Circle 215

Power-Operated **Refrigerator Doors** 

On Free Data Card, Circle 216

Lighting Units for Hazardous Locations



tures, dust-tight units, and various water-tight and vapor-tight units. Complete specifications and data on the full line are given in the 20-page catalog. Benjamin Div., Thomas In-Add a valuable man to your staff ... Your Raynor Distributor offers you NATIONWIDE CONSULTATION ... dustries Inc., 207 E. Broadway, Louisville 2, Ky. On Free Data Card, Circle 217 INSTALLATION ... SERVICE

> Fluorescent Ballasts What You Need to Know about Fluo-

For more information, turn to Reader Service card, circle No. 379

# SUPER-STRENGTH MOISTURE BARRIE

Punch it, poke it, crunch it . . . Moistop resists rips or tears under all kinds of job-site beating, assures an impenetrable barrier (perm rating 0.15) against moisture migration through floors - forever! Combines the inertness of polyethylene film with the toughness of reinforced, waterproof Sisalkraft. Comes in 1,200 sq. ft. rolls 72", 84", and 96" wide, lays down fast over areas prepared for concrete slabs on grade or basement floors and crawl spaces in homes. Exceeds FHA Minimum Property Requirements. Check complete specifications in SWEET'S Architectural File, 8h/AM. For sample, write: American Sisalkraft Company, Attleboro, Mass.

# NOISTOP REINFORCED PAPER A DEVELOPMENT OF AMERICAN SISALKRAFT COMPANY/DIVISION OF ST. REGIS PAPER COMPANY

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

JULY 1962 P/A



## Aluminum EXPANSION JOINT COVERS



This is the new E-L Expansion Joint Cover available in a range to answer all requirements for floors, ceilings, and interior or exterior walls.

E-L covers, of fine quality extruded aluminum, are exceptionally sturdy, strong, and efficient. They are well-made. And they give a trim look to interiors and exteriors.

At the same time, they afford the particular economies synonymous with modern aluminum extrusions. A low first cost, a long range savings in long life and little upkeep.

E-L covers are supplied for 1", 1½", and 2" expansion or contraction. Their efficiency is underscored by the design concepts hinted at in the cut-away above. But consider these features too:

PATTERNS: Plain plate shown; four different patterned plates and special abrasive plates also available.

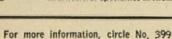
MATERIALS: All members extruded aluminum. Abrasive plates have aluminum oxide particles embedded in surface, Filler strips of abrasiveresistant extruded vinyl. Aluminum anchors self-locking and adjustable for desired centers.

FINISHES: Mill or beautiful satin finish. An array of color finishes too, selected to harmonize pleasingly with tile or terrazzo.

Our NEW CATALOG gives complete data write for it! Samples also supplied on request.



EXTRUDED LOUVER CORP. Williamsport, Pennsylvania Architectural Specialties in Aluminum



rescent Ballasts. 16 pages, contains basic information on the operation of ballasts and their proper installation in fluorescent-lighting systems. Among the topics discussed are: fluorescent lamp types, ballast function, the three basic ballast circuits, industry specifications and standards, the effect of heat on ballast life, the problem of ballast sound, and the prevention of undesirable ballast failure conditions. A recommended ballast specification form is provided. Ballasts for Fluorescent Lamps: Ratings and Data, 24 pages, contains complete descriptions and data on GE's full line. General Electric Co., Schenectady 5. N.Y.

On Free Data Card, Circle 218

#### Metering Equipment

Complete line of meter centers and accessories for multi-metering applications is covered in new 16-page Metering Equipment. According to the manufacturer, this is the first time that meter centers for every application in separately metered multiple-unit buildings (such as apartment houses and office buildings) have been available from a single source. Bulletin provides photos, layouts, dimensions, and tables on new wall-mounted meter centers, new free-standing metering switchboard lines, as well as on other equipment. I-T-E Circuit Breaker Co., P.O. Box 2384, Station D, Atlanta, Ga.

On Free Data Card, Circle 219

#### New Concept for School Stages

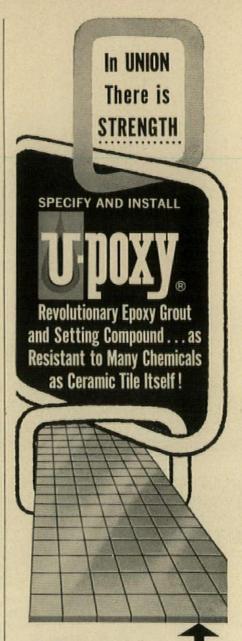
A fresh concept of stage lighting and control equipment for schools and similar applications is presented in *New School Stages for Old.* The "Modified Proscenium Stage Plan" shown here was devised by James Hull Miller, theater designer. In this 24-page bulletin, he describes the basic idea and its merits, gives a typical layout, and discusses the background projection system and scenic design for the space stage. Hub Electric Co., Inc., 2255 W. Grand Ave., Chicago 12, Ill.

On Free Data Card, Circle 220

#### FINISHERS/PROTECTORS

#### Vinyl Coatings

Properties and fields of application of "BFC Vinyl Coatings" are noted in new 4-page brochure. An exposureresistance chart (based on 20 years of experience with vinyl coatings for



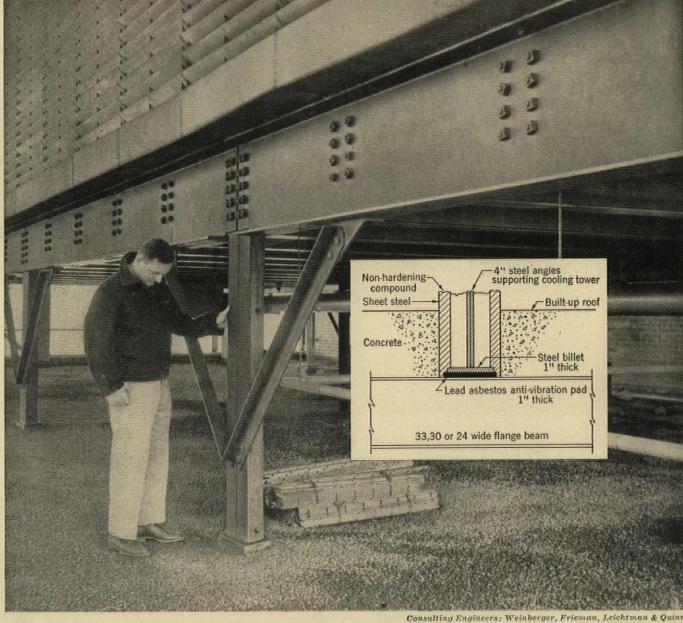
July 1962

# This 5% joint area is the most critical part of any floor.

Brick and tile floors are no better than their joints. New Miracle U-POXY is unequaled for application in all installations where corrosives are encountered. Forms a dense, tight joint of phenomenal strength and resistance to food acids, oils, greases, fats and chemicals. Eliminates high maintenance costs and expensive shut downs on new or existing floors. You can rest your reputation on U-POXY Grout and Setting Compound.



For more information, circle No. 395



Consulting Engineers: Weinberger, Frieman, Leichtman & Quinn Architects: Sylvan Bien & Robert L. Bien Pads supplied by John F. Abernethy & Co., Inc.

## Machine vibration tamed with feet of LEAD

Give machinery in motion lead asbestos pads to stand upon, and a designer may have noise and vibration problems quickly under control. An example is the air-conditioning unit atop the new 35-story skyscraper at 575 Lexington Avenue, New York. Here lead asbestos pads just one inch thick, placed between the cooling tower and the building's structural steel, cushion the wide spectrum of noise and vibration created by the 205,000-pound unit and confine it to the tower.

This use of lead asbestos also saved

considerable time and money. Pads and supporting columns for the tower were positioned while major steel work was in progress. It was not necessary, as with usual methods, to wait until the concrete roof slab had been poured. If you have a vibration or noise problem, perhaps the solution lies in one of the many forms of lead. We'd be more than pleased to help you find it. Write to: Lead Industries Association, Inc., Dept. N-7, 292 Madison Ave., N. Y. 17, N. Y.



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

Look Ahead with Lead

8970

metal, masonry, wood, and plastics) shows the relative degree of protection afforded by BFC products against the corrosive action of 48 acids, salts, alkalis, gases, and solvents. Concise stepby-step instructions are given for the proper application of vinyl coatings on various substrates. Better Finishes & Coatings Co., Broad St. and Hepburn Rd., Clifton, N.J.

On Free Data Card, Circle 221

#### **Pool Painting Specs**

Complete application data on epoxy pool coatings is contained in 8-page *Guide to Engineered Pool Painting Specifications.* Prepared for architects and engineers, the bulletin gives data for paintings all types of pools poured concrete, sprayed concrete, steel, and aluminum. Repainting specs are also provided. The Kelley Paint Co., 1445 S. 15 St., Louisville 10, Ky. On Free Data Card, Circle 222

#### Anodic Coating for Architectural Aluminum

New 12-page standard covers quality requirements and conformance tests

for anodically coated aluminum alloys used in architectural applications. This is the first time such a standard has been developed and issued on an industry basis. The standard covers both maintained and unmaintained surfaces. Four appendices deal with preparation of quality-control test specimens, stain test, mortar test for clear lacquers, and methods for measuring thickness of anodic coatings. Write (on letterhead to: The Aluminum Association, 420 Lexington Ave., New York 17, N.Y.

#### INSULATION

#### **Acoustical Materials**

1962 edition of Sound Absorption Coefficients of Architectural Acoustical Materials features information in three new categories. 1), Flamespread classifications are included for the first time. 2), Fire-resistance data of ceiling acoustical materials, measured in hours, has been noted for a few products in the past two years. This year, the number of products included with such ratings has grown to 39, and two summary tables have been included for convenient reference. 3), Ceiling-attenuation factors are given for 77 products. Other information provided in the bulletin includes noise-reduction coefficients, recommended specification range of the materials, mounting requirements, size, weight, thickness, and light reflectance. Write (enclosing \$.50) to: Acoustical Materials Association, 335 E. 45 St., New York 17, N.Y.

#### SANITATION/PLUMBING

#### Stainless-Steel Sinks

New 8-page Catalog NP-3 has been issued by Elkay, largest producer of stainless-steel sinks in the world. Highlight of the catalog is the new "Cuisine Console," which features for the first time a built-in light source, builtin spray in the faucet, convenient electrical outlets, and other innovations. Another section is devoted to the complete "Cuisine Centre" line. Elkay Manufacturing Co., 2700 S. 17th Ave., Broadview, Ill.

On Free Data Card, Circle 223



# THIS IS THE SCHOOL THAT V-LOK BUILT STRONGER... FASTER... FOR LESS!

# ...because V-LOK interlocks!

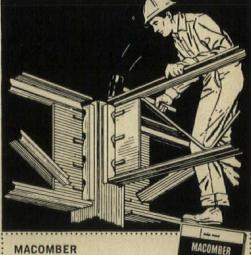
V-LOK steel structures go up so fast they advance occupancy time. A hammer blow securely seats their interlocking deep end connections. Result: A stronger, more rigid frame. Faster decking, too, with exclusive nailable V-section chords. And V-LOK structures grow with you. They permit wide design latitude for loading, clear heights, roof type, bay area. What's more, V-LOK is compatible with modern finishing materials and techniques.

For FREE 48-page design manual, return this coupon today.





For more information, turn to Reader Service card, circle No. 358



MACOMBER V-LOK	MA V-		MACOMBER Canton 1, Ohio
		your V-LOI	Please send me Design Manual. Name
1	Position	P	Company
			Address
te VP-27	ie State	Zone	City

Why be misled by the "Or Equal" Myth of Air Flow Specifications? We invite you to make this quick comparison

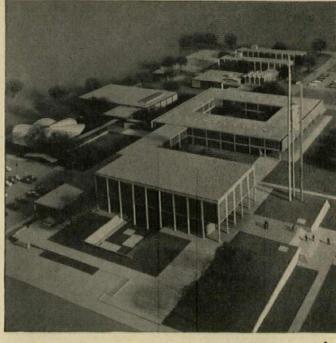
COOK VENTI-RATER **Buyer's Guide for Ventilator Construction Features** 

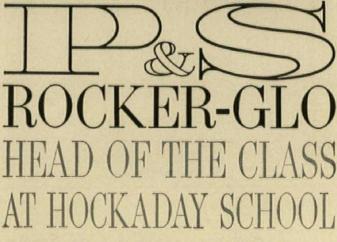
	COOK	OTHER
	YES	NO
All aluminum blower wheels	V	1 3
All aluminum power assembly on belt driven models	1	
Sealed, prelubricated, rubber mounted bearings	V	S.a.s
Variable pitch driver sheaves on belt driven models	V	
One piece all aluminum curb cap	V	
Watertight conduit integral part of unit	V	123-1
All motors with "Sealed for Life" lubrication feature	V	
.080096 ga. aluminum baffles and top cap.	V	
.080 ga. aluminum inlets	V	
.080125 ga. aluminum motor plates	V	
.125 ga. aluminum back plates on blower wheels	V	
Patented storm band and drain on wall unit	V	
Venturi type inlets with anti-backdraft feature	V	

Cook ventilator specifications can be your Buyer's Guide for your air movement needs. You can be sure that the answer to your ventilating problems has been designed and built into the Cook all-aluminum line of ventilators.



For more information, turn to Reader Service card, circle No. 407 104





In modern, spacious Hock-aday School in Dallas, Texas, 20 ampere Rocker-Glo switches control the lighting in all areas.

As many architects and electrical contractors are discovering . . . there's a good reason for specifying P&S wiring devices.

P&S wiring devices are time-tested for the highest quality, and most functional design. P&S Rocker-Glo can be used on fluorescent and tungsten filament lamp loads at full current rating.

Always insist on the best . Performance Specified P&S wiring devices. For more information write Dept. PA-762.

PASS & SEYMOUR INC. SYRACUSE 9. N. Y.

BOSTON CHICAGO LOS ANGELES For more information, turn to Reader Service card, circle No. 376

Harwood K. Smith and Partners Architects Hall-Fisk Electric Company **Electrical Contractor** Gregerson & Gaynor Mechanical and **Electrical Engineers** Robert E. McKee **General Contractor** 



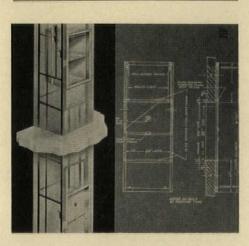
Rocker-Glo, 2231

SAN FRANCISCO

#### SPECIAL EQUIPMENT

## Catalog and Guide for Hospital Casework

New 80-page book is designed both as a catalog of hospital casework and as a guide to building and remodeling for every type of patient care. A number of innovations in equipment arrangement and use are seen in the cabinets, casework, and wardrobes. Many floor plans in *Catalog 627* give assistance in the planning of hospitals, nursing homes, homes for the aged, sanitariums, and clinics. Write (on letterhead) to: Maysteel Products, Inc., 800 Horicon St., Mayville, Wis.



#### Vertical Lifts

Catalog, 12 pages, describes the complete line of Matot vertical lift equipment. Various types of electric dumbwaiters are illustrated: record carriers, book lifts, money lifts, and mail carriers. The catalog also shows handoperated units that can be economically converted to electric operation in the future. Freight elevators, handoperated, are described. For each unit, the catalog gives dimensions, engineering data, and operating features. Specifications and installation details are included. D. A. Matot, Inc., 1533 W. Altgeld St., Chicago 14, Ill.

On Free Data Card, Circle 224

#### **Bathroom Cabinets**

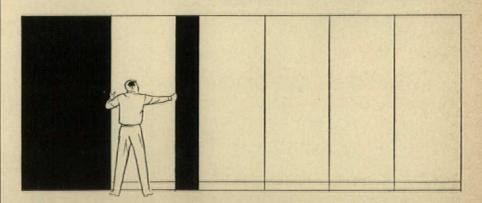
1962 line of bathroom cabinets, mirrors, and accessories is illustrated in new 32-page catalog. All models manufactured by Miami-Carey are shown, including mirror-cabinet combinations, recessed and surface cabinets, and cabinets and mirrors for hotelmotel use. Photos of the units are accompanied by specifications and typical installation drawings. Miami

# FOLDING WALLS

## ... custom engineered to meet your exact design requirements

R-W Folding Walls are produced to fulfill the exact functional requirements of your design and provide sound-retarding qualities compatible with the surrounding construction . . . the design does not have to be compromised to accommodate a standard product. Both R-W Folding and Movable Walls provide a practical and effective method of solving the problem of dividing space and sound to meet changing space requirements.

**R-W FOLDING WALLS...** consist of a series of panels hinged together that move back and forth on a ceiling track from a storage pocket by manual or electric operation. As they reach the fully extended position a Perimeter Seal Mechanism is automatically actuated to stabilize the partition and retard sound transmission. Recommended where you require a space and sound divider for a specific location.



**R-W MOVABLE WALLS...** consist of a series of individual panels that are moved into position via ceiling tracks to form a solid wall. Manually actuated Floor-Seal Mechanism locks the panel in position and retards sound transmission at the floor level. Recommended where great flexibility is required. Tracks and switches can be located in such a manner that the Movable Wall panels can be utilized to form a multitude of various sized rooms, hallways, etc.

For complete information . . request Catalog No. 602.



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

Cabinet Div., The Philip Carey Manufacturing Co., Middletown, Ohio. On Free Data Card, Circle 225

#### SURFACING MATERIALS



Particleboard under Floor Coverings A new guide to installing particle-

board and floor coverings is now avail-

able. The application instructions, which include step-by-step details both for an advanced method of gluenailing the underlayment and for conventional nailing (and stapling), apply specifically to the firm's "Versabord" particleboard. Weyerhaeuser guarantees performance of its underlayment when so installed. Weyerhaeuser Co., P.O. Box 138, Tacoma, Wash.

On Free Data Card, Circle 226

#### Hardboard Panels with Plastic Finish

Quick Facts about Marlite is a new reference folder containing color swatches, descriptive literature, and technical information on the complete line of Marlite plastic-surfaced hardboard. Actual samples illustrate a variety of patterns and panel types. Of particular interest is "Korelock," a rigid hollow-core panel that reduces installation time to a minimum. Specification sheets and the 1962 Marlite catalog are included in the folder. Marsh Wall Products, Inc., Dover, Ohio.

On Free Data Card, Circle 227

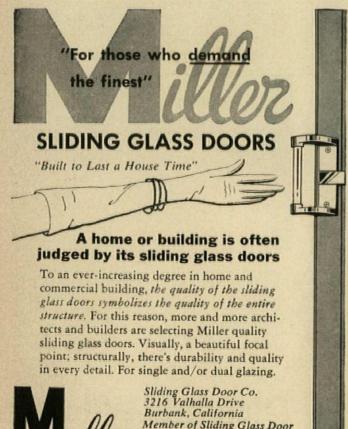
## Tasteful Line of Vinyl Wallcoverings

One of Sweden's leading producers of vinyl wallcoverings, Galon AB, has just introduced a tasteful line of these fabrics to the U.S. Trademarked "Scan-Designs," the wallcoverings have many excellent qualities: they are water-proof, hard-wearing, and washable; resistant to fire, mildew, and stains; will not fade, split, or shrink. Five folders of samples show the five patterns, with swatches illustrating the complete range of handsome and subtle colors. The five patterns are a homespun open-weave texture, linen, grasscloth, leather, and wood. Galon Fabrics, Inc., 281 Fifth Ave., New York 16, N.Y.

On Free Data Card, Circle 228

PROGRESSIVE ARCHITECTURE NIBWS REPORT

REINHOLD PUBLISHING CORPORATION 430 PARK AVENUE NEW YORK 22, N.Y. Publisher.....D. Bradford Wilkin Editor..... Thomas H. Creighton News Editor .....James T. Burns, Jr.



Member of Sliding Glass Door & Window Institute Member of Building Contractors Association

· Write for new catalog. For more information, turn to Reader Service card, circle No. 410

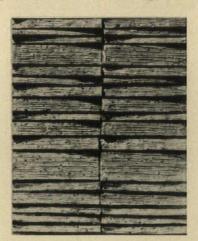
BETTER BUILDINGS for the MOTOR TRAVELER ... Motels **By GEOFFREY BAKER and BRUNO FUNARO** With over 600 photos and plans this book covers in detail all the facts the architect must consider in designing, building and equipping a motel. This is the only complete up-to-date book on the subject. You will find all the information you need on design essentials-plus ideas and sound information based on actual experience in building many types of roadside accommodations. You will find hints on exciting room settings, signs to attract interest, restaurants, play areas, swimming pools, parking lots and

> carports. 268 pages, 9" by 12". Over 600 plans and plans and photos. \$13.50

Write today for your 10-day-FREE examination copy.

**REINHOLD PUBLISHING CORPORATION** 430 Park Ave., Dept. M-126, New York 22, N. Y.

# Now, your own design concept



# can be dramatically reproduced



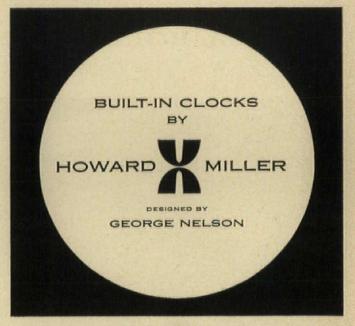
# in lovely, lasting ceramic walls

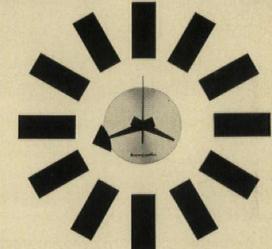
Visualize the handsome effects you can create with low-relief sculptured ceramic walls of  $\frac{3}{8}''$  CV Durathin. There is no limit to the design possibilities . . . no restriction on your choice of colors.

You will fully appreciate the versatility of sculptured CV Durathin when you see the 21 patterns illustrated in our new Design Series brochure. Send for it. Whatever design you select or create, Federal Seaboard will custom-make it for you. You have a choice of gloss, satin or unglazed finishes . . . and unit sizes range up to a maximum of 18" x 24" on centers. The price? Much less than you'd expect for walls of individualized beauty, quality and permanence.



10 EAST 40TH STREET . NEW YORK 16, N.Y. For more information, turn to Reader Service card, circle No. 409

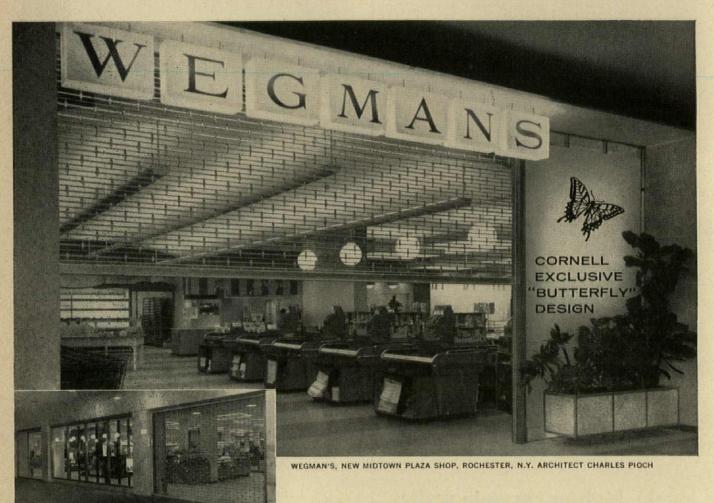




No. 6772 16" or 23" dia... black, white or aluminum hour indicators... black or white hands... white or aluminum center disc.



Selling Impact of "Open Store Fronts" with Protective Functional Beauty of CORNELL ROLLING AND SLIDING GRILLES Win Wide Acceptance in Stores, Malls and Shopping Centers



MCCURDY'S, ROCHESTER MIDTOWN PLAZA.



ROLLING GRILLE FOR DINING AREA



SLIDING GRILLE, EASTWOOD (ALA.) SHOPPING CENTER, THORSEN & THORSHOV (MINN.) ARCHITECT

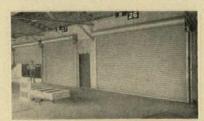
**ROLLING GRILLES:** As light and airy as a butterfly in appearance . . . yet they give steel-door protection. Many Cornell Rolling Grilles have been installed in the new MIDTOWN PLAZA SHOPPING CENTER, ROCHESTER. Available in galvanized, stainless steel, bronze and silvery satin or gold anodized aluminum. Manual or motor operation.

SLIDING GRILLES: Provide a protective barrier at lower cost. Stack to one side in approximately 21/4" per foot of opening width. Travel around corners to enclose irregular areas. Steel or aluminum. Also new colorbond vinyl-protected steel in white, gold, black, green. Require no maintenance. Will not rust or corrode.

**ROLLING METAL DOORS:** for shop and receiving entrances. Underwriter's labeled and commercial service. Motorized or manual.

ROLLING COUNTER SHUTTERS: For cafeterias, kitchens, etc. Aluminum, stainless steel, bronze, galvanized steel.

Write for catalog and brochures.

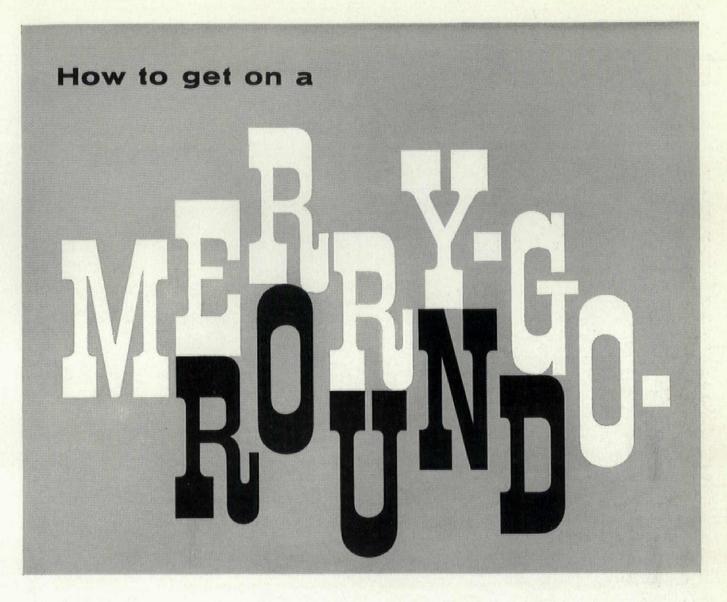


ROLLING STEEL SERVICE DOOR

CORNELL IRON WORKS, INC. Established 1828



36th Ave. at 13th St., Long Island City 6, N.Y. • STillwell 4-3880 REPRESENTATIVES IN PRINCIPAL CITIES



It is certainly possible to design an air conditioning system by specifying a variety of major components made by different manufacturers.

You may even save the owners a few dollars—with refrigeration equipment from one source, cooling and heating coils from another and fans from somewhere else.

But each added source of supply multiplies the owners' problems when they try to fix responsibility for performance. There they are—going round and round.

Whom will they call if mechanical

trouble develops? Which component needs attention? Where will they turn for service? The answers come easily when you specify equipment from one responsible supplier of major components—able to keep the equipment in first-class operating condition.

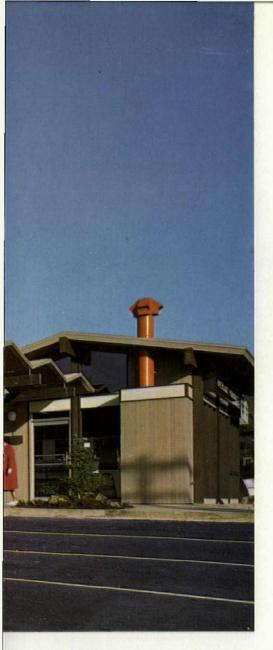
Although not the only air conditioning manufacturer offering a broad line of components, Carrier is best prepared to serve the owner should trouble come. For our company and our dealers maintain the largest and best-trained service organization in the business over 11,000 men strong.

Carrier Air Conditioning Company



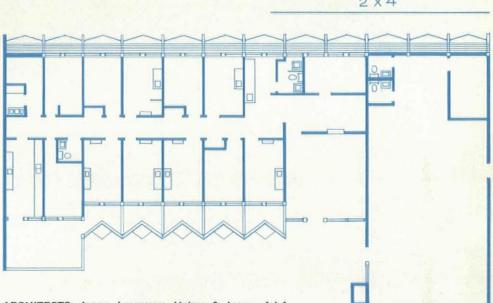
# MODERN DESIGN Uses WEST COAST LUMBER

WEST COAST DOUGLAS FIR WEST COAST HEMLOCK WESTERN RED CEDAR SITKA SPRUCE WHITE FIR





Simple application technique of 1" x 2" Western Red Cedar produces dramatic, but practical result for privacy screen.



ARCHITECTS: Jones, Lovegren, Helms & Jones, A.I.A.

The intimate charm of a modern residence has been designed into this Bellevue, Washington medical center, located in a residential area. It features the imaginative use of standard sizes and grades of West Coast Lumber. Built on a hillside site, the structure provides 4,850 square feet of space on two floors for five individual office suites and an apothecary shop.

The privacy screen of Western Red Cedar takes its pattern from the simulated folded plate roof which runs immediately above it, horizontal to ground level. The screen provides a visual division of the offices from the upper-level, 16-car parking lot, while allowing a full view and diffusion of early morning and late afternoon sunlight. Character is subtly added to the building by the pattern of the folded plate roof, the function of which is weather protection for the outside entrance corridor.

The apothecary shop and clinic blend into the relaxed suburban atmosphere. The rich, natural appearance of West Coast Lumber offers an impression of friendly welcome to patients, replacing the conventional "sanitary white" for such structures. This building is the second of a medical "complex" planned for the area.

This striking and imaginative interpretation of modern architectural ideas has been accomplished with maximum economy through the practical use of West Coast Lumber's many sizes and grades. You'll find a limitless field of design applications for versatile, practical West Coast Lumber. Your local retail lumber dealer is a convenient supply source.

#### **Technical West Coast Lumber information:**

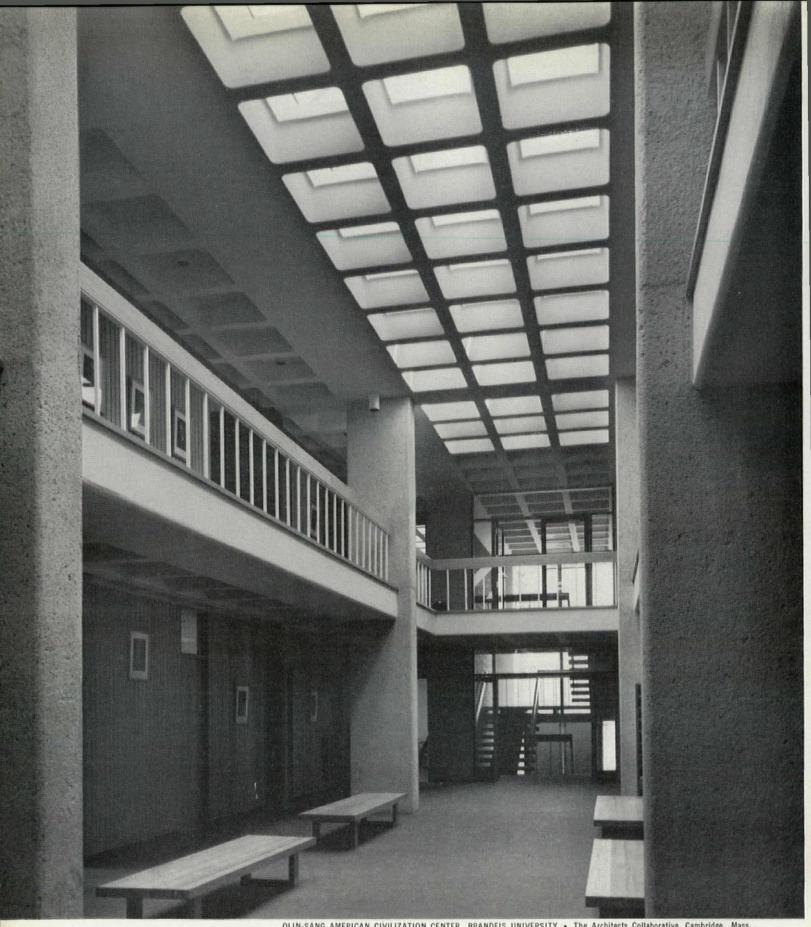
**Posts:** West Coast Douglas Fir 4" x 4", 6", 8", 10". Glue laminated 7" x 7" and 7" x 8". **Beams:** Glue laminated West Coast Douglas Fir  $5\frac{1}{4}$ " x 8",  $5\frac{1}{4}$ " x  $11\frac{1}{4}$ ",  $5\frac{1}{4}$ " x  $12\frac{7}{8}$ ",  $5\frac{1}{4}$ " x  $14\frac{1}{2}$ " to various lengths. **Joists:** West Coast Douglas Fir 2" x 6" spaced 12" and 16" o.c. **Subfloor:** West Coast Douglas Fir 1" x 6" shiplap. Wall framing: West Coast Hemlock 2" x 4". Roof Deck: West Coast Douglas Fir 2" x 6" tongue and groove. Entrance canopy: West Coast Douglas Fir 2" x 6" tongue and groove. Siding: Western Red Cedar 1" x 4" tongue and groove.

Screen: Western Red Cedar 1" x 4" tongue and groove

"Buildings for Business," full color, 12-pages full of small building ideas. Write for your personal copy today ... Dept. 777

WEST COAST LUMBERMEN'S ASSOCIATION

1410 S. W. Morrison Street, Portland 5, Oregon



OLIN-SANG AMERICAN CIVILIZATION CENTER, BRANDEIS UNIVERSITY . The Architects Collaborative, Cambridge, Mass.

#### ONE 395 SQ. FT. SKYDOME® UNIT DAYLIGHTS THIS ENTIRE HALL

A single Skydome®, 8½ ft. wide x 46½ ft. long, was custom-built to achieve dramatic, effective daylighting through this honeycomb grid ceiling. Formed of shatterproof acrylic plastic, this watertight skylight seals off the elements. At the same time, it admits cheerful, evenly diffused, glarefree daylight to the hall below and accentuates the unusual play of contrasting textures. We welcome other opportunities to combine daylighting with advanced design ideas. For further information, please phone or write our Custom Engineering Department.



AMERICAN CYANAMID COMPANY CYANAMID BUILDING PRODUCTS DIVISION, 5 BAY STATE ROAD, CAMBRIDGE 38, MASS. For more information, turn to Reader Service card, circle No. 326

## July 1962 PROGRESSIVE ARCHITECTURE®

#### THOMAS H. CREIGHTON, FAIA, EDITOR

JAN C. ROWAN, AIA, MANAGING EDITOR BURTON H. HOLMES, AIA, TECHNICAL EDITOR JAMES T. BURNS, JR., NEWS EDITOR JOHN M. DIXON, AIA, ASSOCIATE EDITOR

ASSISTANT EDITORS C. RAY SMITH, GEORGE LUBASZ, JEAN HATTON DUFFY, ELLEN PERRY

CONTRIBUTING EDITOR: FEATURES ILSE MEISSNER REESE

CONTRIBUTING EDITORS: COLUMNS NORMAN COPLAN, E. E. HALMOS, JR. WILLIAM J. McGUINNESS, HAROLD J. ROSEN, JUDGE BERNARD TOMSON

#### GRAPHICS

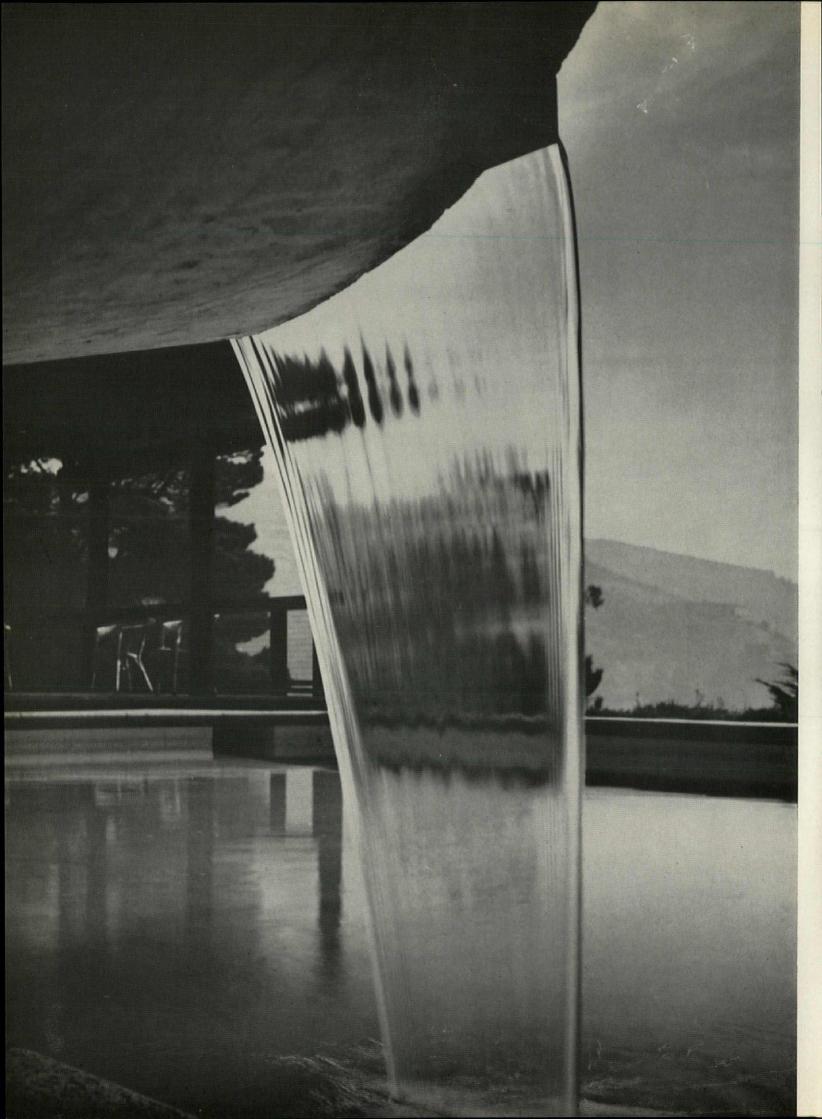
CAROL BOWEN, ART DIRECTOR MARION FEIGL, ASSISTANT TO ART DIRECTOR NICHOLAS LOSCALZO, DRAFTSMAN JOSEPH A. PAPPA, ASSISTANT DRAFTSMAN

#### PRODUCTION

JOSEPH M. SCANLON, PRODUCTION MANAGER ANN DOUGLASS, EDITORIAL PRODUCTION

EDITORIAL ASSISTANTS JUNE WETHERELL FRAME, BEATRICE COCHEO, ANITA RUBINSTEIN

RIEIMIEIOLID IPUIBLEISIEIIME COIRIPOIRATTION 430 PARK AVENUE, NEW YORK 22, NEW YORK



#### EDITORIAL FEATURES

Cover Frontispiece CENTRAL PARK, NEW YORK CITY, ca. 1865 (page 116)

- POOL FOR RESIDENCE, BERKELEY, CALIFORNIA (page 118) Photo: Morley Baer
- 116 SOME REFLECTIONS ON THE ARCHITECTURE OF LEISURE: Introduction by Richard P. Dober
- 118 Pool and Garden for Residence, Berkeley, California: Lawrence Halprin and Associates, Landscape Architects
- 121 Private Golf Course, Toronto, Ontario, Canada: Raymond Moriyama and Fraser Watts, Architects; George Tanaka, Landscape Architect
- 124 Lake Region Yacht and Country Club, Winter Haven, Florida: Paul Rudolph, Architect; Gene Leedy, Associate Architect
- 128 The Rittenhouse Swim Club, Philadelphia, Pennsylvania: Frank Schlesinger and Thomas R. Vreeland, Jr., Associated Architects
- 134 Lugano Airport, Agno, Switzerland: Otto Glaus, Architect: Doelf Schnebli, Jean Messerli, Werner Biswang, Hans Elmer, Elisabeth Madel Associates
- 140 Akademie der Kuenste, Berlin, Germany: Werner Duettmann, Architect
- 148 Soccer Stadium for Mexico City, Mexico: Felix Candela, Architect; Luis La Guette, Associate Architect
- 156 KITCHENS: INTERIOR DESIGN DATA
- 164 THE ARCHITECT'S COMMON LAW COPYRIGHT: PRACTICE OF ARCHITECTURE By John Warren Giles
- 166 LIFT-SHAPE STRUCTURES
- 168 GLUED BUILDING CONSTRUCTION
- 169 SELECTED DETAIL: Lighted Handrail, Akademie der Kuenste, Berlin, Germany



Bathing at Midland Beach, Staten Island, 1896



Jenny Lind sings at Castle Garden, 1850.

# Some Reflections on the Architecture of Leisure

Since 1779, pursuit of happiness has been the avowed aim of the American people. In this issue, P/A presents recent examples of recreational facilities, built both here and abroad. They illustrate the wide range of this building type and-whether private or public, large or small, catering to the mind or to the body-they are all examples of a happy sort of architecture.



Trolley to races at Coney Island, 1897



Pleasure railway in





New York cyclists, 1897.



United States Agriculture Society Fair, 1856.



Bowlers in Waverly Bowling Saloon, c. 1854.

JULY 1962 P/A

#### BY RICHARD P. DOBER

Not everyone shares equally in the affluence that marks America today, but the drop in the average work week from fifty-two hours in 1910 to less than forty in 1960, along with a rising family income, has given many people the time and the money to participate in what has been called the "new leisure." The term is somewhat misleading: there really is not much "new" leisure, just more of it.

Even in Colonial days, when survival dictated a rigorous existence of hard work and little leisure, Americans managed to find diversion, if only in utilitarian pursuits such as hunting and fishing. Huck Finn excepted, our Puritan distaste for wanton idleness has never been put aside. We are always claiming that pleasures are useful; active recreation builds the body, passive pursuits enhance the mind. This attitude links the gaiety at a barn-raising on the frontier with the gathering of friends and relatives to pour concrete for the vacation house.

As a country, we have never lacked ingenuity in creating forms of leisure appropriate to the times. In glancing back through history, it is evident that new forms have emerged at the important transition periods: the change from a rural to an urban society, industrialization, the emancipation of women, the automobile, and now automation.

Commercial amusements were city-bred in the early 19th Century: the theater, the museum, the circus, and bowling. Trotting and the country fair were rural sports, but limited as to season and duration.

In many respects, our leisure seems to run in cycles as a kind of countervailing power. As machines began to replace human muscle, the greater the interest became in outdoor sports: tennis, bicycling, swimming, and roller-skating. As cities grew and raw land disappeared, there was a movement to build parks. The best of these, such as Central Park (New York), Fairmount Park (Philadelphia), and Franklin Park (Boston), provided all modes of recreation from boating to band concerts. About the same time, people began to be paid for their playing skills, and other people would pay to watch. Spectator sports such as baseball became popular, and a good horse or foot race would draw a large crowd.

The railroad and trolley-car extended recreation. Mountain and seashore resorts, whose clientele had previously been restricted to the rich, grew in number and size. The crowded trolley carried people to Prospect Park, Coney Island, and Willow Grove. The trolley park was to those days what Disneyland is to ours; and what the railroad did for Atlantic City, the airplane is doing for the Caribbean Islands.

All our exuberant decades—the 90's and 20's and the present one—have had surges of country-club building, golf courses, and private recreation associations. The joining instinct, like Puritanism, has never been blanketed.

Technological innovation has had its part, too. The pneumatic tire encourages bicycling, just as the gunite process and plastic tubing has made it possible to build cheap backyard swimming pools. Indoors, the stereoscope, movies, radio, and television form another important series of leisure-like activities.

The architecture of leisure has, for the most part, been subservient to other building types. In the historical listings of great commissions, theaters, museums, auditoriums, and resort hotels never outrank commercial buildings, churches, houses and schools. It may be that those responsible for providing leisure did not encourage significant architecture, though Castle Garden, Saratoga's United States Hotel, and Barnum's Museum were controversial and exciting undertakings for their times.

Little remains of 19th-Century leisure architecture: mostly

wood construction, influenced by the romanticism of Andrew Jackson Downing, or modeled after the English *exotica* of Sir William Chambers, their emphemeral physical manifestations would change as quickly as fads and fashions in play. The most significant and enduring designs are probably the urban parks.

One might quibble and suggest that the baronial palaces of the Vanderbilts and most of Newport were pleasure domes, but that is stretching the definition of leisure. They do mark a turning point, though, for leading architects began to get commissions for designing play facilities for the wealthy. Like everything else those days, the eclectic sauce was poured over every form. Tennis courts were stuffed in Loire Valley orangeries, and swimming pools were encased in Renaissance coach houses. My grandfather claims that Baker Bowl was Gothic, but his opinion may have been conditioned by watching the Philadelphia infield make the double-play.

The precedent of considering leisure facilities as amenable to "architecture" was an encouraging first step that helped some architects away from eclecticism. Special programming considerations made it easier to gain approval for functional solutions and contemporary expressions. Thus Anderson and Beckwith's Alumni Swimming Pool (MIT, 1938) becomes one of the first modern buildings on the college campus.

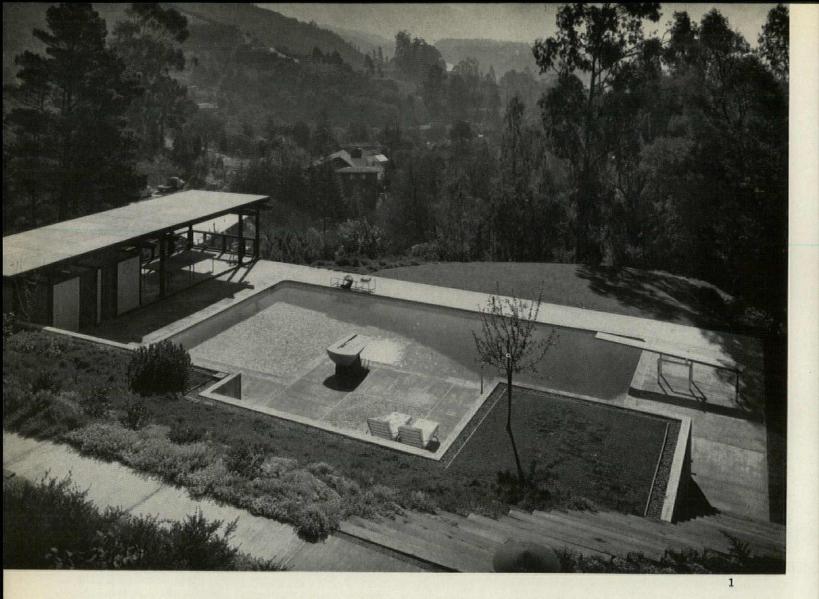
Programming considerations are still the key to good solutions. The impact of large numbers of people using public facilities for short periods of time imposes a different set of conditions than those encountered in designing equivalent facilities for a private club. The capacities of a seaside public dressing room must be examined not just as a summer building, but also as to its durability when battered by winter storms. A putting green can be safely placed near the children's swimming pool, but the eighteenth green in the same position can be dangerous. Drives, walks, parking and service areas can be a nuisance or a convenience, depending on how well they are located. Through programming, proper plant materials can complement the architecture, reinforce the natural beauty, control circulation, afford privacy and seclusion.

Commissions for leisure-time facilities give many architects ideal opportunities for experimentation in structure and the use of materials. A state that insists on cloaking all its new offices in pseudo-Georgian, ambivalently accepts an extreme solution in concrete for a mountain-top lodge. The intrinsic delights that leisure architecture can produce in these circumstances should soon have carry-over values into other types of commissions.

The question of taste in the design of leisure facilities must be mentioned. Excesses seem to be always with us, whether they are overbearing ornateness of Flagler's castles in the 1920's, or the latest Collins Avenue geegaw, publicized as the most advanced example of the architecture of our times. Preciousness is another danger. The new tennis pavilion at Princeton attempts to do in contemporary materials what the Victorians did better in wood and glass.

Leisure will afford even greater opportunities for significant architecture in the years ahead. State and Government policies are now directed toward acquiring large acreages for recreation. We will have more people, and they will have more time for the pursuit of happiness. The design of facilities offers unusual professional challenges; architecture for leisure does not have the restraints and constraints associated with earth-bound commissions. Hopefully, this augurs well for something entirely new in the way of social progress, for it would be tragic if we were to build merely an equivalent of the Roman Colosseum.

Photos: Courtesy museum of the City of New York







JULY 1962 P/A

# Hillside Pool

POOL AND GARDEN FOR RESIDENCE • BERK-ELEY, CALIFORNIA • LAWRENCE HALPRIN & ASSOCIATES, LANDSCAPE ARCHITECTS.

This property, typical of so many building sites in the San Francisco area, climbs the side of a steep slope. The house occupies the north end and highest point of the hill and its garden falls away sharply southward.

It was Halprin's design intention to treat this garden as a piece of sculpture in which to move around. "Its essential quality is to be hard," he says, "not soft; to generate certain sharp qualities of form, and to encourage people to participate in the sense of form."

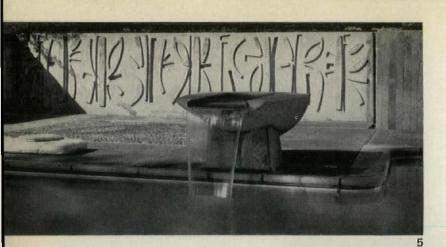
"We started, of course, with an extremely beautiful site. The softness is all around. The views are of the hills to the south—planes piled one behind the other in a receding series of cut-outs and silhouettes. In addition, there are the very lovely qualities of the surrounding trees, the Eucalyptus and Monterey Pine and Live Oak which we kept and used to frame the views and surround the sculpture."

In this setting, Halprin's "sculpture" moves assuredly between the house (by architect/owner Reeve Gould with William Gillis and David Leaf) at one extreme, and the pool pavilion (architects in collaboration with landscape architects) at the other. The first element in this large composition is the wood deck (2) to the south of the house and directly adjacent to it. This terrace serves as a place for entertaining, as well as a platform from which to enjoy the far views and the activities at the pool. From the deck, a short run of steps descends to a level landing (1, 3)-a minor, though important, design element at midpoint. And another curving flight of stairs continues down to the pool (1, 4)-the dominant element of the composition. The center of the pool platform is a fountain, made of concrete, which spills a wide, thin sheet of water into the pool and adds to the composition an element of gentle sound and motion. Halprin thought of this sculpture as the "pivot around which people will move."

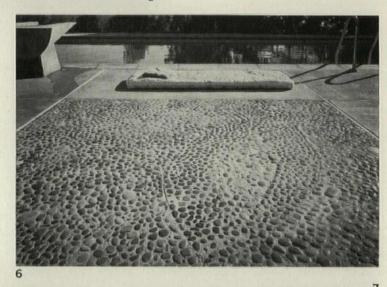
Several practical considerations, set by the owners—both enthusiastic swimmers — determined that the pool be longer and deeper than usual, that a one-meter board be included, and that provision be made for year-round use of the pool. To make this possible, radiant heating coils were laid into the concrete, and a niche in the retaining walls acts as a sun trap and as a shield against drafts (4).

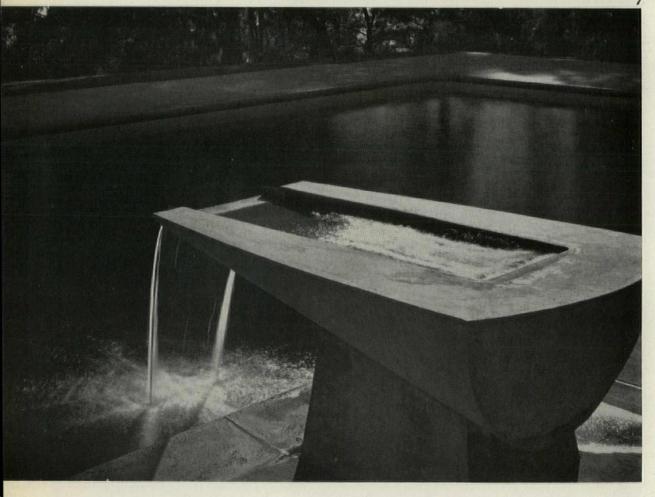
The planting has been kept simple and quite unassuming, using native plant material wherever possible, to allow the structural and sculptural qualities of the garden to stand out strongly.

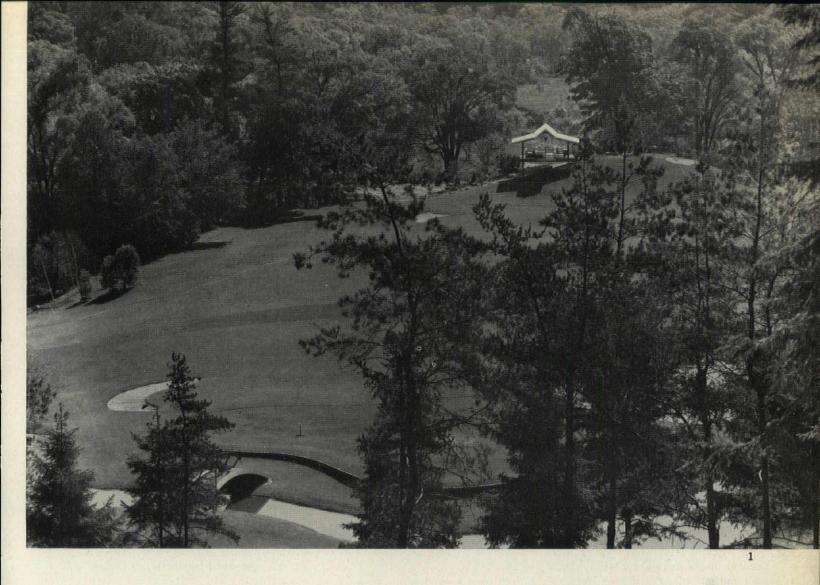




The material used throughout the pool area is concrete-"striated," according to Halprin, "by the form marks of the 1x4's and enriched in certain places by band sawing out parts of the forms against which the wall was formed (5). The floor, also, is paved in concrete to continue the qualities of sculpture, but one area of it is enriched with stones of different colors (6), pressed into the soft pour before it had set." The landscape architects, with sculptor Jacques Overhoff, designed the concrete fountain (7), and the wall relief (5) that lines the recess in the retaining wall.







# Three-hole Golf Course

PRIVATE GOLF COURSE • TORONTO, ONTARIO, CANADA • RAYMOND MORIYAMA AND FRASER WATTS, ARCHITECTS • GEORGE TANAKA, LANDSCAPE ARCHITECT • G. DOWDELL & ASSOCIATES, STRUCTURAL ENGINEERS

The client, confronted with a rather uninteresting piece of property behind his house, wished to have it developed "into something which would look attractive from the house and which would serve some purpose." These stipulations were easily met by the design of a three-hole golf course. The final solution is not only purposeful and attractive but, most importantly, the designers have succeeded in creating an area of calm and quiet within very close range of a busy metropolis.

The golf course serves in a most appropriate way as the natural transition between the city and the unspoiled gran-





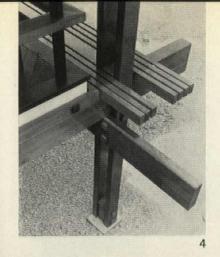
deur of the Don River Valley that borders the course on one side. Virgin land and man-made landscape blend together gracefully without conflict—the native textures and colors of grass, sand, water, stone, and wood serving as the designers' palette.

All of the architectural elements were consciously subordinated to the landscape. Thus the half-way house, seen from a distance (1), is merely a floating roof above the landscape. Retaining walls, bridges, and other minor structures are the fluent continuations of the contours.

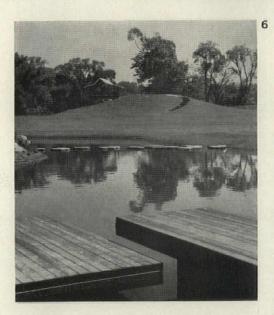
Seen from a closer distance, however, there is considerable interest of architectural detail, particuluarly in the halfway house (1, 2, 3, 4, 5). Four wood piers suspend this light and graceful structure above ground. The roof, which is the structure's only prominent element, is further emphasized by a white surfacing that allows it to be seen from a distance and that catches the light of the setting sun. The actual cross-shaped platform and the building's underpinnings are all light wood members left in their natural state and joined in a manner reminiscent of oriental architecture—a design motif that is evident throughout the landscape plan.

In designing both structures and gardens, the architects kept in mind "that construction and maintenance would be undertaken by the available men on the staff." But, above all, they never lost sight of their chief goal: "to blend the landscape with architecture."

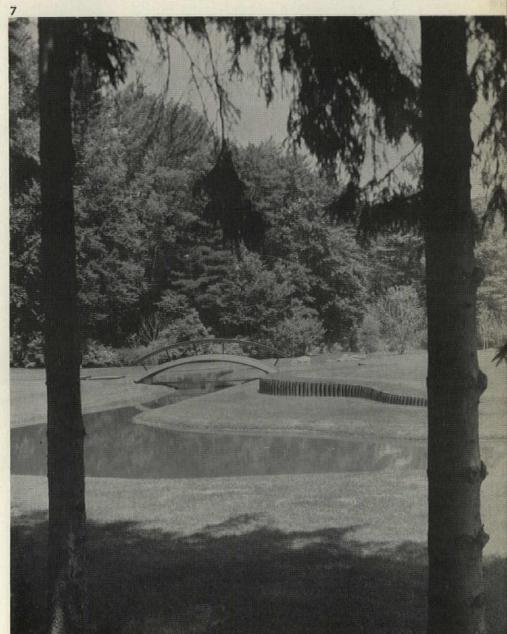


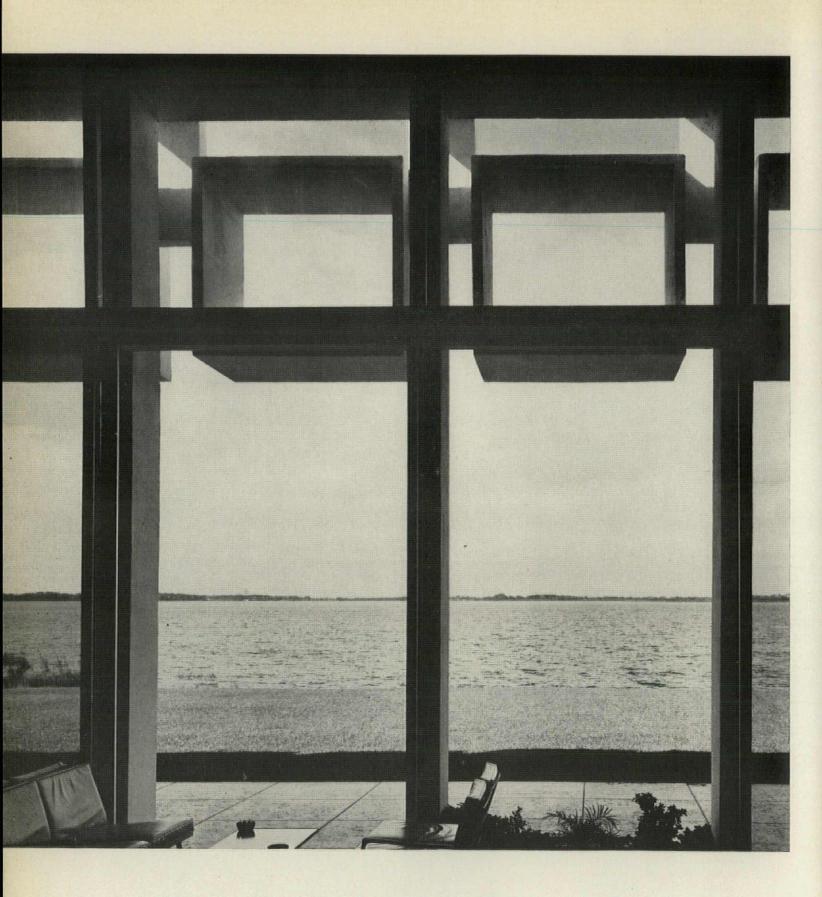




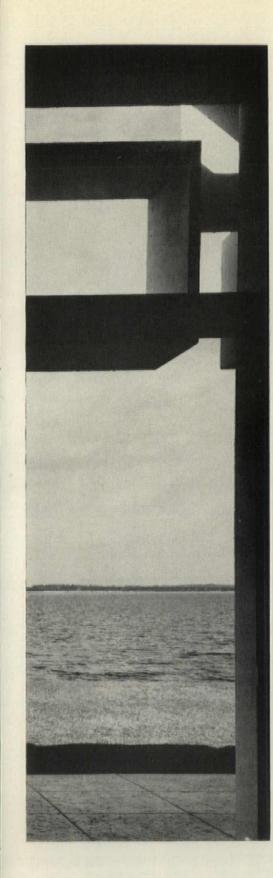


The halj-way house (2,3,4,5)is a simple assembly of four double wood columns that receive the two floor beams and the two laminated roof beams. Diagonally laid pine provides the platform flooring; red cedar planking edges two sides of the open shelter. The roof is a sandwich of exterior plywood on a 2" x 6" core, an outer layer of sprayed-on vinyl, and a cedar strip ceiling. The dock platforms (6) are of solid planking. Wood decking also spans between the two glue-laminated bridge spans (7).





# Yacht and Country Club



LAKE REGION YACHT AND COUNTRY CLUB • WINTER HAVEN, FLORIDA • PAUL RUDOLPH, ARCHITECT • GENE LEEDY, ASSOCIATE ARCHITECT • EBAUGH & GOETHE, ENGINEERS • SIDNEY BARKER, STRUCTURAL ENGINEER

Standing on a man-made terrace at the edge of Lake Hamilton, the club has the composure of a classical temple. Uniform rows of white concrete columns and precast sunshades surround the structure on all sides, interrupted only at the entrance. Their repetitive forms dominate all views into and out of the building.

The building is actually composed of two parallel two-story pavilions, each one 128 ft long, 21 ft wide, and 18 ft high, and each one standing within a peristyle of columns on 6'-8" centers. Between them is a large roofed hall of the same height, unbroken except by glass partitions and translucent curtains. The sides of the pavilions that face this central space are similar to the outer façades except that the sunshades have been omitted.

Although ceiling heights and fenestration vary according to the functions of different parts of the club, the discipline of the modular structure is felt throughout the building. The visual organization of the interior is strengthened by the uniform precast concrete coping that runs around all major interior spaces at a constant height of  $11' \cdot 1\frac{1}{2}''$ above the floor.

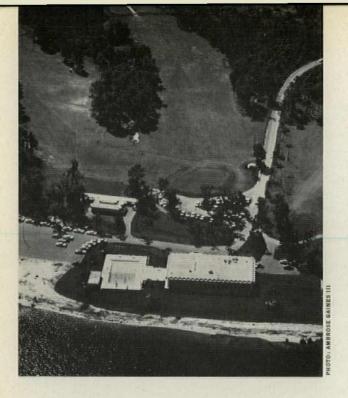
The coping serves various purposes, depending on the type of wall or partition of which it forms a part. It supports tracks for sliding doors and windows and frames for fixed glass and insect screens. In some cases it is merely a cornice between courses of brick; in others it serves as a suspended curtain track. On all sides that face interior spaces, it carries a continuous metal light cornice.

The entrance to the building is under a cantilevered concrete canopy that drops to a low point of 7'-6" above floor level. This low entrance emphasizes the spaciousness of the high, skylighted hall into which it leads.

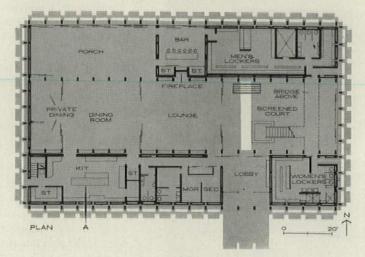
The upper floors of the pavilions flanking the central hall are devoted to mechanical spaces and an open porch on the south side, and house a self-contained teen-age club on the north side.

The cost of the entire project, including the pool and the professional golf school nearby, was \$300,000. The club grounds include an 18-hole golf course; facilities for yachts will be developed after a proposed canal linking the lake to the Gulf has been completed.





White concrete columns and precast sunshades cast deep shadows on the cream-colored brick walls, which are almost solid on the entrance front (bottom), but interrupted by large expanses of glazed and screened openings on the sides, overlooking the lake (facing page, top left). A stair to the upper-floor lounge and porch rises from the skylighted central court (facing page, top right).



OPEN DECK HARD FINISH OPEN DECK HARD FINISH PLAS ON GYPSUM LATH MECHANICAL ROOM	METAL LIGHT COVE	FIXED CLEAR GLASS	ACOUSTIC PLASTER ON METAL LATH	METAL MANGERS METAL LIGHT COVE	HARD FINISH CONT CONC 9HELF	CEMENT - PLASTER FIXED CLEAR GLASS	
	FIXED OBSCURE GLASS	SLIDING OBSCURE GLASS DINING TERRAZZO ON CONC SLAB	CONC-		PORCH	SLDING GLASS FIXED GLASS SLIDING SCREEN	
and the second	Pale Marine	SECTION A		A)mangalangu	R. C.	and the second s	REAL PROPERTY



126 The Architecture of Leisure

JULY 1962 P/A











# Urban Swim Club

THE RITTENHOUSE SWIM CLUB • PHILADEL-PHIA, PENNSYLVANIA • FRANK SCHLESINGER AND THOMAS R. VREELAND, JR., ASSOCIATED ARCHITECTS • SEYMOUR W. GREENBERG, STRUCTURAL ENGINEERS • FRED FRANKEL, POOL CONSULTANT • VINOKUR-PACE ENGI-NEERING SERVICES, MECHANICAL ENGINEERS

The private outdoor swimming club is a familiar type in the suburbs, but the investors who established this club knew of none in the heart of the city, except as dependencies of motels or apartments. They undertook to build a club in the Rittenhouse Square vicinity for 500 members, most of whom would live within walking distance.

The site they selected has a 220-ft frontage on Lombard Street and runs back 80 ft to an alley. It consisted of a parking lot and a few derelict houses that were to be torn down and was surrounded largely by three-story row houses. With the exception of two trees along the east boundary, there was no vegetation.

Once the venture was initiated, its success depended on completing the project by the start of the 1961 season and within a budget of \$200,000. Working drawings were started early in March of 1961 and completed in three weeks. Construction was completed—by an enthusiastic contractor—in two and a half months. The progress shots above were taken May 5, June 3, June 9, and June 24, 1961. The pool was filled and opened for use by July 1. The total cost, including all extras, was \$194,000.

Vreeland's explanation of the design process is illuminating: "Certain functions—the restaurant and kitchen, the lockers and steam rooms, and the machinery—had to be roofed over or en-

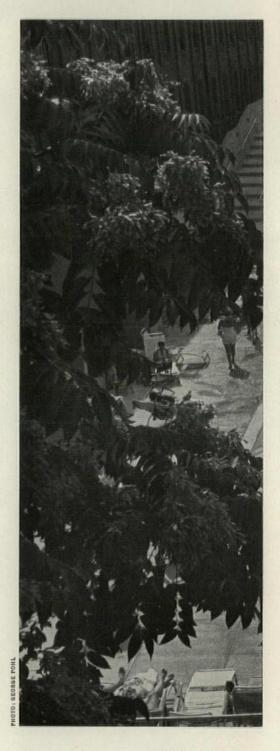
128 The Architecture of Leisure

closed. The trick was to make them disappear and release the site completely for outdoor use. It struck us that we would benefit greatly by raising the pool and its surrounding deck areas half a level above grade in order to achieve a psychological break with the street. This suggested putting the locker rooms half a level below grade beneath the pool deck and flanking the pool. In order to relieve these semi-basement spaces, we brought daylight and air to them through massive skylights set high along each edge of the pool deck and punched windows through the pool walls.

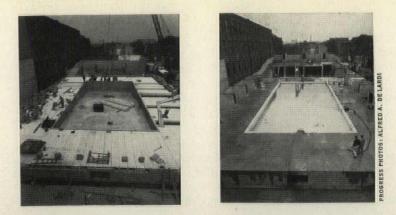
"The clubhouse containing the restaurant, kitchen, and entrance lobby was set down at the west end of the site at grade. Above it is an ample sun deck overlooking the pool. Three more massive skylights on this deck bring light and air into the blind back of the clubhouse. A brick-paved entrance at grade separates the clubhouse from the pool house and allows the restaurant to spill out into the sun. A similar brick court at the opposite end of the pool house provides a protected play space for the small children, close by but physically separated from the adults.

"Thus the whole lot was organized into a play of terraces separated by half levels and tied together by broad step ramps which make movement from one level to another easy and graceful. In the dead space beneath these ramps we hid the machinery.

"One proceeds logically from the entrance court down the ramp, past the check room counter to the lockers, and from there past the showers and toilets, out the other side, and up the ramp to find oneself at the shallow end of the pool. Access to the locker rooms from



JULY 1962 P/A





either end is consequently convenient and out of sight. The pool is in full view of the restaurant, and diners are not tempted to bring food onto the pool deck.

"A wall surrounds the entire site, shielding it from the street. Inside, the impression is of a totality; all parts relate naturally to each other in an easy flow, and even from the locker rooms the pool is visible."

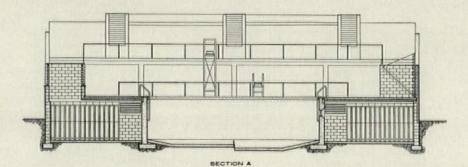
The natural air movement induced through all the enclosed portions of the building by the ventilating skylight stacks makes the interiors cool and comfortable, even on the hottest days. The need for economical and rapid construction made the selection of readily available masonry and precast materials logical. Walls are of 12-in. concrete block, left exposed. The pool wall is 12in. poured concrete. The decks are formed with precast concrete channels spanning between walls. Deep precast beams, supported on brick piers, carry the channels over the clubhouse. The channel spans are a uniform 20 ft throughout. Pool piping runs exposed along the undersides of the channels and is easily accessible for repair.

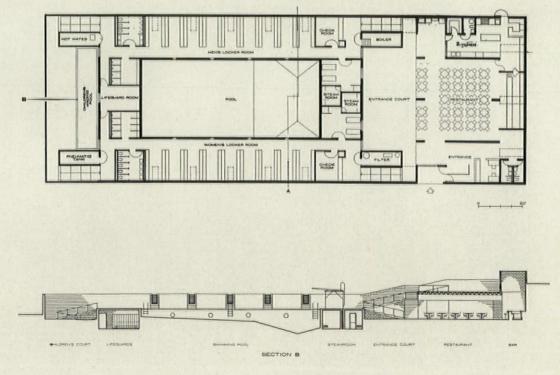
Construction proceeded smoothly due to the straightforwardness of the design.

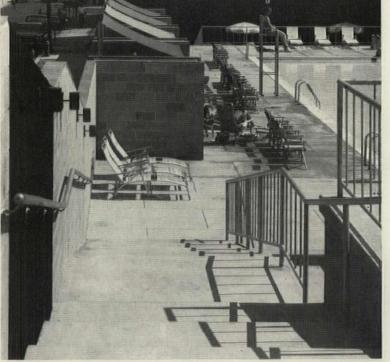
All of the precast members were set by crane from the street in two days. The horizontal dispersion of the project allowed carpenters and masons to work simultaneously, without interference.

The initial budget would not allow for planting. The introduction of plant materials in the courts and in large tubs on the upper deck and the planting of trees along the outside wall will soften the effect of the block construction.

During the first season, the owners and members were unanimous in their enthusiasm for the building. They are now beginning a second season that is expected to be even more successful.



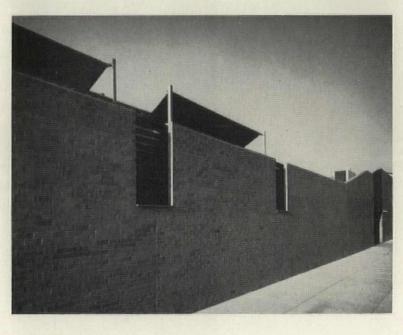




TOS: MALCOLM SMITH/ARCHITECTURAL GRAPHICS ASSOCS.

protects the pool from the dust and bustle of the street. The outer side is faced with salmon brick to relate it to the neighborhood. A screen of creosotestained redwood at the entrance (above) permits a glimpse of the court inside. Above the entrance is a step ramp leading from the upper deck to the pool (left). The masonry stacks of the locker-room skylights form alcoves along either side of the pool (below). The brightly colored awnings that shade them are visible from the street outside (below left).

A solid concrete block wall



JULY 1962 P/A

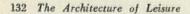


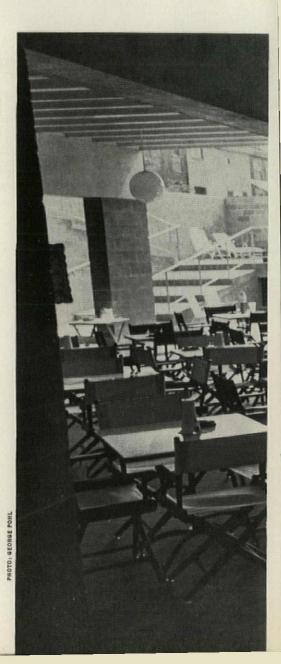
Light and natural ventilation for the locker rooms (right) are provided by stacks pro-jecting above the pool deck. The street-level entrance court (top, facing page) is paved with brick set in sand. The children's pool court, on the same level at the opposite end of the main pool, is similarly treated (below). The restaurant (below right) extends out into the entrance court and has a full view of the pool deck. Exposed block walls, precast channel ceilings and galvanized iron railings compose a Spartan backdrop for colorful furniture, awnings, umbrellas, and swimmers. Planting will be added to soften the architectural forms as the budget permits.

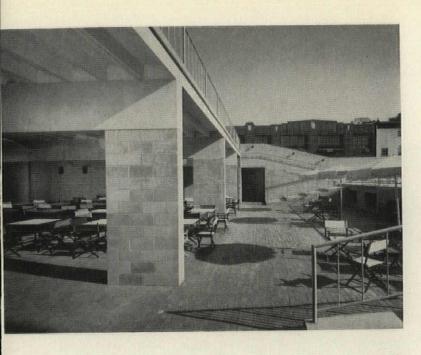




PHOTOS, EXCEPT AS NOTED: MALCOLM SMITH/ARCHITECTURAL GRAPHICS ASSOCS.









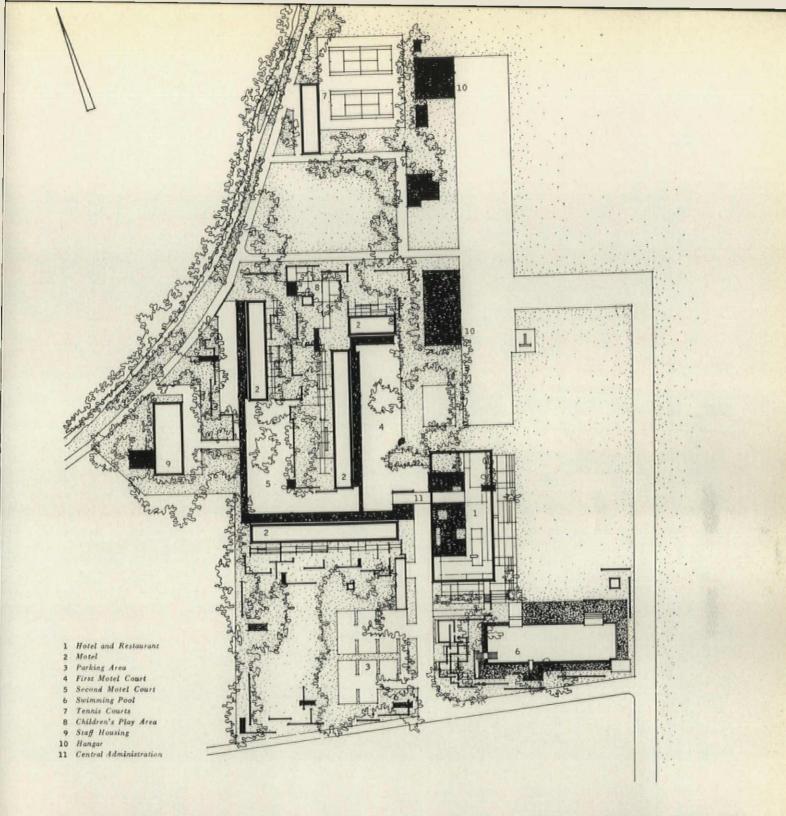
### Airport for Pleasure Craft



LUGANO AIRPORT • AGNO, SWITZERLAND • OTTO GLAUS, ARCHITECT • DOELF SCHNE-BLI, JEAN MESSERLI, WERNER BISWANG, HANS ELMER, ELISABETH MADEL, ASSO-CIATES • WALTER RUPRECHT, ENGINEER

The building program of Lugano Airport differed in many respects from that of the typical commercial, traffic-oriented airport. It was to serve primarily as a vacation resort for flying enthusiasts. For this reason, there are, in addition to the usual airport services, a resort hotel and restaurant, a motel, a swimming pool, tennis courts, and extensive landscape developments. The location of the airport—in the sunny plain of Agno, between Lake Lugano and ranges of mountains to the north—is appropriate to its function as a resort. In the plain of Agno, the air is clear, sunlight is bright, colors are sharp and pure. The architect wanted the undeveloped expanse of the airport site to become as animated as the landscape, and the static masses of the buildings to be in harmonious contrast with surrounding nature. The playful forms of the buildings, the lively colors and textures of the concrete surfaces, the stepped terraces interspersed with fields of flowers, the sparkling sheet of water visible over the edge of the raised pool, and colorful sun umbrellas—all were to convey to the visitor at one glance a gay holiday atmosphere.

Construction of the airport proceeded in accordance with a master plan (*facing page*) developed by the architect. The most dominant of the structures is the hotel with its restaurant, terrace, and airport control tower. This building ad-

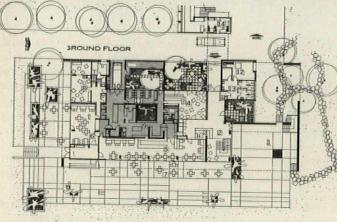


joins the airfield; and from its broad visitor terrace and the private loggias of the hotel rooms above, guests can relax and watch the flying activities. In contrast, the motel rooms are set further back in horizontal, dispersed rows around quiet and pleasant parking courts. Each motel suite has its own private garden, which, at the far end, gives onto the public gardens. Throughout, site development and architecture have been unified, screenwalls and low terrace walls forming fluent transitions. Even parking areas, ordinarily ignored or avoided as a design problem, were carefully planned so as not to disturb the homogeneity of the total scheme.

The unity of the design is also attributable to the architect's use of only two building materials—exposed reinforced concrete and natural sandstone for all of the structures. In the interiors of the hotel and motel, oak and walnut were used; floors at ground level were tiled; others were carpeted.

Le Corbusier's form language, so skillfully adapted in this case, proved to be exceptionally appropriate. It is regrettable, however, that the architects could not carry this theme to its perfect conclusion. A change of ownership has resulted in a gradual "softening" of the exteriors and the introduction of "decorative" iron rails, chandeliers, and chintz curtains into the interiors. Fortunately, the original vision of architect Glaus and his associates—to create a world apart from everyday association, a place that gives itself to the "irrational of vacation adventure"—has been too well realized and too skillfully executed to be obliterated easily.





4 R FLO 54 54 П 24 F GROUND FLOOR

1	Covered Patio
2	Stair Hall
3	Hotel Reception
4	Bar
5	Restaurant
6	Grill Room
7	Terrace Restaurant

- 8 Club Room
   9 Kitchen
   10 Delivery Entrance
   11 Staff Dining
   12 Mechanical Services
   13 Toilets
   14 Motel Reception
- UPPER FLOOR 1 Stair Hall
- Starr Halt
   Guest Suite
   Guest Room
   Staff
   Services
   To Roof Terrace

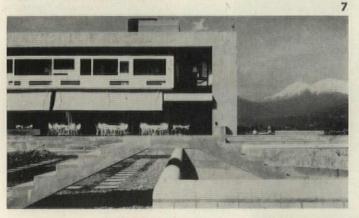
136 The Architecture of Leisure



3

The hotel (1) is a two-story structure in which the major public rooms occupy the ground floor. Guest rooms and their private loggias are on the upper floor, with most of them oriented toward the flying field. The airport control tower (2) rests on top of the building and is accessible from the hotel's roof terrace (3), which is also open to the public for viewing, dining, and sunning. Several garden courts (4, 5, 6) recede into or project from the building to provide pleasant seating areas, and, incidentally, serve to emphasize its plastic quality. The hotel's south terrace (7) links directly with the swimming pool. Because of unfavorable ground conditions, the pool had to be built above ground. In season, when the pool is in use, water fills it completely and spills over the edges into beds of gravel that carry the overflow away. Bridges give access to the elevated basin.

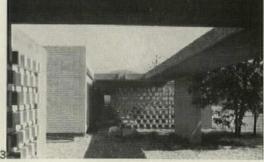


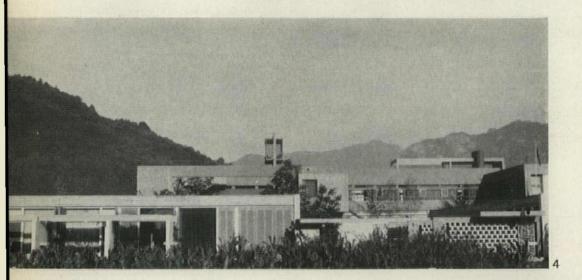






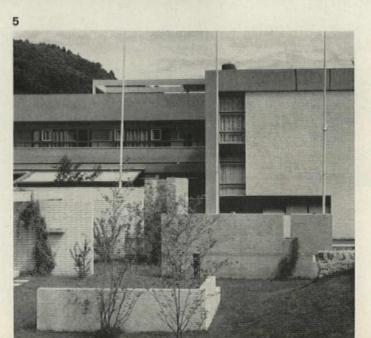




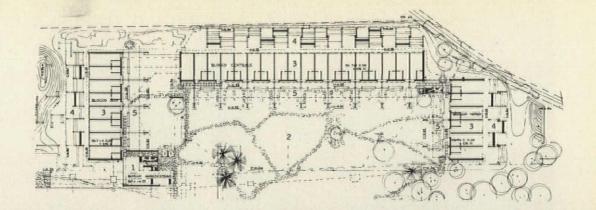


The motel rooms are grouped in horseshoe fashion around parking courts (2, 3). Each unit has its own carport, entry hall (6), bath, living/bedroom and its own screened garden (7). Screen walls add particular visual interest to the landscape and help to tie the low horizontal motel elements to the more dominant hotel structure (4, 5). The hotel has its own parking area (1). Though it is a rather large expanse, the architect has succeeded in avoiding the usual unsightliness of a parking lot by setting the paving blocks into beds of grass.

A second-story wing links the hotel with the motel, and provides a covered entryway and a logical checkpoint for all arrivals and departures.



FIRST MOTEL COURT 1 Reception Office 2 Parking Court 3 Motel Rooms 4 Private Gardens 5 Carports









### Community Cultural Center

AKADEMIE DER KUENSTE • BERLIN, GER-MANY • WERNER DUETTMANN, ARCHITECT

The donor, now living in New York, wanted this gift to be his contribution to the cultural life of his former hometown. Under the guidance of the Berlin Academy of Arts, a program was undertaken to explore the recreational and educational needs of the members of the Academy, as well as those of the general public. The program logic-

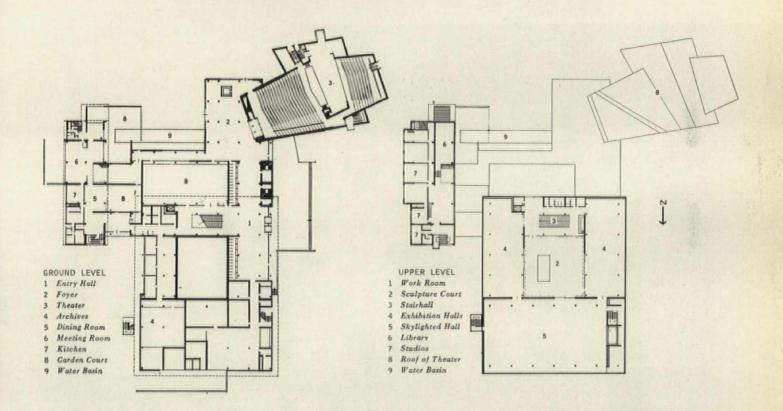
ally fell into three parts: the internal administrative section, public exhibitions, and the performing arts. The architect maintained these subdivisions, and, in designing the complex for a site in the immediate vicinity of the new Hansa Viertel, was particularly intent on expressing in clear architectural terms the function of each building.

The administration building is a vertical slab, five stories high, which, in addition to offices, provides space for assemblies, conference rooms for members, accommodations and workrooms for out-of-town guests, and studios.

The exhibition building is a horizontal slab, recognizable from the exterior by its saw-tooth skylight. Three large exhibition halls surround a central sculpture court, which, on its fourth side, borders the main stair hall.

The third of the building elements the one that is architecturally the most interesting—is the theater, a multipur-



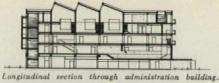


pose hall used for lectures, films, ballet performances, and experimental theater. To make this building as flexible as possible, the theater was given two auditoriums on either side of a central stage, to be used separately or in combination. Seen from the exterior, the theater's central stage and the two auditoriums are again clearly distinguishable. Multifaceted, and jewel-like, this building stands out among the other two, yet is skillfully united with them.

Though each of the three structures has a very strong individual character, the complex has a remarkable unity, symbolizing architecturally the distinctive function of each, while at the same time stressing the importance of their interdependence.

The exterior spaces between the three elements form handsome courts that not only serve to tie the diverse structures together, but also provide appropriate settings for outdoor exhibits, as well as open-air space for the relaxation of members and the visiting public. Glazed passages from one building to the other cross these garden courts and offer pleasant views in either direction.

The materials common to all three buildings are Dutch handmade bricks, washed concrete with white marble pebbles for the walls, slate or wood block for the floors, Brazilian pine wood for the ceilings, and copper sheeting for the exterior of the theater.

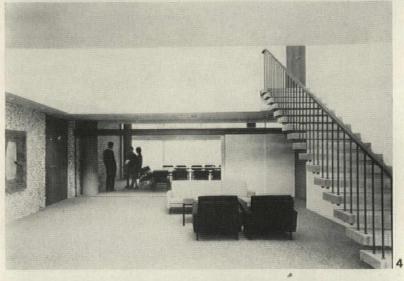




The administration building (1), the only nonpublic building of the three, is the one farthest removed from the street. On its east side, it borders on a public park; on its west side, it fronts on several garden courts (2) that lie between it and the exhibition building. In this structure are housed the administrative offices of the Academy, kitchen and dining facilities, a large assembly hall which, by means of sliding doors, can be interconnected with the adjoining clubrooms (3, 4). In addition, several smaller meeting rooms (5) and lounges (6) are provided for conferences or informal discussion groups. All of these rooms share a non-institutional atmosphere that is rare in structures of this type.

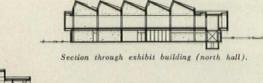












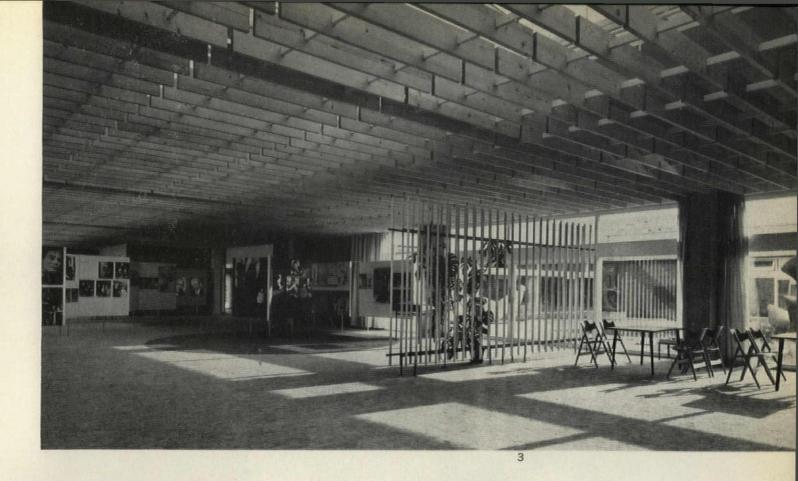


Section through exhibit building (east and west halls).



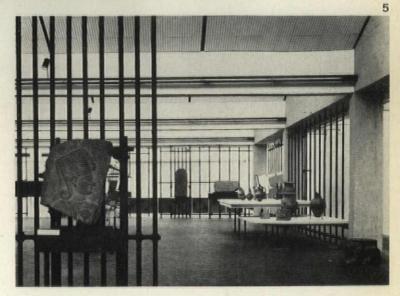
The exhibition building (1) is the place of contact between Academy and public. It is a simple white cube directly accessible from the street and linked with the administration building (far left in section and photo 1) by a glassed-in gallery. All three of the exhibit halls are on the upper level circling the sculpture court (2) on three sides. East hall and west hall (3) are of equal size and employ the same ceiling treatment: a series of hung wood baffles to diffuse daylight and to conceal the light strips, the partial skylight, the heating pipes, and the concrete beams. The north hall, (4, 5) with its saw-toothed, partly glazed roof, is the largest and most impressive of the three spaces. Blocks of Brazilian pine, laid on end, provide the flooring in these rooms.

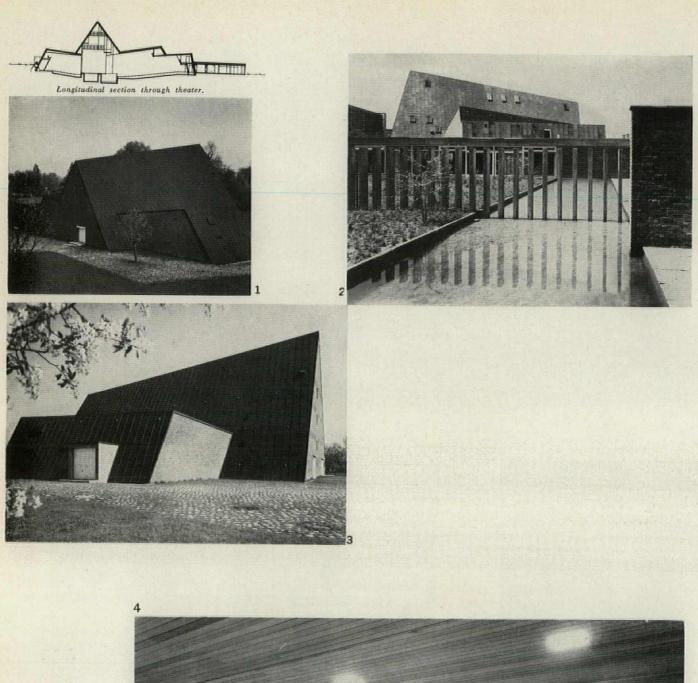




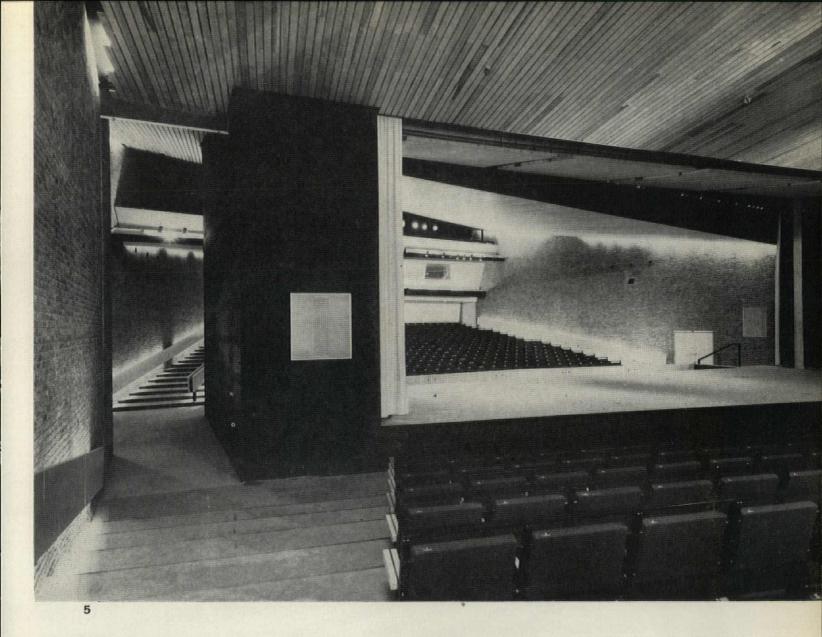








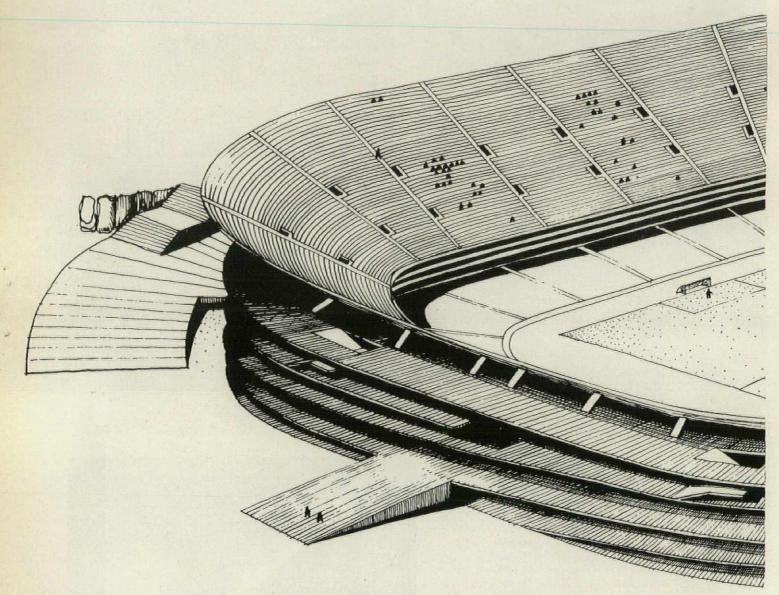




The theater is an asymmetrical "concrete tent" that takes on the appearance of a giant sculpture to be studied from many angles: from the northwest (1), the east (2), the southwest (3). The walls of the "studio," as it is called, are of cast-in-place concrete, faced on either side with handmade Dutch bricks. On the outside, the studio's roof is surfaced with copper. This sheeting is also brought into the foyer (4). where an opening through the sloping wall of the studio provides access into its interior. Looking from the small auditorium through the stage opening toward the large auditorium (5), one can see the stage lighting bridge overhead (6). the doors to the joyer and the openings of the projection booth.



### Soccer Stadium for 110,000



A limited competition for a soccer stadium, to be built in Mexico City, produced this preliminary project designed by Felix Candela, Architect, and Luis La Guette, Associate Architect. Although the solution was not premiated, it would have been one of the largest soccer stadiums (in seating capacity) in the world. A discussion of the primary elements of its exposed reinforced-concrete construction follows.

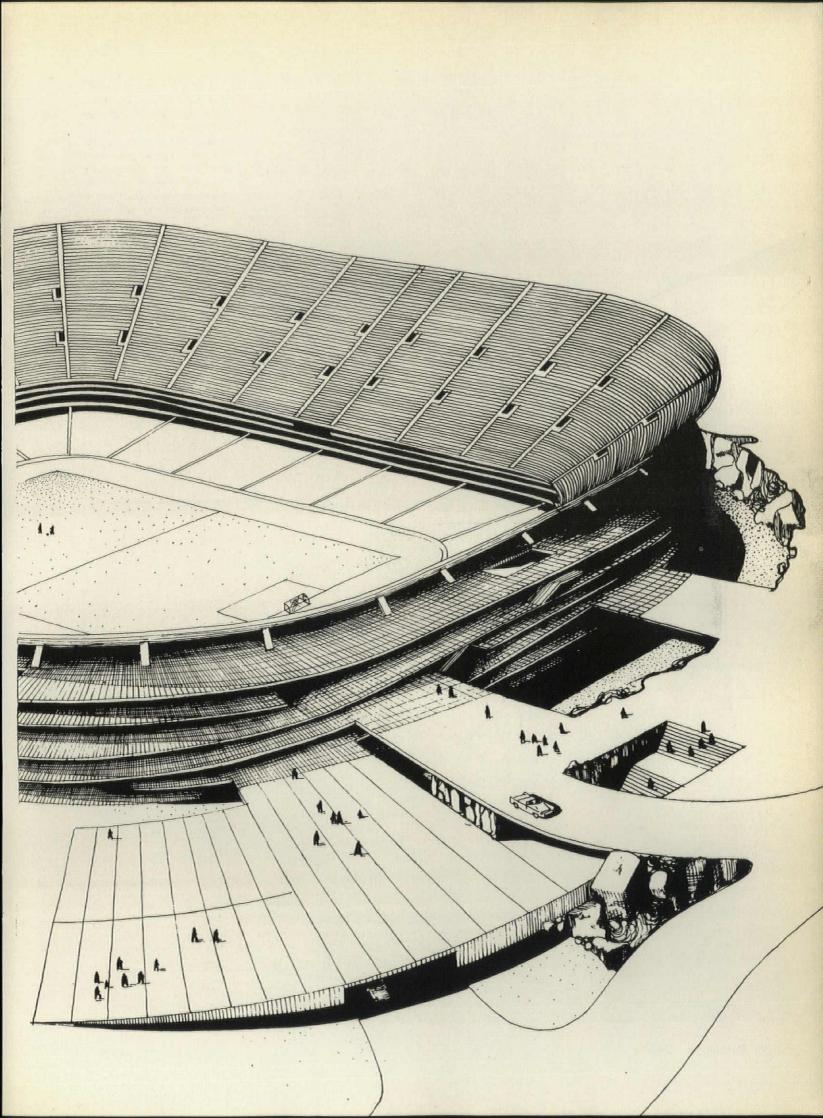
Apart from the facilities normally needed for a structure of this kind, there was one requirement of the program that

particularly affected the design solution. That was the location of a substantial number of boxes and preferred seats in the best possible viewing position, yet completely separated from the rest of the public, even to the extent of having completely separate ingress and egress.

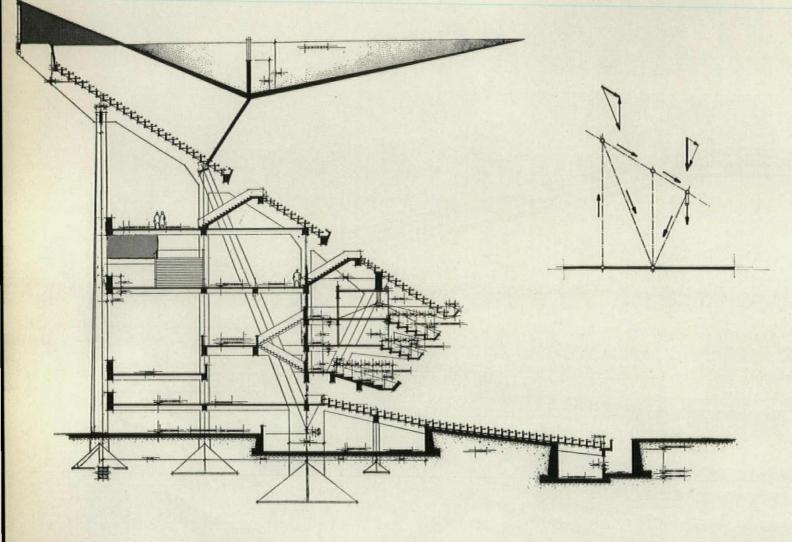
Arranged in two tiers, and suspended from the cantilever of the upper grandstand, are 460 closed boxes accommodating 4150 spectators. Another tier of open boxes or preferred seats, with a capacity of 4600 fans, is hung immediately below the closed boxes. This scheme created a difficult problem in southern part of the city-offered the

the design of the transverse section. Numerous studies were made before a solution was found that maintained a minimum total height for the stadium, compatible with the condition that the upper grandstand must start at the fourth-floor level.

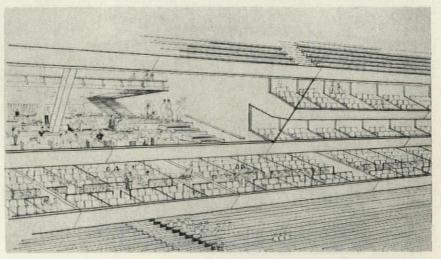
The presence of phreatic water, only 7 ft below the street level, precluded the usual practice of excavating to locate the playing field beneath street level. However, the selected site-an abandoned quarry on the outskirts of the lava field known as the "El Pedregal" in the



Two tiers of private boxes and a tier of preferred seats are suspended from the upper grandstand. All seats but the first few rows of the lower grandstand are protected by the reinforced-concrete umbrellas overhead that have a free cantilever of 108 ft.

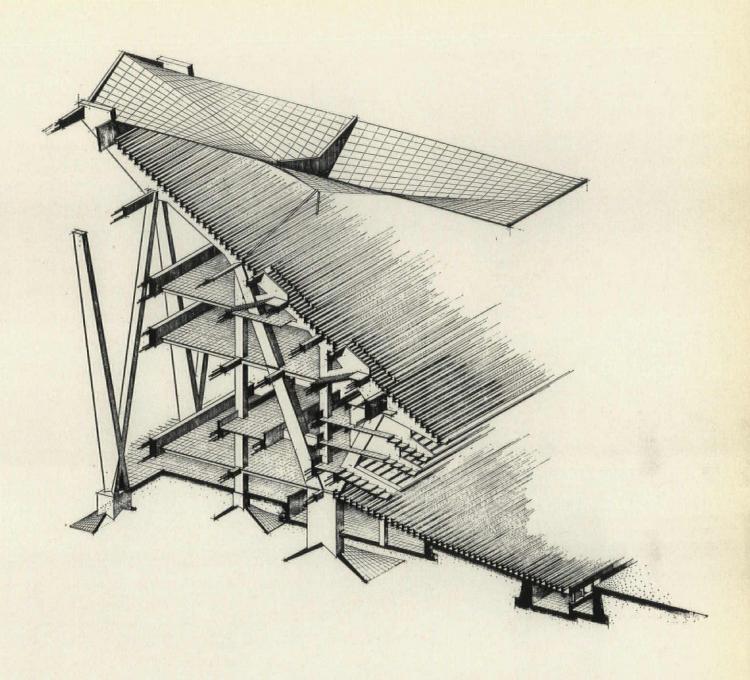






150 Materials and Methods

JULY 1962 P/A



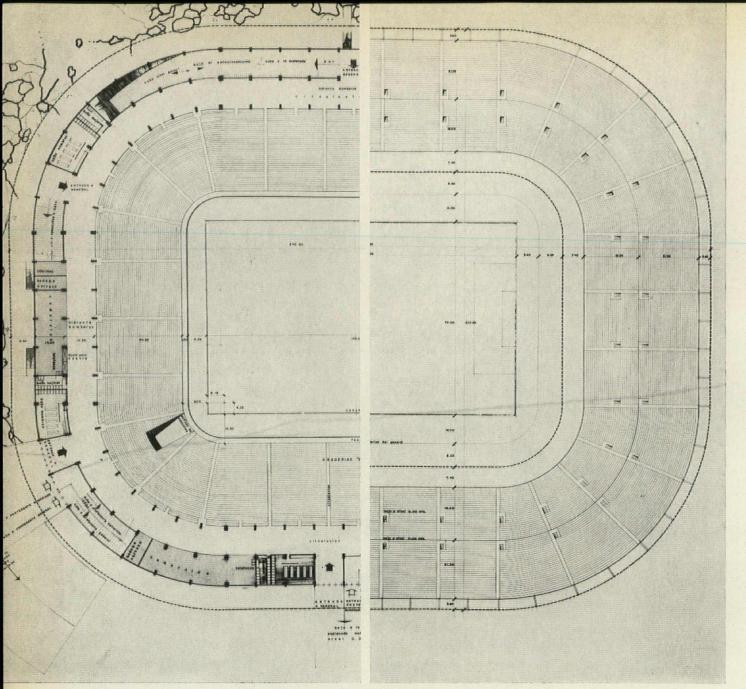
possibility of having access to the stadium at an intermediate level, 30 ft above the ground, for two-thirds of the perimeter of the building.

Since the stadium had a definite yet somewhat limited budget, the entire design was developed strictly on an economical basis. It was considered improper to indulge in structural fantasies, incompatible in any event with the huge scale of the building, or to consider the project as an opportunity to test "bright" new structural concepts. The same may be said of any "architectural treatment" of the façades. It was considered probable that, by the end of construction, funds would be so depleted

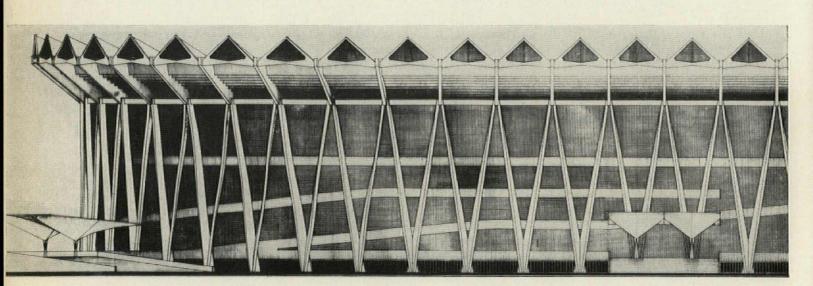
that any nonessential features of the façades would be eliminated, leaving the building unfinished. Therefore, the exposed reinforced-concrete structure is the main and sole architectural design element of the composition.

Primary structural design problem was the 50 ft cantilever of the upper grandstand with the tiers of boxes hanging from it. The obvious solution was the placement of an inclined strut to help support the transverse beam at an appropriate point. The boxes might have been suspended at this location; however, as the module of the framing is about 34 ft, a distance too great to be spanned by the floors of the boxes, longitudinal beams joining the frames at this location were introduced into the design and the boxes suspended individually from these beams.

The inclined strut supporting the cantilever produces a tremendous horizontal thrust which the columns are unable to resist in bending. This was counteracted by placing an additional inclined member in the opposite direction. Thus the thrust is balanced with the help of the intermediate column, which, as a result, is working mostly in tension (see force diagram, facing page). Furthermore, the second inclined strut serves to triangulate the structure transversly, an important consideration for



Plans of lower grandstand (left) and upper grandstand (right).



structure in a seismic zone such as Mexico City. In this manner, most of the load on each frame is transferred to the base of the interior column, as may be observed by the comparative size of the footings. These are made in the shape of umbrellas, formed by four hyberbolic-paraboloid slabs. Since the stadium is located in the clearing of original ground left by exploitation of the quarry, the quality of the soil is better than in most other places in Mexico City's valley. This is due to the timeless action of the weight of 30 ft of rock consolidating the soil below. Therefore, as a preliminary asssumption, it was considered that a surface foundation with isolated footings would be

acceptable, without the need of piling or other foundation methods.

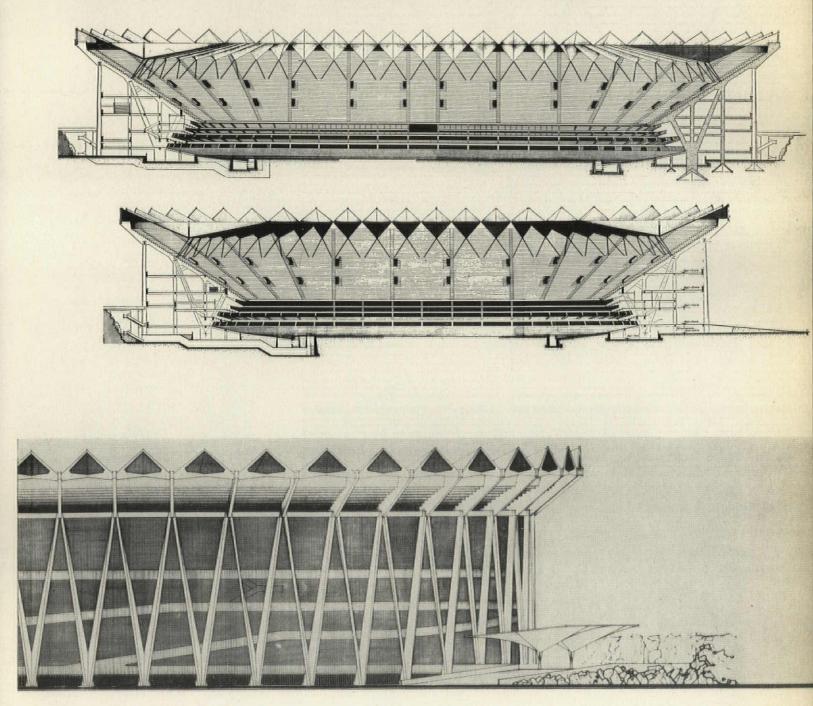
Most of the public seating, with the exception of the first rows of the lower raised floor-which are the poorest and cheapest seats-is covered by a reinforced-concrete shell roof made up of individual units formed by four hyperbolic-paraboloid slabs, 11/2-in. thick and in the shape of a modified umbrella, covering an area of 34' x 171'. Edges of the umbrella are partially prestressed to prevent deflection of forward free corners. The umbrellas are supported at an intermediate point by two steel pipes, 10 in. in diameter, forming an inverted-V to prevent lateral movement. These also serve as drains for the roof and allow a

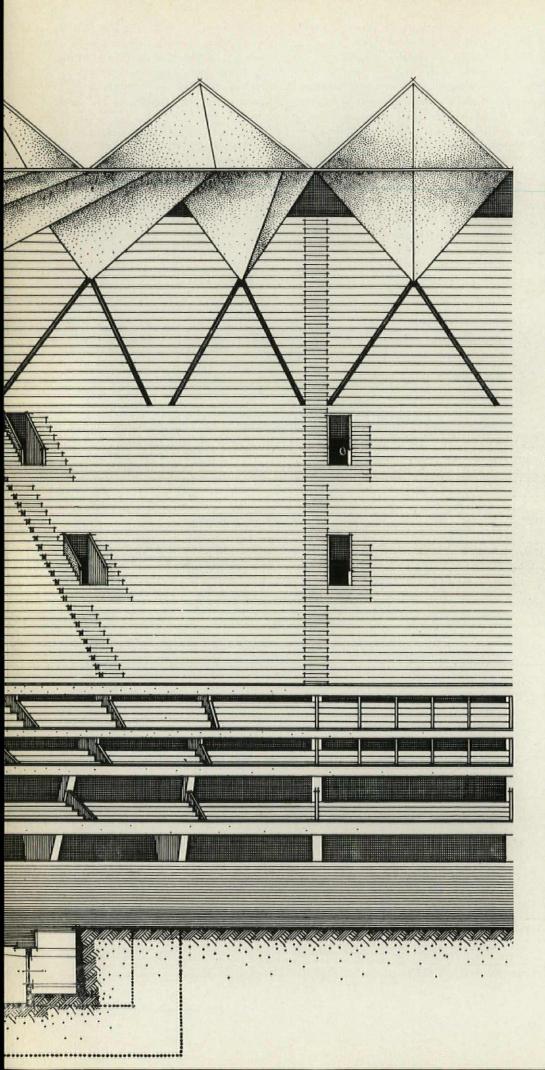
free cantilever of 108 ft. The rear part of the umbrellas forms a broken line, visible on the façade, and is anchored to the back of the main beam of the frame in order to stabilize the umbrellas and allow for the pin supports of the steel pipes.

Since each umbrella is an independent structural unit, the stadium roof could be completed by various stages.

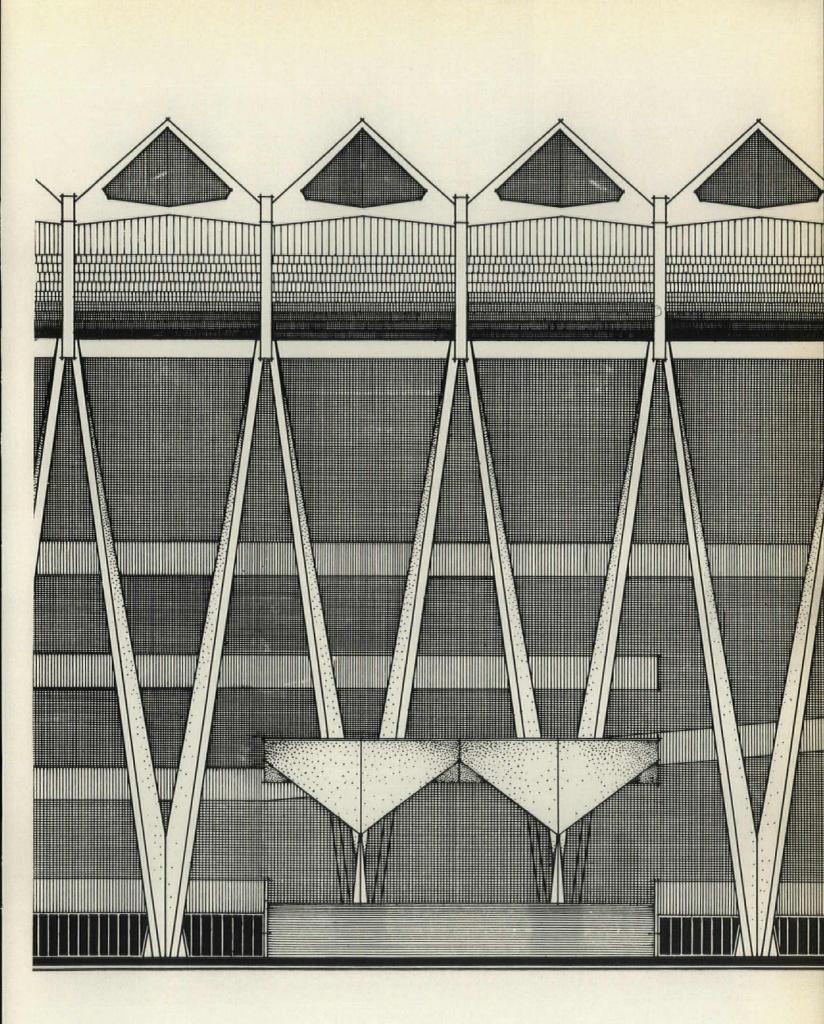
Façade supports are inclined not only to give interest to the exterior, but also to provide further triangulation of the structure.

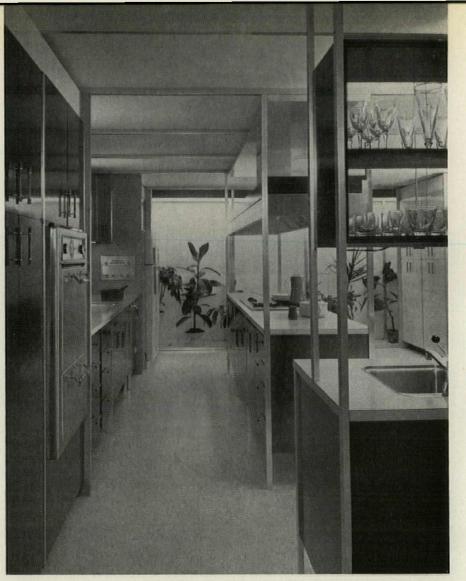
Estimated cost of construction, including parking areas, roads, inside the plot, pedestrian paved areas, and landscaping, was \$6,000,000 (U. S. currency).





Fragments of drawings showing details of stadium's interior (left) and exterior (right) are published here at same size as shown on original competition presentation panels. They are the work of the talented Ferdinand Fuentes of Candela's office.





## **KITCHENS**

For the past 30 years, at least, the American kitchen has generally been considered a model of efficiency and economy. The increasing difficulty of securing domestic help has resulted in a more careful examination of residential kitchen planning in order to establish standards for functional facility and dimensional appropriateness. Based on the triangular work pattern between refrigerator, sink, and range, standard kitchen shapes—the "corridor," "U," and "L"—have been recognized. And the operational order of placing equipment—storage, preparation, cooking, and serving—has become canon.

The design of kitchens based on these principles tended to produce units that were clinical in appearance—the result, perhaps, of using available standard equipment. There were always those, however, who preferred a less automatic-looking, more humanized kitchen—sometimes distinctly sentimental.

The increased acceptance of the open plan as a logical expression of informal living, without servants, brought about the combined cooking-eating space. With this arrangement, various means have been found to screen one area from the other without completely separating them, and to give the cooking area an attractive appearance when seen from the dining area.

As the desire for this kind of kitchen became widespread, manufacturers introduced new equipment—notably wall ovens, built-in refrigerators, and sinks and ranges that can be used as islands. However, the standards of planning, and the approach to the design of cabinets themselves, have remained fairly fixed.

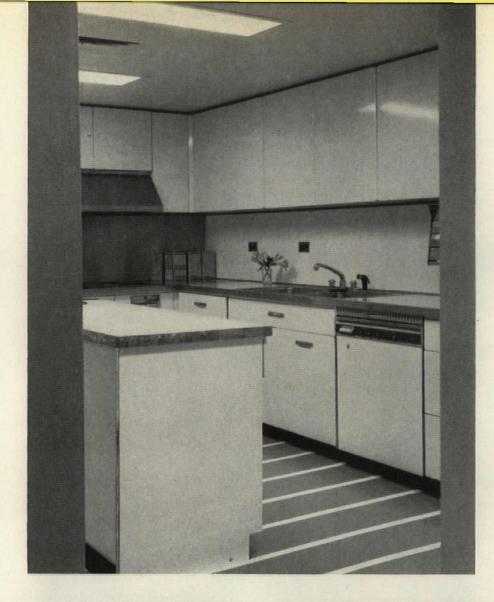
Cabinet manufacturers have recognized a trend toward the warmer, as opposed to the clinical, kitchen by making porcelainized cabinets available in colors. There has also been an increase in the availability of ready-made units in natural wood. Innovations in the design of cabinets, however, have been left largely to architects and designers, who must work without carefully analyzed design standards in this area.

Recently, several new cabinet designs have been developed, indicating that the potential for storage units has not yet been fulfilled. One such development is Paul McCobb's pole-supported series (*above*),

which is now commercially available. This design recognizes the flexibility of the open plan, lifts cabinets off the floor to admit more light and air and to lessen stooping, and also achieves an appearance of fine cabinetwork. Another of these developments is the steel cabinet system that Peter Muller-Munk Associates designed for U.S. Steel (see page 158). This system, which is offered to manufacturers for adaptation, eliminates swinging doors, prevents stored goods from becoming inaccessible, and also prevents the accumulation of dust in the cabinets themselves.

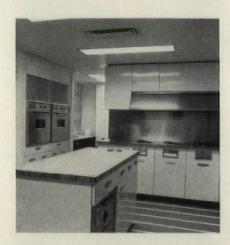
On the following pages we present a group of American kitchens that illustrate many of the above-mentioned ideas at work. The first of these, although not residential, is designed with standard equipment exclusively. The others show a varied use of materials, means of screening the combined cooking-eating space, and both the clinical and the more humanized kitchen; two European kitchens show the direct approach of their designers and the differences in equipment and use of materials in other countries.

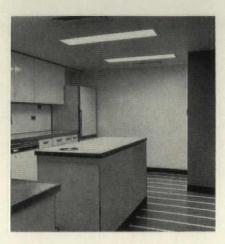
For listing of photo credits, see p. 214.







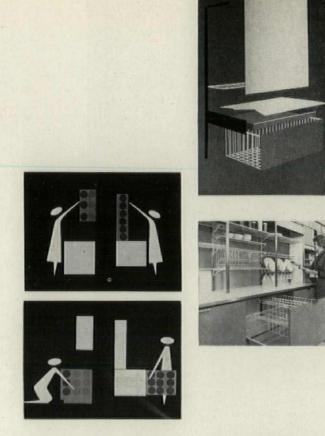




A series of off-the-floor cabinets, similar to pole storage-wall systems, was designed by Paul McCobb for Mutschler Kitchens, Inc. (facing page). In the separate, staffed kitchen (this page) for executive offices [IDD, MARCH 1962 P/A], by Knoll Planning Unit, standard cabinets and equipment were used; this kitchen indicates how meticulous alignment and detailing can give distinction to ordinary components.

DATA: descriptions and sources of the major materials and furnishings shown.

KITCHEN BY KNOLL PLANNING UNIT Walls: vinyl/white, red/Vicrtex/L. E. Carpenter. Flooring: vinyl tile/smoke gray, white stripes/Amtico. Cabinets: white enameled steel/General Electric. Counters: gray scrim/Textolite; maple cutting board; at range/stainless steel; backsplash—at range/stainless steel, at sink/white vinyl/Textolite. Equipments: range, wall oven/stainless steel/Ceneral Electric; sink/ stainless steel/Electric; food-warmer/stain-less steel/Toastmaster; range hood/stainless steel/ custom-made.







Kitchen cabinets were re-examined by Peter Muller-Munk Associates for U.S. Steel. The resulting design shows how reapportionment of volume can make goods more accessible. Diagrams (above) compare standard cabinets with a new design that has shallower and taller upper cabinets and raised bins beneath. These units eliminate stretching and stooping and make contents more visible. The system is composed of steel supports, tambour-type steel upper cabinet fronts, coated wire shelves, perforated drawers, and foam-filled steel panels.



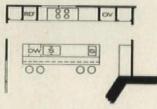




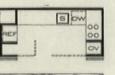




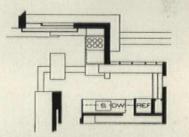
A combined cooking-eating space (top) is given a sense of separation by a cabinet, suspended over the bar and sink, which is accessible from both sides. Supports conceal plumbing vents. A freestanding sideboard (middle) partially screens a kitchen, but a folding wall can close it off completely. Standard white cabinets are combined with custom walnut cabinetry. A highly personal kitchen (below) rejects the clinical idea and brings out kitchen symbolism with a big black range and hood. Brick counters are used throughout the house [IDD, APRIL 1962 P/A].



KITCHEN BY ROCKRISE & WATSON, ARCHI-TECTS Walls, door: redwood/natural Flooring: ceramic tile/gray/Duraglaze/Gladding. McBean & Co. Cabinets: redwood plywood/custom-designed, Counters: at range/stainless steel; at sink, bar/Formica/white. Equipment: range, ovens/stainless steel/Thermidor Electrie Mfg. Co.; refrigerator, freezer/stainless steel /Revco; sunks/stainless steel/Ziegler-Harris.



KITCHEN BY DAVIS, BRODY & WISNIEWSKI, ARCHITECTS Walls, partition: matched oil walnut/custom.made. Cabinets: white enamel/United Metal Products. Counters: white Formica: at range/ stainless steel; backsplash/white Formica. Equipment: refrigerator, dishwasher/white enamel; range, oven/ stainless steel/all Hotpoint; sink/stainless steel/Elkay.

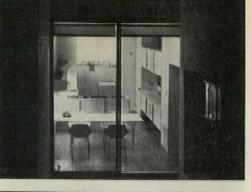


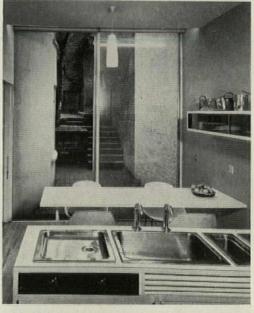
KITCHEN BY MALCOLM B. WELLS, ARCHITECT Walls: rough finished plaster. Floor: red brick, Cabinets: fir plywood/custom-designed, Counters: brick, white Formica, chopping block. Equipment: range/black iron/Castle Pines Corp.

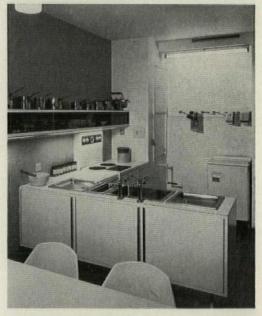


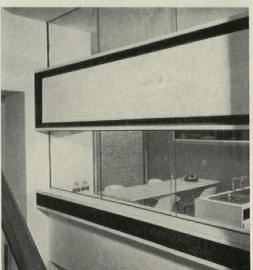
Kitchens 159

Generally, European kitchens are neither clinical nor oversentimentailized. The ascetic kitchen in London (photos at right), by architect Louis Osman, uses standard equipment built into custom cabinets faced with black and white plastic laminate. Manipulation of these two values gives the design a rhythmic interest, which is carried into the corridor on a storage wall with passthrough (bottom). The sink work-counter contains two sunken drainboards and a glass or silver washer; note that handles for the spigots are on the cabinet front.













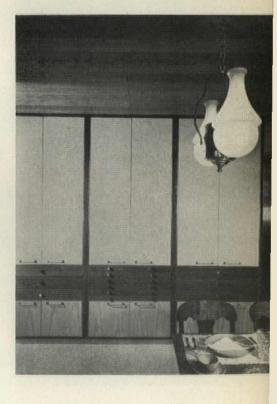
A separate, staffed kitchen in Milan by Architect Luigi Caccia Dominioni has a large stainless-steel work table cantilevered out into the middle to complete a steel U-shaped scullery area. The room is given a luxurious appearance by the use of rich earth colors: mud-brown glazed tile on floor and walls, moss-green tile in the toe space, and natural wood cabinets. The ceiling is luminous. The double stainless-steel sink and drainboards have a raised front edge that prevents water from spilling onto the floor.

160 Interior Design Data

KITCHEN BY GERALD LUSS, DESIGNS FOR BUSINESS Walls: teak, ash. Geiling: ash. Flooring: vinyl tile/tan/Corlon/Armstrong Cork Co. Cabinets: teak/white, blue lemon/plastic laminate/Parkwood Laminates Inc.; stainless steel kickplates/all custommade. Counters: white Formica. Equipment: range. oven/lemon, yellow enamel/Wedgewood Holly; hood, exhaust fan/Trade Winds; sink, blender/stainless steel/Elkay Mfg. Co.; dishwasher/teak front/Waste King; refigerator/white enamel/Aman Refrigerating Inc. Lighting: recessed/Lightolier, Century Lighting; opaline globes/Kurt Versen. Window recess: walls/ plastic laminate/Textolite; bead covering/multi-color/ Window Craft.



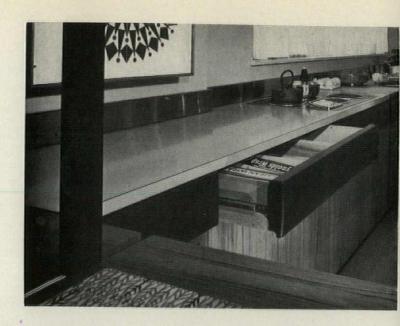
The kitchen shown on this page illustrates unorthodox planning and careful custom cabinet design. The plan fol-lows no standard kitchen shape, but the triangular work pattern obtains. Although the range is screened from an informal eating area (there is a separate dining room in the house), it shares an open counter with a snack bar; the cabinets above conceal a hood and exhaust fan. Materials are chosen to require only minimum maintenance and juxtaposed so as to bring out their richness. Neither clinical nor sentimental, except for the "objets," this kitchen has a place for everything: each piece of flatware has its own teak niche; each knob, handle, and hinge makes its own contribution to the design.

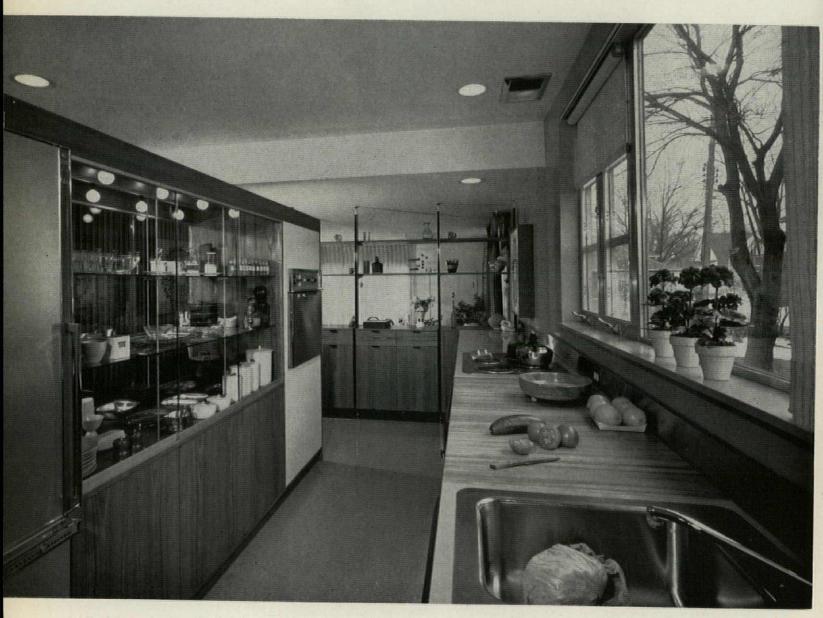












The kitchen shown on these two pages was remodeled for a couple who entertain without servants. The single corridor plan is compact and efficient, but the design is sophisticated. A pole-system storage-wall, which also functions as pass-through, screens the kitchen from a flexible dining room (below). An island (facing page, bottom) separates the kitchen area from a passage lined with teak-paneled doors to closets and other rooms. The island is tall and comprises the refrigerator, oven, and a glass storage cabinet, which is illuminated within and accessible from both sides. To eliminate awkward stretching. no overhead cabinets are used. All cabinets are custom-designed in teak; doors open on spring latches; drawer fronts are padded and vinyl-covered to afford a comfortable strip to lean against while working. These materials give the room elegance and raise the activity of meal preparation to a higher level.

KITCHEN BY DOLORES ENGLE, GEORGE NEL-SON & COMPANY Walls: teak, vinyl/orange (window wall), white (inner walls)/General Tire & Rubber Co, Flooring: vinyl tile/light terra cotta/ Robbins Floor Products. Cabinets: teak, teak plywood, white Parkwood, glass/custom-design; poles, storage wall/Herman Miller. Counters: plastic laminate/ochre/Parkwood Laminates, Inc.; maple cutting board: backsplash/stainless steel. Drawer fronts: Naugahyde/dark tan/Herman Miller. Equipment: refrigerator, oven, range/stainless steel: dishwasher/ white enamel/all General Electric; sink/stainless steel /Elkay Mfg. Co.



### BY JOHN WARREN GILES

The United States Copyright Law provides that "the common law" protects authors of works of art against unauthorized copying until the creator "publishes" his work. "Publication" has been defined as meaning making copies of a work available to the public. Although there is an unanswered question as to whether architectural structures can be protected further by applying for statutory copyright (is a "functional structure" a "work of art"?), it has been generally held that the common law copyright does protect architectural drawings-until "publication." The next question, obviously, is whether the filing of plans with a building department, and the building of a structure for all to see, are legally to be considered as "publication." The authors of P/A's regular legal column, IT'S THE LAW, have written on this subject several times, and Judge Tomson has commented on it in his two books. In the following article, a Washington, D. C., attorney adds further thoughts to the discussion.

A recent California case discusses two questions that are important to architects. The first, does a designer have a common law copyright in plans for a house prepared by him?; and the second, does the filing of the plans in a county office as required by law to obtain a building permit constitute a publication divesting the designer of his common law copyright?

Briefly, this was an action against the owner of a house and the contractor who built it, by the plaintiff who created and designed the plans and specifications that were allegedly used without authorization in building the house. It appeared that the plans had been prepared for a third person, and had been filed in a county office, as required by law, to obtain a building permit. It was held by the California Court that the designer had a common law copyright in the plans prepared by him, and that he was not divested of his rights by the mere filing of the plans.

It should be pointed out that Section 980 of the Civil Code of California pro-

# The Architect's Common Law Copyright

vides: "(a) The author or proprietor of any composition in letters or art has an exclusive ownership in the representation or expression thereof as against all persons except one who originally and independently creates the same or a similar composition. (b) The inventor or proprietor of any invention or design, with or without delineation, or other graphical representation, has an exclusive ownership therein, and in the representation or expression thereof, which continues so long as the invention or design and the representations or expressions thereof made by him remain in his possession." This section of the California statute accepts the traditional theory of protectible property under a common law copyright. The California court said definitely that the plans in this case were in fact such protectible property.

There is no question that publication of these plans would end any claim to a common law copyright. However, the plaintiff in this case successfully contended that as the filing of the plans was required by a Marin County ordinance in order to obtain a building permit, this filing was not voluntary and could not constitute a publication which would deprive the designer of his property right. The defendant contended, and the lower court agreed, that the construction and maintenance of the house in full public view constituted a publication of

Architects know that an architect expresses his thoughts in his plans, drawings, and designs. In this respect, he is similar to all other creators of intellectual properties. In addition, he uses technical signs, symbols, and graphic representations to communicate his ideas.

It is surprising to note that what constitutes "publication" of architectural plans, drawings, and designs where the common law copyright has attached has been considered in only three reported cases in this country.

In a New York case, it was held that the filing of the plans for a building in a municipal building department that required such filing before construction could be approved, and the subsequent construction of the building, was such a publication of the plans as to destroy the architect's common law copyright in the plans. In Philadelphia, it was held that the building of a structure from the plans, and its exposure to the public gaze, was such a publication as to destroy the architect's common law copyright in the plans.

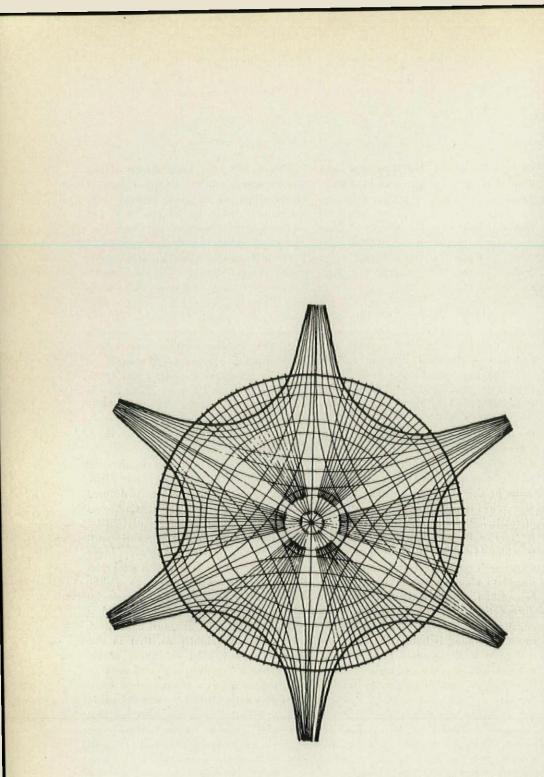
These decisions have been sharply and justifiably criticized. It is clear that common law rights are lost only when there is a "general publication" and not a "limited publication." It should be emphasized that a general publication implies an abandonment of the rights of copyright by a dedication to the public. A "limited publication," on the other hand, is one that communicates a knowledge of its contents under conditions expressly or impliedly precluding its dedication to the public. The essence of the matter is whether the designer, by his disclosure, had the intention of rendering his work common property. It is crystal clear that when an architect files his plans pursuant to a statutory requirement, he certainly does not intend to abandon any of his rights in his work. He is filing these plans under duress, the duress of the statute. It is equally ridiculous to contend that because a building is built from the plans and open to the gaze of the public, it is a publication of the exact plans, which should allow another person, by tracing the plans.

the work, to completely duplicate the ingenuity and work of the original designer. Everyone knows that the real purpose of the requirement of filing plans is to protect the public from unsafe construction. Although it is true that these filed plans are open to public inspection at a later time, for the purpose of determining whether or not the building planned will comply with the law, that public disclosure does not and should not give anyone the right to use them.

Can anyone successfully contend that a completed structure, such as a building, is a publication of the plans under which it was constructed? A completed structure is clearly no more of a copy than the exhibition of an uncopyrighted motion picture, the performance of any uncopyrighted motion picture script, or the broadcast of an uncopyrighted radio script. All these have been held not to dedicate their contents to the public. The question whether the publication of plans and specifications in a magazine would result in the loss of an architect's common law copyright does not seem to have been considered by the courts. However, it would appear that if the magazine is protected by a copyright, then the owners of that copyrightnamely, the magazine-would control the rights to reproduce the plans and specifications. It does not seem that there is complete dedication to the public a when the plans are published in a work or book that is protected by a copyright. A different result would probably be reached if the periodical containing the plans were not protected by a copyright.

One case decided in Missouri differed sufficiently from this recent California case in its facts as to apparently justify the result reached by the Missouri court. In this case, a house, built in accordance with architect's plans and with the architect's consent, was opened to public inspection, and thousands of people inspected the property during a period of several months. The Missouri court held, and we believe rightly so, that in this case the unrestricted exhibition of the house was a "publication," and as a result, the architect's common law copyright was extinguished. It was argued in this case that it was not intended that the public could or would take measurements of the house, but the fact remained that there were no restrictions to keep anyone from so doing, nor was it claimed that any effort was made to prevent it. The court felt that the essence of the matter was not a question of whether measurements were made, but whether the exhibition was public to all the world and unrestricted. As the court said, "By his [the architect's] consent, the bird was released and it is now public property."

On the other hand, it seems obvious that the decision in the California case is sound, and that any other result would have violated equity and common sense.



### LIFT-SHAPE STRUCTURE

A method for constructing unusual shapes without conventional concrete formwork has been developed at the Agricultural & Mechanical College at College Station, Texas. This technique, and the promising conclusions drawn from a full-scale prototype, are reported here in brief.

Unlimited possibilities in thin-shell reinforced-concrete shapes—without using formwork—are indicated by a new structural system called Lift-Shape. Combining form and reinforcement in a single unit, the system involves a steel skeleton that is fabricated on a flat plane, then lifted and "sprung" into final position to receive a covering.

The Lift-Shape idea began in the backyard workshop of James H. Marsh, III, Assistant Professor of Structures with the Division of Architecture at Texas A & M; the 50-ft-diameter prototype shown here was constructed by Marsh and the Architectural Research Group of the college, with a grant from Educational Facilities Laboratories.

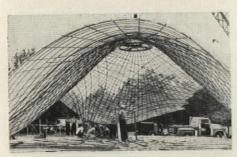
Basis of the system, which is actually a technique of construction and not a new method of structural design, is that when forces are applied to the ends of a straight bar, the bar will take a parabolic form. Combinations of bars will take a limitless variety of curves other than parabolic. A design may be refined through scale models.

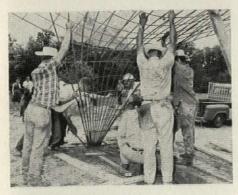
Steel reinforcing bars for the prototype were laid out in three layers: curved bars from one leg to another, straight bars radiating from the center, and circular bars on top. Expanded-metal mesh blanketed the skeleton. Most bar intersections were only loosely tied with wire (a few were welded) so as not to restrain development of the shape during erection. The armature was then hoisted to the proper height by crane, lifting at the center, and the legs adjusted to position. Finally, lightweight concrete was sprayed in successive layers under and over the framework.

Test loading for 20 psf (plus an unexpected test from Hurricane Carla) indicate that the Lift-Shape process gives "as good or better" quality than conventional methods. Cost analysis, too, is promising, with comparative bids showing that conventional construction would have cost 23 per cent more than the actual \$4760 of the experimental structure.

Even before attempts are made to integrate full enclosure and mechanical services into this type of structure, architectural potentials are vast. EFL is particularly enthusiastic, and is now supporting an exploration of plastics as lightweight covering materials.

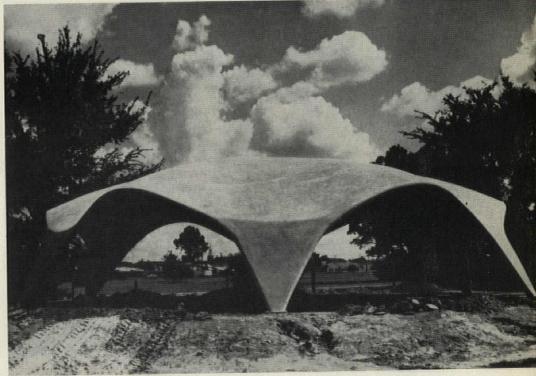












JULY 1962 P/A

# GLUED BUILDING CONSTRUCTION

A small office building for Gilman Brothers, Inc., a Connecticut plastics manufacturer, offered an opportunity to utilize plastics and adhesives directly in building construction. No mechanical fastenings, screws, nails, or bolts were used; all of the various members and elements were chemically bonded together. Primary construction stages are described by Richard Sharpe, of Juster & Gugliotta and Richard Sharpe, Associated Architects and Engineers.

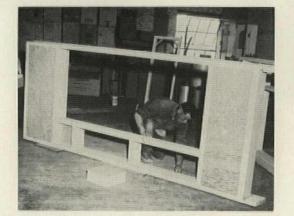
It was decided to develop a building utilizing the advantages of chemically bonded construction (with epoxy glue) without surpassing the capabilities of normal labor, and without the use of special equipment or specially manufactured products. At the same time, it was decided to take full advantage of the heat-insulating and structural qualities of the client's product, an expanded polystyrene foam of the self-extinguishing type. It was, of course, a major requirement that the 1800 sq ft structure be economical.

First step was the development of structural prefinished panels that would satisfy the standards set for strength, rigidity, insulation, and finish. The building was designed on a module to allow the use of standard 4' x 8' and 4' x 10' sheets of Glasweld, plywood, and gypsum board. These sheets became the "skins" for composite panels with Cellulite foam cores, also delivered in 4' x 8' and 4' x 10' sizes.

Various panel sections were load tested to determine their composite action. This testing resolved questions concerning the effect of the foam core's shear modulus of elasticity on the composite bending action of the panels, and the bond strength between the plastic core and the various skins. The composite panels are in effect wide-flange beams, with the core acting more or less as a shear-resisting web, and the stronger skins taking almost all of the direct bending and axial stresses.

The composite panels were assembled at the job site by bonding the skins to the polystyrene cores with hand applicated epoxy glues. One man was capable of hand manufacturing five large panels in one day. The building was constructed







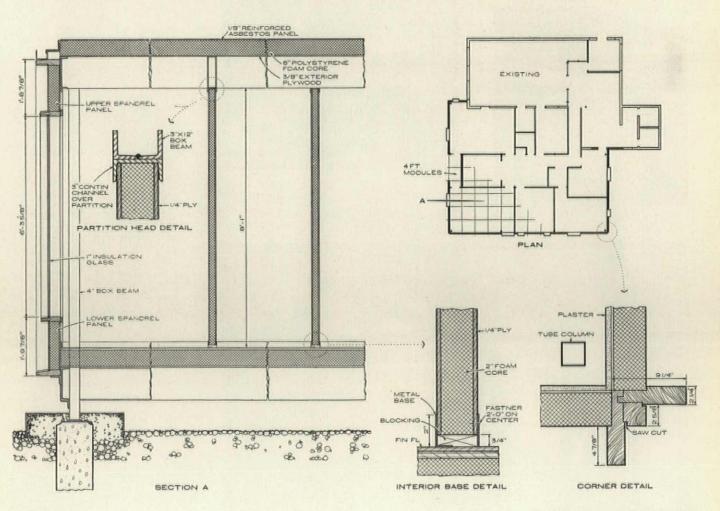
by bonding the composite panels directly to the steel beams upon which they were seated, and to each other with simple splined joints - all with epoxy glues manufactured by Adhesive Products Division, Pittsburgh Plate Glass Company. No heat or pressure was necessary for this bonding. Typical panels weigh less than 100 lb and can be easily placed by two men without mechanical assistance. Cores were 6 in. thick for floors and ceilings, and 4 in. thick for walls. The two-way continuous action of the completed roof, floor, and wall slabs added greatly to the increased rigidity and strength of the whole structure.

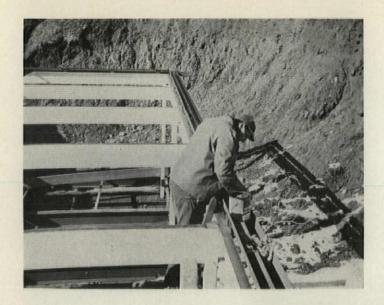
Openings required for windows, doors, and skylights were simply cut into the building where desired; the panels were bonded in place, without affecting the strength of the two-way construction. All windows, doors, and skylights were glued into place in the holes provided for them.

Roof joints between panels were sealed with a polysulfide application after completion of bonding. Although there were a few leaks, which led the owners to request a five-ply roof, the weathertightness of the building since completion, over two years ago, shows that this was unnecessary. In the future, roof joints will be sealed with a spline joint to insure permanent watertightness. Wall joints that were spline-jointed and bonded with epoxy exhibited no leakage.

The heating system for these offices was integrated into the panel construction by means of exposed electrical resistance wires set in the back of the interior gypsum board skins. Thus, no space was lost for heating elements. This heating system provides even, comfortable heat, with the panels never being more than mildly warm to touch. During the coldest day of the past two winters, the total heating cost for the executive offices was \$0.60 for the 24-hr period; it is correspondingly less during more normal weather. Heating wires have produced no ill effects on the bond between the gypsum skin and the self-extinguishing polystyrene core to date.

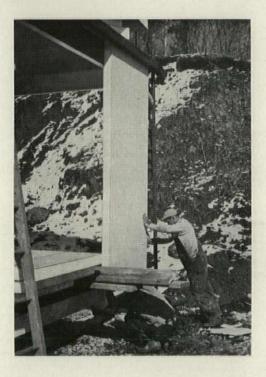
The complete building was erected by inexperienced labor in 32 man-days at a cost of \$13.90 per sq ft, including all finishing and heating.

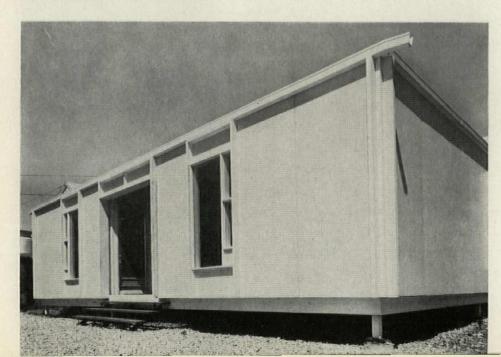


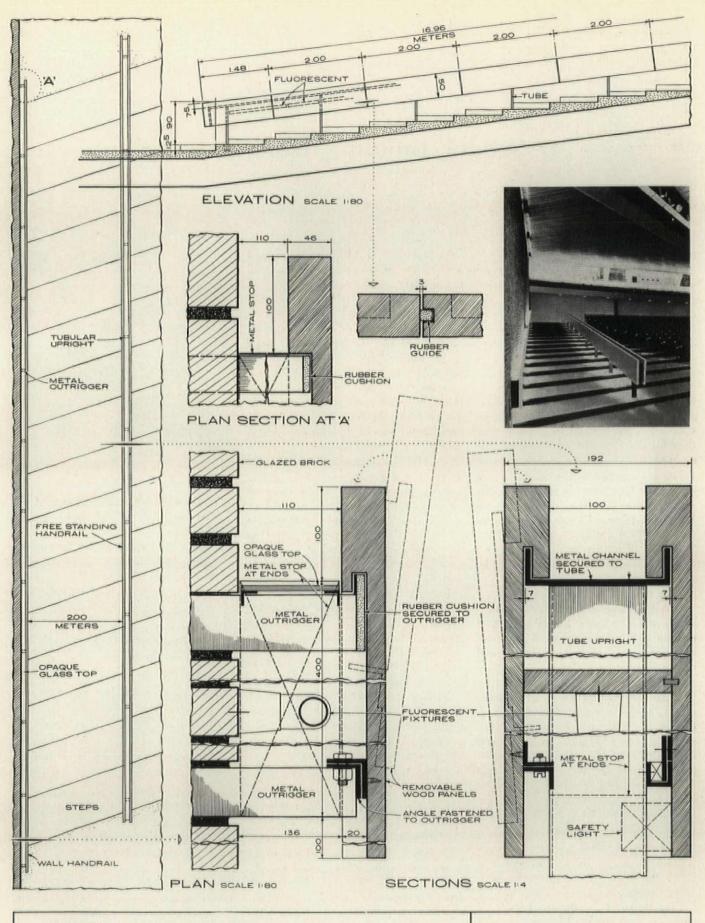


Simplicity of assembly allows construction with relatively unskilled labor. Building weight is about one-fifth that of normal wood construction, while continuity and two-way action provide additional strength. Bonding process allows simple modular construction and eliminates all connection problems between similar and/or dissimilar materials.









AKADEMIE DER KUENSTE: Berlin, Germany WERNER DUETTMANN, Architect

SELECTED DETAIL LIGHTED HANDRAIL

#### MECHANICAL ENGINEERING CRITIQUE



## School Building Isolates Jet Noise

#### BY WILLIAM J. McGUINNESS

A school opposite Los Angeles' new jet airport was virtually inoperable until sound-isolating construction was developed for new and existing portions of the building. The remedial measures are described by the Chairman, Department of Structural Design, School of Architecture, Pratt Institute.

Noises that accompany the operation of airports are becoming a nationwide problem. It is often difficult to select remote sites for airports and quite impractical to attempt to prevent the growth of population and building in their vicinity. The coming of jet power to established airports and the building of new jetports has increased sound levels to the degree that they pose a distinct social problem. The cost of purchasing property surrounding the airfields to create wide, undeveloped buffer zones for sound control is usually prohibitive.

For buildings trapped within such areas, it is possible to reduce sound transmission into the structures sufficiently to permit audibly comfortable and effective operation within. This has been proved at the Imperial Avenue School at El Segundo, California. This existing school, several hundred feet from takeoff runways of the new International Airport at Los Angeles, was virtually inoperable until sound-isolating construction was developed for a new wing and applied there and at existing sections of the school. The methods used and the costs involved will be of interest to those who face similar problems.

#### TABLE

Evaluation of Sound Intensities by the United States Department of Commerce.

Decibels	Equivalent			
100	Automobile horn			
80	City subway			
60	Busy street			
35	Average residence			

School officials at El Segundo retained Architect C. M. Deasy, of Deasy & Bolling, a Los Angeles architectural firm, to study the problem and device remedial measures. He retained Donald Loye, an acoustical engineer, to aid in the work. They found that during the peak hour of jet traffic there were 36 departures per hour. At the point of take-off, just opposite the school, the outdoor sound level was 105 db and the concurrent intensity within the classrooms with windows closed was 85 db which is slightly louder than a city subway (see Table). Obviously, this transmission loss of 20 db through the surfaces of the building had to be increased to reduce the interior noise to an acceptable level. Actual tests showed that the occupants could tolerate 45 db, which is not much higher than the sound level encountered in a residence. This suggested a "target" transmission loss of 60 db. Because of certain considerations of "instrument" scale, the human ear, and effects at various frequencies, Engineer Love established 45 db as the practical amount of sound to be screened out by new isolation measures at the various building surfaces. In selecting materials to do this, factors other than acoustics had to be considered. These included cost, structural safety, maintenance, the nature of the existing buildings, and architectural appearance. The selections were as follows:

1. The buildings were sealed and air conditioned.

2. Exterior walls were of reinforced brick. (Brick had been used in the existing buildings.)

3. Sealed, double-glazed windows were used, with 3-in. space containing dehumidified air. Windows faced away from the runways.

4. Double ceilings were chosen. They consisted of a conventional wood-frame roof and ceiling with an additional ceiling suspended on springs below and isolated from the brick walls by edge strips



of cork for added acoustical control.

5. Acoustical doors with unique frames were chosen.

6. Air intake openings for the air-conditioning systems were provided with sound-absorbing baffles.

Costs per classroom were as	s follows:
Windows	\$280.00
Doors	50.00
Independent ceiling	528.00
Air conditioning	2500.00
Total	\$3358.00

The cost per square foot was \$3.50. In the multipurpose building, the costs were:

Doors	\$200.00
Independent ceiling	1340.00
Total	\$1540.00

The cost per square foot of this room was \$0.67. Air conditioning is not included because the mechanical ventilation that was installed is normal in rooms of this type.

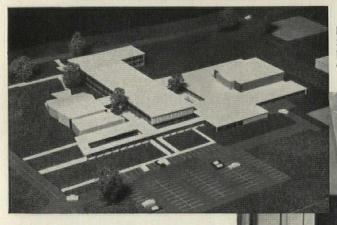
These costs are admittedly high, but the noise problem was a critical one. Lesser measures may be acceptable in locations where the problem is not as great. In any case, it appears that air conditioning must be provided because the mere closing of windows results in a 20-db noise reduction.

# Ruberoid/Matico Vinyl Asbestos Floor Tile Solved This School Problem

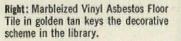
# The Problem:

The Solution:

Quality resilient flooring at moderate cost to take heavy traffic, be easy to maintain. Over 100,000 sq. ft. of Ruberoid/Matico Vinyl Asbestos Floor Tile.



Left: Frank R. Starbuck Junior High School, Racine, Wis., opening Fall, 1962, has a capacity of 1000 to 1100 students, will cost approximately \$2,275,000.



Architect. Warren Holmes Co., Lansing, Mich. Gen. Contractor: Nelson & Co., Racine, Wis. Flooring Contractor: Du Al Floor Co., Inc., Chicago, III.



More than ever, Ruberoid/Matico new Vinyl Asbestos

Floor Tile is suitable for most demanding types of

installations. With 57 styles and colors in its enlarged line, Ruberoid/Matico offers widest range of popular

patterns for every decorative scheme: Marbleized, Tweed, Wood Hues, Maticork, Confetti and Lode o'

Gold. Outstanding for smooth, tight surface, flexibility,

long wear, Ruberoid/Matico's, new Vinyl Asbestos has

greater resistance to indentation. Also it resists grease

and acids, is easy to maintain. True dimension, clean, sharp corners, assure flawless installation. Ask your Ruberoid representative for further information.



**RUBEROID** MATICO Vinyl Asbestos Floor Tile A quality product of The RUBEROID Co. 755 Third Avenue, New York 17, N.Y.

JULY 1962 P/A

#### SPECIFICATIONS CLINIC



### Safeguarding Product Specs

#### BY HAROLD J. ROSEN

A proposal that could protect architects who wish to specify new materials is discussed by the Chief Specifications Writer of Kelly & Gruzen, Architects-Engineers.

Since the publication by the AIA and the Engineers Joint Council of the document entitled "Legal Responsibilities in the Practice of Architecture and Engineering," many architects and specifications writers have been alarmed by its implications concerning professional responsibility.

Paragraph "O" of this document deals with specifying materials and equipment, and the problems associated with them that may lead to claims against the architect for professional negligence. Court decisions are cited that indicate that: (1) the architect is responsible for proper selection and application of materials and adequate research; (2) reliance on advertising material of a manufacturer or other representations of a manufacturer does not necessarily protect the architect.

The architect's fee is wholly inadequate for him to subject each of the materials he specifies to tests to determine their adequacy. The doctor who prescribes a drug is on safer ground than the architect who specifies a material. The Food and Drug Administration approves all new drugs and pharmaceuticals before they may be prescribed by a doctor. The architect, at present, has no comparable agency to safeguard him in selecting materials.

At a recent meeting of the N.Y. Chapter of the CSI, Nathan Walker (of the law firm of Walker & Walker, legal counsel to the N.Y. Chapter of the AIA) made the following interesting suggestion concerning a course of procedure that conceivably could protect architects:

"1. The Institute, meaning CSI, should request manufacturers to submit samples of their materials, which then would cause them to be tested, at the expense of the manufacturers, by an independent testing laboratory. "2. The results of these tests would be made available to the members of CSI and others whom CSI felt worthy of receiving this information.

"3. Members of the Institute would furnish the Institute with a résumé of their experience and knowledge gained through the use of new materials. This information, likewise, would be made available to the members of CSI.

"4. A rotating panel of experts in CSI would be appointed to consider the qualities and suitability of new materials. Their opinions and findings likewise would be made available."

In brief, the Institute would accumulate the information and serve as a storehouse of the knowledge and experience thus acquired. In case of legal difficulties, the defending professional could argue that he made a proper investigation by securing information through the Institute, and that he based his judgment, whether right or wrong, upon this information. His position could be reinforced in court by the opinion of the Institute's panel of professional experts, who exercised their best judgment.

In my opinion, if such a plan were developed carefully and executed properly, a new specification might well be written into the law, reading somewhat as follows: "A sound test of the judgment of a professional whose actions are challenged is the combined opinion of his colleagues which influenced his judgment."

These observations by a recognized legal authority in the field of architecture and building construction appear to have considerable merit and are worthy of serious study both by CSI and AIA.

Walker's remarks stirred the memory of a chapter member: he recalled the efforts of an independent group of architects and engineers who, some 40 years ago, attempted a plan dealing, among other things, with the investigation of building products. With a little research, he uncovered a document ("Investigating Committees of Architects and Engineers"

-Organized in 1915; Member of ASTM) that described the activities of this group:

"Investigating Committees of Architects and Engineers is a national association of committees organized to investigate anything of interest to an architect or an engineer in connection with the construction of a building. For this purpose, small committees are selected from the offices of practicing architects and engineers of high standing in their respective professions in the different cities of the country. The members of these committees serve without compensation in the interest of the two professions which they represent. They are competent and absolutely unbiassed.

"Such committees visit manufacturing plants, inspect installations, and get acquainted with the men behind the product, so as to judge their honesty of purpose and ability to execute their contracts faithfully, and to furnish goods of real merit.

"When the reports of these committees are favorable, official bulletins are issued, embodying the report and such tests and illustrations that properly describe and illustrate the product in the opinion of the committees. These bulletins are sold to the manufacturers for general distribution, and it is the profit on such bulletins that sustain the activities of the organization.

"The activities include, in addition to the investigation of materials and devices, opposition to methods of construction believed to be dangerous, and to unfair competition and advertising of a misleading character. The organization also conducts a clearing house for information, and works for the establishment and maintenance of proper standards, the close co-operation of all interested in building construction, and, in general, the promotion of better buildings."

Though in the development of his plan, Walker did not have the benefit of the 1915 scheme, and though the two plans, although similar in some respects, do vary substantially, they are both worthy of serious consideration. A further comparison and study of both are justified, in order to aid in the development of new materials and so as to safeguard the architect in his selection of them. Manufacturers of quality building products have as much at stake in such an undertaking as does the architectural profession.



# LIKELY TO BE THE SMALLEST ITEM IN THE BUILDING MAINTENANCE BUDGET!

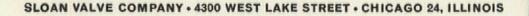
And by small, we mean small...as little as  $1\frac{1}{2}$ ¢ per valve per year according to records from THE STEVENS HOTEL (Conrad Hilton), Chicago, where 3600 ROYAL Flush Valves continue in dependable daily service after 35 years.

In THE EMPIRE STATE BUILDING, New York, Mr. Donald Gibson, Staff Engineer, says Sloan Flush Valves have caused practically no maintenance problems since the opening of that fabulous building.

These experiences are typical of Sloan and especially significant when you consider the hard use and abuse to which Sloan Flush Valves are often subjected in the public toilet rooms of hotels, office buildings, airports, schools, etc.

Such experiences account for Sloan leadership. And Sloan leadership is maintained through a constant effort to make our flush valves even better. Better in design, better in materials, better in workmanship.

Because the Sloan ROYAL is acknowledged as the world's most successful flush valve, attempts have been made to imitate some of its most important features. But why gamble with substitutes when you can plan for the life of the building confidently with Sloan? Specify performance-proven, time-tested Sloan Flush Valves.





#### IT'S THE LAW



#### BY JUDGE BERNARD TOMSON AND NORMAN COPLAN

Nassau County District Court Judge and a New York attorney discuss a decision in which an architectural firm's liability for negligent performance was extended to a third party with which it had no contractual relationship.

Judicial decisions extending an architect's liability for negligent performance to third persons with whom he has no contractual relationship, have been of continuing concern to the profession. A recent decision of the Federal District Court in Minnesota, which found liability in a sum in excess of \$100,000 against an architectural firm in a suit instituted by the contractor's surety company, is consistent with this trend (*Peerless In*surance Company v. Thorshov & Carny, Inc.).

The above action stemmed from the award of a contract for the construction of a county courthouse. The construction contract provided that the owner would make partial payments each month to the contractor "on the basis of a duly certified, approved estimate of the work performed during the preceding calendar month." It further provided that, in applying for payment, the contractor would, if required, furnish an itemized statement, supported by such evidence as the architect may direct, showing his right to the payment claimed.

As a condition of the construction contract, the contractor was required to obtain a surety performance bond in the approximate sum of \$567,000. During the course of construction, the owner notified the surety company that the contractor was in default of his performance under the construction contract, and requested the surety company to complete the construction as required by the terms of the bond. At that stage of construction, the payments to the contractor had been certified by the architect in the sum of approximately \$314,000. The surety company completed the project, and

# Liability for Negligent Performance

thereafter instituted suit against the architect for negligence, contending that approximately \$100,000 of the \$300,000 certified by the architect in connection with the contractor's payment was unjustified, and that, as a consequence, the surety company had sustained damages in that sum.

The issue before the Court was whether an architect could be charged with liability for alleged negligent performance by a surety company that had no direct contractual relationship or privity with the architect. The Court, in ruling on this issue, pointed out that at least in the State of Minnesota—it was a case of first impression.

The Court further stated that the architect's certification of payments to the contractor was based upon the visual examination at the job site by the architect's inspector of construction, and that the inspector did not question the contractor as to the accuracy of costs. The expert testimony at the trial was to the effect that "a 5 per cent error with respect to the individual items in the various estimates was within professional tolerance, but approval of estimates totaling \$314,000, when only \$202,000 had been earned by the contractor, was not within such tolerance according to methods practiced by architects in the community."

The Court, in reaching the conclusion that the architect was liable, treated the excess certification by the architect as constituting a release of the 10 per cent retainage that was to be held by the owner under the construction contract until the construction was completed. In finding that the architect was negligent, and therefore responsible to the surety company for damages claimed, the Court stated:

"Of primary importance is the agreement entered into by the Contractor with the Owner. Secondary to this is the bond furnished by the plaintiff and the latter's responsibility to make good any loss sustained by the Owner on account of the default of the Contractor. In this respect, plaintiff would be entitled to be subrogated to the rights of the Owner and against defendant for loss sustained or met with by reason of defendant's negligence that proximately caused damage resulting therefrom. . . .

"Where, as in the case at bar, the alleged liability of defendant is predicated upon the claimed negligent and wrongful release of the retainage fund provided by the contract for the mutual benefit and protection of the Owner and the surety by subrogation, the Court is of the opinion that the evidence supports the conclusion that defendant had actual or constructive notice and knowledge of the surety bond and the purpose of the retainage fund. Such knowledge added to by the duty of defendant to exercise reasonable care in certifying bills for payment, as it did, charged defendant with notice that the retainage fund was not to be released until the contract had been carried out and concluded, as provided therein, requiring the Contractor to submit satisfactory proof that all bills and indebtedness had been paid."

Although there was no "privity" or contract between the surety company and the architect, the Court nevertheless found liability based upon the mutual contractual relationships among the parties involved. In this respect, the Court said:

"Privity of contract between plaintiff and defendant was not a prerequisite to the existence of the defendant-architect's duty to protect the owner, and the subrogated surety arose out of the general and mutual contractual arrangements, which included privity of contract, a requisite to make effective said duty, the violation of which constitutes actionable negligence.

"To state it otherwise, defendant-architect undertook the performance of professional conduct, which, if negligently performed, would obviously cause loss to the Owner and/or plaintiff-surety. Under such circumstances, the law imposed upon defendant a duty to exercise due care to avoid such loss, and plaintiff-surety was not required to anticipate that retainage funds would be wrong fully released . . . The negligent approval and certifying for payment of sums beyond and in excess of the amount required to be retained was the proximate cause of plaintiff's damage . . . ."

No appeal was taken from this decision, since the dispute was settled on a compromised basis.

# PERMANENT CAREFREE BEAUTY

for this floor . . . because it's Marble. There's nothing quite like Marble for lasting pleasure in use, and for low-cost, easy maintenance. You'll always be proud of Marble . . . the modern, colorful, aristocrat of building materials. For other suggestions on the use of Marble in the home, write for a copy of the new illustrated booklet, HOME DECORATING WITH MARBLE. National Homes Corp., Lafayette, Ind. Architect: Emil A. Schmidlin, A.I.A. Photographer: Ezra Stoller

## Acuse it's Marble. With Marble for last to other suggestions in the home, write illustrated booklet, WITH MARBLE. MARBLE INSTITUTE OF AMERICA, INC.

#### VIEWS

#### Shelter Program Debated

Dear Editor: My gratitude and congratulations to you—and to P/A—for the courageous and humane editorial on "The 'Shelter' Program" [MAY 1962 P/A]. It expresses beautifully and strongly what I believe coincides with the inner feelings of most architects regarding safeguards against the dangers of thermonuclear destruction.

I've observed that those of our colleagues who accept the Shelter Program are not hesitant about acknowledging it, whether it be out of profound conviction, expediency, or out of conformity. But I suspect that most of those who have not yet made up their minds, plus those who do not endorse it, are inhibited about openly expressing their feelings, and it is a weighty sort of silence with undercurrents of fear, pessimism, resignation, or passive conformity. It is also my feeling that the latter group may be in the majority.

With this in mind, the statement comes as a warm beam of common sense, focussed on a humanistic alternative to a grave-digging acquiescence to the game of violent deterrents, now distortedly viewed as "patriotic." It could catalyze a crystallization of opinion. The point it makes is both practical and meaningful. Practical, because it would end the obscene wastefulness of inadequate subterranean constructions; meaningful in that it veers sharply from the schizoid path along which we wend our way with dreams and poems about a more beautifully designed America (or world), while filling holes-in-the-ground with the very resources needed to realize that dream environment.

Architecture is manifest in the everchanging surround of light and air, and in the beauty of the configurations that materials assume therein. The statement hits it on the head by inferring that the essence of the shelter philosophy is antiarchitecture.

Viewed in this light, an exhortation to "participate vigorously" in the Shelter Program is (to me) incompatible with the desiderata and destiny of the profession. Those who sincerely regard the Shelter Program as the only form of Survival Insurance, should consider that to "participate vigorously" therein is tantamount to withdrawal from a larger responsibility—that of being Architects, rather than mere practitioners. In this larger sense, we could thereby do our fellow citizens greater disservice than those builders and architects, who, through selfishness, ignorance, and indifference, made possible the accretion of "ugliness" against which we perennially polemicize, convene, or crusade.

The printing of the statement is an act of leadership in a humanistic direction, consistent with the kind of role that has been projected for us to play by former AIA President Phil Will (reiterated in his excellent essays), as necessary for our survival and potency as a profession. The dramatic opportunity offered us (by the challenging issue of shelters-for living or for dying?) to reassert those values and goals that we proclaim, and to justify our desire to become designers of the Total Man-Made Environment, must not be forfeited. Let us begin to deserve the self-appropriated privilege through principled action.

You have taken the giant step along such a path. I fervently hope that others of stature and respectability among architects will follow suit.

I thank you.

BERTRAM L. BASSUK New York, N.Y.

Dear Editor: Regarding the Shelter Program and its problems, I have just built a shelter for six people to protect the family of a very celebrated eye doctor, and have just completed plans for another shelter for an executive, an attorney-at-law, of I.B.M. In the latter case, I had all the resources of I.B.M. at my disposal, as well as the results of their research and thought on the subject. As a matter of policy, I.B.M. plans to have shelters in their new buildings—in particular, the big offices now building at Armonk, New York.

All seem agreed that nothing can protect you from a direct or near direct hit. They make no attempt to protect from blast. Shelters are only designed to protect from the radiation of fall-out. When the radioactive particles of dust fall back to earth they give up their deadly load of radiation. After about two days it may be safe to come out. Shelters are planned for a two-week stay. Without some sort of shelter, you do not have much chance for survival. Armonk is about 50 miles from New York City: it is figured that, with a direct hit on New York, the people living in Armonk would have about one hour to get into their shelters after the blast.

The very thought of atomic war is so

horrible that most people dread even to think about it. However, the thought of a cyclone or a tornado is also a terrifying thing. People who live in the western United States have learned to build "cyclone cellars," or caves into which they can run when they see a storm coming. These storm cellars may have saved many lives, and most farmers build them. Who can tell whether it is worthwhile to have a "shelter"? I, for one, am perfectly happy without one.

In any case, the architect, as you have said, designs for protection and not for "destruction." The technical aspects involve, as you say, impossible assumptions. However, it gives the client a little peace of mind and adds another status symbol to his collection. No harm is done, and I can see no reason why an architect should not build shelters for people, provided he tells them beforehand how useless he thinks they are.

From fear and pride, and other emotions not so noble, man is building monstrosities every day when he could do much better things with his money. Can architects change man's essential nature? To try to improve man's environment in a developing world is an ideal to which every dedicated architect would subscribe, but, as in so many other ways, we are forced to face reality: to "make what we want out of what we have."

T. LOFTIN JOHNSON Mount Kisco, N.Y.

Dear Editor: The statement by a group of architects regarding the "Shelter Program" has been long due. It is gratifying that at least a segment of the profession is beginning to realize that it cannot stand on the sidelines while the greatest threat to the continuation of life on this planet is poised perilously above us all. I hope this statement will be given the widest publicity throughout the profes-

sion and in the press.

EDWIN J. ROBIN New York, N.Y.

Dear Editor: Congratulations on the courage of your group statement regarding shelters. I think you are right. Designing a bomb shelter would be similar to designing a gallows if one were against capital punishment.

WILLIAM LOGAN Spokane, Wash,

Dear Editor: The "P.S." in the May issue has convinced me more than ever that Thomas Creighton knows what it is all about. Your feet have been—and are —where they should be, and I wish that



#### Five new wood grains enhance Panelyte's\* growing Designer Line

To Panelyte's Designer Line come five new and distinctive wood grains. Five splendid additions bringing our total of authentic wood varieties to *sixteen*. Each capturing the timeless beauty of wood in the permanence of Panelyte. For the *textural* quality, as well as the luxury *look* of wood, specify Panelyte's special Lo-Glo finish. Panelyte's Designer Line now numbers more than forty elegant solids, rich wood grains, authentic marbles, and striking patterns including new Canterbury. It's your line, specially selected to meet today's—and tomorrow's exacting requirements of architects and designers. See it for yourself, and you'll see why Panelyte is now, more than ever, America's style leader in decorative laminates. \*Panelyte is a registered trademark of St. Regis Paper Company for decorative laminates.



the same were true among the hucksters, who ply upon war scares and other tragedies to fatten their coffers.

The comments on the "Shelter" Program indicates that this group's reading transcends the literature put out by the Military-Industrial Complex, which minimizes the effects of fall-out and accepts the murder of millions through radiation as inevitable.

I wish more architects could be persuaded to read articles by eminent scientists in magazines like the Bulletin of the Atomic Scientists, Scientific American, instead of the average newspaper, so that they might come to recognize that (as you stated it) "planning for destruction is an architectural contradiction," and that "planning for atomic destruction is an architectural absurdity."

> JOHN G. C. SOHN Indianapolis, Ind.

Dear Editor: The argument opposing the Shelter Program is twofold: (1) the problem is intellectually insoluble due to (a) conflicting technical data, and (b) difficulty in making the necessary assumptions regarding design criteria; and (2) the act of constructing shelters is morally reprehensible because (a) it will encourage war, and (b) the money devoted to shelters should be used to "improve man's environment."

The first part of the argument is easily disposed of. Indeed, it is so unsubstantial that it falls of its own weight. Is there any technical aspect of architecture on which the data is not conflicting? This has not caused architects to suspend their work. The data must be evaluated in the light of the architect's knowledge and the validity of the sources. Certainly design assumptions are difficult to make. Nevertheless, the ones cited are not impossible to make, given the region in which the shelter is to be located. The information is available. The question, then, is not the difficulty of the problem, but rather whether architects are competent to solve it. I think they are.

The second part of the argument is more interesting. Should architects involve themselves in an activity that is immoral? No, of course not. However, you fail to demonstrate the immorality of shelter building. Granted that the purpose of architecture is the development of civilization; granted that war destroys what civilizations have built; it does not follow that the construction of shelters is an "architectural contradiction." It is obvious that the possibility

of nuclear war exists. The recognition of this fact does not constitute "planning for destruction." A shelter program would not be an act that would precipitate such a conflict. It could, in fact, reduce the probability of an attack, and, should there be one, attenuate its effect upon the people.

The architect's participation in the planning and execution of a program to protect the population from this catastrophe is neither immoral nor a denial of his commitment to the advancement of civilization. The continued existence not to speak of the improvement—of our civilization is threatened. We are obligated to defend it.

> GORDON L. STICE La Cañada, Calif.

Dear Editor: I agree that the architect has an obligation to his client beyond the purely contractual obligations, and I am glad that you, an important representative of the architectural profession, have taken the lead in questioning the effectiveness of the proposed Shelter Program.

It seems to me there is confusion when people speak of saving America. What do we mean? What are we saving: our mountains, our rivers; "our way of life"; our people?

As to our big and wonderful land— I do not think that anyone really means that the Rocky Mountains, or the Great Lakes, or the Hudson River will be destroyed.

"Our way of life"—that's another story. Down South, on a recent business trip, the question of H-bomb shelters came up.

Shall we build "separate but equal" shelters for the Negro? If we do, will that "way of life" prevail after the holocaust? If, on the other hand, "separate but equal" is rejected and white and black plan to live together underground, why not above ground?

I suggest that the Southern shelter building dilemma be resolved by building to live together above ground. I think that would be much more effective as a measure for survival in the world-wide ideological competition than any conceivable underground shelter. "Underground shelter" is a contradiction in terms.

> LOUIS H. FRIEDHEIM New York, N.Y.

#### Personality of the House

Dear Editor: Congratulations on the MAY 1962 P/A ["Personality of the

House"]. It is encouraging to see a little less of "less" and a little more of "more." ALEXANDER STUART Owensboro, Ky.

Dear Editor: Thank you so very much for the May issue on "The Multifarious Life." So handsomely done, so varied, and comprehensive—but above all, what a stimulating thing it is and how very encouraging and exciting to have a glimpse of all that is to come from the younger men.

May I express, through you, my tremendous appreciation for the work of Herb Greene and John Johansen. It is doubly good that such strong and valid conviction has expressed itself in three dimensions.

> HENRY HILL San Francisco, Calif.

Dear Editor: The MAY 1962 P/A is an outstanding issue. We are particularly impressed with Norval White's design. J. MORGAN COX Canton, Obio

Dear Editor: May I congratulate you and your editorial staff for the very fine May issue of P/A. Aside from Herb Greene's house, I was struck with the general lack of originality in house design today. We expect naturally to find the vernacular of Wright and Mies.

However, you have reported accurately and thoroughly on house design as of now and have contributed a valuable issue to the architectural profession.

> JOHN M. JOHANSEN New Canaan, Conn.

#### **Begs** to Differ

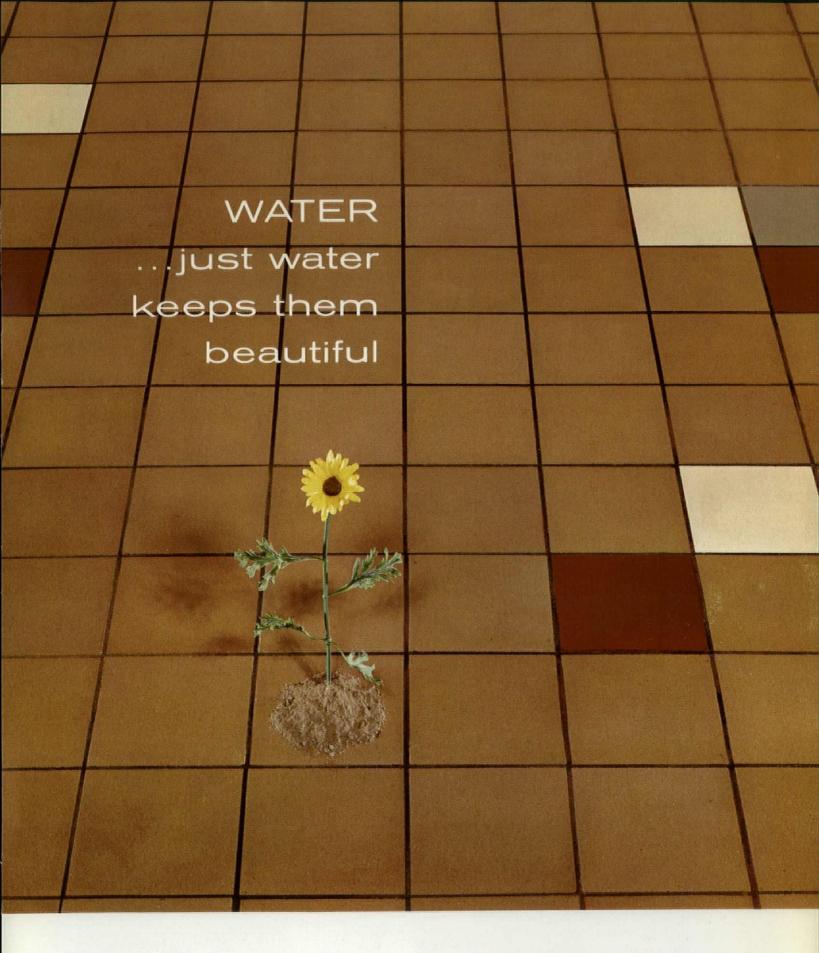
Dear Editor: Reference is made to your news item in the May 1962 P/A, titled "Architecture In Decline."

Unfortunately, the series of symposia at the Museum of Modern Art did not contribute anything to architecture. Louis Kahn's unprepared statement perhaps did.

> MICHAEL RUBENSTEIN New York, N.Y

#### Errata: Century 21 Coliseum

In the MARCH 1962 P/A, credits for the structural design of the Century 21 Coliseum (p. 180) were ambiguously, if not improperly, stated. Full structural design credits go to the firm of Peter H. Hostmark & Associates, of Seattle. Additional engineering computations performed in connection with the construction of this building were only those commissioned by subcontractors in order to allow the use of their proprietary materials of construction.



Beautiful Summitville quarry tile is stain and scratch-resistant, fire-proof and fade-proof and practically maintenance-free. Quarry tile never needs waxing, sealing or replacement due to dents caused by heavy furniture or "spike" heels. It is easy to clean and keep clean with simple "washing" techniques.

Summitville Quarry Tile is available in six 'earth' colors and a wide variety of textures and patterns.

See your local Ceramic Tile Contractor or write for the full story. SUMMITVILLE TILES, INC., Summitville, Ohio.

# SUMMITVILLE QUARRY TILE

MEMBER: TILE COUNCIL OF AMERICA, INCORPORATED



Burnham & Root's Reliance Building . . .



... and Monadnock Building



## A Genuinely Great Critic

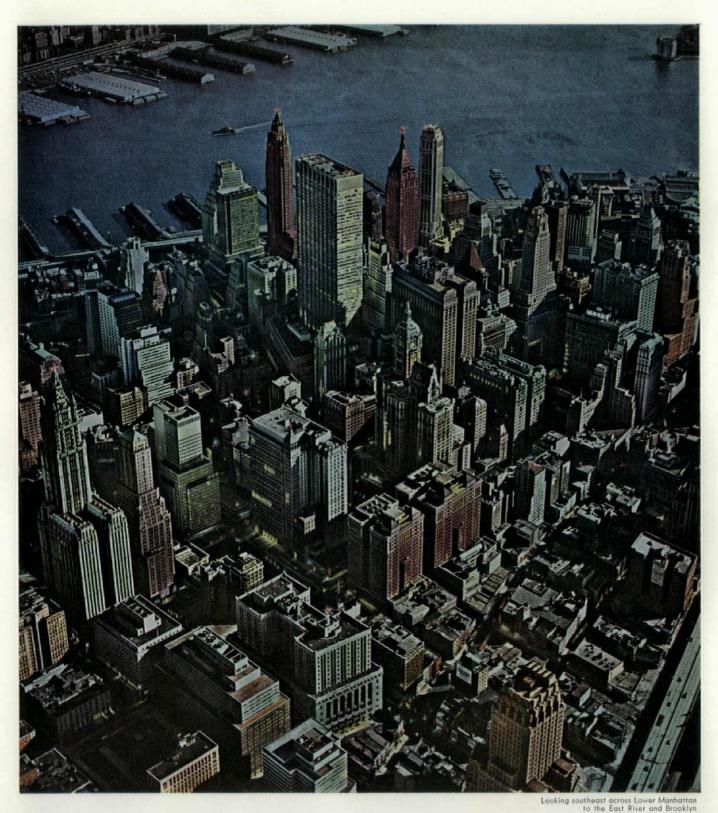
#### BY LEONARD K. EATON

AMERICAN ARCHITECTURE AND OTHER WRITINGS, by Montgomery Schuyler. Edited by William H. Jordy and Ralph Coe. Published by Harvard University Press, Cambridge 38, Mass. (1961, 664 pp., 2 vols., illus. \$12.50). Reviewer is Associate Professor of Architecture at the College of Architecture and Design, University of Michigan.

These two handsome volumes, part of the John Harvard library, are a praiseworthy effort to make basic materials on the history of American culture available to a wide reading public. Although the name of Montgomery Schuyler is not well known today, he was, historically unquestionably America's speaking, greatest architectural critic. A descendant of that old Dutch stock that has contributed so many men and women of note to American life, he was born in 1843 in Ithaca, New York, into a clerical family. Attending Hobart College briefly, he moved to New York City at the close of the Civil War and there joined the staff of the old New York World, where a gifted editor, Manton Marble, had assembled an exceptionally talented group of writers. Although Schuyler remained essentially a journalist for the rest of his life (he died in 1914), his chief importance is as a contributor to the Architectural Record, whose staff he joined in 1891, and to a variety of other periodicals as well, notably Brickbuilder, Scribner's, and Harper's Monthly. His life thus spanned many of the most fas-

cinating and controversial developments in the history of American architecture: the rise of H. H. Richardson and his school, the creation of the skyscraper and the "prairie style" in Chicago, and the nationwide triumph of Beaux Arts reaction after the World's Fair of 1893. On all these phenomena, Schuyler commented with sharp perception.

Professor Jordy, of Brown University, and Ralph Coe, of the William Rockhill Nelson Gallery of Art, have supplied a lengthy introduction, and since this essay is likely to be the standard evaluation of Schuyler's work for some time to come, it is this reviewer's first concern. The authors perform their chief service in tracking down the frequently arcane allusions that are scattered throughout Schuyler's writings and in analyzing the sources of his critical position. His basic tenets, they find, derive from Ruskin, Viollet-le-Duc, and somewhat surprisingly, Leopold Eidlitz, a New York architect of the Gothic revival, and author of an important but exceedingly turgid book entitled The Nature and Function of Art (New York and London, 1881). It was Eidlitz and Viollet who gave Schuyler his understanding of structural expression as the basis for architecture, a conviction from which he deviated only slightly during the course of a long and complex career. "There was Ruskin's painterly approach to picturesque massing and frank exploitation for properties inherent in them, together with the discipline offered Continued on page 190



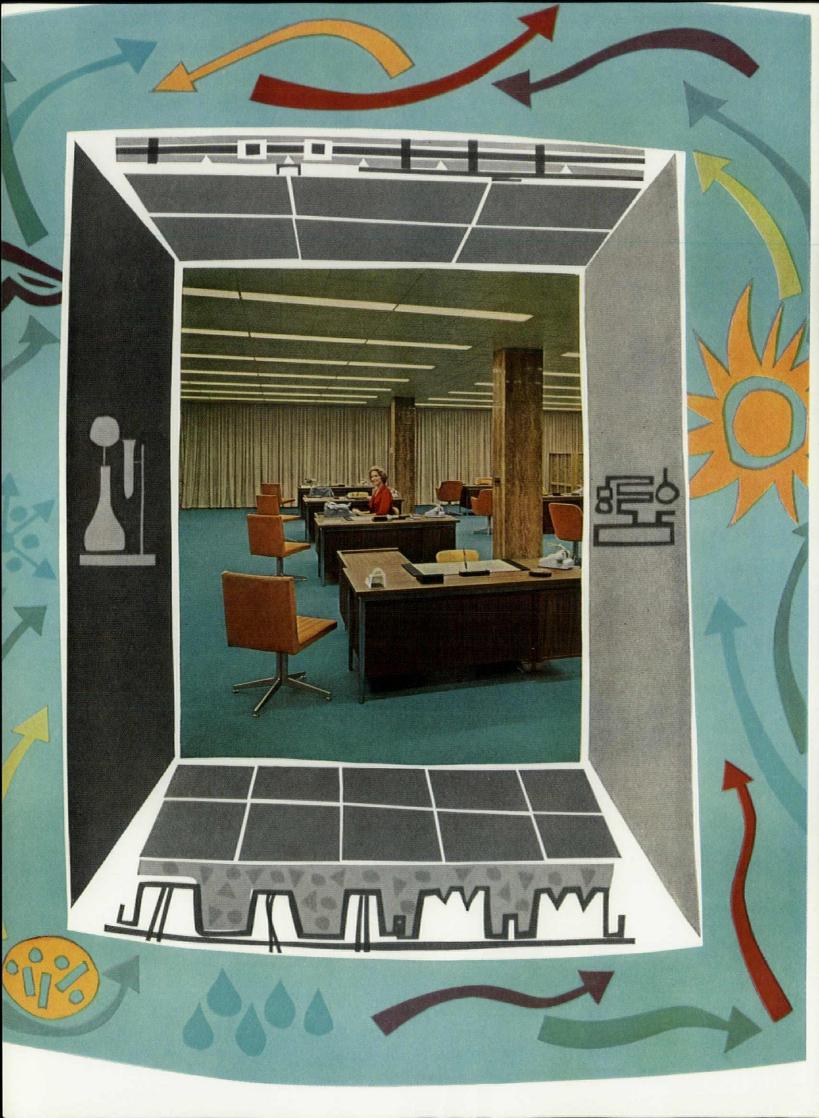
**NEW YORK CITY** elevator riders know that AUTOTRONIC<sup>®</sup> elevatoring by OTIS delivers a predictable performance. It doesn't require correction or experimentation after installation because of inadequate planning or performance. It goes far beyond simply taking the operator out of the car and substituting limited automation. It provides 'seconds away service' – a magnificent service made possible by the exclusive OTIS combination of traffic speeding OTIS Electronic Doors and completely AUTOMATIC traffic supervision. For busy office and institutional buildings – large or small!



to the cast kiver and brooklyn



AUTOTRONIC<sup>®</sup> OR ATTENDANT-OPERATED PASSENGER ELEVATORS + ESCALATORS + TRAV-O+LATORS + FREIGHT ELEVATORS + DUMBWAITERS ELEVATOR MODERNIZATION & MAINTENANCE + MILITARY ELECTRONIC SYSTEMS + GAS & ELECTRIC TRUCKS BY BAKER INDUSTRIAL TRUCK DIVISION



# BREAKTHROUGH IN OFFICE COMFORT CONTROL

New Inland Integrated Air Floor System provides COMPLETE CONTROL of indoor climate ..... and at LOWER COST than conventional systems.

A new concept in the control of indoor comfort has been developed by Inland engineers. It is a practical, economical system which controls environment *completely*, at costs considerably less than those of conventional heating and air conditioning systems.



The new Inland Integrated Air Floor System combines the functions of four time-tested components to provide simultaneous control of: (1) temperature of air and room surfaces, (2) relative humidity, (3) air motion, (4) bacteria content. What this means to employers and employees alike is clear: better working conditions, increased effectiveness, less absenteeism.

Because it is designed as part of the building, the Inland IAF System delivers all of its benefits at significant savings, both in first and operating costs. Furthermore, it offers the designer new freedom in the creation of healthful, efficient, comfortable interior spaces.

How is this possible? Three years of Inland re-

search have combined (1) a Burgess-Manning radiant ceiling system<sup>\*</sup>, (2) a Kathabar chemical air conditioner<sup>†</sup>, (3) a standard refrigeration plant and (4) Inland Hi-Bond Celluflor, into an integrated system. The functions of all four harmonize to increase the efficiency of each and to reduce total costs considerably.

Use of radiant ceiling panels and a chemical air conditioner cuts the need for outside air to a fraction of that required by ordinary systems. As a result, all of the circulated air can easily be carried in the cells of Inland Celluflor, with ample room left over for power and signal lines. Building design can be more compact — less space wasted between floors and smaller areas devoted to mechanical equipment. Savings in construction and building materials are significant.

Space is too limited here to explain how the Inland IAF System works, but a sound-slide program has been prepared which tells the story quickly and meaningfully. If you would like your organization to see this program, please write the Milwaukee address listed below or call your local Inland office.

> \*Burgess-Manning Company, Libertyville, Illinois, †Surface Combustion Div., Midland-Ross Corp., Toledo, Ohio. EF-25



Inland Steel Products Company Engineered Products Division DEPT: G, 4069 WEST BURNHAM STREET • MILWAUKEE 1, WISCONSIN

ALBANY, ATLANTA, BALTIMORE, BOSTON, BUFFALO, CHICAGO, CINCINNATI, CLEVELAND, COLUMBUS. DALLAS, DENVER. DETROIT, FREMONT, CALIF., HOUSTON, INDIANAPOLIS, KANSAS CITY, MO., LOS ANGELES, NEW ORLEANS, NEW YORK, OMAHA, PHILADELPHIA, PITTSBURGH, SALT LAKE CITY, SAN FRANCISCO, SEATTLE, ST. LOUIS, ST. PAUL, TULSA



# 20 job-proved ways to speed work, prevent callbacks with 3M Adhesives!

At 3M, ways to improve today's best construction adhesives are always under study. From continuous research and testing, both in the lab and on the job, come the latest 3M Brand Adhesives and Sealers for many building needs. For many requirements, 3M provides a choice of adhesive formulations so you can match performance features and application advantages exactly to the job at hand. Here are 20 of these adhesive products—all proven installation moneymakers because they speed work, help stop callbacks before they happen.

#### FOR COUNTER LAMINATES

New "FASTBOND" 10 Contact Cement combines these 10 most-wanted features: up to 100 degrees extra heat resistance; dries ready for bonding in 10 minutes or less; over an hour open time; grips tight, even with warped laminate; waterproof; ultra-thin glue line; strengthens with age; ready for finishing as soon as bond is made; no irritating odors; applies easily with brush, trowel, roller.

New "FASTBOND" 5 Contact Cement provides the advantages of "FASTBOND" 10 in sprayable form. Ready to bond in 5 minutes, 30-minute open time.

#### FOR GYPSUM DRYWALL

*New 3M Brand Drywall Joist/Stud Adhesive*, for single ply installations, reduces nailing by 50% or more—minimizes "popping," spackling. Applies with caulking gun, 30 minutes completion time.

New 3M Brand Drywall Contact Cement provides instant bond strength for laminating 2-ply wallboard constructions. No nails, no shoring, even on ceilings. No fumes, odors or fire hazard. Dries in 5 minutes, changes color when ready to bond, provides up to an hour open time.

#### FOR CERAMIC AND CLAY TILE

*3M Brand CTA-11* bonds clay and ceramic tile to practically any sound, smooth wall surface—provides more than

one ton shear strength per tile. Resists soaps, detergents, high heat.

*3M Brand CTA-12* provides rigid but tough bonds for clay floor tile to plywood, concrete and terrazzo floors above grade, including radiant-heated floors.

*3M Brand CTA-20* applies easily to practically any sound, smooth wall surface—gives four hours open time for bonding ceramic wall tile. Strength exceeds 1,500 pounds per tile.

CTA-11, CTA-12, CTA-20 carry these hallmarks, conform with Spec. CS 181-52.



3M Brand CTA-50, a water-dispersed adhesive, bonds ceramic tile to walls features non-flammability, mild odor, high strength, water resistance, easy workability and clean-up.

#### FOR FLOORING MATERIALS

3M Brand Vinyl and Rubber Tile Adhesive, water-based, adheres linoleum and cork as well as vinyl and rubber materials to wood or concrete above-grade floors, even radiant-heated ones. Ready to bond in 5-20 minutes.

3M Brand Wood Block Flooring Adhesive bonds laminated wood block flooring to above-grade concrete slab and wood floors. Fast drying, water resistant —gains strength rapidly. May be used on radiant-heated floors.

3M Brand Cove Base Adhesive bonds rubber, vinyl, asphalt cove molding to any sound, clean foundation material. Sets quickly, holds base in place immediately—no shoring needed.

#### FOR CURTAINWALL, OTHER EXTERIOR SEALING NEEDS

WEATHERBAN® Brand Sealer, in 4 colors, adheres strongly, cures without shrinkage to a solid rubber seal that

flexes, stretches, compresses with wall movement. Cushions glass against breaks and cracks, defies even torrential rains. In actual installations, this sealer has remained flexible, even after 15 years exposure. Available in black, aluminum, gray, and off-white colors.

#### FOR DUCT JOINTS

3M Brand Duct Sealer 800 Premium Grade provides long-lived, trouble-free seals for high-velocity heating and air conditioning systems. Resists water, oil, fuel, continuous heats up to 200°F, intermittent exposure up to 250°F! Skins over in 5 minutes, becomes tack-free in an hour, attains full hardness in 1 to 3 days.

3M Brand Duct Sealer Standard Grade meets critical established specification requirements at an economical price. For medium to high velocity systems. Drying characteristics similar to Duct Sealer 800.

#### FOR INSULATION

3M Brand Insulation Adhesive Fast Drying provides economical, high coverage, withstands heat to 180°F. Brushed on, a gallon covers 200 square feet. Bonds batt-type, other low density insulation materials.

3M Brand Insulation Adhesive Tacky withstands temperatures to 250°F, is highly resistant to steam, water. Especially recommended for low density fibrous glass insulation.

3M Brand Insulation Adhesive Nonflammable is water-dispersed, eliminates danger of fire, even near open flames, welding, sparks, other hazards. When dry, adhesive is flexible, highly water resistant.

See your nearby 3M distributor! He can provide complete data on these and other 3M Adhesive products for construction use—help you select the ones "just right" for your requirements. Or see Sweet's Catalog or write AC&S Division, Dept. SBC-72, 3M Company, St. Paul 1, Minn.

"WEATHERBAN" IS A REG. TM OF 3M CO.



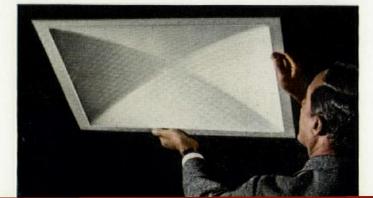
For more information, turn to Reader Service card, circle No. 367

# ACOUSTI-SHELL 3-D CEILING PANELS

MOVABLE PARTITION, J-M HIGHWALLS

CONFERENCE TABLE, J-M COLORLITH

# ACOUSTI-SHELL - new J-M acoustical product-



Acoustical ceilings can now be more than just a plane surface! New J-M Acousti-Shell is a molded unit that rises gently to a 2" vaulted center.

This third-dimensional effect adds both height and interest to virtually any ceiling, as the above photograph demonstrates. The panels also offer excellent sound absorption across the entire audible range.

And because each Acousti-Shell unit is made entirely of fiber glass, it has a flame-spread rating of zero. The base material is sound-absorbing glass fibers . . . the sur-



FLOORING, J-M TERRAFLEX

# brings a true 3rd dimension to sound control!

facing material is a woven fiber glass fabric. These are molded into units 24" x 24" x 2" high, which are of a shelllike thickness about one-third that of flat sound-control panels. Yet they are strong, rigid and easily installed in a simple suspended grid system.

Standard Acousti-Shell fabric colors are white, blue and green. On special order, however, the surface fabric may be dyed in a wide variety of colors or can be printed with custom designs.

The new Acousti-Shell line also includes flat panels for

borders, for areas around columns and beams, for spotlight cut-outs and similar uses.

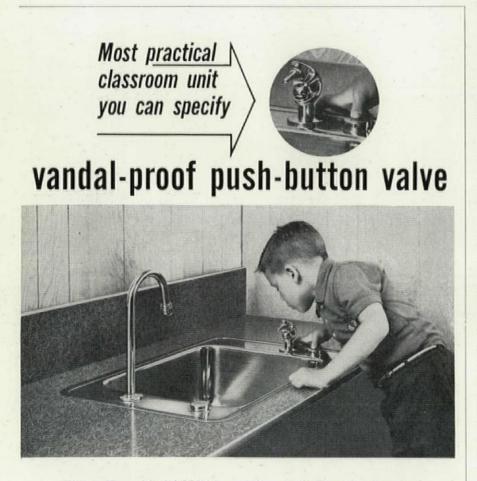
For more information and a look at this unique new ceiling panel, call your J-M Representative. Or write Johns-Manville, Dept. PA-762, Box 158, New York 16, N. Y. In Canada: Port Credit, Ont. Cable: Johnmanvil.



#### Continued from page 182

by the architectural breadth of Richardson's composition. There was the structural, functional, and organic bias of Eidlitz and Viollet-le-Duc. Underlying this cluster of ideas, there was the desire that architecture should possess a 'reality' or 'objective beauty' transcending fashion, formalism, and eclecticism, that modern buildings be 'ideas' resonant with the life which produced them" these were the sources of the Schuyler point of view.

The chief difficulty of the editors is a curious lack of sympathy for their subject. Despite their protestations of historical objectivity, they generally evaluate Schuyler's criticism in modern terms. Themselves partisans of the curtain-wall structures of the 40's and 50's, they are irritated with Schuyler's preference for Burnham & Root's Monadnock Building over the firm's Reliance Building; the Monadnock, of course, is a giant masonry slab, the tallest bearingwall structure ever built in the United States, while the Reliance clearly foreshadows Lever House and the Seagram Building. In similar fashion, they are angry with Schuyler because he did not



This is Haws Model 2284 in stainless steel—featuring the new Haws push-button valves that send vandalism worries down the drain! Slow-closing valves work smoothly under slight pressure: can't be jammed or pried. And the gooseneck is extra-heavy 3/s" brass pipe: even you can't bend it! Same valves available on all Haws receptors, including enameled iron. Ask for the specs: write for details on Haws push-button valve.



HAWS DRINKING FAUCET COMPANY 1441 Fourth Street • Berkeley 10, California For more information, turn to Reader Service card, circle No. 346 pay sufficient attention to the work of the Greene brothers, Irving Gill, Bernard Maybeck, or the Chicago school other than Sullivan and Wright. "The polite world of the New York litterateur," they write, "smothered the critic which Schuyler might have been. Very rarely did the most creative work of the period penetrate his well insulated environment." This reviewer, on the contrary, would hold that it was precisely this genteel background that enabled Schuyler to approach the most radical work of his time with an open mind. His social position was so well established, his lineage so impeccable, that it did not matter if he showed a pronounced skepticism about the classic revival and the works of McKim, Mead & White, preferring to trust in the vitality of wild men from the West like Sullivan and Wright. To say that he should have gone farther than he did is to misunderstand the historical situation. One is reminded of Henry-Russell Hitchcock's famous reproach of 1929 to Frank Llovd Wright that he had failed to learn from the leaders of the International school. The same moralistic fallacy is evident in both comments.

Having treated Schuyler's point of view, Jordy and Coe group the reprints of his work under six major headings: the Heritage of Victorian Gothic, the Richardsonian Interlude, Bridges: Rationalistic Engineering, Skyscrapers: Rationalistic Architecture, the Beaux Arts Reaction, and Late Sullivan and Early Wright. Although the contemporary architect will probably be most interested in Schuyler's remarks about the great pioneers of the Chicago school, there are many other choice bits of criticism that should not be missed. Schuyler was the first American to take bridge design seriously, and his remarks on the important bridges of his time are well worth reading. He was particularly acute in his analyses of the relation of bridge to townscape; in this respect it is a shame that the editors did not see fit to include Schuyler's treatment of the bridges of Pittsburgh, part of his admirable 1911 article on the architecture of that city. They are to be congratulated, however, on their decision to reprint in its entirety his famous "Last Words about the World's Fair" (1894). Surely no finer criticism of exhibition architecture has ever been written. Schuyler saw with startling clarity both the strong point of the fair-its superb grouping of monumental buildings-and the disastrous consequences that might ensue if their Continued on page 194



Acrylic shields extruded of Du Pont LUCITE stay crystal clear year after year, while non-acrylic plastics have a natural tendency to turn yellow. One measure of comparison is the tolerable yellowing factor specification by the Society of the Plastics Industry. The Society was able to set a yellowing factor for acrylics only one-fifth as high as for non-acrylics, even after the acrylics had been exposed to UV light twice as long... In effect, a yellowing of less than one-tenth that of non-acrylics. To get the most light-stable product for the lighting fixtures in your building, always specify shields made from Du Pont LUCITE acrylic resin.

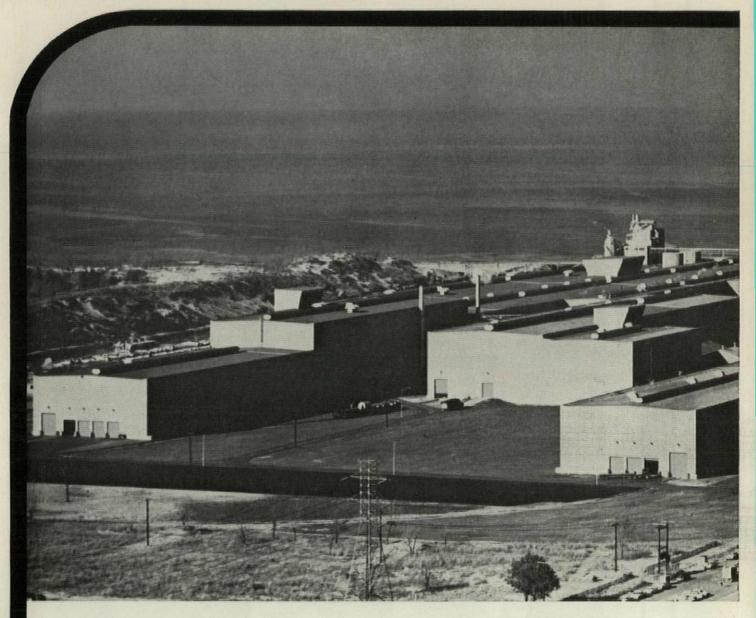
Lighting fixture by Lightolier, Inc., Jersey City, New Jersey, with "Prismalux" one-piece lens-diffuser extruded of LUCITE by Plaskolite, Inc., Columbus, Ohio. PLASTICS DEPARTMENT **OUPOND** 

SEND FOR MORE INFORMATION

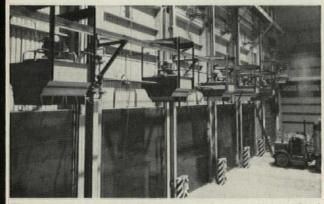
	0					100	
	U					-	
	0						
	Ĕ					- 112	
		-				-	
	65					53	
	2						
						S	
	44						
	0				100		
00	01				100		
D	+1 14						
	e z				-		
; m	-						
2 60	A C				1000		
- h-	S E						
	0 -						
: 9	T D				2		
ξE	00 00						
- E	6 6		1.20				
SZ	13 10		1.0				
a management					1		
9 . 0	to o						
	00						
	- >						
NO A	1 K					1.00	
9 2	3 8	*					
CD CD	0 "						
EG	> C	*					
	77 (7)					1	
i O m	2 4					134	
22.00	41 10		*				
	10 07						
N F	~ ~		- t.	28.			
10	0 0	•		2			
NE	47 67		C	5	40		
10.2	0 0	-	0	0	5		
3	0 0	e	100	0.	e		
34.	<ul> <li>Please send your lighting booklet.</li> <li>Please ask an acrylic-sheet manufacturer to co</li> </ul>	Name	Position.	Company	Address	CityState	
	hate hate	10	S	ö	H	5	
	<b>D D</b>		0	~	2	25	
Dept. PZ-7, Room 2507L, Nemours Bldg., Wilmington 98, Delaware	LL	-	Lin	0	1	0	

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY For more information, turn to Reader Service card, circle No. 339

#### DOORWAY TO TIME CONTROL



# How to save more man-hours with

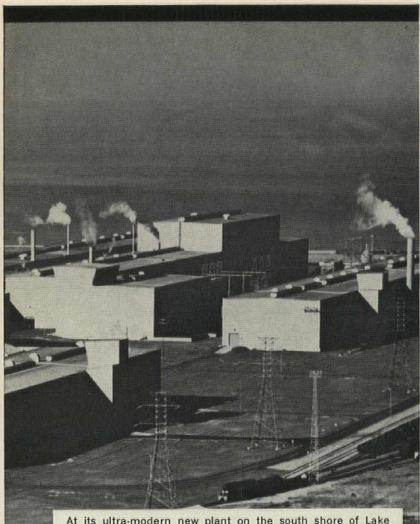


Bank of five steel "OVERHEAD DOOR" installations at Midwest Steel Division plant converts factory sidewall into a "movable wall," and provides control of traffic, time, space and climate. The saving of man-hours can be a function of The "OVERHEAD DOOR," just as surely as it helps control traffic, space and climate through its "movable wall" function.

Motorized, push-button doors contribute importantly to this time-saving. And completely automated doors operated electronically, can contribute even more. For example, a fork-lift driver may take 75 seconds to open and close an industrial door. At an average of one opening-and-closing per half-hour, 16 cycles per day per door, and a \$2.25 wage rate, driver downtime alone can cost industry \$183 per door per year!

When you multiply \$183 by many doors, you can see the yearly savings possible with the automated "OVERHEAD DOOR."

Besides man-hour savings and weather protection, both motorized and electronic "OVERHEAD DOOR" in-



At its ultra-modern new plant on the south shore of Lake Michigan at Portage, Indiana, Midwest Steel Division of National Steel Corporation utilizes 38 motorized units of The "OVERHEAD DOOR." All doors are 16-gauge steel, built to withstand 150mph winds. Architect: Swindell Dressler.



Driver has pulled cord, and "OVERHEAD DOOR" is moving up in Air Express building at Atlanta's new airport. Immediate door operation permits tractors to pull package-laden carts into and out of building, quickly and efficiently, saving many man-hours.



Automatically-operated, upward-acting, expandedmetal gates by "OVERHEAD DOOR" are used in this pigeon-hole parking structure at Columbus, Ohio. Representing the newest in car-park automation, this driverless "file system" depends on The "OVERHEAD DOOR" for swift, automatic handling.



Industrial truck and fork-lift operators need, never leave their vehicles as they approach an automated "OVERHEAD DOOR" installation. At the touch of a dash-mounted electronic button, powerful lift mechanism raises the door, or outer gate, speeds traffic flow, eliminates stop-and-go man-hours.

# the motorized "OVERHEAD DOOR"

stallations can provide unlimited ingress and egress at traffic-flow arteries; control strategic expansion or confinement of given shop areas and functions; and safeguard the welfare of employees by closing to preserve warmth in winter, opening to provide full ventilation in summer.

#### GET THE COMPLETE STORY NOW

For detailed information, call your local distributor, listed in the white pages. Or write Overhead Door Corporation, the company that engineered and pioneered door automation—and originated upward-acting sectional doors for industry, commerce and residential building. *General Office and Manufacturing Division*: Hartford City, Ind. *Manufacturing Distributors*: Dallas, Tex.; Portland, Ore.; Cortland, N.Y.;

Hillside, N.J.; Lewistown, Pa.; Nashua, N.H. In Canada: Oakville, Ontario.





#### Continued from page 190

neoclassic style were widely imitated. He was likewise quite correct in calling Sullivan's influential Transportation Building a valiant, if only partially successful, effort to grapple with the difficult problem of a plaster architecture. As the editors indicate, this essay is a real masterpiece in the complex genre of architectural criticism.

In sum, these volumes should restore and even enhance Schuyler's reputation. Despite the somewhat niggling quality of the introduction, he appears as a singularly attractive personality and an exceptionally far-seeing critic. No man of his time had a finer perception of the creative forces that were at work and of the true nature of the currents that were challenging them. Probably his final word on the Beaux Arts reaction is contained in the superb spoof entitled "Architecture Made Easy." This piece can still stand as a rebuke to the deplorable tendency to rehabilitate neoclassic design, which is abroad in some quarters today. If his vigor flagged somewhat at the end of his life, he can certainly be forgiven for becoming a bit tired after passing the age of 60. Even in 1912, at



For more information, turn to Reader Service card, circle No. 397

69, he still had enough energy to write the following memorable lines in a review of the great Wasmuth publication of Frank Lloyd Wright's buildings: "Meanwhile, it is hard to see how an unprejudiced inquirer can deny that such designers as Mr. Sullivan and Mr. Wright have the root of the matter, and that their works are of good hope, in contrast with the rehandling and rehashing of admired historical forms in which there is no future nor any possibility of progress." Great criticism, Mies van der Rohe has observed, is as scarce as great architecture. We should all be grateful to the Harvard Press and to Messrs. Jordy and Coe for making available these selections from the writings of a genuinely great critic.

#### **Rigor Mortis of CIAM**

New FRONTIERS IN ARCHITECTURE by Oscar Newman. Published by Universe Books, Inc., 381 Park Ave. South, New York 16, N. Y. (1961, 224 pp., illus. \$15)

In the fall of 1959, over 40 architects ventured to the Dutch town of Otterlo for a meeting organized by CIAM's Team X. Wendell H. Lovett and Louis I. Kahn were the only U.S. architects present. This book, the first of a series called *Documents of Modern Architecture*, is a selection of the work shown at Otterlo by the pilgrimaging architects. Also included are the discussions that followed each presentation, and a summary of the happenings at this and at previous CIAM congresses.

The work and the discussions point clearly to the irrevocable split of the CIAM fraternity into factions, and to the death of modern architecture as a single ideology. The schism is perhaps best illustrated by an exchange between a sympathizer with the old-guard philosophy and a "non-conformist":

Jerry Soltan "The previous generation of CIAM people fought a clear-cut opposition —an external enemy. Our task is to fight the interior enemy—the brother modernist. The fight of the previous generation may have heen more heraldic—our task requires far more moral strength. If a new CIAM is to exist, this will be its task. The aim of the new CIAM should be twofold: to help in the development of some really worthwhile ideas on the basis of the principles established by the previous CIAM, and to unmask those claiming to be modern but who are in reality thriving on that which is base and superficial in human nature."

Aldo van Eyck: "You can go to Amsterdam and drive for hours through kilometres of *Continued on page 199* 

#### Continued from page 194

funktionelle Stadt made up of the four keys of CIAM—but you cannot live there. That is our enemy. The enemy is this terrible, rational one-track mind. In Dubrovnik some people said: 'Let us have no more mystical talk, no philosophical talk, no vagueness.' And I remember saying, 'Nous avons le droit d'être vague.' It is the people who are always so clear, who always know exactly where clarity is, they are the ones who are always so vague—so frightfully vague and the result of all that vagueness is an uninhabitable form of living. I think that is our enemy. Our enemy is the immediate CIAM past."

No wonder then that the introduction to the book refers to the Otterlo conference as perhaps the last of CIAM congresses.

J.C.R.

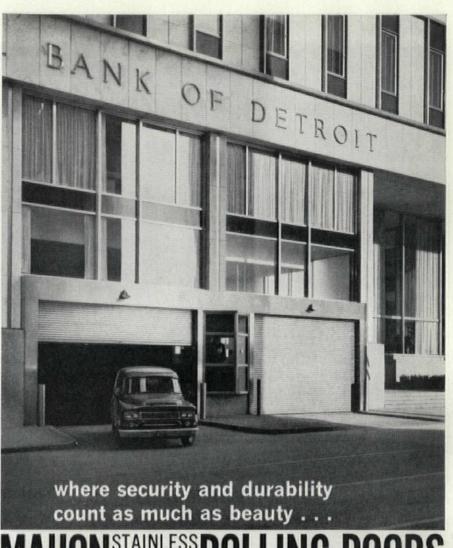
#### Urban Growth and Change

MEGALOPOLIS: THE URBANIZED NORTH-EASTERN SEABOARD OF THE UNITED STATES by Jean Gottmann. Published by The Twentieth Century Fund, 41 E. 70 St., New York 21, N.Y. (1961, 810 pp., maps, charts, tables, \$10)

In this important work, Jean Gottmann, a distinguished geographer, member of the Institute for Advanced Study at Princeton and professor at the University of Paris, analyzes the developing pattern of linked urban areas that line the East Coast from the Merrimack River in the north to the Potomac in the south. This urban region, which has also been called Inter-urbia and the East Coast City, is named Megalopolis by Gottmann, after an ancient Greek settlement whose optimistic founders hoped that it might become the world's greatest city.

The author's purposes are threefold. First, to identify the megalopolitan phenomenon as a real and essentially unique situation. Second, to examine its characteristics and the patterns of life and development created by an urban area with nearly 40 million inhabitants. And lastly, to draw some tentative conclusions about this new form of urban organization, which may soon be rivalled by comparable settlements elsewhere in the world. In all of these aims, he succeeds admirably, despite the magnitude of the task of even describing this enormous entity in any detail.

Aided by a multitude of maps and charts, this astute French observer examines the origins of Megalopolis, its changing approach to land use (in the broadest sense), the economic organization of the region, and its amazingly complex governmental and population *Continued on page 202* 



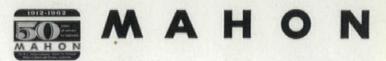
# MAHONSTEEL ROLLING DOORS

Bankers are pretty touchy about security—and why not? Their inventory is money which must be protected at all times. And how about your inventory? Maybe it's just as attractive as money. If you, too, have valuable property to protect and yet need fast, easy access to it, a Mahon Rolling Door could be your answer. We make them in steel or aluminum—natural or colored finishes—motorized or hand operated in whatever size you need. Drawings of each door are numbered and filed so that replacement parts can be quickly provided.

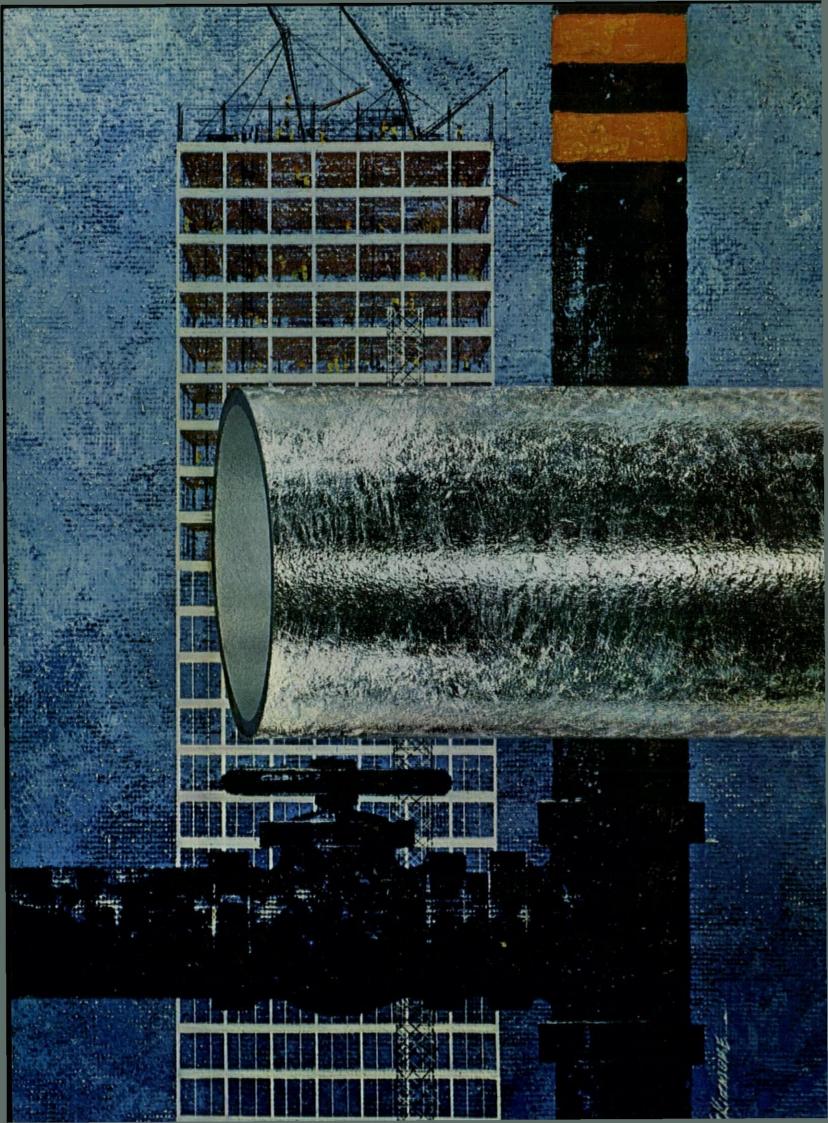
Mahon has almost 40 years experience in designing, fabricating, erecting and servicing rolling doors for industry, institutions and commercial buildings. Whether your need is for new construction, remodeling or replacement . . . "make it Mahon." Write for Catalog G-62 or see Sweet's Files.

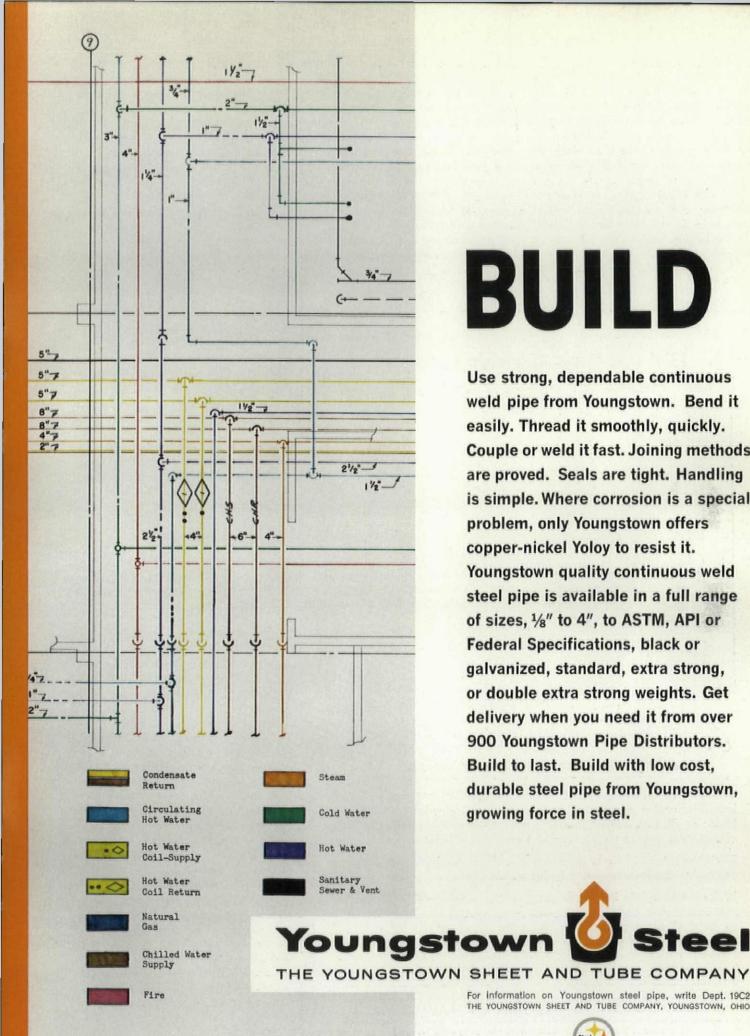
#### THE R. C. MAHON COMPANY

6565 E. EIGHT MILE ROAD, DETROIT 34, MICHIGAN Manufacturing Plants—Detroit, Michigan and Torrance, California. Sales-Engineering Offices—Detroit, New York, E. Orange, N. J., Cleveland Hts., Ohio, Chicago, Torrance, San Francisco and Seattle.



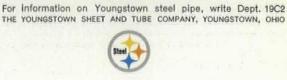
For more information, turn to Reader Service card, circle No. 359





# BUILD

Use strong, dependable continuous weld pipe from Youngstown. Bend it easily. Thread it smoothly, quickly. Couple or weld it fast. Joining methods are proved. Seals are tight. Handling is simple. Where corrosion is a special problem, only Youngstown offers copper-nickel Yoloy to resist it. Youngstown quality continuous weld steel pipe is available in a full range of sizes, 1/8" to 4", to ASTM, API or Federal Specifications, black or galvanized, standard, extra strong, or double extra strong weights. Get delivery when you need it from over 900 Youngstown Pipe Distributors. Build to last. Build with low cost, durable steel pipe from Youngstown, growing force in steel.



#### Continued from page 199

patterns. Far from being horrified by the spread of urbanization along a 500-mile stretch of coast, Gottmann is encouraged by the success of Megalopolis in providing its residents with the highest incomes in the world, and, in many respects, the most stimulating of social and intellectual environments. In the region's impressive state of economic well-being for an intensively settled population, he sees hope for comparable success in other densely settled portions of the world.

The lessons to be learned from this

study are many. For the planner, it provides a context heretofore lacking, within which the localized phenomena of urban growth and change can be comprehended. The great diversity of metropolitan and rural land use and economic patterns is clearly illustrated, but at the same time the range of chioce for any single portion of Megalopolis is seen to be limited. The manifold pressures of continental economics and technology provide a framework within which the particular community can make its own decisions. While this context is a limiting factor, the very knowledge of the limits



For more information, turn to Reader Service card, circle No. 389

Zone.

State.

City.

provides a valuable tool for local and metropolitan decision-making.

Gottmann does not accept the arguments of those who fear that great population growth will bring about hardship through a shortage of the essential commodity of land. Rather, he finds that Megalopolis has shown that it is possible to achieve great density commensurate with a high standard of living. Even in the matter of food production, he indicates (with the able assistance of Professor Edward Higbee, author of a fascinating chapter on the agriculture of Megalopolis) that this densely urbanized region is still able to provide a very substantial portion of its own needs. He anticipates a continuation of the dispersion of population at lower densities throughout the region, as in the past, and finds that this dispersed pattern has already converted areas which on casual inspection appear still rural to an exurban form of life with factories and homes diffused through the landscape.

Megalopolis is an excellent introduction to the comprehension of modern urban life, and especially to the understanding of any particular component of the metropolitan region that now lines our seacoast. For those of us who tend to lose sight of the forest because of our concentration on the cutting (or planting) of a particular tree, this transatlantic visitor has provided a worthy overview.

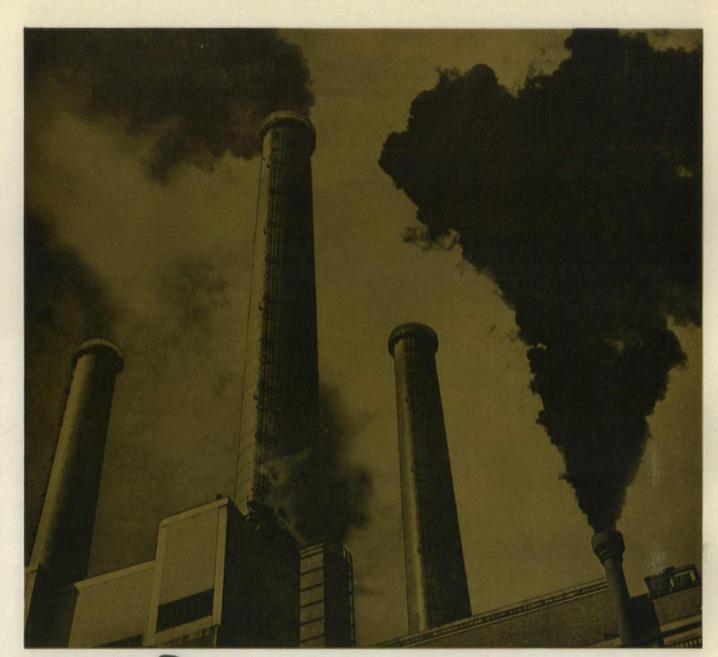
> DAVID A. GROSSMAN The Planning Services Group Cambridge, Mass.

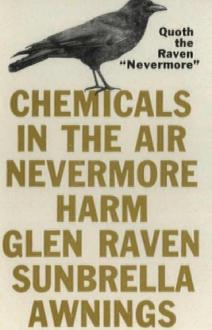
#### **Rationalized Anti-Rationalism**

ANONYMOUS (20TH CENTURY). by Leonardo Ricci. Published by George Braziller, Inc., 215 Park Ave. South, New York 3, N. Y. (1962, 254 pp., \$5)

The clearest expressions of Leonardo Ricci's approach to the vital problems of contemporary architecture occur, in this amiable but not very lucid or coherent book, in a chapter entitled "Town Planning, An Analysis," when he compares his own approach to that of "The Rationalists." The Rationalists, according to Ricci, begin the design of a school by saying: "So many inhabitants, so many children; so many children, so many classrooms; so many classrooms, so many schools," and then, after determining such things as maximum radii, consider the problem solved. At most, he says, they add a brief discussion as to whether the school should have one story or two, or whether each classroom should be built for 25 or for 30 children.

Continued on page 206





When you use SUNBRELLA fabric, made of 100% Acrilan\* acrylic fiber, both homes and businesses enjoy the full beauty of woven awnings . . . confident that chemicals in the air will harm the fabric nevermore . . . not even in heavy industrial areas.

Proof of superiority lies in recent rugged tests. Samples of SUNBRELLA and conventional fabrics were suspended in baths of acids and alkalis. The conventional products deteriorated or were completely destroyed. SUNBRELLA was unaffected. You can depend on an installation of SUNBRELLA anywhere, any weather, any time. \*Reg.TM of Chemstrand Glen Raven Glen Raven Acrilan acrylic fiber CHEMSTRAND

GLEN RAVEN COTTON MILLS, INC., Glen Raven, N. C.

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

New fireproofing system for structural steel dramatically cuts inspection time and costs



# FIREGODE<sup>W</sup>

DIRECT CONTACT FIREPROOFING makes more sense than ever with the development of U.L.approved FIRECODE "V" by United States Gypsum. This spray-on gypsum plaster lets you build lighter with structural steel—eliminates the costly dead weight of reinforced floor slabs. Its use now assures faster fireproofing, with fewer application steps, reducing your supervisory time and expense. It does this at no added cost—in fact, you can usually cut the over-all building cost. Adaptability like this broadens the scope of structural steel in design.

FIRECODE "V" is the lowest-cost way to protect structural steel. It pumps faster, at lower consistencies, than other spray-ons, uses any reputable high-power machine. It provides fire ratings through application thickness alone —no tamping, no special bonding preparations, no repeat inspections and extra supervisory time after each step!

For the full story on FIRECODE "V" Plaster, contact your U.S.G. Representative, or write Dept. PA-25, 300 W. Adams St., Chicago 6, Ill.

ATFS

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

UNITED STATES GYPSUM

the greatest name in building



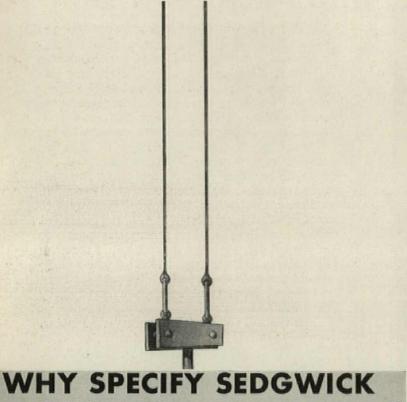
FIRECODE "V" Plaster also sprays directly to corrugated, flat, or cellular steel deck units.

JULY 1962 P/A

Continued from page 202

His own approach is quite different. He asks himself first of all what education really is, and how it should be administered. He then asks himself whether the school, as a building, is not bound to disappear altogether whether it should not become an integral part of the home; whether, in other words, it is wholesome, at least for those under six, to be regimented, or whether it would not be better to leave them free in the community which exists among the homes and which all members of the community may enjoy.

This same kind of analysis is applied to all other building types. Are hospitals a good thing, or would it not be better for people to be left in their own homes, after being visited there by mobile operating theaters? Must there really be museums? Must there still be churches? Are theaters necessary? Since we do not know what kind of drama we need today, "... it could even be that we no longer need any theater at all. It could be that other means of expression have taken its place."



# WHY SPECIFY SEDGWICK DUMB WAITERS AND DOORS?

MAXIMUM SAFETY AND ULTIMATE ECONOMY LONG-LASTING, TROUBLE-FREE SERVICE WIDE RANGE OF EQUIPMENT TO SUIT ALL SERVICE NEEDS DUMB WAITERS AND DUMB-WAITER DOORS FROM A SINGLE SOURCE ELECTRIC AND MANUAL TYPES AUTO-MATIC CONTROL FEATURES TAILORED TO SPECIFIC NEEDS FLEX-IBLE LOCATION OF MACHINE MINIMUM SPACE REQUIREMENTS FREE ENGINEERING SERVICE: SPECIFICATIONS, RECOMMENDATIONS NATIONWIDE SERVICE QUALITY MANUFACTURING SINCE 1893 SEDGWICK — THE FIRST NAME IN LIFTS — IS YOUR ASSURANCE OF DEPENDABILITY. WRITE FOR CATALOG AND NAME OF NEAREST REPRESENTATIVE. OTHER SEDGWICK PRODUCTS = SIDEWALK ELEVA-TORS = FREIGHT-WAITERS = RESIDENCE ELEVATORS = STAIR-CHAIRS<sup>®</sup>



164 WEST 15th STREET, NEW YORK 11, NEW YORK For more information, turn to Reader Service card, circle No. 385

206 Book Reviews

Those who consider such negatory arguments and rhetorical questions immensely profound will be stimulated by this book. Those who find rationalized anti-rationalism irritating will probably put is aside, simply wondering whether Professor Ricci has ever, in fact, been commissioned to design a school, hospital, museum, church, or theater, and, if so, what it was he said to his clients. Only the most patient readers, however, will get as far as his discussion on architecture and town planning, since this is preceded by 85 pages of what purports to be his lecture to freshman architectural students, but which reads like a juvenile attempt at an existentialist autobiography.

First exercises in eagerly written Thoughts About Life can often be absorbingly entertaining in small doses, especially to parents and friends. But they have to be remarkably good to interest the general public, and it is a pity that Professor Ricci should have indulged in this at such tedious length, because he has a great many perspicacious things to say about actual buildings when he chooses to say them; and on the rare occasions when he does so in this book he writes with directness, simplicity, and great charm.

Indeed, nobody could read this book without concluding that Professor Ricci must be a delightful person to talk to and listen to. ("I look at the Egyptian statue of Queen Tuna at the Vatican Museum. Luckily there is no one else in the hall, so I can make some experiments. I pull up my trouser on one leg and compare it with the leg of the statue. My leg seems false, the statue's leg seems real.") But I find it difficult to believe that his reminiscences of the war, his remarks on conjugal intimacy, and his description of reading the newspaper in the bathroom can effectively orient beginners toward a sound philosophy of design, or that (with his reminiscences now in print) they will stimulate original thoughts amongst architects of riper years.

Perhaps his students at Florence University actually do leave his first lecture saying "Damn clever, this professor," and "What poetry!" But more elderly and less impressionable readers may find such divagations hard to take, and, while admiring his gallant attempt to formulate an architectural theory in terms of existentialist philosophy, may feel that there is more to be learned about contemporary architecture and the programming of contemporary buildings

Continued on page 208

# and build for keeps

Nothing's a better-looking building investment than the modern concrete masonry wall. Nothing's sounder—especially when reinforced with Dur-o-wal, the engineered steel rod reinforcement with the trussed design. Can more than double flexural wall strength, outfunctions brick-header construction. Write for new 44-page test report concerning the effectiveness of Dur-o-wal tied construction.



# DUR-O-WAL MANUFACTURING PLANTS

Dur-O-waL Div., Cedar Rapids Block Co., ECADAR RAPIDS, IA. Dur-O-waL of III., 260 S. Highland Ave., AURORA, ILL
 Dur-O-waL Prod., Inc., Box 528, SYRACUSE, N. Y.
 Dur-O-waL Div., Frontier Mfg. Co., Box 49, PHOENIX, ARIZ. Dur-O-waL of Ala., Inc., Box 5446, BIRMINGHAM, ALA.
 Dur-O-waL Div., Frontier Mfg. Co., Box 49, PHOENIX, ARIZ. Dur-O-waL of Colorado, 29th and Court St., PUEBLO, COLO.
 Dur-O-waL Prod., Inc., 4500 E. Lombard St., BALTIMORE, MD. DUr-O-waL of Minn., 2653 - 37th Ave., So., MINNEAPOLIS, MINN.
 Dur-O-waL Inc., 1678 Norwood Ave., TOLEDO, OHIO
 Dur-O-waL Mainton, 2653 - 37th Ave., So., MINNEAPOLIS, MINN.
 Dur-O-waL Ltd., 789 Woodward Avenue, HAMILTON, ONTARIO, CANADA





flexibility-the two basic factors for a repair-free masonry wall are assured by these engineered companion products. Dur-o-wal reinforcement, top left, increases flexural strength 71 to 261 per cent, depending on weight Dur-o-wal, number of courses, type of mortar. The ready-made Rapid Control Joint, beneath with its neoprene compound flange flexes with the wall, keeps itself sealed tight. Continued from page 206

from the real Rationalists (whose writing Professor Ricci seems to ignore completely), than from Dostoievsky or Jean-Paul Sartre.

> PETER COLLINS McGill University Montreal, Canada

### Marina Manual

MARINAS: RECOMMENDATIONS FOR DE-SIGN, CONSTRUCTION AND MAINTENANCE, by Charles A. Chaney. National Association of Engine and Boat Manufacturers,

# Inc., 420 Lexington Ave., New York 17, N.Y. (1961. 247 pp., illus. \$7.50)

This second edition of *Marinas* completely revises the original 1939 work. It contains the latest information on every aspect of marina construction, maintenance, and site planning, as well as on related matters of financial feasibility and boat-handling equipment. The work also explores a wide range of technical and structural questions such as bulkheading, piling, strength of materials, and mechanical services.



Essentially, Marinas is a technical manual, with numerous charts, tables, and engineering formulas. It should be invaluable to anyone engaged in the construction or management of these facilities; as a manual, however, the book will be somewhat disappointing to architects. There is a scarcity of over-all plans and photographs, and only a highly abbreviated section of ten pages is devoted to the buildings connected with marinas. The author's conclusion that this subject ". . . is exceedingly broad and flexible, being limited only by acceptable styles of architecture and approved qualities of materials . . ." is undoubtedly correct, but his thesis lacks specific visual documentation.

DR. FREDERICK HERMAN Architect College of William & Mary Norfolk, Va.

### OTHER BOOKS TO BE NOTED

The Archaic Gravestone of Attica. Gisela Richter. Phaidon Publishers, Inc., 1961. Distributed by New York Graphic Society, Greenwich, Conn. 80 pp. plus illus. \$15

Richly illustrated catalog of the 79 extant examples of the Greek stele from 610 to 500 B.C.

Bibliography No. 4: Shear, Diagonal Tension, and Torsion in Structural Concrete. American Concrete Institute, P.O. Box 4754, Redford Station, Detroit 19, Mich., 1962. 121 pp. \$9 Annotated list of 469 articles, concerned

Annotated list of 469 articles, concerned mainly with the shear behavior of structural members, that have appeared in technical publications from 1897 through 1959.

Cumulative Index to ASCE Publications. American Society of Civil Engineers, United Engineering Center, 345 E. 47 St., New York 17, N.Y., 1961. 816 pp. \$20

Index, by title and author, to articles appearing in Civil Engineering from first issue in 1930 through December 1959; papers in Transactions from 1935 (cut-off point of an earlier index) through 1959; and Proceedings from 1950 through 1959. Most items are listed under more than one heading for ease in finding. Public and school libraries are eligible for 50 per cent discount.

The Drawings of Frank Lloyd Wright. 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 be reviewed.

Foundations of Structures (Second Edition), Clarence W. Dunham. McGraw-Hill Book Co., Inc., 330 W. 42 St., New York 36, N.Y., 1962, 722 pp., illus. \$12.75

Revised textbook, seeking to give the student the ability to design safe and practicable substructures. Most examples are of the type encountered in ordinary construction; major and complicated foundations are not discussed.

Industrial Building, Volume II. Clapp & Poliak, Inc., 341 Madison Ave., New York Continued on page 210

Southfield, Michigan

23555 Telegraph Road

# Man who draws his own conclusions

# CASTELL TIGHT-TEXTURED LEAD locks out light — locks in black

This man's drawing produces the highest number of sharp, bold Diazotypes or blueprints—without feathered or "burned out" lines. Chiselpoint or needlepoint, CASTELL gives him the point strength and the unvarying uniformity of grading he must have in his work. Only CASTELL's exclusive microlet milling can produce the tight-textured graphite that locks out light, locks in black. Draws perfectly on all bases, including Cronar\*, Mylar\*, and Kodagraph\* based films. 8B to 10H. Try CASTELL wood pencil or LOCKTITE Tel-A-Grade holder with CASTELL Refill lead and draw your own conclusions.

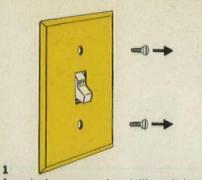
Helps the hand that shapes the future.

DRAW

\*Reg. T.M.'s of DuPont and Eastman

A.W.FABER - CASTELL / Pencil Company, Inc., Newark 3, N. J.

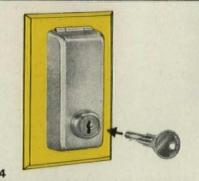
JULY 1962 P/A



Any single or ganged metallic switchplate can be fitted with Hubbell's Locking Cover for toggle switches. Simply remove and discard two screws, but leave plate in place.



Place the opening in the back of the locking cover attachment over the switch handle. Fasten it through the switchplate screwholes with two steel screws provided with it.



Yale tumbler lock prevents access to switch handle and screws. Locks available for individual or master keying. Cover comes in brushed brass, brushed chrome, etc. No rewiring is necessary.

# Locking Cover Attachments Halt Tampering with Switches

Wherever there's a reason for preventing the unauthorized operation of switches, there's a reason for Hubbell's easy-to-install Locking Cover Attachment.

Equipped with a Yale tumbler lock, this rugged accessory protects people and guards electrical equipment in plants, laboratories, hospitals, workshops, prisons, and asylums.

For buildings requiring several

attachments, you may specify: (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. To protect owners, extra keys are never supplied.

These locking covers are sold by electrical distributors handling Hubbell<sup>®</sup> wiring devices. Or write for folder and prices.



210 Other Books to be Noted

Continued from page 208

17, N.Y., 1961. 203 pp., illus. \$5 (paperbound)

Proceedings of the second Industrial Building Congress, held in New York last fall. Thirty-six papers cover various aspects of new industrial construction and renovation of existing facilities. Among subjects discussed: design and construction in Mexico and Canada; the effects of building design on employee morale and productivity; effective use of building models; planning efficient and economical lighting.

Municipal Refuse Disposal. Committee on Refuse Disposal, American Public Works Association. Public Administration Service, 1313 E. 60 St., Chicago 37, Ill., 1961. 522 pp., illus. \$8

Comprehensive discussion and evaluation of the seven major disposal methods—sanitary landfills, central incineration, on-site incineration, garbage grinding, feeding garbage to swine, composting, and salvage/reclamation.

**Operation School Burning No. 2.** National Fire Protection Assn., 60 Batterymarch St., Boston 10, Mass., 1961. 352 pp., illus. \$5.75

Report on a series of experimental fires that were aimed at discovering improved ways of protecting children and teachers in open-stairway, multistory buildings. Tests covered performance of automatic sprinklers and fire-detection equipment, and behavior of accoustic ceilings, plastic diffusers on lighting fixtures, and plastic-glazed windows.

Partnership for Renewal: A Working Program. Office of Development Co-ordinator, City of Philadelphia, 620 Penn Square Bldg., Philadelphia 7, Pa., 1961. 112 pp., illus. (paperbound)

An evaluation of Philadelphia's Leadership Program, an experiment in improving housing and neighborhood conditions through City-citizen co-operation. Recommendations for future renewal efforts are based on the varied success of the techniques used in Philadelphia. The project and report were made possible by an HHFA Demonstration Grant.

Planning Atomic Shelters: A Guidebook for Architects and Engineers. Edited by Gifford H. Albright. The Pennsylvania State University Press, University Park, Pa., 1961. 196 pp., illus. \$10 (spiral bound)

Information for planning shelter as an integrated part of new buildings. Discussed as background are basic principles of protection, weapons effects, and architectural planning of integrated convertible shelters. Selected military structures are used as demonstrations to illustrate that "shelters can be incorporated within conventional spaces of buildings without decreasing the efficient performance of normal functions or creating windowless monstrosities, and at little or no increase in cost."

The Science of Daylight. John W. T. Walsh, Pitman Publishing Corp., 2 W. 45 St., New York 36, N.Y., 1962. 285 pp., illus. \$7.75

A single-volume source of information from England on the various aspects of daylight illumination, Various chapters discuss daylight calculation, sunlight control, requirements for different building types, and town planning considerations. Author is a past President of the International Commission on Illumination. Bibliography.



# Which client can afford FOAMGLAS Roof Insulation today?

The new thickness and unit size means that quality FOAMGLAS®can be the right insulation specification for most building roofs; an office building, an industrial plant, a hospital, a bank or a research lab.



# Nothing but FOAMGLAS Roof Insulation gives a building the constant insulating value that results from an in-

organic, cellular glass composition. It just can't absorb moisture. And, it's available now in a  $1\frac{1}{2}$ " thick FOAMGLAS-BOARD **PITTSBURGH** 

unit—a sandwich of FOAMGLAS covered with kraft laminate paper in a 2' x 4' size. This new thickness and size means a reduced installed cost. Write for your copy of the FOAMGLAS Building Insulation catalog. It includes application specifications, thicknesses, U-values. Pittsburgh Corning Corporation, Dept. AB72, One Gateway Center, Pittsburgh 22, Pa.



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



Comfort lighting by Day-Brite. Lamps operate closer to rated operating conditions for greater efficiency. Airhandling and static unit are "color matched" for color stability.

# It's a lighting fixture ...

# ANNOUNCING THE FIRST ALL-PURPOSE LIGHT-AIR DIFFUSER



# works 5 ways to offer new versatility in comfort conditioning with light and air

A combined achievement of Day-Brite and Barber-Colman engineering and research.

CLYMATRON is the first air handling lighting fixture that can exhaust heat from the roomand lamp compartment as it delivers comfort lighting and conditioned air.

CLYMATRON is the first air handling lighting fixture to integrate electronic sensing elements for automatic temperature control systems.

Special coated enclosures which reflect infrared energy prevent the majority of heat of the lighting fixture from entering the room. Now you can install more light and reduce air cooling requirements in the conditioned space.

And regardless how the CLYMATRON is used in air-handling applications, the unit is "color matched" to eliminate color shift.

Compatible with all basic ceiling systems and recessed lighting applications, the CLYMATRON may be used individually or in continuous rows. Available in 1'x4' and 2'x4' units.

For new design freedom . . . for a new degree of thermal control of space with higher lighting levels, include the CLYMATRON in your planning now!



DAY-BRITE LIGHTING, INC. ST. LOUIS, MO. • SANTA CLARA, CALIF.



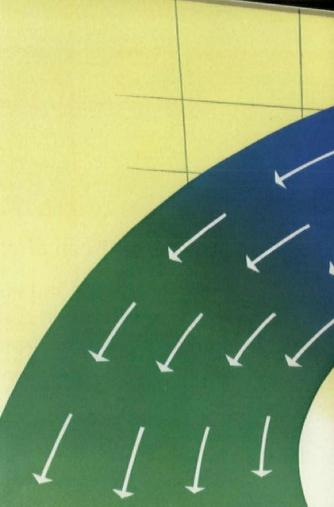
BARBER-COLMAN COMPANY ROCKFORD, ILLINOIS



Engineered air distribution by Barber-Colman. Lowvelocity delivery of conditioned air minimizes noise levels. No ceiling or enclosure smudge reduces maintenance costs.

# lt's an Air Diffuser...





PAT. NO. 2,991,708 OTHER PATENTS APPLIED FOR



Complete air handling capability—including air return as well as air supply. Interchangeable in any location from the same unit.

# It's an Air Return...



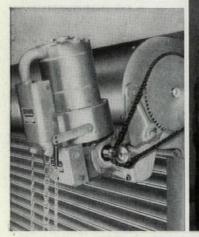
Reduce space cooling problems appreciably by extracting lighting heat before it enters the room.

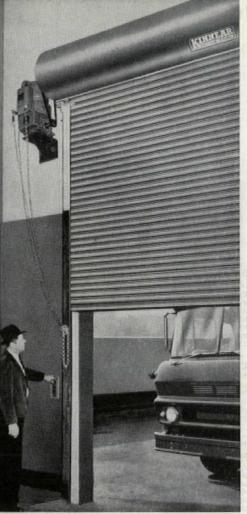
# It's a Heat Extractor...

# It's an Air Exchanger NOW YOUR LIGHT/HEAT GOES TO WORK

DAY-BRITE (B) LIGHTING FIXTURES

# There's a "Powerful Difference" in KINNEAR Motor Operated Rolling Doors!





# The Kinnear Motor Operator is NEW in every detail -- AND BUILT EXCLUSIVELY FOR DOOR SERVICE

Kinnear's new Power Operator for rolling doors is a specific-purpose unit. All features are uniquely integrated for door control that combines highest efficiency and durability.

Its reserve power assures smooth action that defies wind pressure, drifted snow, collected grime, or extra years of usage.

Special thermal protection prevents overload troubles — the motor cuts out before damage can occur.

New worm gearing takes "stop and go" action in its stride!

A new centrifugal clutch transmits motor action to the door without shock, increasing protection against motor stalls and overload damage. The new power unit permits easy removal for servicing without disturbing the auxiliary hand-chain operator.

Seven sizes fit all door needs without costly "over-powering." Can be installed vertically or horizontally . . . bracket-mounted on the door or wall, or for through-the-wall operation.

Kinnear originated the door with the curtain of interlocking slats that opens upward, coils compactly overhead, and saves floor, wall and ceiling space. This new Power Operator brings the basic efficiency of Kinnear Doors to a new high in dependable, push-button convenience. Write for complete information on Kinnear Rolling Doors and Power Operators.

FACTORIES: 1900-20 Fields Avenue, Columbus 16, Ohio

1742 Yosemite Ave., San Francisco 24, Calif.

Offices and Representatives in All Principal Cities

# The KINNEAR Manufacturing Company



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

214 Notices

# PHOTO CREDITS

### Kitchens

PAGE 156

Photo: Tom Yee, Courtesy Paul McCobb Design Associates
PAGE 157
All: Courtesy Knoll Associates

PAGE 158

All: Courtesy U.S. Steel

PAGE 159

Top: Morley Baer
Midle: Alexandre Georges
Bottom: Cortlandt V. D. Hubbard

PAGE 160

Left Side: Casali-Domus
Right Side: Sam Lambert, Architectural Design

PAGE 161

All: Ben Schnall

## NOTICES

### New Addresses

CHANDLER CUDLIPP Associates, Inc., 141 E. 55th St., New York 22, N.Y.

DAMUCK AND PAINCHAUD, Architects, 72 Whitney Ave., New Haven 10, Conn.

LAWRENCE HALPRIN & ASSOCIATES, 1620 Montgomery St., San Francisco 11, Calif.

HUNTER AND BENEDICT, Architects, 3670 Wilshire Blvd., Los Angeles 5, Calif.

ROBERT PARLETT, Site Engineering, 641 Mission St., San Francisco 5, Calif.

RIDDLE CONNOR & ASSOCIATES, 800 Confederation St., Sarnia, Ontario, Canada. STANLEY RONDA, JR., 1122 Camden St., Toledo 5, Ohio.

EMERY ROTH & SONS, 850 Third Ave., New York 22, N.Y.

# New firms

JOHN T. COLLINS, PETER J. BARICEV, principals in firm of ColLINS & BARICEV, Architects, P. O. Box 532, Pascagoula, Miss.

DAVID G. CRECO, Architect, 28 Reef Road, Fairfield, Conn.

CHARLES JAMES KOULBANIS, 20 E. 58 St., New York 22, N.Y.

MATLOCK ASSOCIATES, Consulting Engineers-Research & Development, 1605 W. 35 St., Austin, Texas.

JOHN J. ROWLAND, JAMES M. SIMPSON, ROBERT H. FERGUSON, JR., principals in firm of ROWLAND, SIMPSON AND FERGU-SON, INC., Architects, 811 N. Queen St., Kinston, N.C.

CLIFFORD DOUGLAS STEWART AND FEL-LOWES DAVIS, Architects, 123 Newbury St., Boston 16, Mass.

URBAN PLANNING ASSOCIATES, 305 E. 45 St., New York 17, N.Y.

JOSEPH WYTHE, GEORGE THOMSON, prin-Continued on page 225

# **GIGANTIC Reduced-Price List** Make REINHOLD's Art and Architectural **References Work for You!**

### ART IN EUROPEAN ARCHITECTURE

by PAUL DAMAZ. Preface by Le Corbusier. Shows the use of color, mural painting, sculpture, stained glass, and mosaics in office buildings, factories, schools, churches, gardens, and steamships. 450 illustrations, (15 in color). 81/2 x 101/2, 242 pages.

Was \$7.95 Now \$3.95

# FABRICATING HOUSES

FABRICATING HOUSES FROM COMPONENT PARTS by NORMAN CHERNER, Showing how factory fab-ricated houses can be combined into quality budget houses, this valuable book has over 300 illustrations on floor plans, framing plans, ele-vations, sections, and expansion plans for 15 different designs. Included are more than 300 entries of available materials and their uses – plus manufacturers' addresses. 81/2 x 101/2, 208 nages. plus manu 208 pages. Was \$7.95 Now \$3.95

MADE IN DENMARK



IMARK by ARNE KARLSEN and ANKER TIEDEMANN. Full dis-play of furniture, textiles, silver, ceramics, and glass produced by Danish crafts-men and industry — illus-trating why Danish design has become synonymous with good taste. Covers work-shops, factories, and Danish homes — plus complete gal-lery of utility wares. 200 photographs accompany the lively text. 63/4 x 93/4, 176 pages. page:

Was \$7.95 Now \$3.95

# LETTER DESIGN

LETTER DESIGN IN THE GRAPHIC ARTS by MORTIMER LEACH. Reference book on letter forms: the three major sources, fully illustrated. Authoritative material on letter design, space advertising, outdoor displays, package design, and hand lettering. 8¼ x 10¼, 192 pages. Was \$12.00- Now \$7.50

### FIVE CALIFORNIA ARCHITECTS

FIVE CALIFORNIA ARCHITECTS by ESTHER McCOY. 200 illustrations and text tell the exciting history of the rise of the Cali-fornia school of architecture as seen through the work of five men who gave it impetus and direction. Along with a profound understanding of their professional careers and major work is a penetrating critical appraisal. 81/4 x 101/4, 208 pages. Was \$100 Note: \$405 208 pages. Was \$10.00 Now \$4.95

# ARCHITECTURE U.S.A.



ARCHITECTURE U.S.A. New Revised Edition With the second se

# LIGHTING IN ARCHITECTURE

by WALTER KOHLER and WASSILI LUCKHARDT. Deals with light as an artistic expression, sur-veying all technical aspects – including the influence of color – with 300 photographs, (19 in color) illustrating interior and exterior views of buildings in the U.S. and abroad, 8½ x 11, 223 pages. Was \$15.00 Now \$5.00 Was \$15.00 Now \$5.00

# **BUILDERS' HOMES**

BUILDERS' HOMES FOR BETTER LIVING by A. QUINCY JONES, FREDERICK E. EMMONS, and JOHN L. CHAPMAN. 207 illustrations serve to show how tract houses can be related to their sites and also successfully Integrated into the community. Contains information on business aspects of building, merchandising, methods, codes, and regulations. 8 x 10½, 224 pages. Was \$8.95- Now \$4.50

THE CITY by ELIEL SAARINEN. Points out the fundamentals of all town building which, when applied, will make the city of tomorrow a healthy, pleasant environment for living and working. Saarinen analyzes the growth and decay of the urban community, pointing out positive remedies to restore and preserve health. 6 x 9, 379 pages. Was \$6.95 Now \$3.50



THE AMERICAN HOUSE TODAY by KATHERINE M. FORD and THOMAS H. CREIGHTON. Round-up of 85 best homes for small, large, or growing families. Evaluation by cost, site, space, appearance – complete details. 500 illus-trations, (plans, photo-graphs, and drawings). 8½ x 10½, 235 pages. Was <del>\$7.95</del> Now \$3.95

# SAVING DOLLARS

SAVING DULLARS IN BUILDING SCHOOLS by DAVID A. PIERCE. An excellent handbook, examining educational and architectural plan-ning of schools — general design, room design, site planning, finance, operation, and mainte-nance. Construction section covers principles, materials, and construction techniques. 8½ x 11, 112 pages. Was \$5.95 - Now \$2.95 Was-\$5.95 Now \$2.95

CREATIVE GARDENS by JAMES C, ROSE. A thought-provoking counter-point of handsome photographs and factual case histories of the revolution in contemporary land-scape planning. 265 black and white illustrations plus 24 full color plates demonstrate the new concept in gardens. 634 x 934, 208 pages. Was \$10.00- Now \$4.95

# TOWARD NEW TOWNS

TOWARD NEW TOWNS FOR AMERICA by CLARENCE S. STEIN. "Most important contri-bution to planning literature" says the American Society of Planning Officials. The book records Mr. Stein's experience in the creation of safe, comely, and neighborly communities set in spa-cious natural greenery. 8½ x 10½, 240 pages. Was \$12,50- Now \$6.95

# ARCHITECTURAL PRACTICE

ARCHITECTURAL PRACTICE — 3rd Revised Edition by CLINTON H. COWGILL and BEN JOHN SMALL. Comprehensive coverage of professional, busi-ness, and legal aspects of architectural practice. Includes detailed discussion of commissions, accounting, and bookkeeping systems, agree-ment and procedural forms of every kind, specifi-cations, insurance and bond requirements. 8½ x 11, 272 pages. Was \$12.50- Now \$10.00

### **OSCAR NIEMEYER:** Works in Progress



ogress edited by STAMO PAPADAKI. Selected from Niemeyer's creativity during 1950-1956, this handsome book contain-ing 300 illustrations shows thirty-five bold new projects — each from preliminary sketches to finished build-ings. 9 x 9, 192 pages. Was \$10.00- Now \$4.95

# REINFORCED CONCRETE

REINFORCED CONCRETE IN ARCHITECTURE by ALY AIMED RAAFAT. A long-needed bridge between architectural design and recently devel-oped engineering know-how in reinforced con-crete. Begins 1760, with the rediscovery of construction in South America – more than 450 illustrations. 8¼ x 10¼, 240 pages. Was \$15.00- Now \$7.50

# THE WEATHER

THE WEATHER CONDITIONED HOUSE by GROFF CONKLIN. Shows how to design endur-ing houses more economical to maintain through meeting thermal, physical, and aesthetic demands of their environment. Covers hot clim-ate design, cold weather conditioning, material deterioration, etc. – with 200 illustrations. 8¼ x 11, 254 pages. Was \$14.75- Now \$4.95

HIGH SCHOOLS

HIGH SCHOOLS Today and Tomorrow by CHARLES BURSCH and JOHN LYON REID. An outstanding educator and an experienced archi-tect present a more flexible building program designed for today's student and his increasing research needs. Plans and drawings illustrate this careful study of functional space — space for television aids, weather recording, suitable shop and craft facilities, extended consideration of supervision of music practice rooms, etc. — adaptable material for any educational environ-ment. 8½ x 10½, 127 pages. Was \$7.50- Now \$3.95



RECREATION PLACES by WAYNE R. WILLIAMS. This book covers all recent thinking on recreation places — including the history of recreation places where recreation places where recreation places where for recreation playgrounds, etc. — with 400 illustrations of this new architectural practice. 9 x 12, 302 pages, (P/A Library). Was \$18.00- Now \$6.50

### FRANK LLOYD WRIGHT:

FRANK LLOYD WRIGHT: The First Golden Age by GRANT MANSON. "No one else has done half so much and so well in describing and evaluat-ing Wright's achievements."—Lewis Mumford. A dramatic new perspective on this famous archi-tect: early life, experience as draftsman-designer for Lyman Silsbee, outstanding conception and evolution of Prairie House, a complete biography to 1910, the turning point in Wright's life as architect and individual. 814 x 1014, 240 pages. Was \$10.00- Now \$5.00

SHOPS AND STORES by MORRIS KETCHUM, Jr. From store fronts to sales counters, store planning is analyzed cov-ering equipment, use of color, sales, services, advertising, and display. There are 350 illustra-tions which include examples from the best stores built in the past 10 years. 9 x 12, 264 pages, (P/A Library).

Was \$15.00 Now \$9.95

### **100 YEARS OF**

100 YEARS OF ARCHITECTURE IN AMERICA by FREDERIC GUTHEIM. An excellent guide to American architecture. 200 Illustrations — many of which are in full color — cover all parts of the country and all major building types. A special feature: "Ten Buildings in America's Future." 9 x 9, 96 pages. Was \$4:00- Now \$1.95

## ACOUSTICS

ACOUSTICS FOR THE ARCHITECT by HAROLD BURRIS-MEYER and LEWIS S. GOODFRIEND, Provides all the essential informa-tion needed to handle acoustics and noise con-trol in all types of buildings where no consultant has been employed. In addition to 100 illustra-tions, the book discusses sound systems, acous-tical integration, etc. 8¼ x 10¼, 134 pages. Was \$10.00- Now \$7.50

# Mail This Coupon Today 30 Days' Examination!

REINHOLD BOOK DIVISION Dept. M-123, 430 Park Avenue New York 22, New York Please send me the book(s) listed below			
	for 30 days' examination under the follow-		
	ing terms: Total payment enclosed (Reinhold pays regular delivery charges) Bill me (plus delivery charges)		
	***************************************		
	NAME (please print)		
	ADDRESS		
	CITY/ZONE STATE		
	SAVE MONEY! Enclose full payment and Reinhold pays all regular delivery charges. Same return privilege guaranteed. Please add sales tax on Ohio, Pennsylvania, and New York City orders. Send check or money order only-do not enclose cash!		

# AMERICA'S BEST KNOWN WINDOWS SOLVE PROBLEMS IN ANY TYPE OF LIGHT CONSTRUCTION

山町

1

Un



Fisherman's Wharf Motel, St. Clair, Michigan. Architect: George D. Lytle

# The Andersen Window that solved two problems in this Michigan Motel

Need for large window areas plus insulating effectiveness met with Andersen Gliders

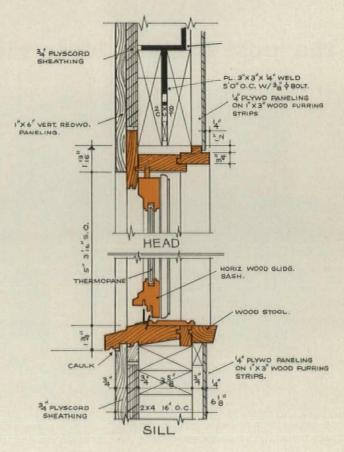
To take advantage of the view without sacrificing natural ventilation, Architect George Lytle selected Andersen Gliders—the picture windows that glide open sideways.

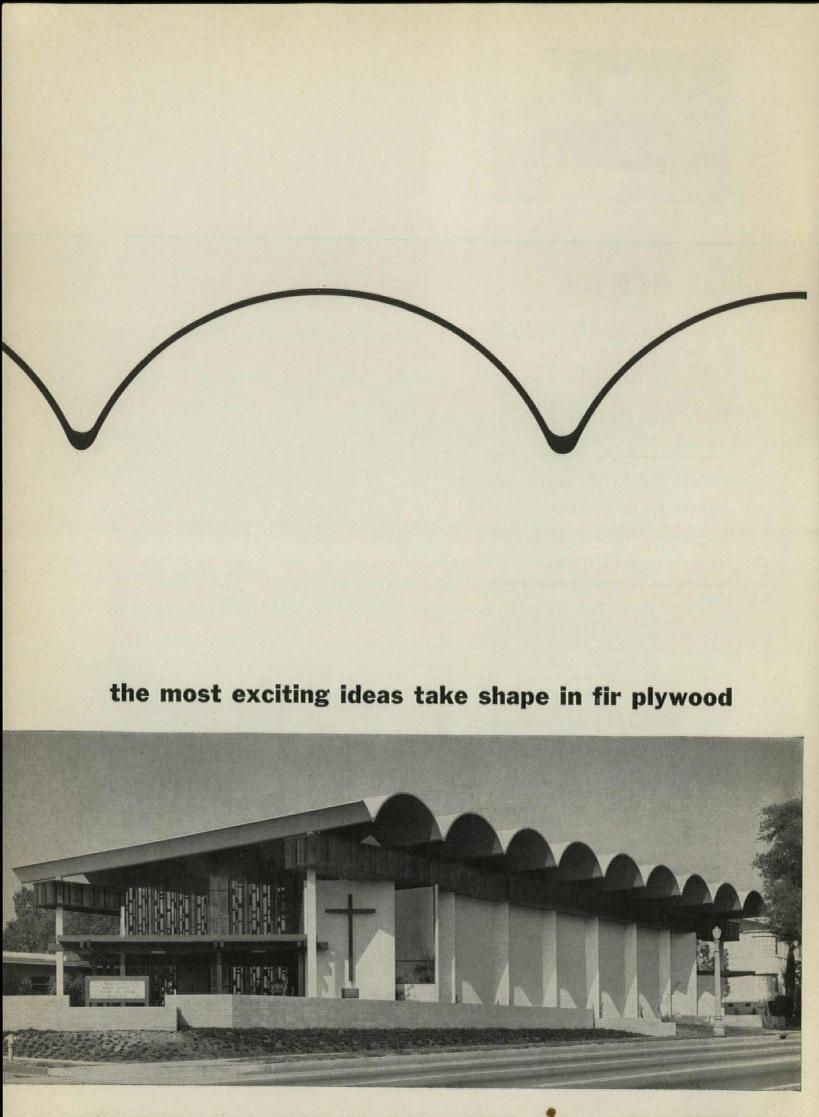
But, Andersen Gliders also helped solve the heat loss problem. Each unit is electrically heated—controlled in the unit and from a master control panel in the office. Temperatures in each unit can be lowered as guests leave, raised as guests arrive—all from the office. Saves on the heating bills. And, Andersen Windows, with the natural insulating qualities of wood plus their weathertightness (about 5 times industry standards) serve perfectly.

Andersen Windows offer you maximum design flexibility for any light construction project: 7 kinds of windows, 30 different types, 685 cataloged sizes.

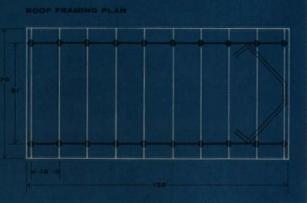
Check Sweet's File or write for Detail catalog and Tracing detail files. Andersen Windows are available from lumber and millwork dealers throughout the United States and Canada.







TYPICAL VAULT CONNECTION AT SUPPORTS



ST. PAUL'S LUTHERAN CHURCH

LOCATION: MONROVIA, CALIFORNIA SMITH AND WILLIAMS SOUTH PASADENA, CALIFORNIA BERKELEY PLYWOOD COMPANY SAN LEANDRO, CALIFORNIA FABRICATOR:

NINE PLYWOOD VAULTS, seeming to float on panels of light, give this church its simple grace and elegance. They provide the additional, practical advantages of construction economy and a 51x135 ft. support-free interior.

Each vault rises to an apex of 27 feet and spans an area 15x51 ft .-- longest span on record for an unsupported plywood vaulted roof system. The roof components were prefabricated, and were so carefully engineered that installation took only seven hours.

This church is one more example of the striking new architectural forms that are becoming a practical possibility with plywood: high in structural strength and integrity, economical of labor and materials, and offering superior design flexibility. For more information on plywood structural systems, write (USA only) Douglas Fir Plywood Association, Tacoma 2, Washington.



# Sheffield's new open web steel joists are adaptable to virtually any building design

These SJI-approved high-strength steel joists are the answer to fast, economical construction of schools, factories and commercial structures of all kinds. Whether you're designing or building a traditional or contemporary structure, Sheffield Open Web Steel Joists can simplify floor and roof handling.

These new joists have virtually unlimited adaptability for imaginative design. They are ideal for either pitched or flat roofs. They can be placed fast. They are the perfect answer where deadlines and weather are to be considered.

Today Sheffield's new high-strength Open Web Steel Joists are available in three standardized series — approved by The Steel Joist Institute. J-SERIES (replacing the old S-Series), based on a stress in tension of 22,000 psi and made from 36,000 psi minimum yield strength steel. Spans up to 48'.

**H-SERIES** (completely new), high-strength joists based on a stress in tension of 30,000 psi, and made from 50,000 psi minimum yield strength steel. Spans up to 48'.

LA-SERIES (replacing the old LS-Series), based on stress in tension of 22,000 psi, and made from 36,000 psi minimum yield strength steel. Spans up to 96'.

(LS-SERIES. These joists extend beyond the span range of SJI Standard joists, but are designed in accordance with their specifications. Based on stress in tension of 22,000 psi and made from 36,000 psi minimum yield strength steel. Spans up to 144'.)

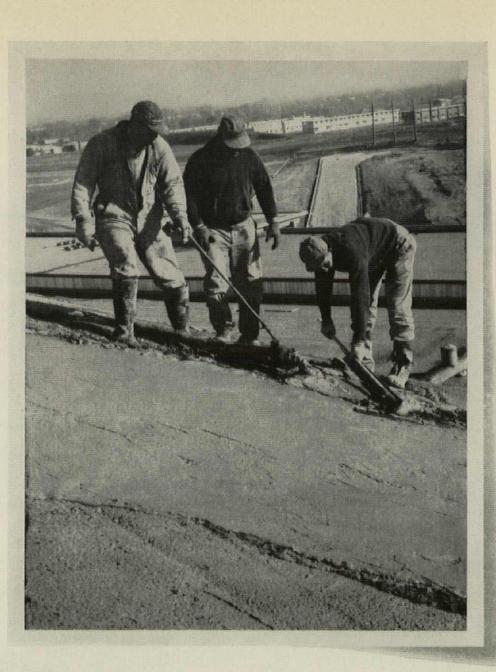
# It pays to consider these advantages of new high-strength Sheffield Open Web Steel Joist construction

- They are lightweight reduce deadload.
- Savings are substantial in both construction and maintenance.
- · Prefabricated and ready to place.
- Fast, easy erection is possible in any weather.
- They allow plenty of freeway for pipe and conduit.
- · Excellent for radiant heating systems.
- No form work or curing time is required.
  Dimensions and carrying capacity are standardized.
- · Permanent and non-shrinking.
- Termite-proof and rot-proof.

Bring your files up to date with this useful reference book. Sixty pages of specifications and load tables on J-Series and H-Series Sheffield Open Web Steel Joists. (LA-Series and LS-Series information available on request.) Write Sheffield Division, Armco Steel Corporation, Sheffield Station, Kansas City 25, Missouri.



ARMCO Sheffield Division



The application of Zonolite insulating concrete roof decks is as specified, *exactly* 

ONOLITE DOF DECKS	(ANY DATE) 19 62		
Ce	rtificate		
The undersigned 20NOLIT	E COMPANY ,		
a member of 1	Vermiculite Institute and		
ABC CONTRACTI	NG COMPANY		
ANY TOWN, U.S	The second		
an approved applicator of the afore			
	<ol> <li>the applicator hereinabove named is an approved applicator of the undersigned member of Vermiculite Institute, and</li> </ol>		
	which was installed in a building located		
at 400 - 8th aven	UE		
ANY TOWN, U.S.	Α		
was prepared and applie	d by said approved applicator in accord-		
ance with specifications	of Vermiculite Institute in effect at the		
time said installation w	is made.		
	ABC CONTRACTING COMPANY		
ZONOLITE COMPANY	ABC CONTRACTING COMPANY		
By President (Title)	By President (Tide)		

# We certify it

It is a regrettable fact that often architects and engineers don't get what they specify and pay for. But it is a fact.

In order to protect you and your client, as well as our own reputation and that of our approved roof deck applicators, we issue this certificate.

Given after roof deck completion, and after laboratory tests of samples from the job, it certifies that the Zonolite concrete was prepared and applied in

accordance with the specifications set down by the Vermiculite Institute.

You get what you pay for when you specify Zonolite concrete roof decks—light weight, insulating value, fire resistance, permanence, application as specified. We certify it.

To obtain complete information on Zonolite Roof Deck Systems, write Zonolite Company, 135 S. LaSalle Street, Chicago 3, Illinois.

# ZONOLITE

For more information, turn to Reader Service card, circle No. 398

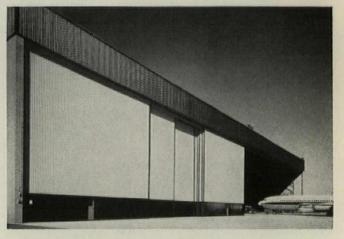
# <u>New from Bowman</u>... BOWMANIZED STEEL

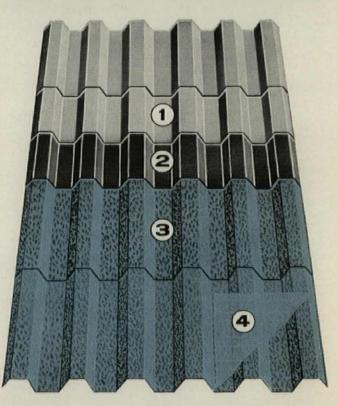
• The siding on this attractive hangar is fabricated from the new Bowmanized Steel. Bowman Steel Corporation, long a leader in the protected metal industry, has developed and patented a process of coating steel and aluminum building panels that applies 2 to 4 times the ordinary film thickness in eight standard colors, and an attractive surface texture.

• The Bowmanized process utilizes elevated temperatures to achieve flowability rather than solvents, thus allowing the use of thicker coatings than possible with solvent systems. Bowmanized Steel is manufactured as follows:

- (1) The metal is first cleaned and phosphatized to insure maximum metal preparation for adhesion of further coatings.
- (2) The acrylic adhesive used is applied at 300°F to both sides of the metal.
- (3) The adhesive-coated metal is passed through coating rolls where the heavy alkyd weather coating is applied. This weather coating is available in seven standard colors.
- (4) After curing, pre-cast polyethylene film is pressed onto the surface of the material. This film protects the surface of the product during roll forming, transporting to the job, and storage at the job. It is easily removed immediately prior to erection.

After the polyethylene film is applied, the completed Bowmanized product is sheared to customer-specified lengths and roll formed to the desired cross section.





Learn more about Bowmanized Steel on the following page



For complete information, write or call the Bowman Steel sales office nearest you: Baltimore, Birmingham, Boston, Chicago, Cincinnati, New York, New Haven, Norfolk, Philadelphia, Pittsburgh, St. Louis, Syracuse, and agents in other principal cities. Incorporated 1898.



JULY 1962 P/A

Continued from page 214

cipals in firm of WYTHE & THOMSON, Architects, 329 Pacific St., Monterey, Calif.

# Name Changes

ROBERT G. PEASE, made Partner in firm of S. ELMER CHAMBERS AND ROBERT G. PEASE, Architects, 205 Harrison St., Syracuse 2, N.Y. Formerly S. ELMER CHAMBERS, Architect.

HERMAN, SIMONS AND BASSETT, Architects, 144 W. Lafayette Boulevard, Suite 632, Detroit, Mich. Formerly HER-MAN AND SIMONS, Architects.

HUMMEL, HUMMEL, JONES AND SHAW-VER, Architects, 1324 Idaho St., Boise, Idaho. Formerly HUMMEL, HUMMEL AND JONES, Architects.

C. F. MURPHY ASSOCIATES, Architects-Engineers, 224 S. Michigan Ave., Chicago 4, Ill. Formerly NAESS & MURPHY.

ROBERT LEE CORSBIE, made Partner in firm of Rose, BEATON & CORSBIE, Architects and Engineers, 10 Columbus Circle, New York 19, N.Y. Formerly Rose, BEATON & ASSOCIATES.

STEPHENS-WALSH-EMMONS-STAUFFER & SHANKS, Engineers-Architects, 308 Mayer Central Building, 3033 N. Central Ave., Phoenix 12, Ariz. Formerly JOHN E. STEPHENS & ASSOCIATES.

VHAY FERRARI & WIDMER, Architects, 508 Denslowe Drive, Reno, Nevada. Formerly VHAY Associates.

WIMBERLY, WHISENAND, ALLISON & TONG, Architects, 315 Royal Hawaiian Ave., Honolulu, Hawaii. Formerly WIM-BERLY & COOK.

# **Elections**, Appointments

W. BURNETT AUSTIN, joined the firm of HENNINGSON, DURHAM & RICHARDSON, Engineers and Architects, Omaha, Neb.

CHARLES R. BOYLE, joined the Century City project, largest privately financed urban development, Beverly Hills, Calif., as Associate Director.

MORTON S. FINE of MORTON S. FINE & ASSOCIATES, Consulting Engineers, appointed by Connecticut Governor JOHN DEMPSEY to the State Board of Registration of Professional Engineers and Land Surveyors. He was also elected as Chairman of the West Hartford, Connecticut Town Plan and Zoning Commission.

CLARENCE M. SMITH, appointed Principal Planner for the Department of Urban Renewal in the Planning Division of TEC-SEARCH, INC., Management Consulting firm, Evanston, Ill.

PAUL BOSHOLM, became member of the

JULY 1962 P/A

architectural department in firm of WIL-SEY, HAM & BLAIR, Engineers and Planners, Milbrae, Calif.

SALVATORE COCO, appointed Chief Architectural Designer in firm of CHARLES LUCKMAN ASSOCIATES, Planning-Architecture-Engineering, New York City and Los Angeles.

PAUL ETTINGTON, named Business Development Manager in firm of KAISER ENGI-NEERS, Oakland, Calif.

GUY FURGIUELE named Chief Engineer, R. O. GRIMES became Assistant Chief Engineer, MORRIS BACKER became Manager of the Projects Division, C. E. BROWN promoted to Manager of the Mechanical Engineering Department in firm of BOVAY ENGINEERS, Houston office.

NICK HARRISON, LEONARD GERKIN, named Vice-Presidents in firm of Engineering Service Corporation, Los Angeles, Calif.

RONALD THOMPSON, appointed Principal Planner in firm of HARSTAD ASSOCIATES, Engineers - Architects - Planners, Seattle, Wash.

### P/A Congratulates . . .

IRA F. BECKER, named Manager, Product Sales for vinyl building panels; WILLIAM J. HOOFE, III, named Manager, Product Sales, plastic panels; EDWARD T. KLETT, JR. appointed Manager, Product Sales, coatings and finishes; NORMAN KOHLER, named Manager, Product Sales, gypsum products, in firm of ALLIED CHEMICAL'S BARRETT DIVISION.

LOREN H. BONNETT appointed Vice-President, General Manager of Eljer Plumbingware Division of THE MURRAY CORPORATION OF AMERICA.

HOWARD BRITON, appointed Vice-President of MARVIN ELECTRIC MANUFACTURING COMPANY.

KENNETH T. FRATE, appointed Projects Manager of the Industrial Division, RALPH TASMAN BUILDING ASSOCIATES, INC.

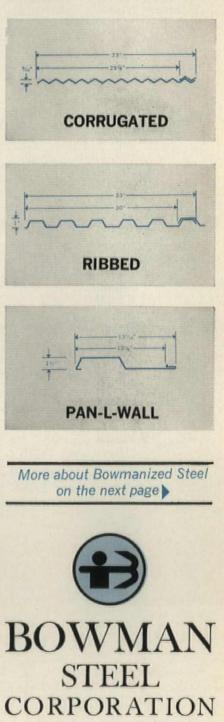
ROBERT A. HACKATHORN, named Chairman of the Board; A. WILLIAM REY-NOLDS, III named President of the CRAW-FORD DOOR COMPANY.

JOHN G. MARSHALL, appointed Sales Manager of the Building Products Division of THE STANDARD PRODUCTS COM-PANY, Cleveland, Ohio.

FRENCH R. MCKNIGHT, elected President; JOHN M. PRINCE, elected Vice-President; CLARK E. MCDONALD, reelected Managing-Director and Secretary-Treasurer, of THE HARDWOOD PLYwood INSTITUTE.

# BOWMANIZED STEEL

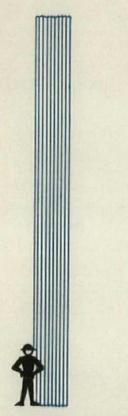
Not only is Bowmanized Steel available in eight permanent colors, and lengths up to forty feet, but in any of these three roll-formed cross sections.



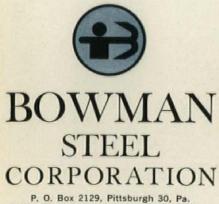
P. O. Box 2129, Pittsburgh 30, Pa. Sales offices and agents in principal cities.

# BOWMANIZED STEEL

Bowmanized Steel is available in any length up to 40 feet; allows the use of one building panel from ground to eave; no end laps; lower erection costs; better looking building.—Specify Bowmanized Steel.



See the preceeding two pages for more about Bowmanized Steel.



P. O. Box 2129, Pittsburgh 30, Pa. Sales offices and agents in principal cities.

# P/A JOBS AND MEN

# SITUATIONS OPEN

ARCHITECT—CONSTRUCTION—SALES—Architect trained. Sales ability to locate and followup potential clients for industrial and commercial work. Long established Design & Construction organization. Salary and incentive. Send complete resume—Box #412, PRO-GRESSIVE ARCHITECTURE,

ARCHITECTURAL SPECIFICATIONS—Graduate architect widely experienced in preparation of specifications will find permanent, highlevel position with this established firm engaged in design of large projects. Interviews granted to qualified applicants. Moving expenses paid. All replies acknowledged and handled in confidence. Write Box #413, PROGRESSIVE ARCHITECTURE,

EXPERIENCED ARCHITECTURAL DRAFTSMEN —Wanted by long established—since 1932 progressive firm of sound reputation doing contemporary architecture in largest and most rapidly growing city in southwest area of U.S.A. Good pay, permanent employment with benefits. General practice includes schools, telephone buildings, government and institutional buildings, industrial and commercial buildings, churches & residences. Prefer men 30 to 50 age group, having in excess of 7 years experience. College degree desirable but not essential. We consider everyone on our staff to a member of the firm. Please state age, education, experience, marital status and starting salary. Also please send recent photograph or snapshot. Louis G. Hesselden, A.I.A., Architect, P.O. Box #803, Albuquerque, New Mexico.

PROJECT MANAGER—Graduate architect or engineer, preferably with advanced degrees, thoroughly experienced in design and construction of all types of buildings for industry and government. Assignment requires proven administrator with polished professional skills to direct every phase of consulting service with established firm. Salary open. Desired age range 30-40. Moving expenses paid. All replies will be acknowledged and treated in confidence. Send complete resume to Box #414, PROGRESSIVE ARCHITECTURE.

RETIRED ARCHITECTURAL CONTACT MAN— To call on architects part time or few days a week, to introduce high quality line of aluminum railings. No selling, estimating nor order taking. Compensation for each call, no commission. Can supplement social security income. Openings in most major cities. Blumcraft of Pittsburgh, 460 Melwood Street, Pittsburgh 13, Pennsylvania.

# SITUATIONS WANTED

ARCHITECT—Degree, A.I.A. California and NCARB Certificates. Age 39, married, 16 years diversified experience, project management, specifications, drawing production, client relations. Responsible for production of buildings up to ten million dollars for one project. Moderate design ability. Desire responsible position with possible future association or partnership. Box #415, PROGRESSIVE ARCHITECTURE.

ARCHITECT-Desires work abroad, Europe, Near East or Middle East preferred. 12 years

### Advertising Rates

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

experience including client relations, design, working drawings, specifications field supervision, public agencies, 7 years as project manager with large eastern office. Previous writing career. Pennsylvania registration, NCARB certificate. Box #416, PROGRESSIVE ARCHITECTURE.

ARCHITECT—28, Bachelor or Architecture degree. Registered in Canada. 4 years diversified and responsible experience in design, working drawings supervision and administration including client contact. Desires permanent position or partnership with opportunity for creative design in small, progressive firm in Canada or United States. Resume on request. PROGRESSIVE ARCHITECTURE, Box #417.

CAPABLE PRESTIGE DESIGNER — Fulbright Scholar, Loyal. Dedicated to architecture. Experienced in administrative and construction procedures. Has done client and consultant liason, design, working drawings and supervision for first-rate firms. Class of 1955, Yale. Desires small firm and responsible work. Architect, Apt. 1A, 245 Henry Street, Brooklyn Heights, N. Y.

DESIGNER—Want free-lance jobs. 11 years experience in architectural design, drafting, detailing. Write Box #418, PROGRESSIVE ARCHITECTURE.

GERMAN ARCHITECT—32, single, degree from the University of Karlsruhe (Germany), varied and international experience, 6 years in Germany, Italy, France. Fluent Italian and French. Desires position in the United States. Will consider any location can begin work September 1962. Write Box #419, PROGRES-SIVE ARCHITECTURE.

GERMAN ENGINEER—Of overground buildings, age 25. Wishes to work in an office for one year. Designing & drafting. Available September 1. Prefer north central states. Werner von Sengbusch, Hamburgh-Volksdorf, Germany, Waldredder 4.

GRADUATE ARCHITECT—Seeks position with progressive firm engaged in contemporary work and interested in agressive young men eager to learn. Three years experience with architectural and engineering firms. Age 26, married, family. Prefer location in Southwestern United States. Excellent references, complete experience record available upon request. Write Box #420, PROGRESSIVE ARCHI-TECTURE.

REGISTERED ARCHITECT—Age 36, family, eleven years experience, familiar with all phases of architectural practice. Desires responsible position with a progressive firm as designer with a chance for advancement. Re-*Continued on page 227* 

# P/A JOBS AND MEN

Continued from page 226

sume on request. Box #421, PROGRESSIVE ARCHITECTURE.

REGISTERED ARCHITECT—(Written examination), age 35. Bach. of Arch. Degree. 10 years experience in leading architects' offices. Desires permanent association or partnership in modern office. Willing to invest in partial or major firm interest and will consider location anywhere in U.S. Resume and photo on request. Box #422, PROGRESSIVE ARCHI-TECTURE.

REGISTERED ARCHITECTS—Husband & wife practicing architects. Registered in New York, Pennsylvania, New Jersey, NCARB. No children. Awards, extensive varied training, 31 years combined experience. Seeking interesting work abroad. Renderings, quick sketches, mature detailing, specifications, supervision, construction, interiors, business management, accounting, allied arts. Travel, settle. Indicate location. Resume, brochure. Box #423, PROGRESSIVE ARCHITECTURE.

REGISTERED STRUCTURAL ENGINEER—Eleven years experience designing and preparing working drawings for commercial, institutional and light industrial buildings in both concrete and steel. Desire association with A&E firm or consultant in S.E. Box #424, PROGRESSIVE ARCHITECTURE.

SENIOR STRUCTURAL ENGINEER—With thorough supervisory experience with leading engineering and construction firms. Large industrials, power plants, waterfront structures, dams, airfields, bridges, etc. Excellent estimator and spec. writer. Sound client contact and negotiating experience. Desire position with architectural, consulting or industrial firm. Box #425, PROGRESSIVE ARCHITECTURE.

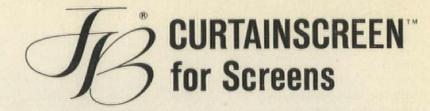
# MISCELLANEOUS

ARCHITECTURAL & DESIGN PERSONNEL AGENCY—A personalized placement service for top-level architects, designers, engineers, draftmen, estimators and interior designers; selective contracts arranged in a confidential and professional manner. Interviews by appointment. 58 Park Avenue, New York. MUrray Hill 3-2523.

CAREER BUILDERS—RUTH FORREST—since 1947 a Personnel Agency specializing in Architectural, Interior, and Industrial Designers; all Home Furnishings and related personnel. Trainees to top executives, 515 Madison Ave., New York 22, N.Y. PLaza 2-7640.

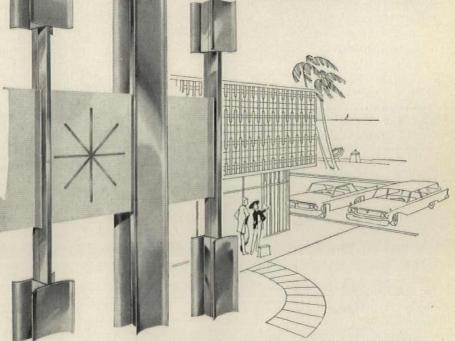
FOR SALE: ARCHITECTURAL OFFICE—Well equipped with printing, duplicating and binding machines, files, tables and desks. Owner retiring. No other architectural office in town. Opportunity to build good practice. Building with six-room apartment, first floor, offices two upper floors. Walter F. Rittenhouse, Box #350, Kitanning, Pennsylvania.

HELEN HUTCHINS PERSONNEL AGENCY-Specialist Architectural, Industrial, Interior, Design; Decorative Arts and Trades; Home Furnishing Field; Architects, Designers, Draftsmen, Administrative Personnel, Interviews by appointment, 767 Lexington Ave., New York 21, N. Y. TE 8-3070.



Now Julius Blum provides custom-fabricated screens at quantity-production prices! The secret? It's the new **Curtainscreen** system of coordinated components which **you** combine to produce your own individual design for every application. **Curtainscreen** meets any screening need, any type, any size, any scale, inside or outside. For solar screens, facing screens, space dividers, railings, vision barriers, or any other screening problem, **Curtainscreen** provides a unique and economical solution. For further information and details, write for **Curtainscreen** 

Bulletin No. 141-A.



JULIUS BLUM & CO., INC., CARLSTADT, NEW JERSEY TELEPHONES: CARLSTADT, GENeva 8-4600; PHILADELPHIA, MArket 7-7596; NEW YORK, OXford 5-2236 For more information, turn to Reader Service card, circle No. 331

# DIRECTORY OF PRODUCT ADVERTISERS

Aetna Steel Products       15         Albina Engine & Machine Works       86         American Cyanamid Co., Building       112         Products Division (Skydome)       112         American SisalKraft Co	Glen Raven Cotton Mills, Inc 203 Glynn-Johnson Corp 26	Otis Elevator Co
American Telephone & Telegraph Co       22         Andersen Corp.	Harrington & King Perforating Co., Inc.86Haws Drinking Faucet Co190Hillyard Chemical Co.76Hubbell, Harvey, Inc.210	Panelyte Division, St. Regis Paper Co       179         Pass & Seymour       104         Pittsburgh-Corning Corp.       211         Pittsburgh Plate Glass       57 thru 62         Portland Cement Association       29
Azrock Products Div.       2nd Cover         Bally Case & Cooler Co.       83         Bethlehem Steel Co.       39 thru 42         Blum, Julius & Company.       227         Bowman Steel Corp.       224, 225, 226	Inland Steel Products Co	Raynor Mfg. Co
California Redwood Assn.23Carrier Air Conditioning Company109Carpenter, L. E. & Co., Inc.35Ceco Steel Products Corp.96,97Concrete Reinforcing Steel Institute.36Cook, Loren Company.104Cornell Iron Works, Inc.108	Kentile, Inc.	Ruberoid/Matico, The Ruberoid Co.,         Floor Tile Div
Day-Brite Lighting, Inc	LCN Closers, Inc	Steelcraft Mfg. Co.       3.         Summitville Tiles, Inc.       18         Sunroc Corp.       20
Dow Corning Corp.91Drusteel Corp.3rd Coverdu Pont de Nemours, E. I. & Co.,Lucite Div.191Dur-O-Wall207	Macomber, Inc.         103           Mahon, R. C., Co.         199           Maple Flooring Mfrs. Assn.         34           Marble Institute of America         177           Marsh Wall Products, Inc.         93	Taylor, Halsey W., Co
Eastern Products Corp 27 Extruded Louver Corp 100	Maxitrol208McDonald Products, Inc.38McPhilben Lighting Co.8Miller, Howard Clock Co.,8Built-in Division107Miller Sliding Glass Door Co., Inc.106Minnesota Mining & Mfg. Co.186, 187	UniMac Co.       103         United States Gypsum Co.       204, 203         U.S. Steel Corp., National Tube Div32, 33       104         Universal Atlas Cement Co., Div. of       105         U.S. Steel Corp.       14         Upco Company       100         Uvalde Rock Asphalt Co.       2nd Cover
Faber-Castell, A. W. Pencil Co 209Federal Seaboard Terra Cotta 107Fenestra, Inc	Mississippi Glass Co.         47,48           Moore, P. O., Inc.         38           Mosaic Tile Co.         44,45	West Coast Lumbermen's Assn110, 111 Wood Conversion Co
Foamweave, Inc 43	National Gypsum Co	Youngstown Sheet & Tube Co200,20
General Bronze Corp.         19           General Fireproofing Co.         9	National Tube Division, U.S. Steel Corp	Zero Weather Stripping Co., Inc 19 Zonolite Co

# SALES, SERVICE, AND CIRCULATION

PROGRESSIVE ARCHITECTURE WILLIAM R. EVANS, JR. SAM H. PATTERSON, JR. JOSEPH M. SCANLON DAVID N. WHITCOMBE SUE FELDMAN REINHOLD PUBLISHING CORPORATION Advertising Sales Manager Research and Promotion Manager Production Manager Circulation Manager Subscription Manager

NEW YORK OFFICE 430 Park Ave., New York 22, N. Y. MUrray Hill 8-8600 ROBERT L. BASSINETTE HARRINGTON A. ROSE DONALD W. THOMPSON

PITTSBURGH OFFICE Porter Bldg., 601 Grant St., Pittsburgh 19, Pa. ATlantic 1-9421 ALBERT E. McCLIMANS

DISTRICT MANAGER

DISTRICT MANAGER DISTRICT MANAGER

DISTRICT MANAGER

CLEVELAND OFFICE East-Ohio Building, 1717 E. 9th St., Cleveland 14, Ohio PRospect 1-4011-12-13 JOHN F. KELLY DISTRICT MANAGER

CHICAGO OFFICE 111 W. Washington St., Chicago 2, Ill. RAndolph 6-8497 CHARLES A. ULLRICH RALPH E. PETERSEN, JR. CARL J. NOLTE, JR.

DISTRICT MANAGER DISTRICT MANAGER DISTRICT MANAGER

WEST COAST ADVERTISING REPRESENTATIVES Duncan A. Scott & Company 85 Post St., San Francisco 4, Calif. GArfield 1-7950 DUNCAN A. SCOTT, CYRIL B. JOBSON

Duncan A. Scott & Company 1901 W. 8th St., Los Angeles 57, Calif. HU 3-6211 DAVID CLARK PETER SCHULZ

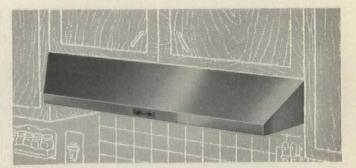
SOUTHERN ADVERTISING REPRESENTATIVE Robert L. Watkins Associates 505-805 Peachtree Bldg., Atlanta 8, Ga. TRinity 4-6427 ROBERT L. WATKINS

## EXECUTIVE-ADMINISTRATIVE

DAVID BRADFORD WILKIN THOMAS H. CREIGHTON, FAIA WILLIAM R. EVANS, JR. VICE PRESIDENT AND PUBLISHER Editor Advertising Sales Manager

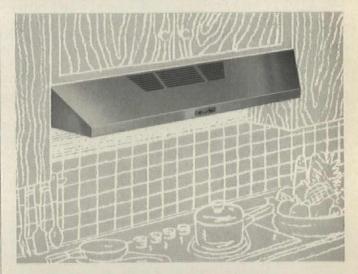


OFFERS SO MUCH ...FOR SO LITTLE



# IN THE ALL-NEW, SELF-CONTAINED PACE SETTER VENTILATING HOOD

This budget buy with powerful built-in ventilator comes in satin chrome or coppertone. Drawer-type filter. Enclosed light. Interchangeable  $3\frac{1}{4}$  " x 10" discharge with damper. Front mounted switches. 30", 36", 42", 48" lengths. A surprising price tag.



# IN THE ALL-NEW VENTLESS TOWN HOUSE HOOD

Low cost, efficient ventless hood in coppertone and satin chrome. Grease impingement and activated carbon pull-out filters. Enclosed light. Front mounted switches. 30", 36", 42" lengths. Priced to make sales. Write for complete information.



DIVISION OF ROBBINS & MYERS, INC. 7755 Paramount Place, Pico Rivera, California · Dept. PA

For more information, turn to Reader Service card, circle No. 392

JULY 1962 P/A

Mouras 1. Leugh

ps.

The Question of Quality—in architecture and other aspects of life—came to my mind when I went out into the suburbs recently with an architect friend to see a house that he had designed. These are always risky expeditions; almost every architect is very proud of practically every job he has done, and an architect's pride is no guarantee of what my findings may be. The risk is run by both of us. I may be in the position of hurting the feelings of a person I like, or dissimulating, because, according to my subjective, not necessarily correct evaluation, I find that I don't like the building. And he runs the risk of being embarrassed by an apparent negative reaction on my part; I realize that it's no fun showing a work you are proud of to an editor and having it badly received. (Parenthetically—this is not the point of my essay—this problem bothers all of my colleagues, on many magazines. Each of us has developed his own noncommittal word or phrase: "Very interesting!" or perhaps even "Remarkable!" One editor I know relies on the expression: "Say, that's a *building*, isn't it!")

But in this case I am writing of, there was no problem; I was honestly and deeply impressed with the house, and could compliment the architect with full sincerity. And beyond ranking up plus value judgments on many value scales, for the concept, the form, the design in all its details, the technology, the relationship with site and neighborhood—beyond all this, I was delighted to see a *quality* in the design of the house, of a degree one seldom finds today. This was visually expressed in every aspect of craftsmanship. Not only was cabinet work of unusual quality, in materials and workmanship; even mass-produced components, such as certain wall panels, had been selected with great care and installed with meticulous precision. Behind this visible richness of quality, however, anyone with knowledge of the production of architecture could sense the quality of detailing, the quality of specifications writing, the quality of supervision on the job that had been necessary to produce the quality of the finished work of architecture.

I was thinking of this pleasant experience while I was talking the other day to an academic friend who is about to launch on a study of the relationship between mechanization and quality in all aspects of life. I think that, like a good researcher, he is beginning without prejudice; he will see what his studies turn up. Personally, I don't believe I could be open-minded about this. It seems to me very clear that the house I saw was a remarkable exception to a rule: the rule that, as things become more available to more people, they worsen in quality. I don't believe they have to, or that they should, but they do. More and more people travel, stay in hotels, eat in "good" restaurants, live in "luxury" apartments, buy "designer" clothes and furniture. And travel accommodations, hotel service, quality of restaurant food, construction quality of apartment houses, and both design and craftsmanship of clothes and furniture have become worse.

The most miserable aspect of this phenomenon, it seems to me, is that appreciation of quality has also declined, along with quality itself. No one (or almost no one) complains hitterly about lousy service or poor food or shoddy workmanship. It's not just that we accept it; we no longer see the difference, or the ultimate step in loss of quality—we actually prefer the less good. Another friend (a number of friends seem to have supplied me with inspiration for this column) was remarking recently that his children seem to prefer that massproduced item called a TV Dinner to the fine meals that his wife still likes to produce. Not only is the quality of the family dinner ceremony lost; the taste for quality in the food itself just does not exist.

In architecture, there is the danger that the increasing volume of work and expanding services can operate to reduce the quality of design and construction. All is not lost, however, when I can still see a house and honestly say, "It's beautifully built in all respects."