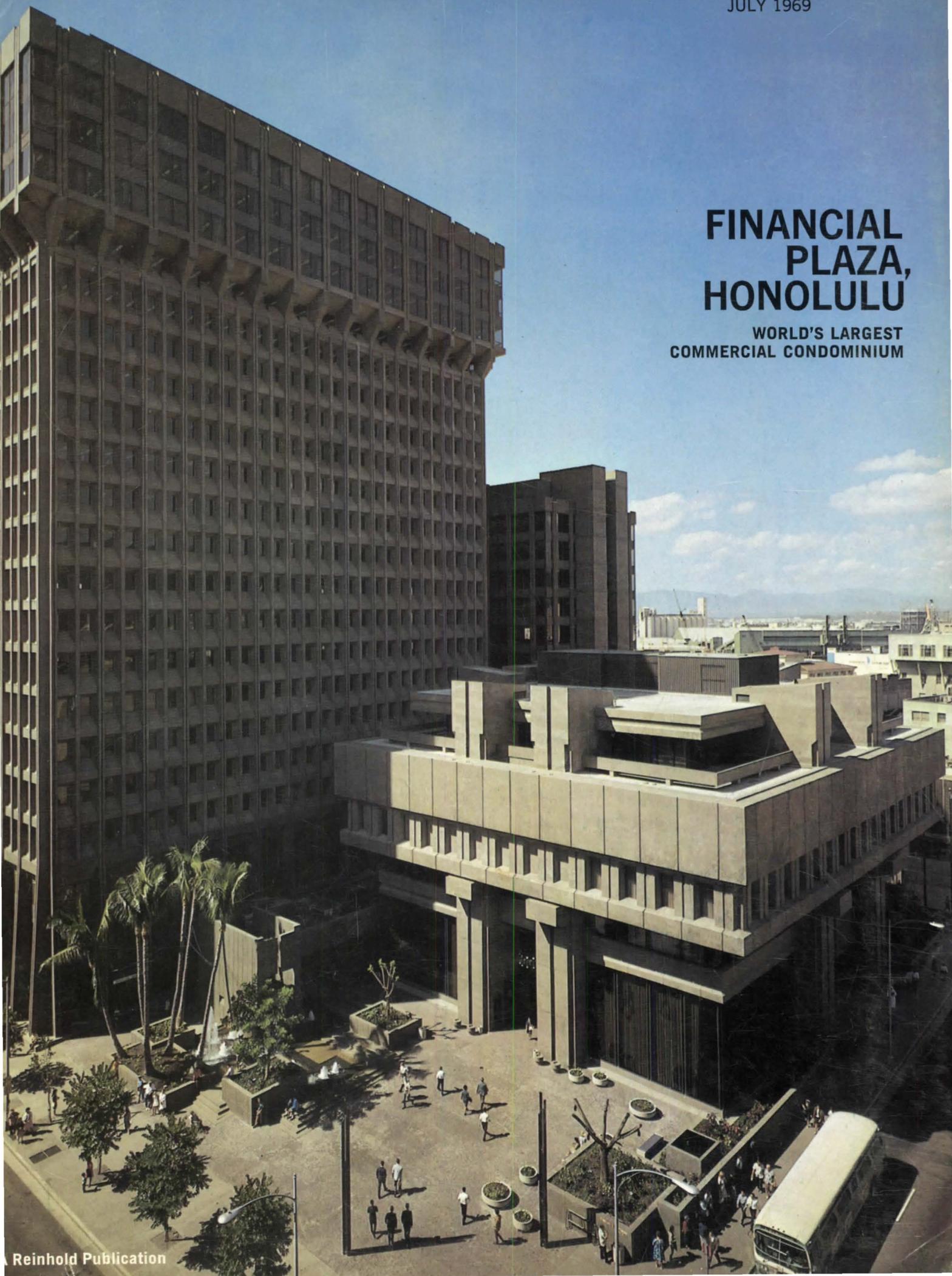


## FINANCIAL PLAZA, HONOLULU

WORLD'S LARGEST  
COMMERCIAL CONDOMINIUM

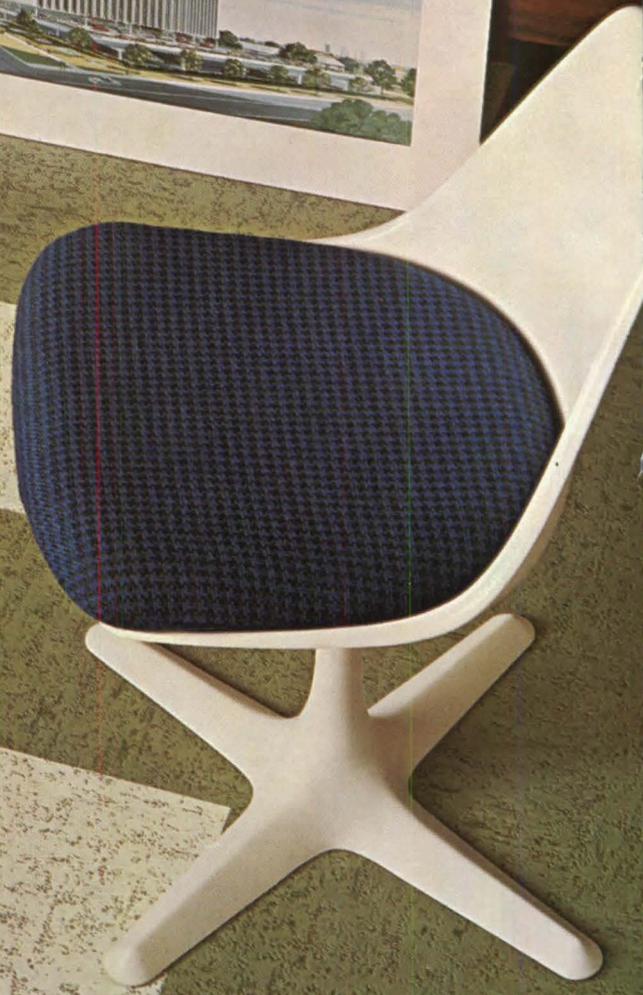
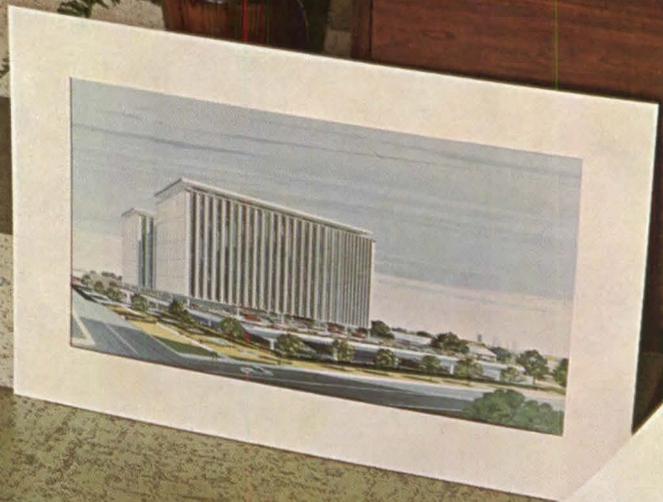


Installation:  
Douglas Plaza Building,  
Dallas, Texas

Architects:  
Brandt and Williford,  
A.I.A., Dallas

Floor Contractor:  
Commercial Floors,  
Dallas

Floor shown: Tarantino  
VT-497 Pyrenees and  
VT-496 Olympia



## Creative Styling: an inherent quality of Azrock floors.

The exceptional range of color and styling available in Azrock vinyl asbestos tile is the ideal complement to the designer's imagination and good taste. Here, in the handsome new Douglas Plaza medical professional building in Dallas, Azrock's Tarantino creates richly colored, understated floors in corridors and offices. The textured surface helps conceal heel and scuff marks . . . and maintenance time and cost are kept to the minimum. Tarantino . . . in four striking colors, 3/32" gauge, 12" x 12" modular size . . . another beautiful example of Azrock creative styling.

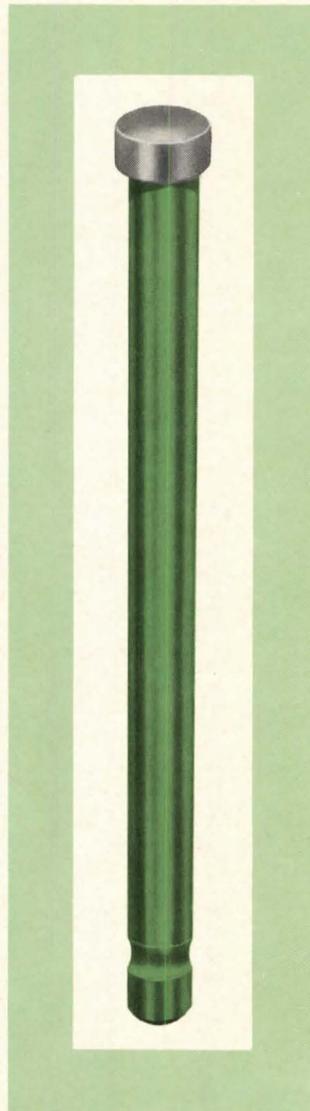
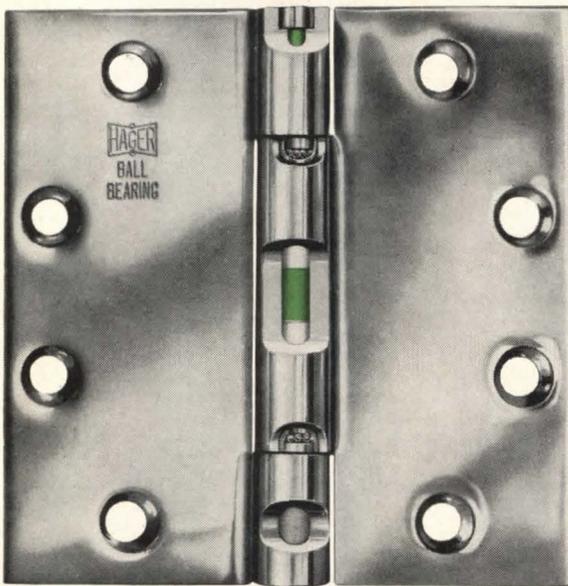
an original floor styling by **AZROCK**<sup>®</sup>

For an independent research report, write today for a free copy of the Wharton School of Finance and Commerce study, "The Economics of Carpeting and Resilient Flooring: An Evaluation and Comparison." Azrock Floor Products, 516 Frost Building, San Antonio, Texas, 78206 — the HemisFair'68<sup>®</sup> City

On Readers' Service Card, Circle No. 327

*Your color guide to finest hinge performance*

# TEFLON GREEN



The coating that lubricates as it protects. The newest addition to refinements in TRI-CON, the world's slimmest concealed ball-bearing hinge.

TEFLON\* dry film lubricant has the lowest friction coefficient of any lubricant. Fused-to-metal Delrin bushings line the barrel of all TRI-CON hinges. This means that metal never touches the pin. Doors move gently, easily, smoothly . . . cushioned by Delrin against Teflon . . . the finest matching for perfect movement. Here's the greatest shield against wear. It never needs oil. And there's lasting protection against rust.

Specify TRI-CON, the hinge with the Teflon Green pin. You're ordering the hinge that works easiest right from the start, and the one that has the best protection against wear. Yet you're working within costs no greater than that for an ordinary premium hinge. Contact your Hager representative for complete information or write.

\*DuPont's registered trademark



**HAGER HINGE COMPANY**  
139 Victor St., St. Louis, Mo. 63104  
In Canada: HAGER HINGE CANADA LTD.



# P/A THIS MONTH

Progressive Architecture® July 1969

Editor  
FORREST WILSON, AIA

Executive Editor  
BURTON H. HOLMES, AIA

Managing Editor  
PETER M. GREEN

Assistant Managing Editor  
GEORGE LUBASZ

Senior Editor  
C. RAY SMITH, AIA

Associate Editors  
ALIS D. RUNGE  
RICHARD WHIPPLE  
DON RANEY  
WILLIAM WILSON ATKIN  
STEPHEN A. KURTZ

Assistant to the Editor  
CHARLOTTE VAN VOORHIS

Assistant Editors  
CHET MANTOLESKY  
JEAN G. ARNOLD  
NINA V. ZEMO

Graphics  
JOEL PETROWER Art Director  
MARTIN TROSSMAN Assistant Art Director  
NICHOLAS R. LOSCALZO Architectural Drawings  
KARL VOSSBRINCK Art and Production

Contributing Editors  
NORMAN COPLAN It's The Law  
BERNARD TOMSON It's The Law  
E. E. HALMOS, JR. Washington/Financial  
HAROLD J. ROSEN Specifications Clinic

---

Publisher  
PHILIP H. HUBBARD, JR.

---

WOLCOTT H. JOHNSON Advertising Sales Manager  
BURCHARD M. DAY Promotion Director  
JOSEPH M. SCANLON Production Manager  
DANIEL H. DESIMONE Assistant Production Manager  
EUGENE A. LIZOTTE Circulation Director  
SUE FELDMAN Subscription Manager

## Financial Plaza of the Pacific

A three-building complex on a landscaped plaza in downtown Honolulu, designed to reflect separate visual identities of the three occupying owners, achieves the seemingly difficult task of forming an integrated unit. LEO S. WOU & ASSOCIATES AND VICTOR GRUEN ASSOCIATES, INC., ARCHITECTS.

86

## Architectural Education

A recent graduate of an architectural school presents the student point of view of architectural education — one that clearly demands a “socially relevant” education.

94

## Discrete Concrete

A well-thought-out building provides painting and drawing space for a small art school. Weary of textured concrete, the architect used the standard finish of plastic-coated concrete forms to produce a “beveled pour marks” texture. PETER VERCELLI, ARCHITECT.

100

## Central Well Becomes Interior Focus of College Commons

Though a typical example of functionalist architecture, this Commons provides separate yet interrelated spaces accommodating all aspects of extracurricular life, while the well effect of the central lounge unites the building. HARRY WEESE & ASSOCIATES, ARCHITECTS.

104

## A Cheshire Cat in Search of a Smile

In sizing up the nature of the Nixon Administration's policy on housing, P/A finds that it curiously resembles that of the Cheshire Cat in search of a smile. This essay presents five possible types of smiles and the occasion on which they are to be used.

108

## Museum Hangs Nature's Grim Tale from a Space Frame

A new lightweight, lower cost steel space frame designed by a Japanese company is used to support an exhibit at New York City's American Museum of Natural History. **112**

## Negative Space Gives Form to Library

Library for a theological school is a well massed structure enclosed by limestone walls and tied together with imaginative fenestrations. CAMPBELL, ALDRICH, & NULTY, ARCHITECTS. **114**

## Multi-Form Bedroom

A furniture system of sliding platforms that extend the width of a narrow room in a New York City brownstone transforms the space physically to produce a simple but iconoclastic system for the conventional bed-study treatment. MICHAEL HOLLANDER, DESIGNER. **126**

## Down by the River

A proposal to rebuild a 45-acre portion of West Harlem would provide housing for 3000 families in a multiuse omnibuilding also containing recreational, cultural and commercial facilities. **130**

## Environment for Exploration and Participation

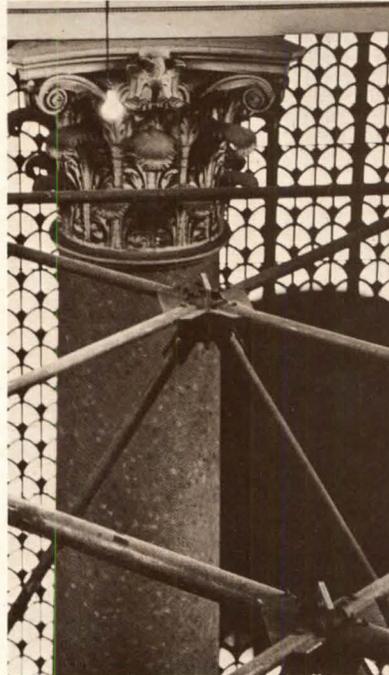
A theater in Harlem is designed to get both audience and actor involved with each other "as one total community." Seating is fragmented and islanded in the over-all space, bounding the main playing area almost everywhere in the room. HARDY HOLZMAN PFEIFFER ASSOCIATES, ARCHITECTS. **134**

## Office Interiors: Designing With Light

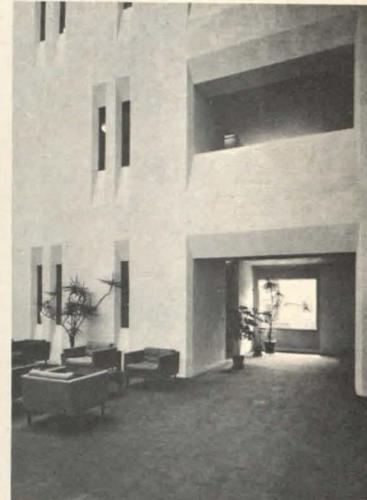
With existing equipment and techniques adapted from the theater, light is becoming an element of architecture and a creator of mood and atmosphere. **138**

## Departments

Your Point of View .....	6
P/A News Report .....	26
Editorial .....	83
Specifications Clinic .....	146
It's the Law .....	148
Book Reviews .....	150
Jobs and Men .....	190
Directory of Product Advertisers .....	194
Readers' Service Card .....	197



Museum Hangs Nature's Grim Tale from a Space Frame (p. 112).



Negative Space Gives Form to Library (p. 114).



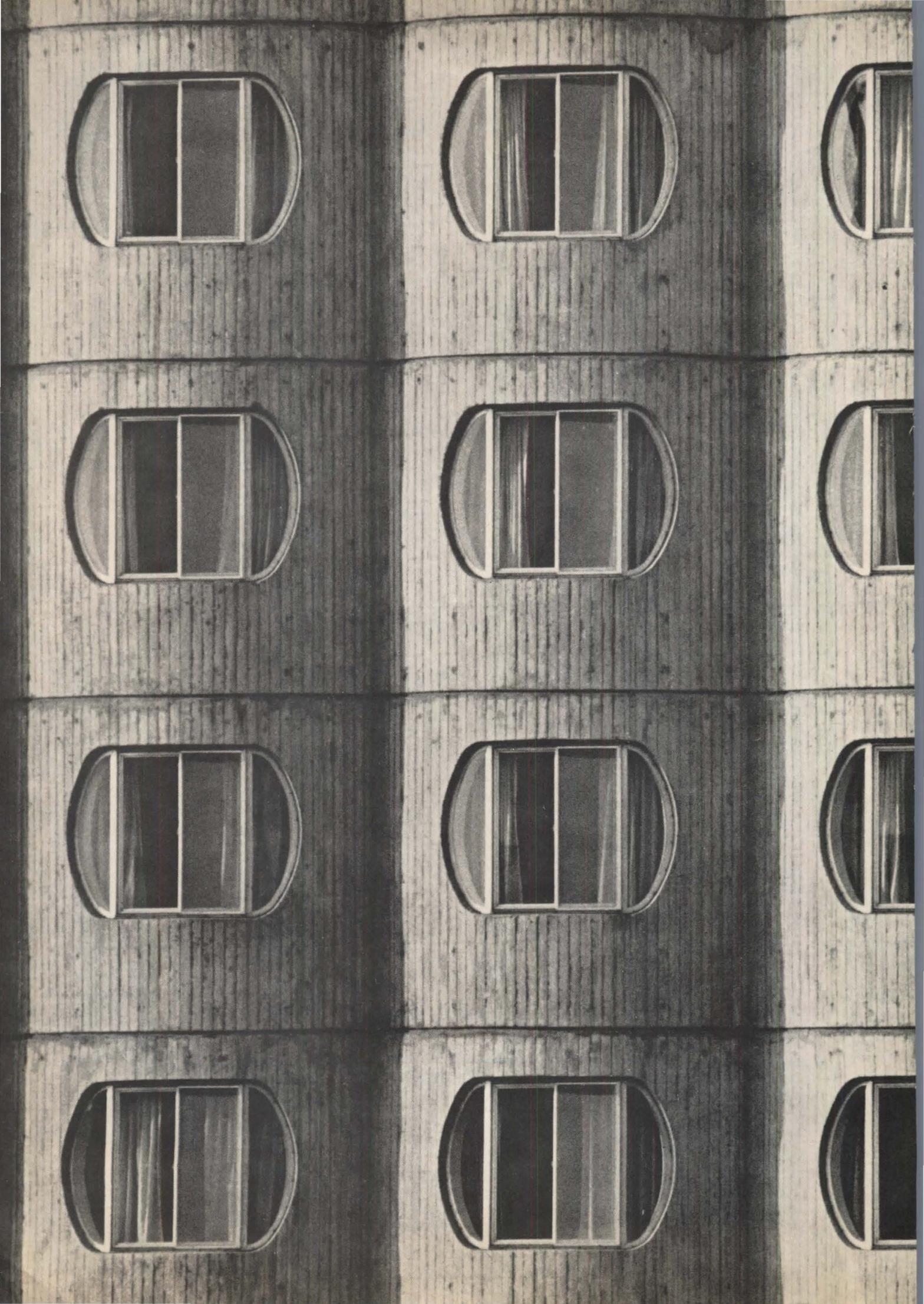
Discrete Concrete (p. 100).

Progressive Architecture, published monthly by Reinhold Publishing Corp., 600 Summer Street, Stamford, Conn., 06904. A subsidiary of Litton Publications, Inc., Division of Litton Industries. James F. Mottershead, President; Philip H. Hubbard, Jr., Vice-President, Administration; Leonard F. Miraglia, Treasurer; Kathleen A. Starke, Secretary; Henry R. Clauser, Thomas N. J. Koerwer, Harry I. Martin, Robert W. Roose, Vice-Presidents. Executive and editorial offices, 600 Summer Street, Stamford, Conn., 06904.

Subscriptions payable in advance. Publisher reserves right to refuse unqualified subscriptions. Subscription prices to those who, by title, are architects, engineers, specifications writers, estimators, designers, or draftsmen, and to government departments, trade associations, above title groups on temporary military service, architectural schools, architectural students, advertisers and their employees: \$5 for one year; \$8 for two years; \$10 for three years. All others: \$10 a year. Above prices are applicable in U.S., U.S. Possessions, and Canada. All practicing architects and engineers outside these areas: \$10 for one year; \$16 for two years; \$20 for three years. All others: \$20 a year. Single copy \$2, payable in advance.



©Reinhold Publishing Corp., subsidiary of Litton Publications, Inc., Division of Litton Industries. 1969 trade mark registered. All rights reserved. Indexed in Art Index, Architectural Index. Second-class postage paid at Stamford, Conn., and at additional office. Volume L, No. 7.



# The beautiful world of reinforced concrete is practically perfect

It's a beautiful view in the new Raymond M. Hilliard Center, Chicago. Texture. Shape. And incomparable design freedom. It's reinforced concrete. No other medium offers more. Just look at all of its many benefits: It's available. Everywhere. Ready to go when you are. A medium that's as sound and durable as any you'll ever work with. Long spans . . . load distribution: no problems. And reinforced concrete dampens sound. Won't rust. It's vermin proof. Fire test rating: the best. Your insurance rates are lower, too. Practical? Reinforced concrete is practically perfect. And new high strength reinforcing steels have opened the door to unlimited design possibilities. Faster, more economical construction. If your mind is occupied by a building that asks to be cast in a more versatile medium, move to reinforced concrete.



**Go 60 and Save.** Grade 60 Steels\*. Here's new strength and economy in a one grade package. Ultimate Strength Design (USD) utilizes fully its 50% greater yield strength. Helps achieve slimmer columns. More usable floor space. Lowers over-all construction costs. Let Grade 60 help you meet the challenge of the 70's whatever you're

building. Write for new Grade 60 Steel Brochure.

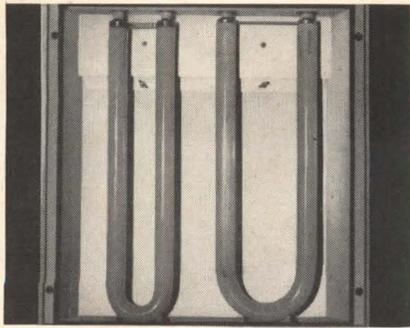
*\*Grade 60" the new term that describes ASTM specs for 60,000 psi reinforcing steels is upgraded in 1968.*



Raymond M. Hilliard Center, Chicago. A public housing development.  
Developer: The Chicago Housing Authority  
Architect & Engineer: Bertrand Goldberg Associates  
Contractor: Paschen Contractors, Inc.



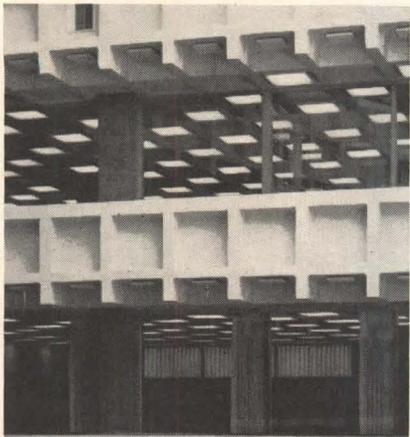
CONCRETE REINFORCING STEEL INSTITUTE  
228 North La Salle Street • Chicago, Illinois 60601



## 25% more light thanks to U.

Keene's new family of 24" or 30" square fixtures gives you 25% more light than similar units using straight fluorescents. You get high light output with complete interior design freedom. Reason: our truly one-of-a-kind fixture that uses any major manufacturer's 40-watt U-shaped lamps...the ones with the 6" leg spacing or the 3½" leg spacing.

Recessed models feature a hinged assembly that puts all electrical components on one side. There are 3 types available: surface, air and non-air, recessed. Want us to shed more light on our new fixture family?



KEENE Corporation,  
Lighting Division,  
(Formerly Sechrist Mfg. Co.),  
4990 Acoma Street,  
Denver, Colorado 80216

Send Info on "U" to Me.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

We've just begun to grow.

**KEENE**  
CORPORATION  
LIGHTING DIVISION

On Readers' Service Card, Circle No. 350

# YOUR POINT OF VIEW

## Reaction to May Issue

Dear Editor: Your May issue is most interesting, but I'm skeptical. Are mergers and methods still new, to say the least, futuristic — just the same old people, same motivations, in a jazzier package? "The new cities should be completely pre-planned and built in sparsely settled areas," to quote page 154. This sounds like "City beautiful again"; "when you let the sun in, mind it wipes its feet."

Big changes are in store. I doubt they will come as you depict. Mr. Hotchkiss sounds on the right track — buildings not so important; people and social forces; the new form generators — but he was too briefly quoted. Catalano's article was excellent.

The real changes are coming from people participation, not more corporate alienation. Sense awakening and the work of the Esalen Institute may have more to offer for the future. Perhaps an article on what they have to say would be interesting.

ROGER KEMBLE  
Vancouver, B.C.  
Canada

Dear Editor: "The New Professionals Challenge Traditional Practice" (MAY 1969 P/A) impressed me as the best issue I can remember in any architectural publication.

Congratulations for collecting a great quantity of informative data. It is an important contribution to my comprehension of this large and growing field, and it gave me food for thought regarding my own future.

Presumably, thousands of other young architects must be having the same reflections.

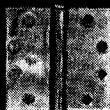
ALLEN KOSOFF  
Architect  
209 Berkeley Drive  
Syracuse, N.Y. 13210

Dear Editor: In the "The New Environmental Professionals" (MAY 1969 P/A) you (hopefully) forgot to mention the *needs of the individual*, which Charles Eames said are "the quality in those things we experience in our senses." These include: sight, the visual environment (objects and light); sound, the acoustic environment; feel, the touch environment; plus smell and taste.

A "Master Builder" is successful only when he solves individual needs. These could also be mass needs, but the direction of approach must be from the individual up and not from the megalopoli down. We, as designers of environments, are not to be dictators (as purveyors of exhibitionism) but servants providing services as well as we can, with at least some humility. Then we won't need "professional ethics, state licensing boards, or any of the other paraphernalia that dignify older professions." So, unless we are exponents of the police state, we should need no more than our agency capacity as designers to be creative in serving individual needs. Thus, if we accept the premise that man is competitive, we need only observe that the architect has professionalized and puritanized himself out of competition and therefore a right to exist, in many cases, except for the folly of trying to fulfill the ego of wealth. A broader basis is needed. The environmental designer of interiors is often justly maligned but also has, interestingly enough, a beautiful freedom from all that paraphernalia of "narrowing classification" of older professions. After all, degrees today keep little better than fish. The deep freeze is not the answer either in an age of change. Therefore, the broader scope of the "Master Designer" is perhaps the best alternative, using our energy to provide environmental dignity for the individual and not in satisfying our stuffy peers and their silly old library of rules at the expense of our client not getting what he retained us for, vainly hopeful, in the first place.

That is why we, as designing professionals, can best be creative in a capitalistic society if we lose our fear of professional degradation.

(Continued on page 16)



**X-5**

**UNIQUE**

For any interior door, regardless of hanging means, Rixson's new X-5 offers superior control, economy and concealment. It can be precisely installed, without measuring, in minutes... removed in less time without disturbing the door... fully adjusted with uncommon ease. Specify, with confidence, for thin slab construction... offset or center pivotal hanging... or even for stock doors, frames, and standard 4½" x 4½" butt hinges.

A **BENTON & BOWLES** product from:

**RIXSON CLOSERS**  
A DIVISION OF RIXSON INC.  
FRANKLIN PARK, ILLINOIS  
In Canada: Rixson of Canada, Ltd.

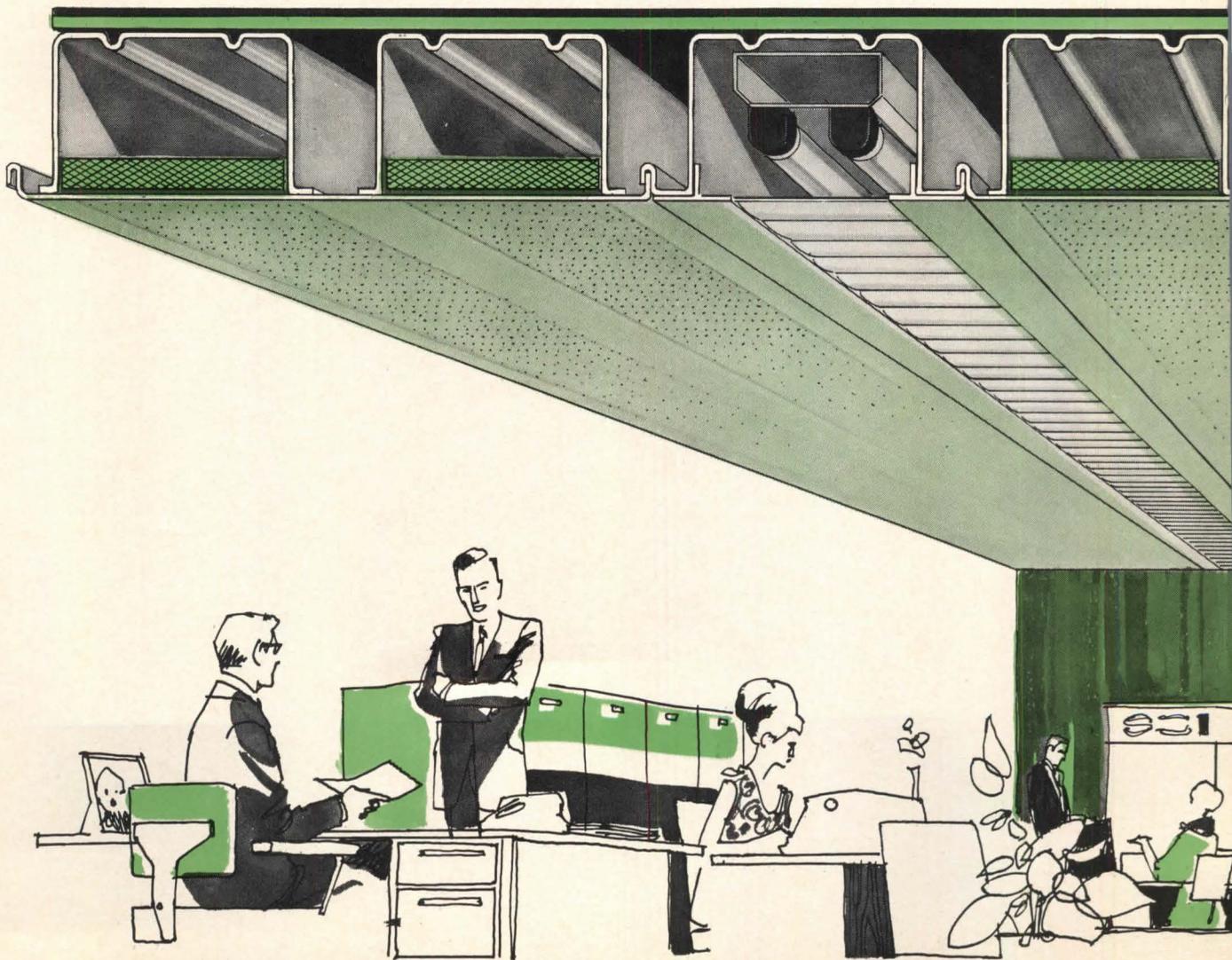


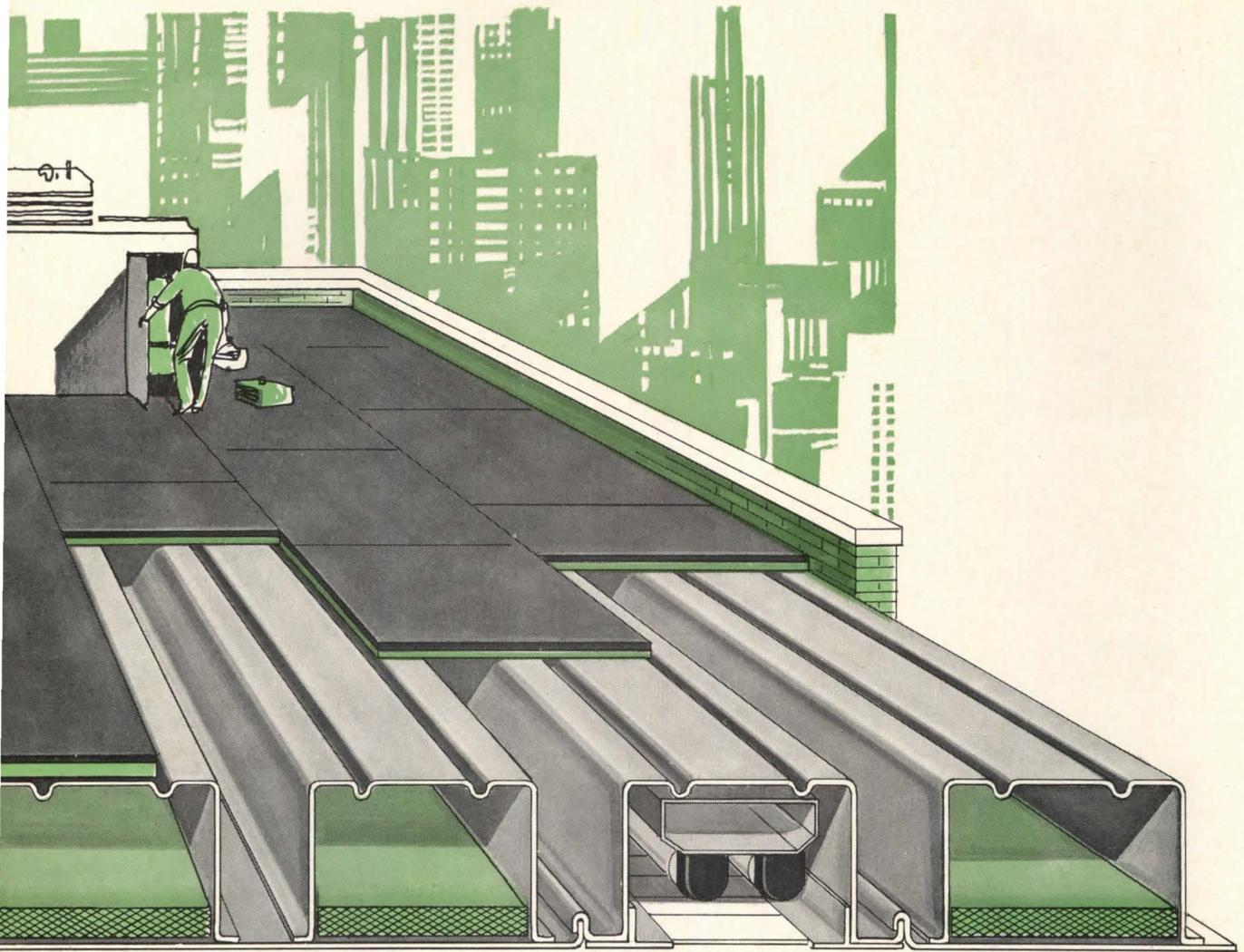
**X-5**

\*DETAILS? JUST ASK.

MAHON  
IS IDEAS  
in building  
products

# IS OUR ROOF A CEILING, OR IS OUR CEILING A ROOF ?





# MAHON LONG-SPAN STEEL DECK

a ceiling inside, a roof outside

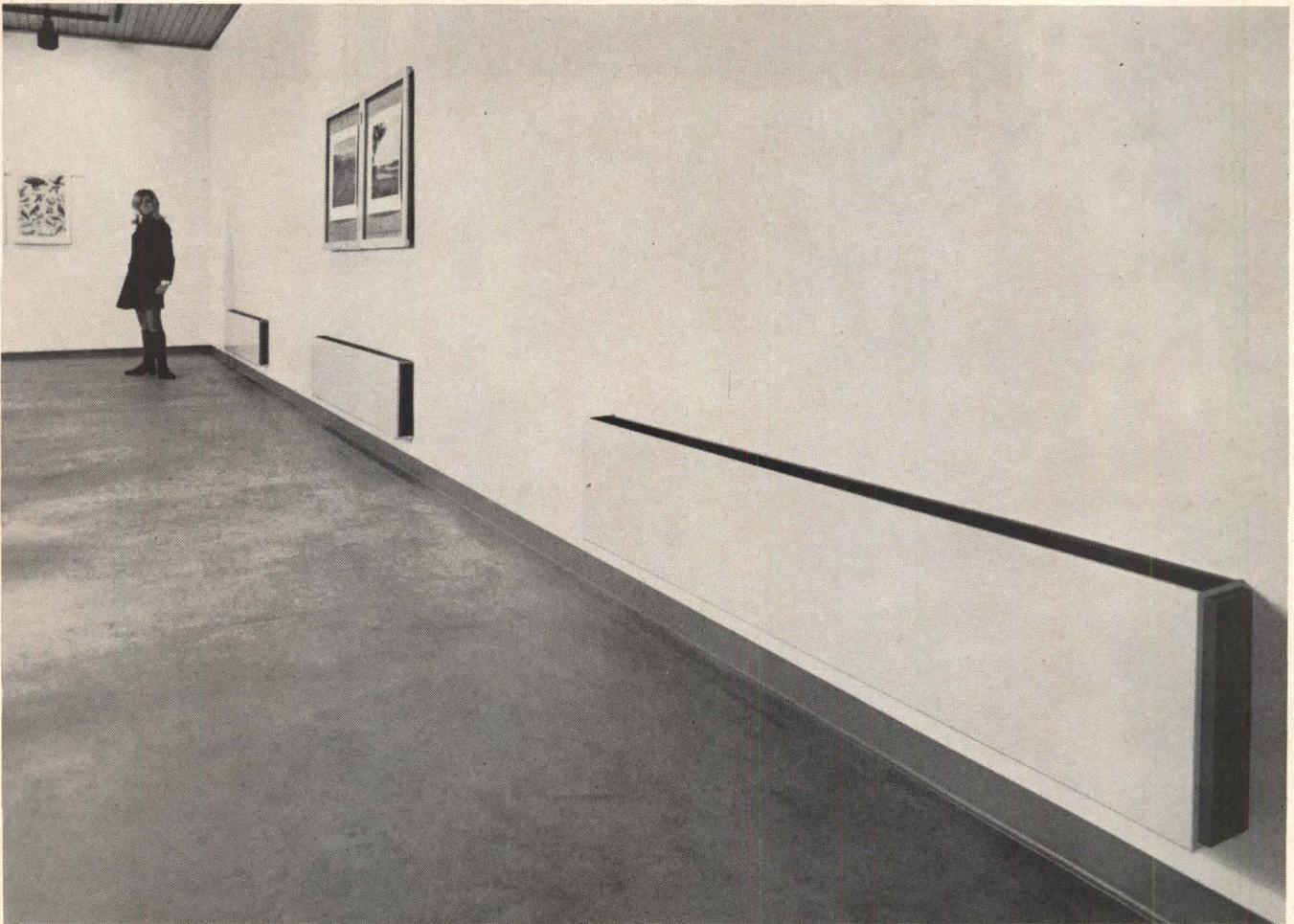
Put Mahon Long-Span Steel Deck over your head and you get more than the structural support of a roof. You get a finished ceiling inside that absorbs sound and houses recessed light fixtures.

Mahon Long-Span Steel Deck is roll-formed from US Standard-gage structural-quality steel . . . available prime-coated only, or hot-dip galvanized for permanent protection against corrosion.

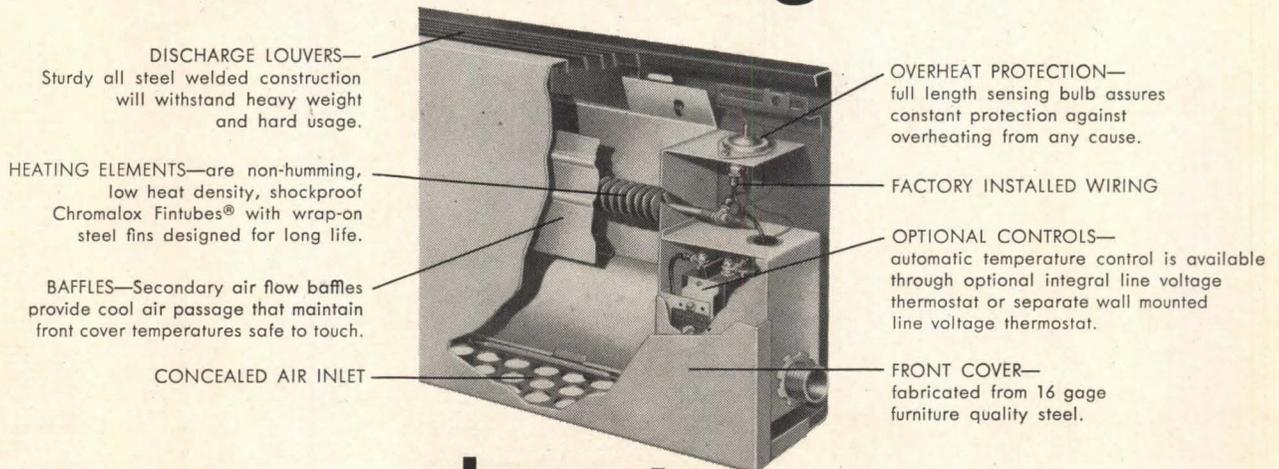
Because of its lightweight strength, Mahon Long-Span Steel Deck is erected quickly, easily and safely. All welding is done from the top surface.

Mahon Long-Span Steel Deck has economic advantages, too, because it cuts labor costs and saves construction time. And it needs no inside finishing material. For complete technical and engineering information, write The R. C. Mahon Co., 34200 Mound Rd., Sterling Heights, Mich. 48090.

**MAHON  
IS IDEAS  
IN BUILDING  
PRODUCTS**



## Chromalox® looks good here



**DISCHARGE LOUVERS**—Sturdy all steel welded construction will withstand heavy weight and hard usage.

**HEATING ELEMENTS**—are non-humming, low heat density, shockproof Chromalox Fintubes® with wrap-on steel fins designed for long life.

**BAFFLES**—Secondary air flow baffles provide cool air passage that maintain front cover temperatures safe to touch.

**CONCEALED AIR INLET**

**OVERHEAT PROTECTION**—full length sensing bulb assures constant protection against overheating from any cause.

**FACTORY INSTALLED WIRING**

**OPTIONAL CONTROLS**—automatic temperature control is available through optional integral line voltage thermostat or separate wall mounted line voltage thermostat.

**FRONT COVER**—fabricated from 16 gage furniture quality steel.

## here too.

Architectural Sill Line—an esthetically pleasing way to provide perimeter comfort heating in even the most contemporary commercial, industrial or institutional structures. Clean, thin-line styling saves space and fits harmoniously with all architectural wall systems and interi-

or surfaces. Available in a selection of baked enamel decorator colors. Chromalox Architectural Sill Line works with any air conditioning system to give year round individual room temperature control. Provides warm air "draft-barrier" protection against cold win-

dow downdrafts. For detailed information call your Chromalox representative. Or write directly for Design Manual F 31101. WC-102

  
**EMERSON**  
**EDWIN L. WIEGAND DIVISION**  
 EMERSON ELECTRIC CO.  
 7748 THOMAS BLVD. PITTSBURGH, PA. 15208

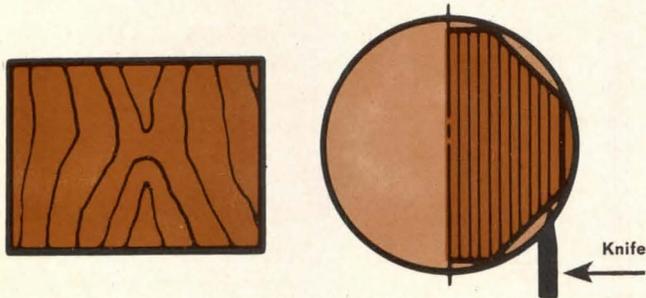
# The art and science of cutting and matching veneers.

By John Lentz

Simply defined, veneers are thin sheets of fine woods glued to core stock, such as Novoply® or lumber cores. This definition, however, leaves a lot unsaid. For cutting and matching veneers for architectural paneling and doors—as done by the skilled woodworkers of U.S. Plywood—involves many careful and complicated procedures.

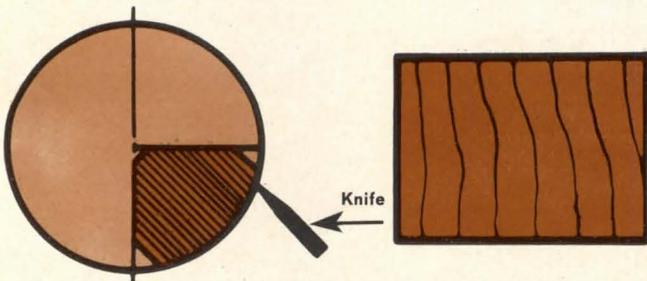
## Veneer cutting

Our veneers are cut from sections of choice logs—called flitches—by one of several methods, depending on the wood species as well as the veneer figure or growth pattern produced by a particular log. Most architectural veneers, however, are either plain, quarter or rotary sliced, as shown here.



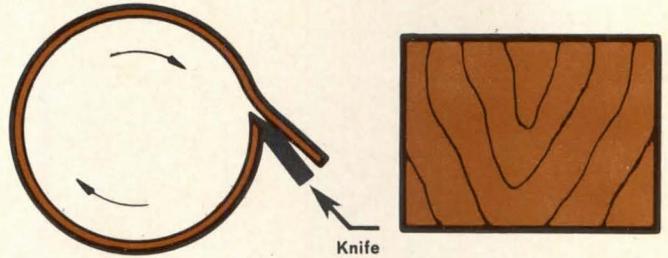
### Plain slicing

In plain or flat slicing, the half log or flitch is mounted with the heart side flat against the guide plate of the slicer. Slicing done parallel to a line through the center of the log produces a cathedral figure.



### Quarter slicing

In quarter slicing, the quarter log or flitch is mounted on the guide plate so that the log's growth rings strike the knife at approximately right angles. Result: a series of stripes which are straight in some woods and varied in others.



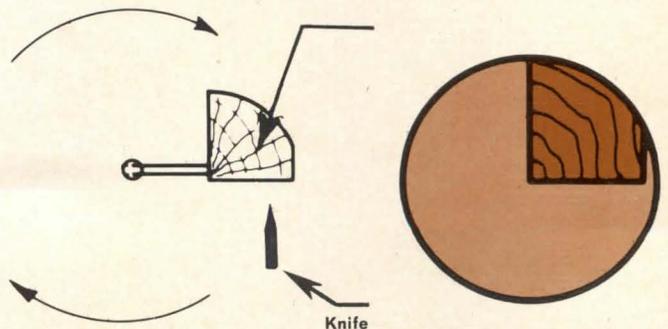
### Rotary slicing

In rotary slicing, the log is mounted centrally in the lathe and turned against a razor sharp blade, like unwinding a roll of paper. Since this cut follows the log's annular growth rings, a bold variegated grain marking results.

As the plain and quarter sliced veneers fall from the knife, they are attached in the *exact* sequence in which they were cut. (Rotary cuts, of course, cannot be sequence matched.) All logs or flitches are identified by number. After laminating, each panel is identified by both its sequence and flitch number.

## Other cutting methods

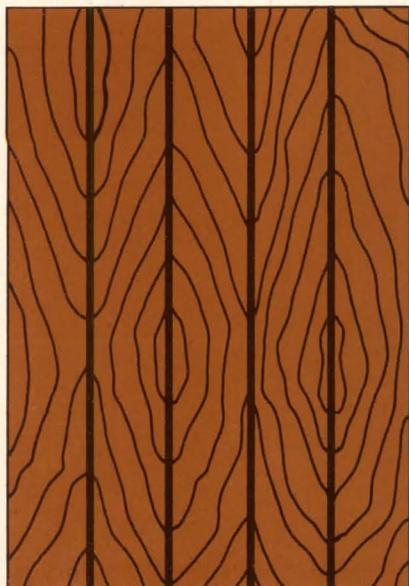
In addition to these methods of slicing, U.S. Plywood produces veneers by other types of cutting to yield a wide range of veneer configurations. Rift cutting, for example, produces a distinctive pattern.



### Rift cutting

This method of cutting produces Comb Grain Oak veneers. The medullary rays of oak radiate from the center of the log like the spokes of a wheel. By cutting perpendicularly to these rays, a comb effect results.

# Veneer matching by U.S. Plywood



Book matching



Slip matching



Random matching

Three matching patterns are most often used: Book, Slip and Random matching.

## Book matching

*In Book matching*, every other sheet of veneer is turned over, like the leaves of a book. Thus, balance at the veneer joint is produced as shown above.

## Slip matching

*In Slip matching*, veneer sheets are joined side by side, without turning. Consequently, the flitch pattern is repeated from sheet to sheet, resulting in a more even color after finishing.

## Random matching

*In so-called "Random mismatching,"* veneer sheets are carefully and deliberately mismatched for the most effective appearance. Veneers from several different logs are often used for one set of panels.

U.S. Plywood has one of the world's largest and most varied inventories of veneers for use in creat-

ing our Weldwood® architectural paneling and doors. Samples of veneer matching are shown in the sketches on this page.

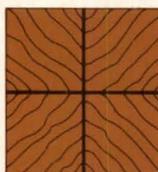
Whatever your esthetic requirements for paneling and doors, we can make them to your design.

We also offer a wide variety of panel and door finishes. For example, our dry film finishes—applied by roll lamination—will not check or craze. These films are also noted for their exceptional resistance to stains and wear.

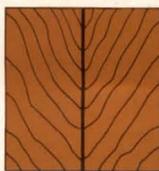
Let our Architects Service Representative work with you in selecting veneers for paneling and doors. He will gladly show you sample veneers, analyze your requirements and suggest the most practical and economic use of our Weldwood products. Call him at your nearest U.S. Plywood Branch Office.



Diamond



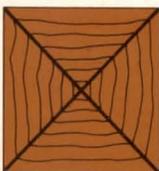
Reverse Diamond



"V"



Herringbone



Box



Reverse box



**U.S. Plywood**

A Division of U.S. Plywood-Champion Papers Inc.  
777 Third Avenue, New York, N.Y. 10017

# HOPE'S

HEAVY  
INTERMEDIATE  
STEEL  
WINDOWS

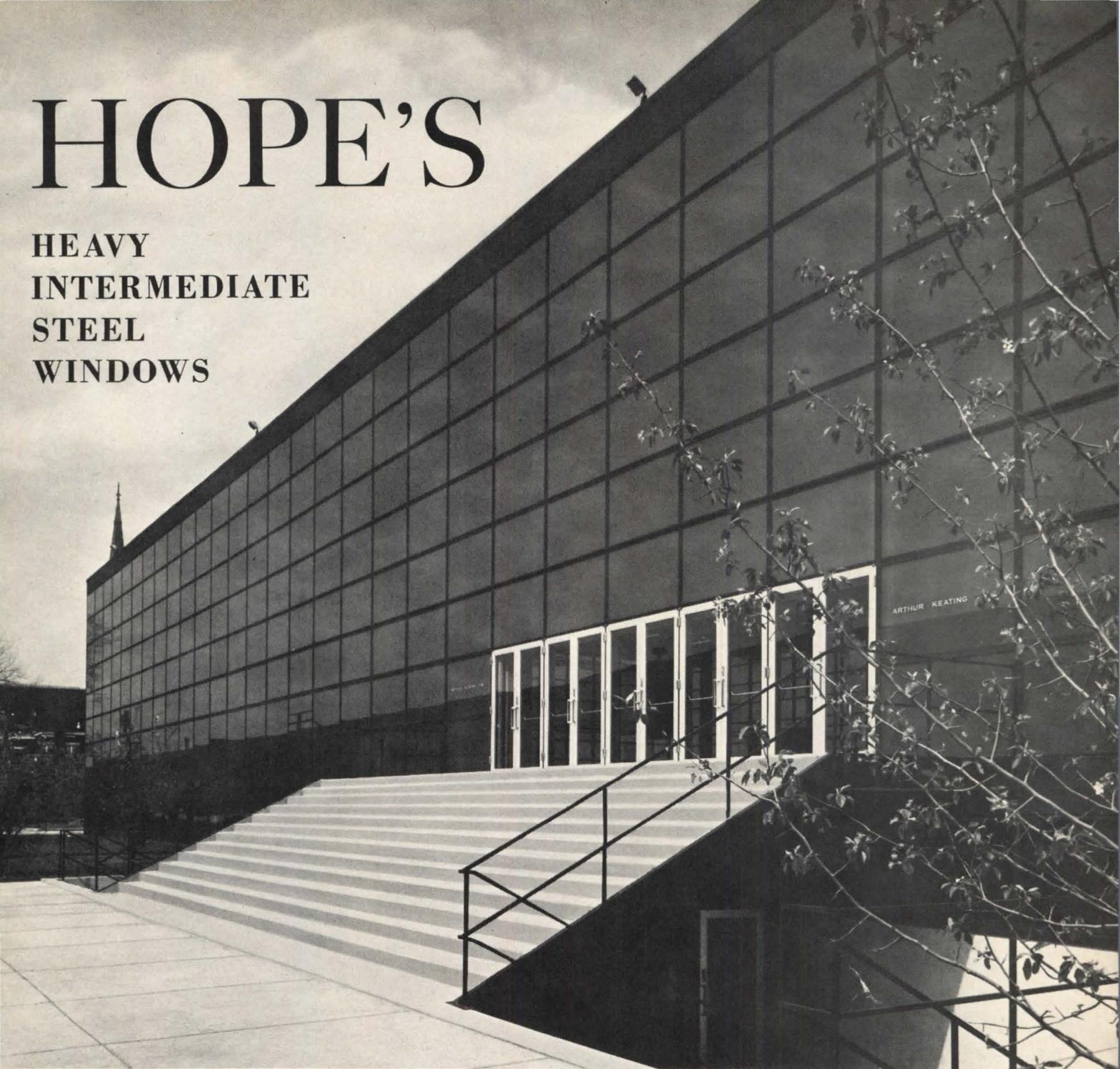


Photo by © Ezra Stoller (ESTO)

## GYMNASIUM (Arthur Keating Hall), ILLINOIS INSTITUTE OF TECHNOLOGY—CHICAGO, ILLINOIS

Architects: *Skidmore Owings & Merrill*

General Contractor: *A. J. Maggio Co.*

Custom Heavy Intermediate Steel Windows were selected by the architects and furnished by Hope's for the exceptionally large window walls in this handsome structure. Installation of all components including entrances (furnished by Hope's) was included in Hope's contract thus eliminating divided responsibility and insuring proper coordination and installation — Hope's would welcome the opportunity to discuss the windows for your next building — no obligation.



MEMBER  
STEEL  
WINDOW  
INSTITUTE

Our catalogs are filed in Sweet's Architectural file and our sales offices and representatives are located in principal cities.

# HOPE'S WINDOWS, INC. *Jamestown, N. Y.*

HOPE'S WINDOWS ARE MADE IN AMERICA BY AMERICAN WORKMEN

# Permalite



YOU MEAN THIS INSULATION BOARD WON'T WARP, WRINKLE OR CREEP?

RIGHT, IT'S PERMALITE SEALSKIN, THE DIMENSIONALLY STABLE PERLITE BOARD.

# Qualite®

The perfect roofing base. Approved for FM Engineering Division Insulated Steel Deck Class 1 construction; Underwriters' Laboratories Inc. Metal Deck Assemblies Construction Nos. 1 and 2; UL Design RC-16 two-hour rating over prestressed concrete units; Design RC-7 one-hour rating on steel deck assembly with an acoustical lay-in ceiling; and others. Sealskin® surface provides a skin-tight bond to roofing. Good all-around roof insurance. Consult your spec data sheet or Sweets Catalog 8a/Gr.

Sealskin®  
RIGID ROOF INSULATION



NEVER NEEDS TAPING.

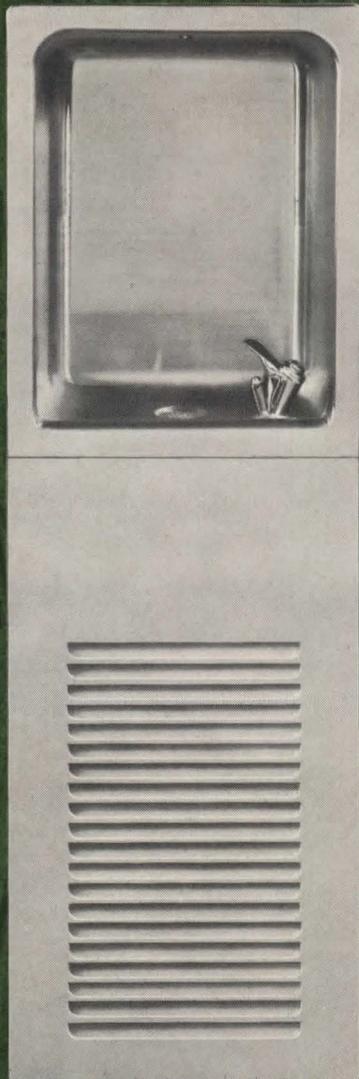


A subsidiary of General Refractories Company



GREFCO Inc. / Building Products Div., 333 North Michigan Avenue, Chicago, Illinois 60601

# Built-In Beauty. New from Haws



■ Keep hallways high, wide and handsome by blending a Haws fully-recessed water cooler with your wall decor. Or choose from many other smartly designed coolers and drinking fountains. Consult Sweet's or write for catalog today. **Haws Drinking Faucet Co., 1441 Fourth Street, Berkeley, California 94710.**

■ Model 84-RC: Receptor of gleaming stainless steel matches louvered grille below, which conceals remote water chiller. Serves six to 12 gallons per hour. Easy to install and service.



**WATER COOLERS**

*Haws makes a better-looking drink of water.*

On Readers' Service Card, Circle No. 346

(Continued from page 6)

tion and accept the additional compensation and broader basis necessary to make ourselves capable of serving the broadest possible needs of those clients we have now and in the future. Though we may not be the most qualified professionals in a particular category of a project, we do not have to deal with professional differences of opinion or jealousies either. We can be more adequately compensated and capable of performing broader services (i. e., shorten the chain of command and supply, from raw material to consumer) and thus be more economic for our clients, as well as providing a unity of design and decision from conception of a project through its occupancy. Obviously, the quality of this kind of project is determined by the person or people engaged in it, but it does offer the "Master Designer" a better opportunity toward excellence and relevance in serving the need for individuality, be it a simple room or megalopoli.

C. A. KORKOWSKI  
K-S Wilshire, Inc.  
Environmental Designer  
Los Angeles, Calif.

## Houston's Growth

Dear Editor: Houston's spectacular growth has not only made architecture a major local profession, but has also made Houston one of the nation's architectural centers. The design and engineering accomplishments at NASA, the Astrodome, a revitalized downtown, and the city's suburban commercial skylines are nationally recognized. Today, Houston architects are involved in billions of dollars of construction across the country and around the world.

Yet even with its participation in land usage, mass transit, parks and recreation, as well as the over-all civic atmosphere, architecture is often taken for granted, not understood, or ignored by the average person.

It is for this reason that we sincerely appreciate your continued publication of news about a profession touching upon the lives of everyone. Thank you.

JAMES G. BEARDSLEY  
Houston, Tex.

COUNT ON

# COSCO®

WHERE THE NEW IDEAS ARE

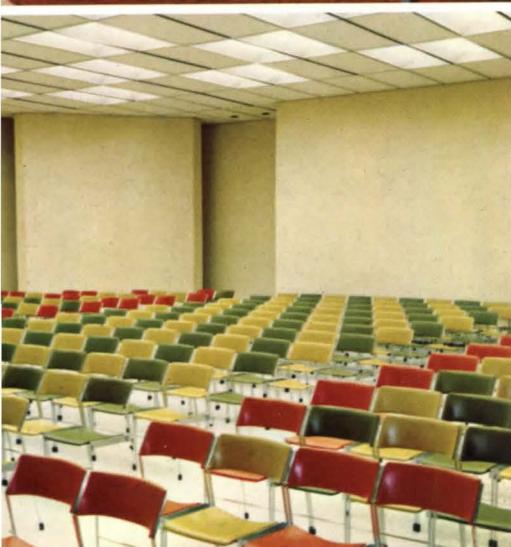
## Our office furniture mixes business and pleasure

These Cosco office products work hard at their individual jobs. Yet they are so attractive in design, it's a pleasure to work with them.

Desks that are highly functional and durable. Filing units for every office need. Lounge furniture that is handsome, yet strong. Utility seating that stands up to wear and is comfortable.

And the entire Cosco line is moderately priced.

For complete information on Cosco furniture for every office need, request the "Architect's Package" when you write Hamilton Cosco, Department PA-79, Gallatin, Tennessee.



# From coast to coast Perfection Gas infra-red warms up the auto business.

Botnick Chevrolet in Binghamton, New York and Riverside Auto Center in Riverside, California, had the same problem. They both wanted to give fast, efficient service in cold weather when doors are open most of the time.

In both cases, Perfection-Schwank Gas infra-red heaters provided the solution. They heat the mechanics, cars, and tools directly.

That makes Gas infra-red economical to operate.

And maintenance costs are low, too.

Because Gas infra-red heaters have no moving parts to wear out or break down.

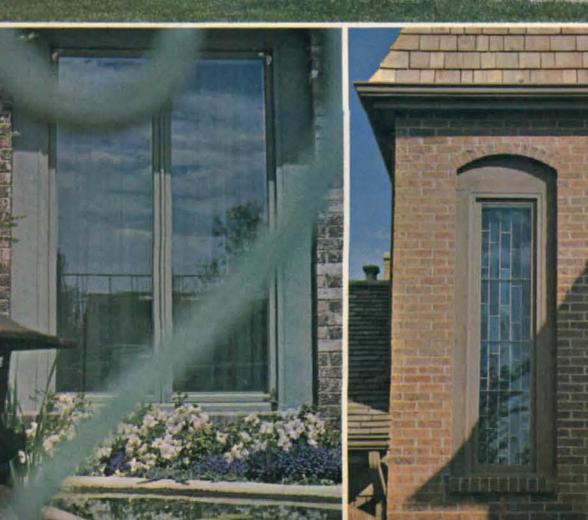
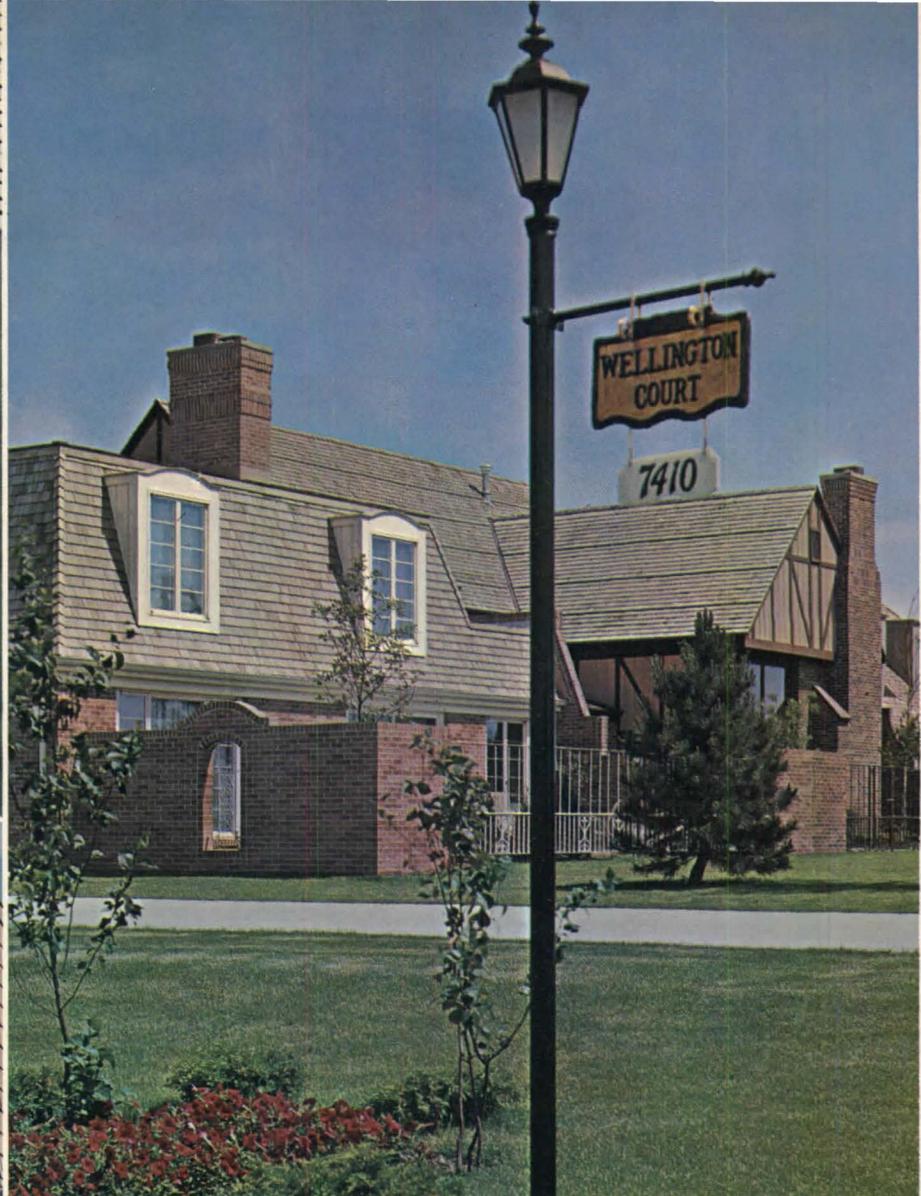
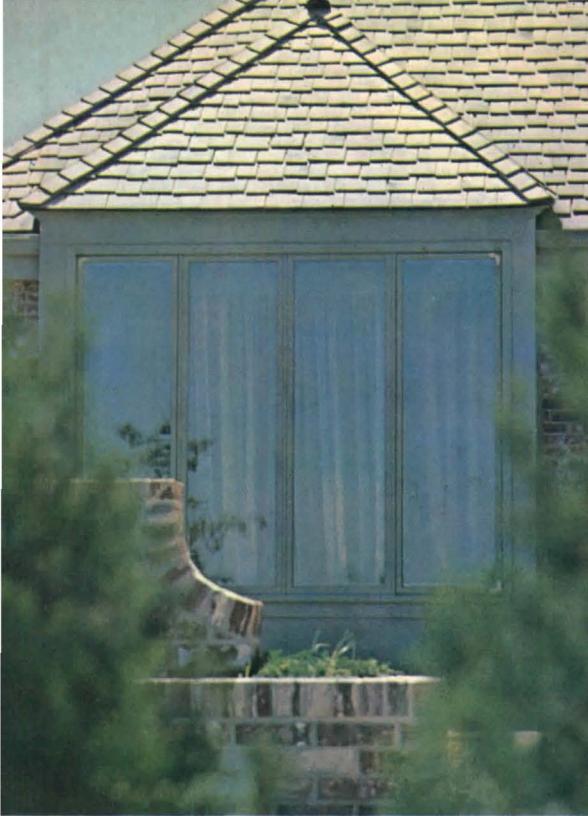
If you'd like to know how Gas infra-red can warm up your business, just call your local Gas Company Sales Engineer. Or contact your Perfection heat engineer, c/o Hupp Inc., 1135 Ivanhoe Road, Cleveland, Ohio 44110.

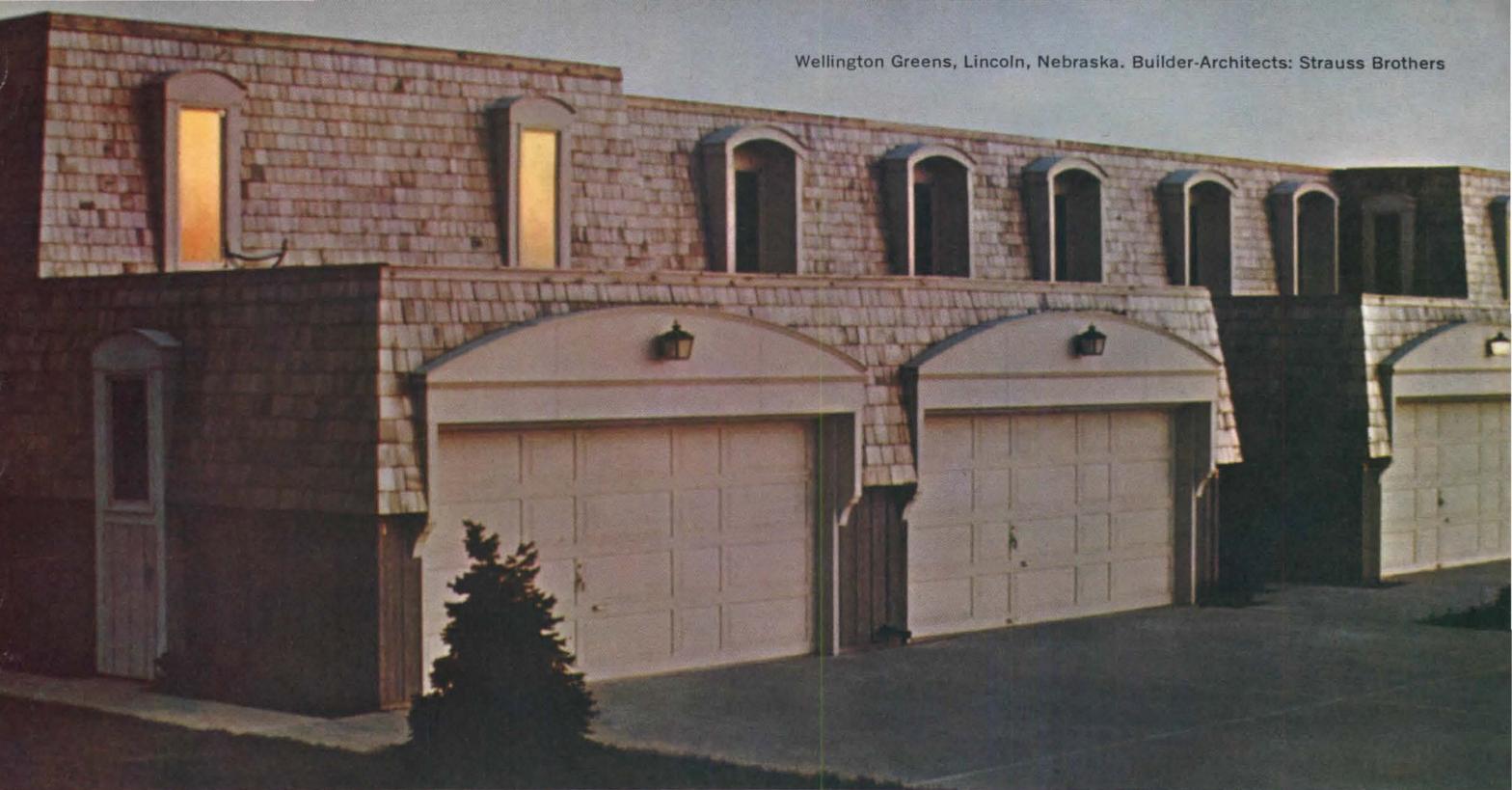


AMERICAN GAS ASSOCIATION, INC.



**For infra-red heating,  
Gas is the natural energy choice.**





Do window design details  
make a difference?

The difference between  
night and day.

These might have been look-alike townhouses. They're all part of the same development. Yet each unit has its own character, charm and sales appeal. Each has its own style of stock Andersen Windows.

Why Andersen? They're America's most beautifully-designed wood windows. Slim. Trim. Elegant. Also they're built to last for the life of the building. Precisely detailed. Incredibly weathertight. And finally, Andersen offers thousands of weapons in the war against conformity—6 window and gliding door styles, hundreds of sizes, a variety of grilles, etc.—all factory assembled and available from local stock.

But if, as the saying goes, "One picture is worth 1000 words," we've already talked too much about the variety and sales appeal of Andersen Windows. For more *technical* information, just call your nearest Andersen Distributor. Or, consult Sweet's Architectural or Light Construction Catalog File.

Andersen Windowalls™



Window Beauty is Andersen

ANDERSEN CORPORATION • BAYPORT, MINNESOTA 55003



THE MACOMBER V-LOK® MODULAR COMPONENT SYSTEM:

# Schoolhouse Systems Project:



Pinewood Elementary School, Mims, Florida. Hirshberg-Thompson and Associates, Architects.

The Schoolhouse Systems Project of the State of Florida is filling one state's need for more and better schools, designed to meet today's educational needs, yet fully adaptable to whatever requirements the future may bring.

The Macomber V-LOK Modular Component System is helping the Schoolhouse Systems Project to achieve its goal. VLMC schools can be erected more quickly and economically, and they feature built-in flexibility that will endure for the life of the buildings.

The systems concept consists of four major components: interlocking V-LOK steel frame and decking by Macomber Incorporated; roof-mounted heating-ventilating-air conditioning system; an integrated lighting-ceiling system

for total environment control, and partitions that are operable or movable, or a combination of both.

All interior components can be relocated at any time to provide entirely new environments for teaching. In a period of social change, educational methods are changing, too. Today's emphasis is on team teaching, the open school, an atmosphere in which the student may participate fully in his own education and advance at his own rate.

Florida's schools are designed to accommodate the new teaching methods. Yet, if tomorrow we adopt still newer methods, or return to the traditional classroom situation, Florida's schools can be converted to new space configurations

# Florida's versatile schools need never become obsolete.

or traditional classrooms.

There's another reason for building VLMC flexibility into a school. Neighborhoods change, and taxpayers may find themselves building secondary schools while primary schools stand vacant. A VLMC school can be converted to fit any age level.

The Florida Schoolhouse Systems Project is teaching educators everywhere an important lesson: No school building need ever become obsolete.

Here's what the Macomber V-LOK Modular-Component System offers to anyone charged with planning educational facilities:

**Variety** in architectural style. The architect can create a school that will harmonize with its surroundings, lend a modern tone to a neighborhood, and reflect the good taste of the school board and school administrators.

**Changeability** of the interior arrangement throughout the life of the building. A VLMC school building does not restrict the flexibility of the educational process, whatever that process may be.

**Performance Control.** A VLMC school begins with a consideration of the needs of the school district. When they have been defined, components are selected to fit these needs exactly. Performance of each component, and of the total facility, can be specified.

**Cost Control.** Before the architect has prepared working drawings, a realistic price can be established for the finished school. The school board can then review bids based on known factors: known performance, known completion date and known cost. The board can "inspect the merchandise" — and the price tag — before buying.

**Lasting Economy.** Initially, a VLMC school saves time and money in terms of earlier delivery of factory-finished components and reduced construction time. Top-quality components in the schools cost appreciably less to maintain, year after year. In the long run, the adaptability of the facility will keep it in service when conventional schools are outmoded.

A VLMC school is easier to sell to the taxpayers when these advantages are pointed out.

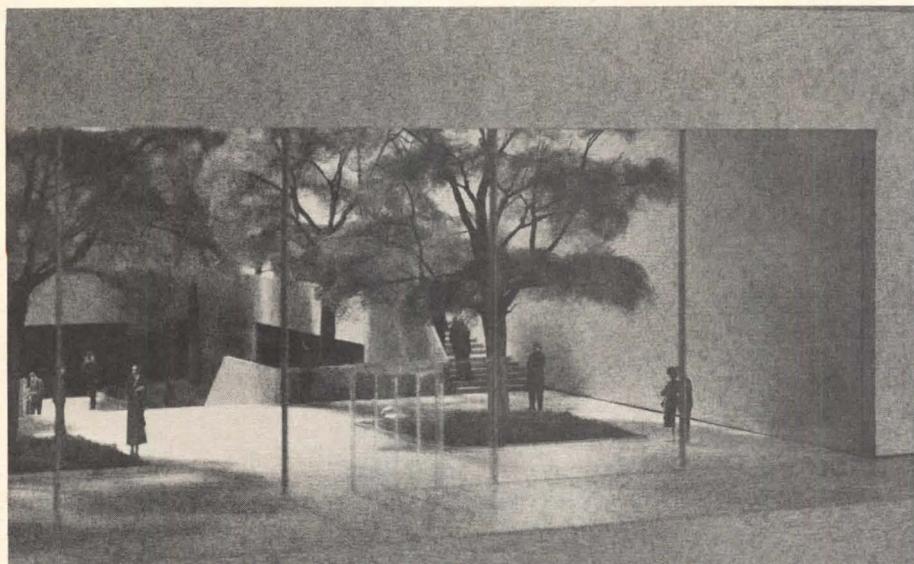
For full details on the Macomber V-LOK Modular Component System, write to *Macomber Incorporated, Canton, Ohio 44701.*

LOOK UNDER  
"STEEL FABRICATORS"  
to find your local  
MACOMBER  
Representative  
in the Yellow Pages  
  
See our Catalog  
in SWEET'S

**MACOMBER**  
INCORPORATED  
SUBSIDIARY OF SHARON STEEL CORPORATION



Callahan Senior High School, Callahan, Florida. Akel, Logan and Shafer, Architects.

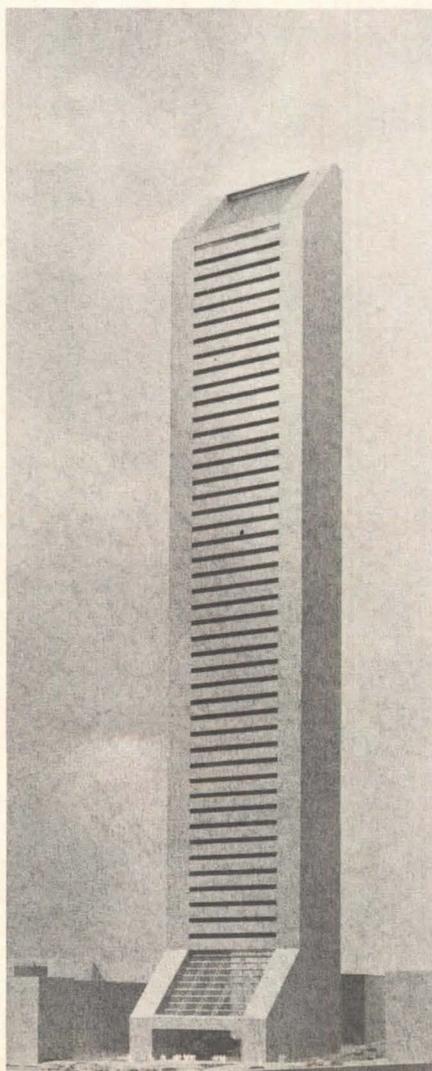


The entrance to the tower.

### Lucky Worcester Gets A Roche

Downtown Worcester, Mass., like downtown most-anywhere-U.S.A., has reached the bottom of the urban downhill-slide. From here on out for Worcester, anyway, it is all up-hill with core-urban-renewal which includes a splendid new building, Worcester Plaza, designed by Kevin Roche/John Dinkeloo & Associates. The 2.9-acre plaza redevelopment will contain several elements, the most notable being the 46-story tower (shown in photo) that will house the Worcester County National Bank. By recessing the 695' tower's nearly mullionless windows behind uninterrupted, reinforced-concrete spandrels, Roche has created an interesting play between horizontal and vertical elements, a play intensified by the diagonals of a solarium-type pitched roof and an 80'-high glass-roofed hall at the base. The main banking floor extends beneath the plaza and is divided into various banking facilities. Above this will be offices of the People's Savings Bank.

The plaza will be an extension of the existing Worcester Common, and act as a unifying element for all the buildings.



### Student and Black Power: Issues in Yale Firings

Student representation has emerged as the real issue in the firing of a teacher and two administrators from Yale University's graduate City Planning Department.

The dismissals, which occurred late in May, began with Christopher Tunnard, chairman of the department and professor of city planning (Tunnard retains his position as a tenured professor), also include Louis S. Deluca, assistant dean of the Arts and Architecture School, and Harry Wexler, associate professor of city planning.

When the dismissals were announced, the reason given was that the three men, without authorization, had sent 12 letters of admission to prospective city planning students. Howard Weaver, Dean of the Art and Architecture School, said that he had heard of the intention of the City Planning Forum, a group comprising students and faculty, to send the letters but that he had strictly forbidden this action. Weaver said, "These letters therefore constitute not merely a violation of official procedure but, more important, in my opinion, a cruel and deceptive subordination to other purposes of the hopes and aspirations of the applicants." Telegrams were immediately sent rescinding the admissions.

The problem really began in December 1968, when students and faculty of the City Planning Department met to discuss student dissatisfaction over curriculum reform. Out of this and subsequent meetings evolved the City Planning Forum, which sent out the letters. Since March 1969, the Forum, composed of all members of the department (the student group-total vote always equals the number of faculty present, with ties broken by the chairman) has made all decisions affecting the function of the department.

Photo: Richard Nickel



Harry Weese & Associates were architects for restoration of architect Louis Sullivan's Auditorium in Chicago, Ill.

Photo: Dave Gleason



D.C. Reeves Elementary School in Ponchatoula, La., a limited budget building designed by Desmond, Miremont, & Burks.

## 1969 AIA Honor Awards Announced

At the end of May, the National AIA announced its annual selection of winners of the 1969 honor awards. Sixteen winners were selected from 465 submissions, among the recipients of the award are those shown in the photos: Boston City Hall; D.C. Reeves Elementary School in Ponchatoula, La.; The Auditorium in Chicago; New York's Exodus House; and San Diego Stadium. The other eleven awards were for: Monsanto Company Cafeteria, St. Louis, Missouri: Vincent C. Kling and Associates; De Anza College, Cupertino, California: Earnest J. Kump Associates; Mill Valley Library, Mill Valley, California: Wurster, Bernardi & Emmons, Inc.; Everson Museum of Art, Syracuse, New York: I.M. Pei and Partners; Des Moines Art Center Addition, Des Moines, Iowa: I.M. Pei and Partners; Convent of the Holy Names, Spokane, Washington: Walker/McGough/Foltz/Lyerla and Peden; Tenneco Building, Houston, Texas: Skidmore, Owings & Merrill; Bolton Square, Baltimore, Maryland: Hugh Newell Jacobson; Collegetown Phase I, Sacramento, California: Neill Smith and Associates; Smith House, Darien, Connecticut: Richard Meier; Putney School Girls Dormitory, Putney, Vermont: John B. Rogers.

This year's special effort to encourage urban design projects and historic preservation or restoration projects accounts for the diversity of winning entries. The AIA jury noted that the major criterion for judging was to consider the design in conjunction with its social relevance.

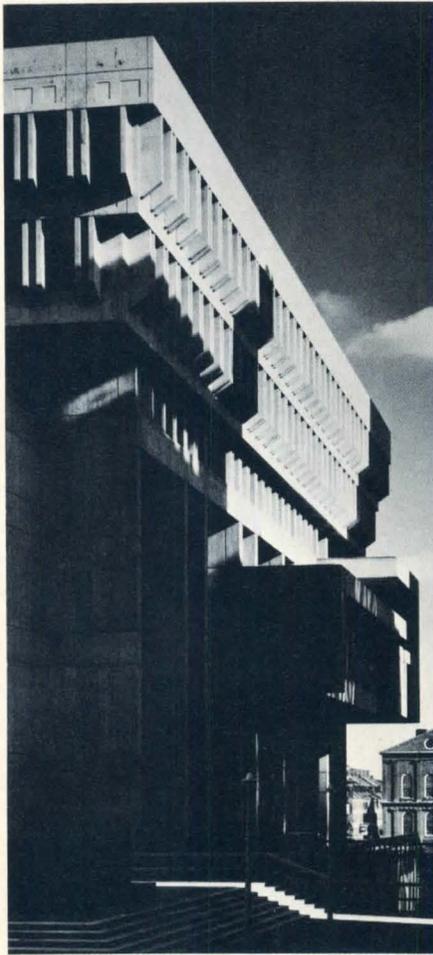
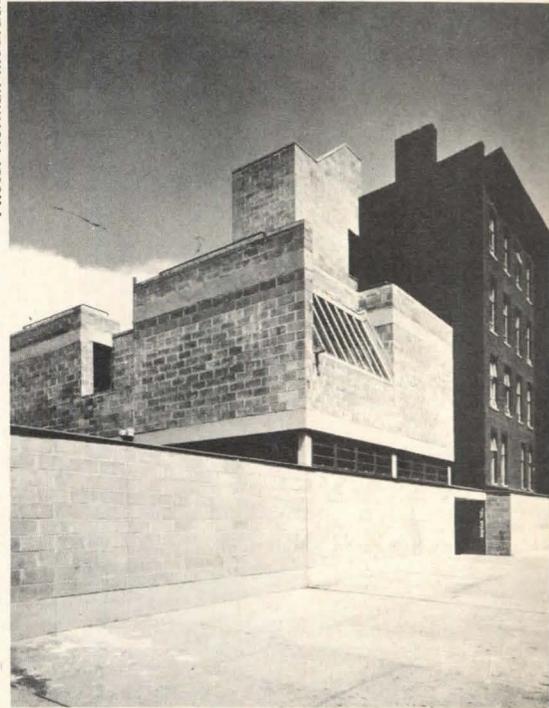


Photo: Ezra Stoller

Boston City Hall, a \$21,600,000 building designed by Kallman, McKinnell & Knowles.

The sixteen were selected by a jury composed of: A. R. Winter, Ray D. Crites, Archibald C. Rogers, Hugh Stubbins, William Turnbull, Jean Paul Carlhian, Robert Durham, F. Blair Reeves, and Max O. Urbahn. The awards were presented at the 1969 joint convention of the AIA and the Royal Architectural Institute of Canada, in Chicago, June 22-26.

Photo: Norman McGrath



Exodus House, designed by Smotrich & Platt, is a rehabilitation center for ex-addicts in New York City.

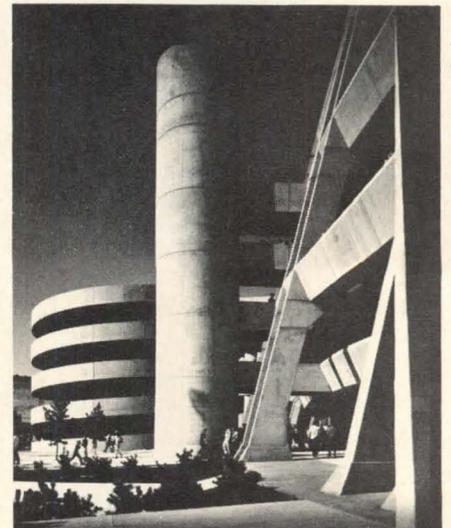
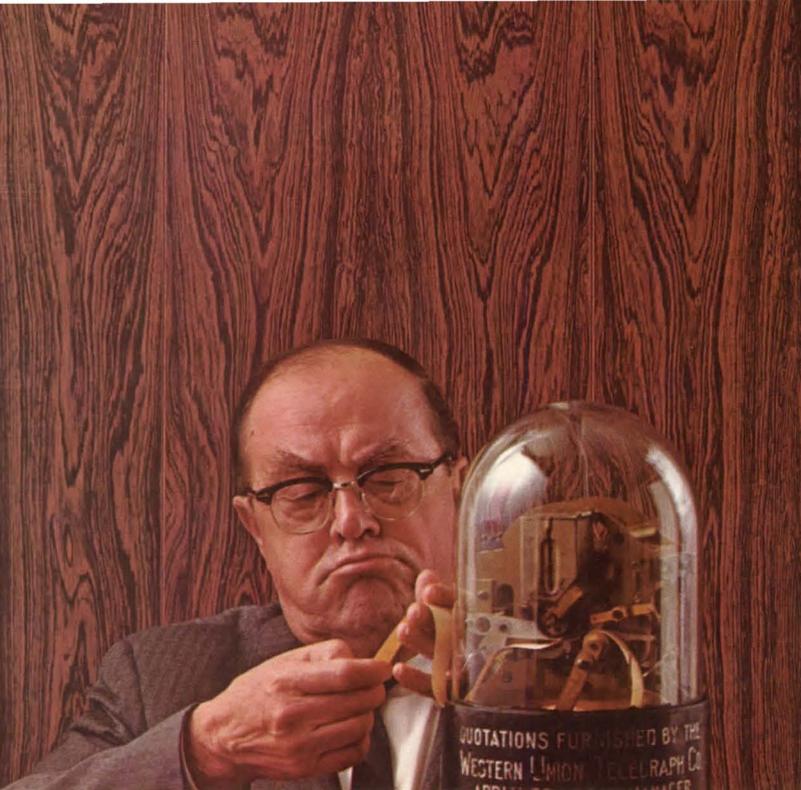


Photo: Julius Shulman

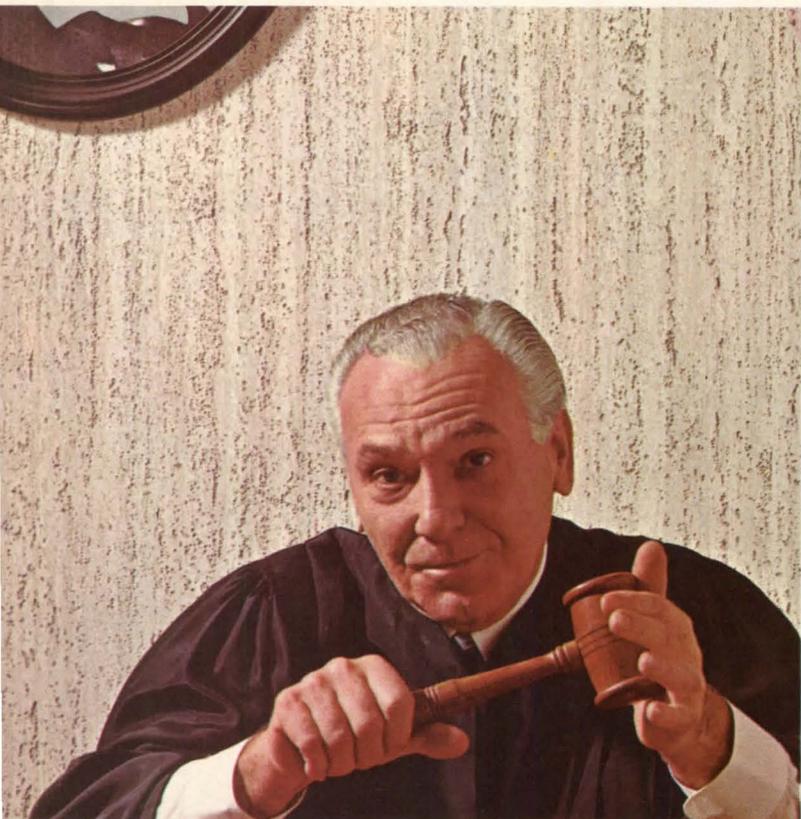
Frank L. Hope & Associates designed San Diego Stadium in California to be used for both football and baseball.



Rosewood Marlite gives walls a hand-rubbed look.



Textured Tapestry Marlite—beauty you can feel.



Travertine or real Marlite? You be the judge.



Textured Oak Marlite has everything but acorns.

682

## Most people don't know real Marlite paneling when they see it.

Don't jump to conclusions when you see a beautiful wall. It may look like hand-rubbed rosewood, imported tapestry, Italian travertine or natural oak planks.

But it could be the real thing: Marlite prefinished hardboard paneling.

Marlite is the one paneling that doesn't limit your imagination. It gives you more than 70 different ways to create exciting

interiors. Deep-embossed textures, authentic woodgrains, rich or pastel colors, original patterns and designs.

And Marlite protects your reputation. Its soilproof, baked-on finish seals out heat, moisture, stains and dents—stays like new for years with practically no maintenance.

You can see the complete Marlite line On Readers' Service Card, Circle No. 359

at your building materials dealer's or in Sweet's File. But beware of imitations. Marlite Division of Masonite Corporation, Dept. 714, Dover, Ohio 44622.



**Marlite**<sup>®</sup>  
plastic-finished paneling

**Grand Central Station vs. Two Breuers**

On September 20, 1968, New York City's Landmarks Preservation Commission determined that Marcel Breuer's proposed design (called Breuer-One) for an office tower over Grand Central Station did not meet the requirements for a Certificate of No Exterior Effect. Since the Beaux Arts façade of the building has been declared a landmark, the commission's refusal to issue a certificate resulted in Breuer returning to the drafting boards. On April 10, Breuer was back before the commission with (Breuer-Two).

Essentially, Breuer-One was a heap of frosting atop the old station — a building on a building. Breuer-Two takes another tack. It removes the station's façade, and preserves only the main concourse, which Breuer calls "the last one of New York's great interior spaces." In place of the triumphal arches, Greek columns, and 48'-high group of statues of Hercules, Mercury, and Minerva around a clock 13' in diameter, will rise the structure shown.

At the April 10 meeting, a major point of contention between opponents and proponents of the design was whether the new building would further congest the area or facilitate pedestrian traffic.

The architect said his design envisioned four additional passageways from the terminal and the office building into the subways. However, the City Planning Commission contended that, despite the improvement in circulation, "the building's 12,000 workers would throw insupportable stress on the already grossly inadequate subway system. As an alternative, the commission recommended that development rights be transferred to adjacent blocks, which the railroad also owns. This would minimize congestion, leave a hole in the center of the area for light (a New York invention — the "air park"), and preserve the façade of Grand Central Terminal. The railroad argued that the surrounding land is tied up in long-term leases that

cannot be broken. The Planning Commission countered that such leases are bought-out all over New York.

The question of whether Grand Central Terminal should go the way of Pennsylvania Station — torn down to make way for the new Madison Square Garden complex — has turned into a test case of the city's newly acquired preservation powers. Beyond the considerations of architectural historians and sentimental New Yorkers lies the concern of the city with its own growth patterns. Also to be considered is the financial situation of the Penn-Central Railroad, which, if the project goes through, could offset its immense losses with the \$3 million annual rent that developer Morris Saady will pay for the air-rights. The Landmarks Commission has promised a decision on whether it will be Breuer-One, Breuer-Two, or nothing by June 24.

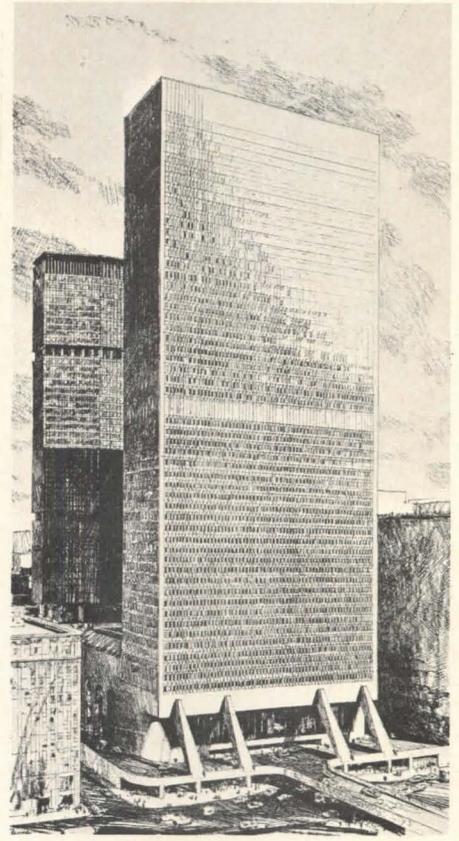


Photo: Alexandre Georges



**Moon Time at Noon Time**

The Bronx Zoo's "World of Darkness," designed by Morris Ketchum, solves the problem of displaying night animals in the daytime. The building is designed to reproduce the animal's outdoor environment indoors and to reverse the day-night cycle, thus enabling zoo visitors to see night animals, which normally sleep in the day, actively pursuing their lives.

Ketchum's design includes theatrical media — film, sound effects, and drawings — to recreate the animals' actual environment.

The physical structure of "The

World of Darkness" itself is unique. The building, set on a glacial knoll, is low and cavernous with a circular shape open at both ends. Exterior walls are steeply sloped concrete panels 20' high and 6' wide, surfaced with black mortar and black granite chips, giving the building an air of mystery. To reflect the sun, the roof is finished with white marble chips.

Different shades of light are used for various effects: red because some night animals do not see red, so it is night to them; and blue-green for animal-day.



***THE PROBLEM SOLVER...***

... IN THE THEATRE  
WHERE A UNIQUE NEW FLOOR COVERING  
IS THE MAIN FEATURE



## This is a popular New Hampshire theatre.

**The carpet is Heugatile . . .** totally-interchangeable carpet squares. The revolutionary new system in wall-to-wall carpeting. Heugatile. Large, durable, deep-pile carpet squares. Like no carpet squares (or carpet) you've ever seen before! Twenty inches by twenty inches. Half inch thick! No adhesives, tack-strip, or underpadding required. Heugatiles are "loose-laid." And totally-interchangeable. Rotate long-wearing Heugatile carpet squares to equalize wear. Keep the entire carpet young-looking up to three times longer than ordinary carpets! Just like rotating the tires on your car makes them last longer. Only easier! Dense animal-fur/man-made-fiber pile for quick, low-cost maintenance. Heugatile. The world's only system of totally-interchangeable, "rotatable" carpet squares. ("You-Ga-Tile"). Now showing coast-to-coast.



**HEUGATILE**® *The problem solver*

LOCATION: CINÉ II, MANCHESTER, NEW HAMPSHIRE  
INTERIOR: CARON CONSTRUCTION CO., MANCHESTER, NEW HAMPSHIRE  
DEALER: ROBAR'S INC., MANCHESTER, NEW HAMPSHIRE  
PHOTOGRAPHER: ROBERT RAICHE, ALPINE PHOTOGRAPHICS, MANCHESTER, N. H.

### OFFICES

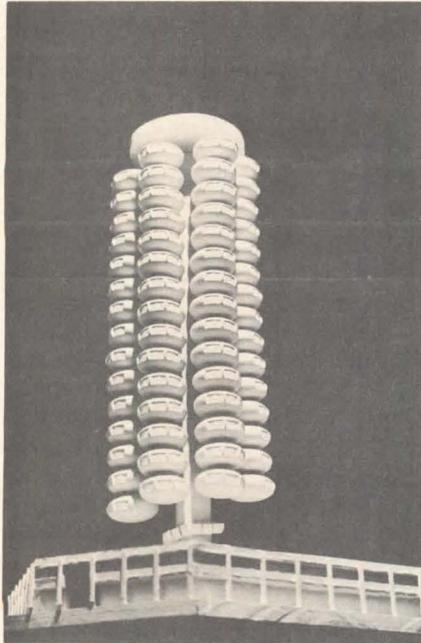
Van Heugten U.S.A. Inc., 185 Sumner Ave., Kenilworth, N.J. 07033 • (201) 245-3480  
Van Heugten U.S.A. Inc., 2555 Nicholson St., San Leandro, Calif. 94578 • (415) 483-4720

### SHOWROOMS

New York — 979 Third Ave., Decoration & Design Bldg. • (212) 355-4705  
Chicago — Chippendale Co., 5th floor, Exhibitors' Bldg., 325 N. Wells St. • (312) 644-8242  
Los Angeles — 516 West 4th St., Santa Ana, Calif. • (714) 547-6413  
San Francisco — Western Mdse. Mart, 1355 Market St. • (415) 483-4720

On Readers' Service Card, Circle No. 389

Photo: Casoni and Casoni



**The Word Really Is "Plastics"**

Futuro, the first of two examples of totally factory mass-produced fiberglass-houses, was designed by Matti Suuronen. Its exterior combines a shell frame of fiberglass insulated with polyurethane foam.

The interior is also fiberglass. It has a general area, used as a living room in the day, which converts to sleeping quarters at night. All standard furnishings are included. Entrance is through a retractable stairway that opens at the base of the unit.

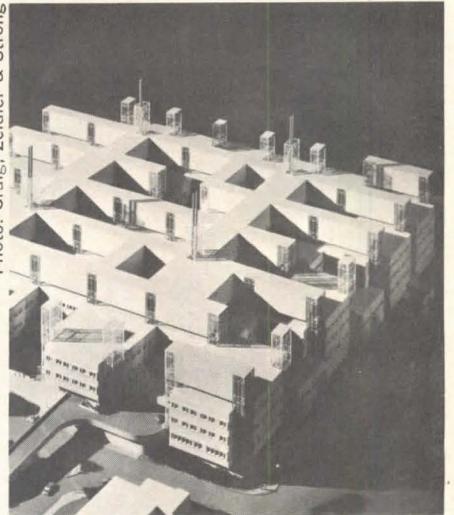
The second example, Rondo, goes one step further and opens up interesting prospects for urban communities. Carlo Casoni, manufacturers of the home, propose that several living units can be combined by means of a central supporting unit (see photo), thus saving much space. With this design, hotels, apartment houses, student hostels, and homes for aged can be built with great speed, helping to solve the urban space problem.

These structures are rugged enough to withstand a snow load in excess of 20' and can stand stalwart in 150 mph winds. They are chemically sealed against water and air infiltration.

**Expandable Medical Center Uses Systems Approach**

A practical solution to the need for flexible, expandable medical facilities is seen in the \$56 million Health Sciences Center under construction at McMaster University, Hamilton, Ont. The "Servo System," developed by Craig, Zeidler & Strong, Toronto architects, provides a permanent structure to house electrical and mechanical services into which changeable units "plug in." The use of a trussed steel frame spanning 85' between tower-like shafts (vertical elements in photo) creates column-free spaces to accommodate any sort of medical function. The glass-enclosed shafts — 10' x 20' — contain primary electrical and mechanical systems, elevators, and stairways. Trusses, 8'-6" high, support the floors, and provide accessible interstitial space in which

Photo: Craig, Zeidler & Strong



mechanical services can be placed horizontally without interfering with functional areas. Precast concrete cladding panels are of three types (solid wall, full window, and half window) to provide interchangeability. Partitions, electrical outlets, and other special services are relocatable within the structure.

Photo: Lionel Freedman



**In City Hall Style**

The Municipal Administration Center for Dallas, Tex., designed by architects I. M. Pei & Partners, New York, and Harper & Kemp, Dallas, is scheduled for completion in 1972. Placed on 7 acres at the edge of the downtown center, the \$39,800,000 structure will extend three blocks, fronting on a spacious plaza. A post-tensioned joist system will be used through-

out, on a 4'-8" module. There will be 11 levels (three below grade), and space for parking 2000 cars beneath the plaza. Each of six 65'-long bays is flanked by service cores: three (vertical tubes in the photo) for stairs, elevators and service facilities, and the remaining cores are used for mechanical shafts for HVAC and for storage areas.

*Ingenious design adds more than 10,000 cu. ft. to interior of school building.*



*Achieved through the use of*  
**BINKLEY**  
**CLEAR-SPAN**  
**METAL INSULATED WALLS**  
*...so light, they hang from the roof*

It's the versatile BINKLEY NO-GIRT WALL SYSTEM, OF COURSE. These fully-insulated metal walls allow full freedom of design while they help you stay strictly within your budget requirements.

Tilt-Up Walls suspend from the roof. Low dead-weight requires less footings . . . More economical foundations . . . Eliminates need for girts and wind columns . . . speeds erection . . . allows freeze-proof construction any time of the year.

It's your choice between ARCHITECTURALLY SCULPTURED PANELS, BINK-RIB and PAN-L-RIB Shapes . . . It's your choice of attractive, no-chip, no-fade practically maintenance-free color coatings—tenacious fluoropolymer coatings which never take a holiday in their resistance to chemical fumes, erosion and industrial fall-out!

THE  
**BINKLEY**  
COMPANY

BUILDING PRODUCTS DIVISION  
WARRENTON, MO. 63383/314-456-3455

*VO-TECH BUILDING, Independence, Missouri. A modern technical school featuring BINK-RIB Panels on NO-GIRT Suspended Wall, Fascia and Soffit.*

*ARCHITECT: HERMAN A. SCHARHAG*



Note the smooth, bright interior of school. Walls reflect and spread light. Unique vertical, tinted-glass windows add note of modern charm.

INSULATION VALUE! It's U = .09 . . . 3 to 4 times as effective as masonry.

NO-GIRT suspended walls gain 30" of interior space all around for a total of well over 10,000 cu. ft. Workbenches suspend from walls to gain optimum space advantage.

*Whether you plan an industrial plant, store, office, institutional or commercial building . . . Remember that BINKLEY NO-GIRT SYSTEM beautifies as it pampers your budget.*

For full details, see your Sweets Catalog or . . . SEND TODAY FOR 20-PAGE BOOKLET.



Crystal City, Arlington, Va.  
Charles E. Smith Construction Company, Inc., contractors  
Weihe, Black, Kerr & Jeffries, architects  
Heinzman & Clifton, structural engineers  
Concrete contractors: Moses-Ecco Company, Inc.;  
Kirk Lindsey, Inc.; the Knollman Company

**\$120,000,000 'total' city  
uses Ceco**

# experience

You're looking at the Crystal City residential-commercial complex, a private development that makes effective use of Ceco's service and experience in Steelforms, Reinforcing Steel, and Aluminum Windows and Curtainwalls.

Ceco Steelform Service provided a waffle flat-slab reinforced concrete floor system on three levels for underground parking to accommodate 4,000 cars. All structural systems in the entire city complex were designed for reinforced concrete, and for economy. Ceco's local warehouse stocks of rebars assured concrete pours on schedule. In Steelform Service, one reliable, firm quotation from Ceco eliminates all guesswork for owner or contractor. Cost variables—labor,

forms, lumber, insurance—are taken care of by Ceco.

Curtainwall construction, furnished mainly by Ceco, was also specified for economic reasons. Ceco aluminum windows and curtainwalls with bronze and black anodized finish call for little maintenance. The wall systems effectively insulate against outdoor noises.

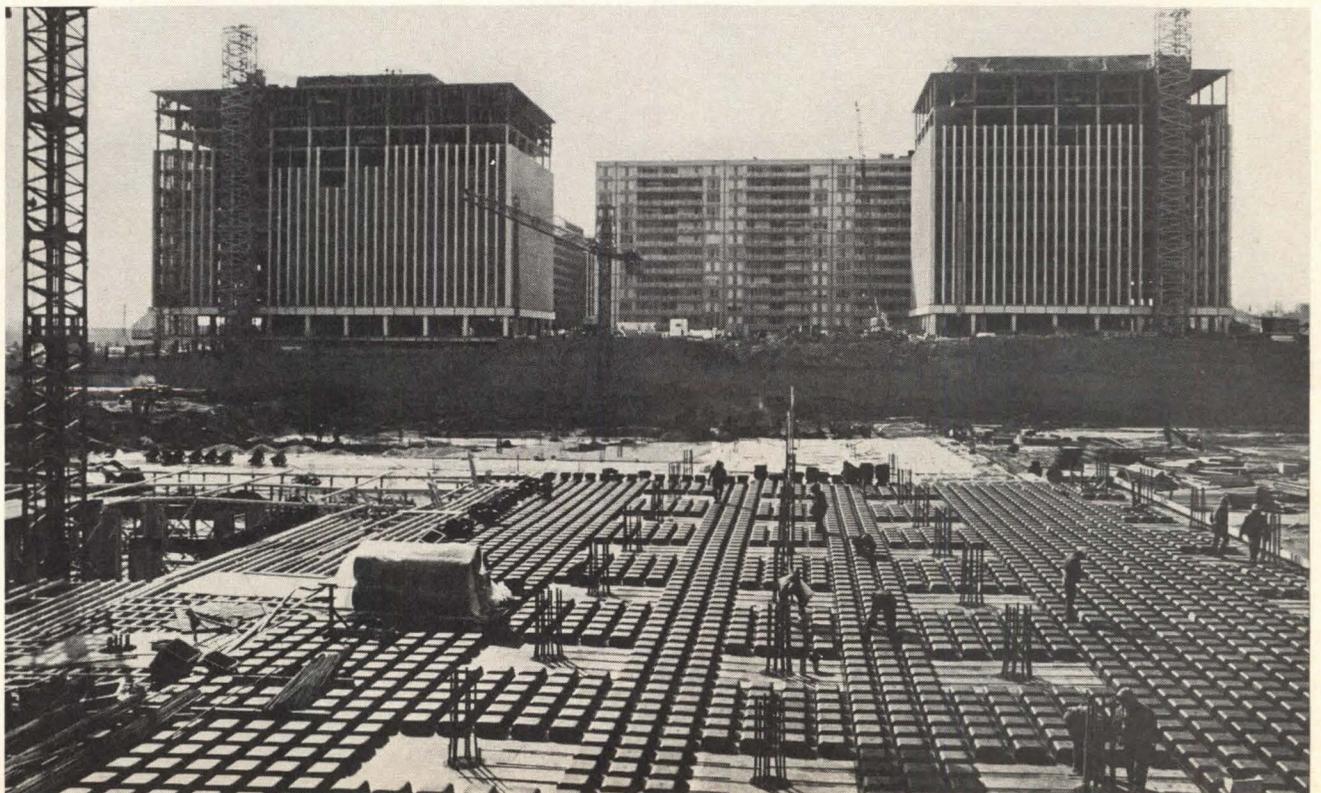
Ceco's specialists can help you plan and build your project from frame stability to outer "personality." Their help can save you money. Fine buildings deserve the advantages offered by Ceco's Experience in construction services and products. The Ceco Corporation, general offices: 5601 West 26th Street, Chicago, Ill. 60650.



On Readers' Service Card, Circle No. 333



Ceco Steelform Service for 790,000 sq ft of monolithic concrete joist construction  
12,700 tons of Ceco-fabricated Reinforcing Steel  
480,000 sq ft of Cecocolor Anodized Aluminum Windows and Curtainwalls



Foreground—Ceco Steeldomes in position before placement of reinforcing steel and pouring of concrete



**Bays For All**

Looking as though it might have been hugged too hard, this corrugated office structure by Pietro Belluschi and Emery Roth & Sons gives every tenant his own bay window. Although the building is situated on the edge of Boston's financial district near the new city hall, a view of the Charles River and the bay will be possible from the top floors. Construction on the 32-story, \$30-million, steel and concrete structure will begin this month, and is expected to be completed in early 1971. Faced with travertine marble, the building will provide 728,000 square feet for tenants. Two below grade parking levels will encourage more people to drive to work.

**Husband and Wife Among 76 Architects Awarded AIA Fellowships**

At the June Convention, Fellowships were bestowed on 76 members of the AIA for their outstanding contributions to architecture.

A life-long honor, Fellowship has existed since the establishment of the Institute in the late

19th Century.

Architects are nominated for their achievement in one of 10 areas: design, science of construction, literature, education, service to the profession, research, urban design, government or industry, or architectural practice. Members are elected, however, for their over-all contribution to architecture rather than for just a single achievement.

For the first time, Fellowship, the highest honor other than the Gold Medal, was given to both a husband and wife — architects Winston and Elizabeth Close.

The new Fellows are: Charles K. Agle, Leonard D. Blackford, Samuel M. Brody, Leon Brown, Henrik H. Bull, Georgius Young Cannon, M. Elliott Carroll, Elizabeth S. Close (Mrs.), Winston A. Close, Jack C. Cohen, Spencer B. Cone, Eugene E. Crawford, Leonard J. Currie, Lewis Davis, Frederick L. Day, Jr., A. Henry Detwiler, Frederick E. Emmons, Edward H. Fickett, Joseph H. Flad, Francis Gassner, Hugh Gibbs, Kemper Goodwin, Walter Gordon, Jules Gregory, Fred M. Guirey, John C. Harkness, Jay Dewey Harnish, Michael M. Harris, Robert O. Hausner, August Frederick Hoenack, Harry James Holroyd, William Dudley Hunt, Jr., John M. Johansen, Raymond Kappe, Gustave R. Keane, William Keck, Harris Atteridge Kemp, William H. Kessler, Alan Kemp Laing, Frank J. Matzke, Bruce McCarty, Harley J. McKee, Philip J. Meathe, Louis Menk, Germano Milono, Ehrman B. Mitchell, Jr., Jesse O. Morgan, Jr., David George Murray, Daniel J. Nacht, Gyo Obata, J. Norman Pease, Jr., John W. Peirce, John Edward Pekruhn, Walter S. Pierce, Jan Hird Pokorny, Robert Alonzo Ritterbush, Kenneth W. Roehrig, John Miles Rowlett, Van Fossen Schwab, Allen G. Siple, Richard Wilson Snibbe, Pat Yates Spillman, Edwin T. Steffian, Joseph Stein, Richard G. Stein, Calvin C. Straub, D. Coder Taylor, Mitchell Van Bourg, Lawrence G. Waldron, Frederick S. Webster, Arthur B. White, James Richard

Wilkinson, A. Osborne Willauer, Floyd Orson Wolfenbarger, C. Clark Zantzinger, Jr., Norman C. Zimmer.

Also at the Convention, six people were made honorary members of AIA. They are: Alan S. Boyd, former Secretary of Transportation; William A. Hewitt, Chairman of Deere & Co.; Thomas P.F. Hoving, Director of the Metropolitan Museum of Art, N.Y.C.; Jonathan King, Vice-President of Educational Facilities Laboratories, Inc., N.Y.C.; Mrs. Anita J. Laird, Director of Interior Design and Furnishing Program, Department of State; and the Honorable Bernard Thomson, Judge of Nassau County, N.Y.



Photo: Judith Raney

**Pollution Reaches All-Time High in New York**

Some cities are ashamed of their polluted rivers, but New York City made a monument out of the murky waters in the East River. Two big pumps throw a column of water up to 600' high — lower when the prevailing wind threatens to spread the goodwill beyond the river. This astonishing \$300,000 monument opposite the United Nations buildings was donated by George T. Delacorte and the Dell Publishing Foundation. Its 700- and 800-hp pumps are housed in a stainless-steel A-frame structure perched on stilts at the tip of Welfare Island (see photo). The designers are Pomerance & Breinen, New York City.



**These light fixtures are 2' x 4'.  
Picture them as 1' x 4'.**

**Or 1' x 1' or 2' x 2' or 3' x 3'. Fact is, any of these standard troffers fit the new C-60/60 Luminaire Ceiling System by Armstrong. So now a room can have special design and lighting effects or meet a variety of lighting requirements without sacrificing the advantages of an integrated ceiling system. With Armstrong C-60/60, all that need be changed is the lighting function. C-60/60 (the accommodating square) and other ceiling innovations are described in our folio. Please write for a copy. Armstrong, 4207 Watson St., Lancaster, Pa. 17604.**

**Or on Readers' Service Card circle No. 300.**

**Armstrong**  
Ceilings Systems that work

## Construction Industry Forms a Foundation

BY E. E. HALMOS, JR.

Attended by the usual doubts and problems, another new industry organization was born in Washington late in May: The Construction Industry Foundation.

Objective: A sort of "umbrella" group that would take aim at the terribly snarled legal problems that grow out of construction work, hopefully assigning responsibility, simplifying contracts and other documents, bettering specifications, and otherwise improving the atmosphere.

Two days of meetings at AIA headquarters in Washington produced agreement on principles and objectives, and a slate of officers — but also exposed a very substantial gap in the united front that such an organization should show:

AIA itself, bankers, specialty and subcontractors, insurance men, lawyers, and others were represented among those attending and among the officers.

But the biggest and most powerful of the contractor groups — the 9000-member Associated General Contractors of America — was very prominently absent (even through an AGC representative sat in on initial meetings last fall).

Replying to press-conference queries about this absence, new CIF President Robert G. Cerny (FAIA) of Minneapolis said he regretted the "no show" at this session, but expected either AGC itself — or "certainly" many of its members — to join at a later date. Others of the new CIF staff admitted that absence of AGC could pose very serious problems for the effectiveness of the new organization.

There were also some undercurrents of comment during the sessions that make it obvious that many of the other groups look at CIF with some doubts.

Said one participant: "The architects for many years have virtually abdicated their function of

supervising construction to the general contractor. They have not deigned to get their shoes dirty on the site. Now, however, the courts are forcing them back into this picture by holding them responsible for performance. They are suddenly getting to be buddies with the rest of us."

Nevertheless, the 18 or so participants in the late-May meeting approved a four-point outline of initial areas of activity for CIF:

(1) Establishment of minimum standards for plans and specs.

(2) A research study of patterns of construction industry litigation, looking to development of procedures to limit legal exposure of third parties, focus responsibility more clearly.

(3) Research into professional relations between survey and soil engineers and the rest of the industry, establishment of limits of responsibility of related parties, look into adequate insurance coverage of such operations.

(4) Establish a cooperative committee to explore improved and more efficient methods of quantity take-offs.

In addition, they elected Cerny as President; Robert F. Cushman, a lawyer of Philadelphia, as Executive Vice-President; Richard H. Oakley, of Honeywell, Inc., as First Vice-President; Bernard H. Trimble, of the National Electrical Contractors Assn., as Second Vice-President; J. W. Rankin, Assistant AIA Secretary, as Secretary, and Charles Dickerson, of Robert Morris Associates of Philadelphia, as Treasurer.

Directors include all the officers, and H.L. Peterson of Honeywell; Dow Ostlund of the Valley National Bank of Phoenix, Ariz.

Next move — beyond getting committee investigations started — is to raise an estimated \$500,000 in dues from member organizations, to underwrite CIF's operations.

Washington

The lengthy discussions involved

in CIF's birth overshadowed, for architects, the deliberate pace of Government activity during the month.

As a matter of fact, very little was happening on Capitol Hill or the White House that was of direct interest: both Congress and the Executive seemed to be holding to their intention of carefully examining existing programs, tinkering with existing machinery, and acting on very little that was really new.

Some money bills were introduced: Senator Yarborough's (D. Texas) proposal (S.2182) for a five-year, \$1,500,000,000 program of grants to aid hospital construction and rehabilitation; more bills concerning industrial and construction safety; schemes for reorganizing some of the functions of the Housing and Urban Development and Transportation departments to bring them more closely into line on urban renewal projects.

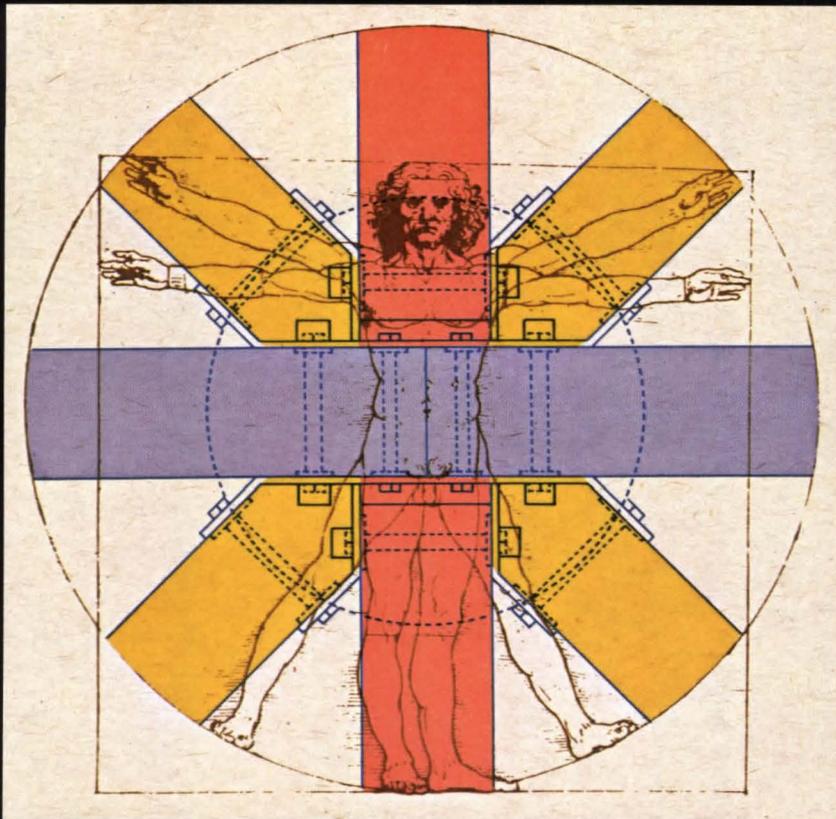
And there were continued fulminations (but no apparent action) over the excessive demands of construction labor, Government spending, and the like.

There was one noticeable trend that could be very important: A definite pullback from the many proposals for establishment of "trust funds" (for airport and airways improvement, for urban mass transit, for forest highways, etc.).

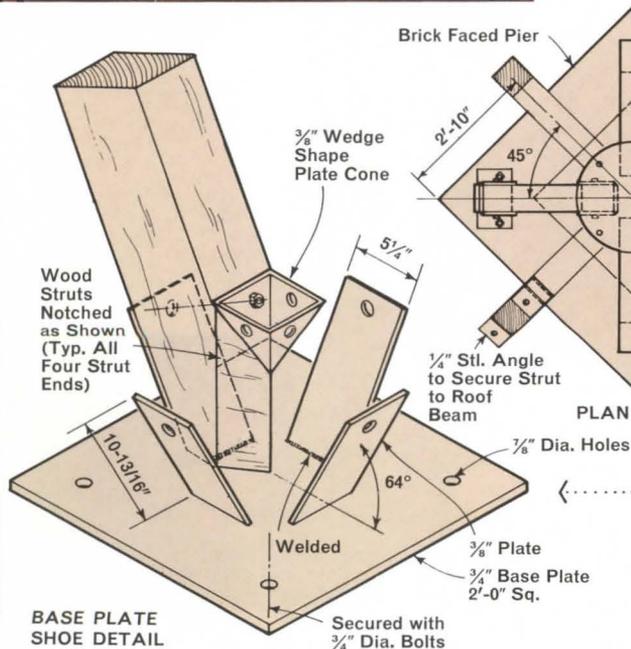
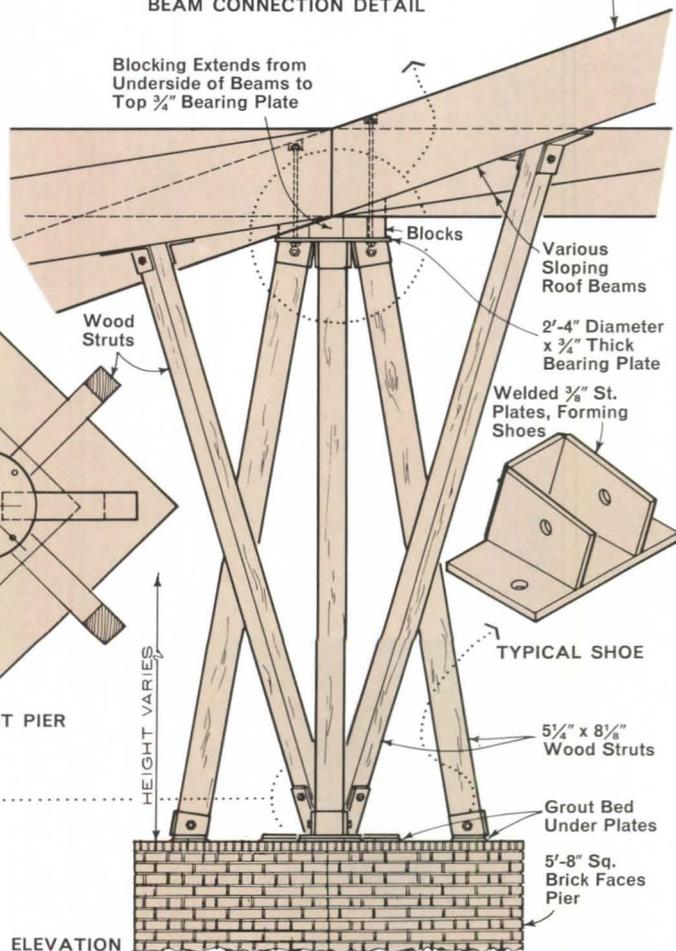
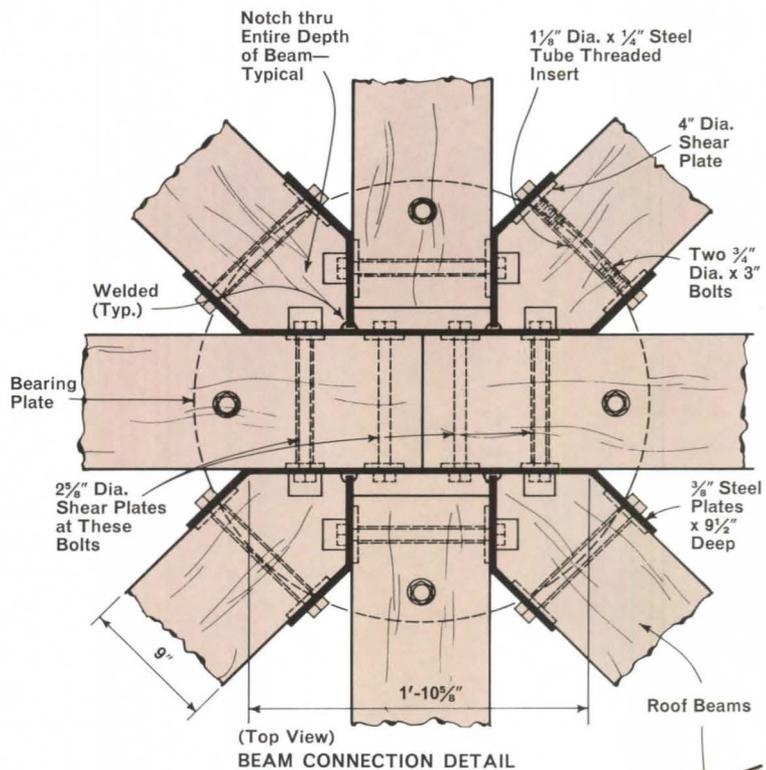
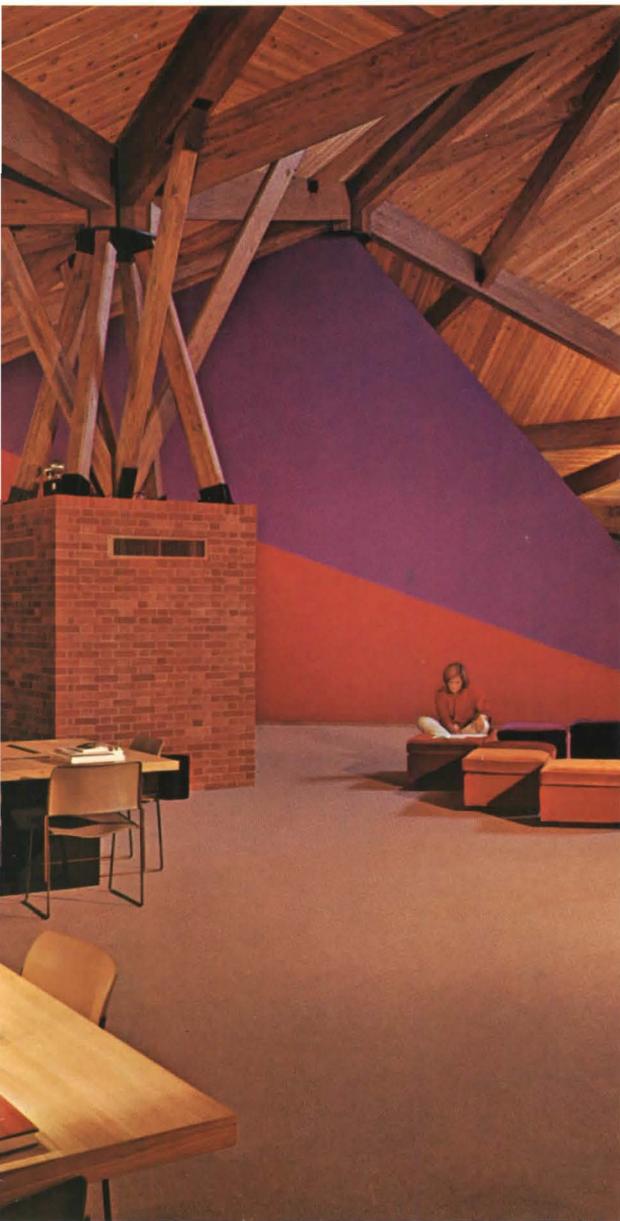
Reason was a sharpening attack in the public press on the very successful Highway fund, which was categorized as an ever-flowing stream of money to supply fuel for the "highway lobby" in several popular magazine articles. Ever sensitive, politicians tried to keep out of the cross-fire, even though it was equally obvious that trust funds offer one of the few ways out of the demand for increasing Government spending, as opposed to the demands for Federal "economy."

On other than on legislative levels, there were also these developments:

The Federal Aviation Administration announced allocations of \$34,200,000 in matching grants for the 1970 fiscal year for airport construction — a sad comedown from the \$75 million "authorized" (but not appropriated) by Congress.



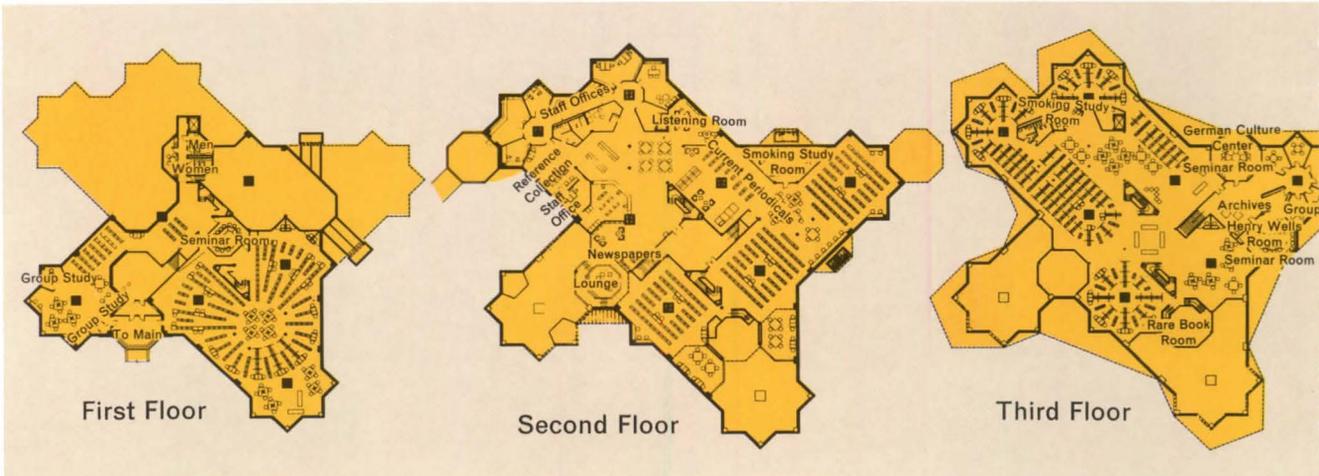
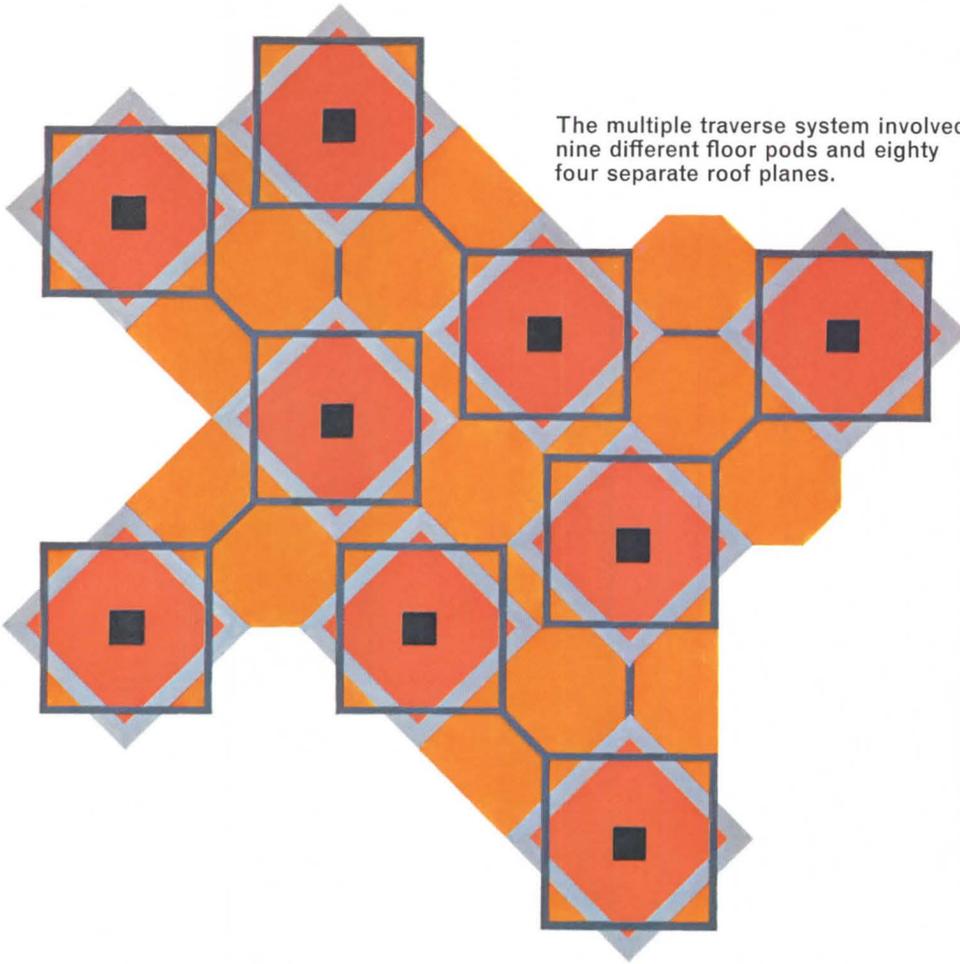
On the following pages you'll see specific examples of how Koppers building products have helped architects and engineers obtain greater latitude of design and save money for clients. These Koppers products are either permanent in themselves, or give permanence to other materials.



The roof is supported by brick exterior walls, single laminated wood columns, and clusters of laminated beams that rise from brick piers which also hold ductwork. Eight laminated beams make up each cluster; four anchored at the corners of the pier and meeting at the roof, and four anchored at the center and flaring out to the roof. See the drawings for connection details.



The multiple traverse system involved nine different floor pods and eighty four separate roof planes.



## They topped city hall with Koppers roofing

The new Boston City Hall was decided upon in 1962 when the architects won a national competition with their idea of just what a city hall should be. It is now a concrete and brick example of architectural achievement.

The organization of the building is complex but open—visitors can pass through their City Hall any time of the day or night and not be confronted by a single door. Erected on a sloping site, the lower floors are partially buried and include garage space, files, computer rooms and offices. The second and third

floors hold those government offices most contacted by the public. The top four floors contain office spaces requiring a minimum of public traffic, and hung below them at the fifth level are the elements of symbolic and civic importance: the Mayor's Suite and the City Council Chambers.

The roof of City Hall is a 74,000 square foot, 4-ply Koppers roof. On the concrete deck, a vapor barrier of one-ply tarred felt was laid, then 1½" ridged insulation board. Next came alternate layers of coal tar pitch and tar-saturated felts with a

final heavy top pouring of coal tar pitch with aggregate embedded.

The molecular structure of coal tar pitch provides long-term waterproofing. Many Koppers built-up coal tar pitch roofs are more than thirty-five years old and still in excellent condition. For more information on Koppers roofing and waterproofing, check the coupon.

Architects and Engineers for the Boston City Hall:

Kallmann, McKinnell & Knowles  
Campbell, Aldrich & Nulty  
Le Messurier Associates, Inc.



Like a bouquet of open umbrellas" new library roof is built with 550 laminated wood beams

The bouquet description was given by one of the students at Wells College where the Louis Jefferson Long Library was recently completed. It is apt because the multiple truss system involved nine different floor pods, three floor levels and 84 separate roof planes. The 550 laminated wood structurals range in length from 8' to 36', in widths from 5" to 11", and in depths from 6" to 13". Almost 39,000 board feet of western red cedar was used for the 3"x6" and 4"x6" double tongue and groove decking.

The library's 55,000 square feet

include stack space for 250,000 volumes, seating capacity for 328 people, various study environments, seminar rooms, a music listening area, a rare book room, a permanent art gallery, and a room which is planned for electronic carrels for information retrieval from library centers.

Because of the numerous elevations and roof planes, every laminated structural member was custom-fabricated by Koppers with varying dimensions, angles of cut, and locations of connections. To coordinate the roof construction a

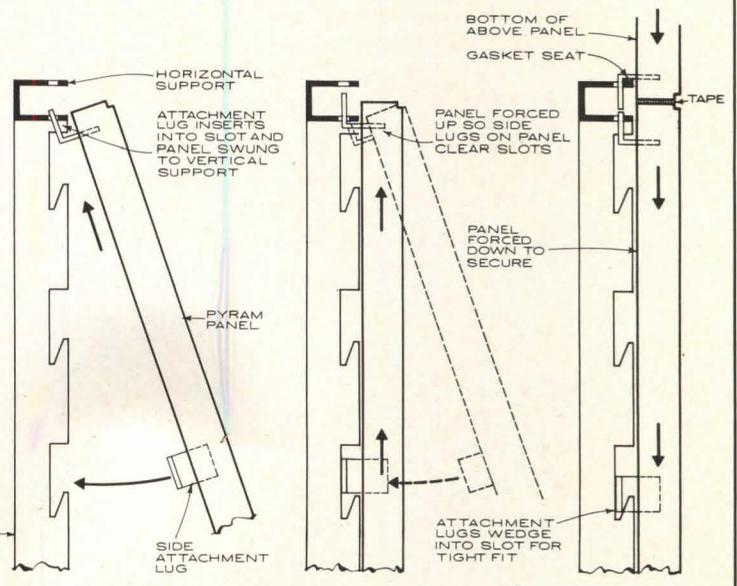
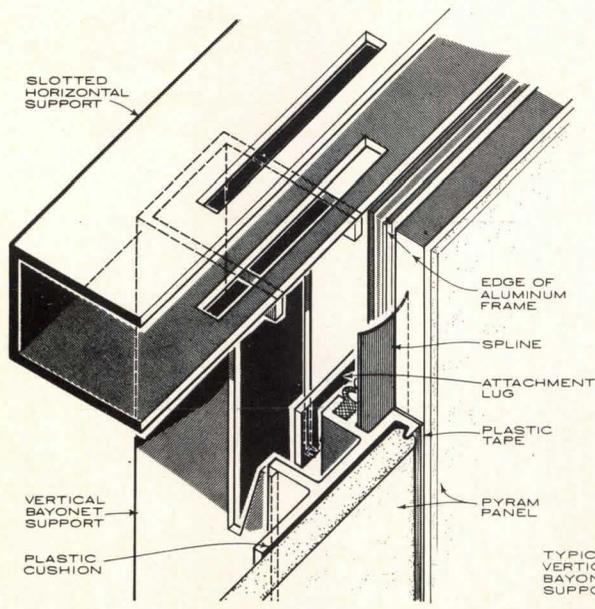
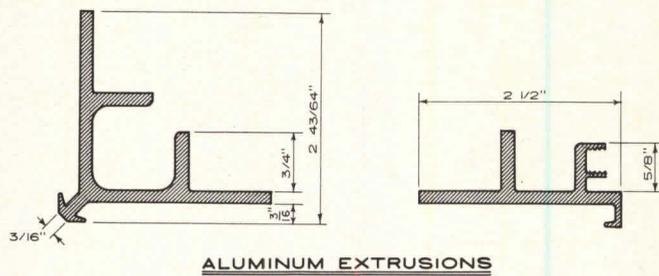
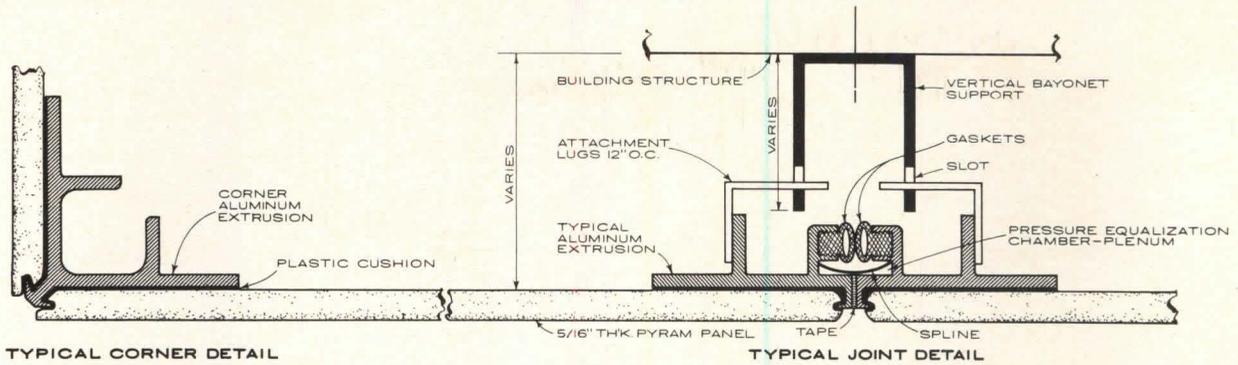
"hot line" was set up between the architect's office in Chicago, the Koppers plant at Peshtigo, Wisconsin, and the job site in Aurora, New York. The shop production drawings were used as blue prints for erection, and only one minor on-the-site modification was made in putting the entire system in place. The job was completed in only 165 working days, from the start of drawings to placement of the decking.

Architect: Skidmore, Owings & Merrill, Chicago, Illinois





# PRODUCTS



## Pyram Anchoring System

From time to time, P/A documents a product development that it believes to be representative of unusual and significant research and design—especially in systems or combinations of materials. The following product system was announced at the AIA Convention in Chicago last month. Pyram is Corning Glass Works' trade name for a new proprietary

ceramic panel it has developed for architectural construction based on patents and trade names known as *Pyroceram*.

Pyroceram is a ceramic material possessing special properties that allow it to be strengthened through an ion exchange process. Resulting characteristics are high strength, low coefficient of expansion, and remarkable resistance to

deterioration from contaminants. This material in actuality is a scientifically made granite, which, unlike natural granite, has a fine—instead of coarse—crystalline structure free from flaws. This phenomenon permits the material to be produced in thicknesses of .200" to .400". Equivalent sizes in granite would require a thickness of 2" to 3" to insure against structural failure.

When these panels were origi-

(Continued on page 46)



# It takes our kind of experience to build our kind of doors.

And your kind of imagination to utilize them to their optimum potential.

More and more creative architects are discovering more and more ways to use The "OVERHEAD DOOR" to improve their designs—improve them functionally, economically, and esthetically.

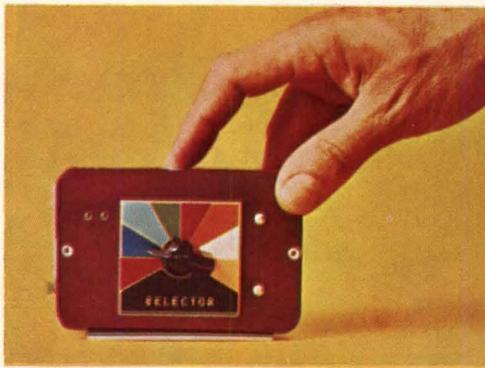
You can do the same.

The "OVERHEAD DOOR" is available to you in just about every material, size, and style. You name the kind of door you need, and if we don't have it in stock, we'll build it for you. And build it *right*. (We've built over eight million doors since 1921, so we're pretty much in practice.)

If your design calls for an electrically operated door—or doors—we have architectural consultants and engineers at the ready to help you determine the right electric operator to do the best job.

You can always specify The "OVERHEAD DOOR" with total confidence. Our nationwide network of factory-trained distributors install and service every door they sell. They also issue a full one-year warranty on all parts and workmanship.

Your nearby Overhead Door distributor is listed in the *white* pages of your phone book. Give him a ring . . . and an opportunity to explain why the phrase "or equal" is fast disappearing from door specs all over America.



*Fully transistorized, portable transmitter with color-coded selector, controls up to 8 doors individually by radio control.*

Nationwide  
Sales • Installation • Service



**OVERHEAD DOOR CORPORATION**  
General Offices: Dallas, Texas 75202  
Manufacturers of The "OVERHEAD DOOR" and  
electric operators for residential and commercial buildings

On Readers' Service Card, Circle No. 365

## PRODUCTS

### Formed acrylic shelf system

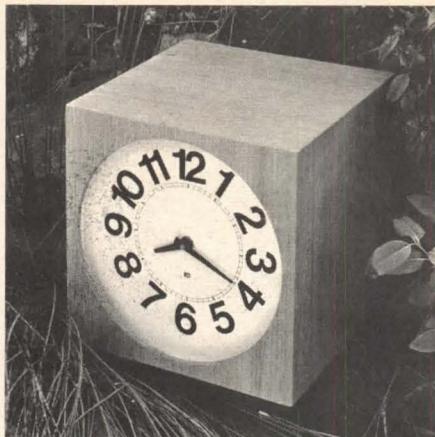
A group of book and magazine shelves are made of formed acrylic in clear and dusty bronze. They attach with screws directly to the wall without the use of rails or brackets. Available in 27" or 36" lengths. Richard Morgenthau & Co., 225 Fifth Ave., New York, N.Y.

Circle 101, Readers' Service Card

### Non-skid floor coating

A combination protective coating and non-skid surface coating includes an abrasive material in a liquid binder and a separate hardener. Said to protect against weathering, corrosion, and wear, it can be applied to any clean, dry surface with a trowel, brush, spray, or roller. Drying time is 5 hours. Epoxo Chemical Div., Falcon Safety Products, Inc., 204 Stern Ave., Springfield, N.J. 07081

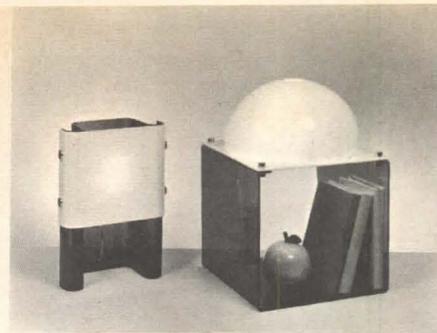
Circle 102, Readers' Service Card



### Nine cubic inches of time

Manufacturer introduces a clock encased in a 9" sq. cube of wood. It can be used as a public or desk clock. Finishes include natural or ebonized walnut, natural oak, English oak, or olive oak. Choice of black on white Arabic or Roman numerals, and clear or bronze crystal. It has a seven-jewel movement and operates on a one-year battery. Washington Clock Works, 224 35th Ave. E., Seattle, Wash. 98102

Circle 103, Readers' Service Card

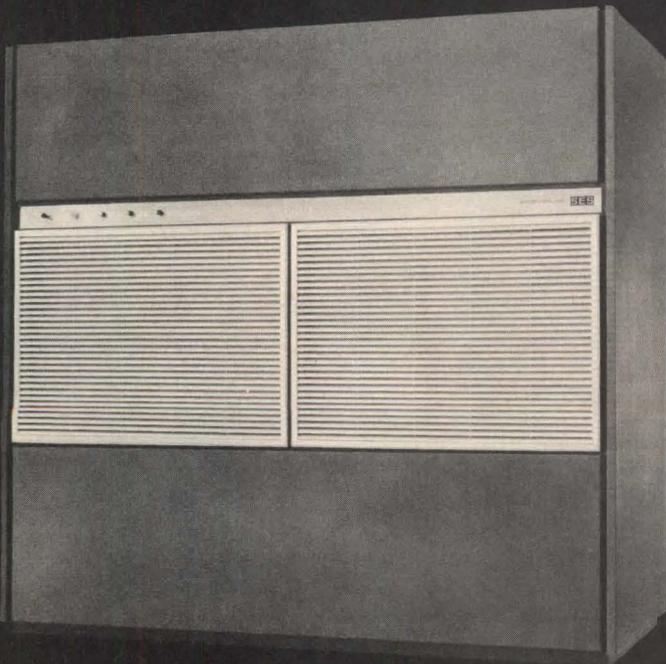


### Sculptural approach to lighting fixtures

Manufacturer introduces three new lighting fixtures. The "Trolley Desk Lamp" straddles a large writing surface with laterally adjustable illumination. It consists of an elevated tramway of clear acrylic plastic, which supports a movable lightbox that slides along "tracks." Dimensions are 26" long by 15" high. The "Showdown" consists of a bronze-colored acrylic display box that supports a white acrylic dome containing the light source. 18" high. "Italian Shapes" consists of orange colored curvaceous bases and white domes of handblown Italian cased glass. Available in 22" and 12" heights. Raymore Products, 225 Fifth Ave., New York, N.Y. 10010

Circle 104, Readers' Service Card

## VERY DEPENDABLE & PRECISE ENVIRONMENTAL CONTROL FOR EXPENSIVE & SENSITIVE COMPUTERS



Computers require precise, constant control of temperature and humidity for efficient operation with minimum down time. Units for this application must handle heat loads up to 95% sensible and 5% latent heat generated by computers and maintain 40%-60% RH levels to keep tapes from becoming brittle. *Site Environment Systems perform these tasks precisely and reliably.*

**Reliable**—Engineered and built to operate continuously. Light and alarm bell indicate need for service. Dual circuits and dual condensers give fail-safe protection.

**Precise**—Automatic Controls filter, warm or cool, humidify and dehumidify room air to maintain environment within narrow tolerances.

**Adaptable**—Completely self-contained units in a complete range of sizes, 3, 5, 7½, 10 and 15 tons for use singly or in combination.

**Flexible**—Available in water or glycol cooled, air-cooled, or chilled water models. Easily altered to duct air up or down through ductwork or floating floors.

**Economical**—Quality engineering reduces need for maintenance. Easy access from front cuts service time.

Write for complete specification information:

## FLOATING FLOORS INC

## Automatic roof vent minimizes fire damage

A complete factory assembled automatic roof vent called the "Naturalite Fire-Vent" opens automatically during a fire to vent smoke, heat, and flames upward and out of building. It is said to confine fire to its point of origin, keep water damage to a minimum and reduce load on sprinkler systems. Available in four standard sizes. Naturalite, Inc., Box 28636, Dallas, Tex. 75228  
Circle 105, Readers' Service Card

## School comfort conflict

A modular concept for air conditioning schools room by room permits control of the required amount of warm or cool air in each classroom as conditions demand. Installation costs of the "Model 579 unit" for each room is said to cost less than a central system because of labor savings. Bryant Air Conditioning Co., 7310 W. Morris St., Indianapolis, Ind. 46231  
Circle 106, Readers' Service Card



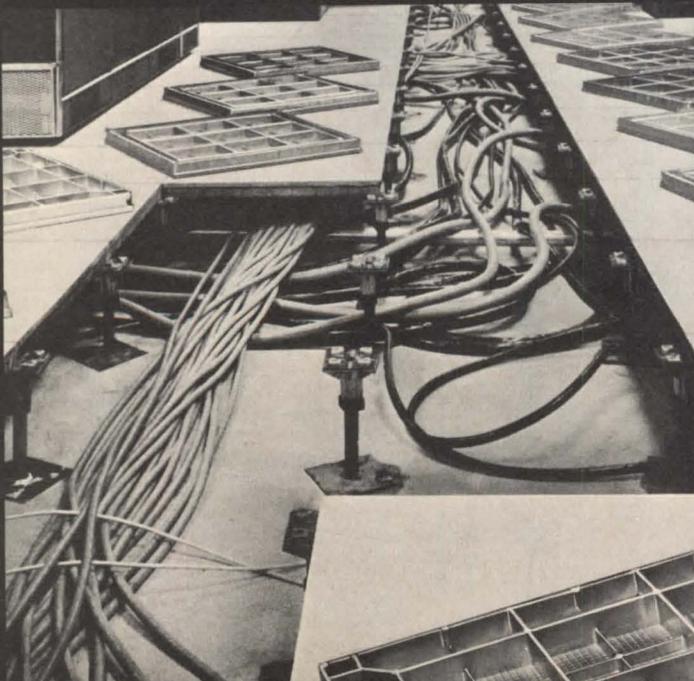
## Office space dilemma revisited

The tub file and the lateral file are just two of the more than 50 models of desks, credenzas and files available in the Motiva 5000 series "designed for optimum space utilization and functional flexibility." The tub file has a sliding top to expose the entire capacity of the file



and is equipped with two lift-out file racks made of heavy gage steel. The lateral file has horizontal grooves along the width of the cabinet to receive adjustable dividers. Cramer Industries Inc., 625 Adams St., Kansas City, Kan.  
Circle 107, Readers' Service Card

# THE ULTIMATE IN ACCESS/AIR PLENUM FLOOR SYSTEMS FOR EXPENSIVE & SENSITIVE COMPUTERS



Elevated Floors provide full access to cables and ducts and a pressurized plenum for efficient, flexible, draft-free air distribution. Choose the best. A lightweight, aluminum panel, precision engineered, maintenance-free floor with all the reserve strength you'll ever need, from Floating Floors, Inc.

**Precision-made**—Floating Floors panels fit perfectly, with complete interchangeability.

**Strong**—Unique combination of die cast panels and pedestals provide all the reserve strength you'll ever need, without stringers.

**Maintenance-free**—Corrosion-resistant aluminum panels never need painting... are grounded for continuous, worry-free operation.

**Cleaner environment**—With aluminum panels, no iron oxide particles or paint flakes can get into the computer room environment.

**Total Access**—Lightweight aluminum panels simply lift out to allow complete access.

**Flexible Air Distribution**—The cavity beneath Floating Floors serve as plenum to deliver air. Rearrangement is by moving louvered panels.

Write for complete specification information:

## FLOATING FLOORS INC

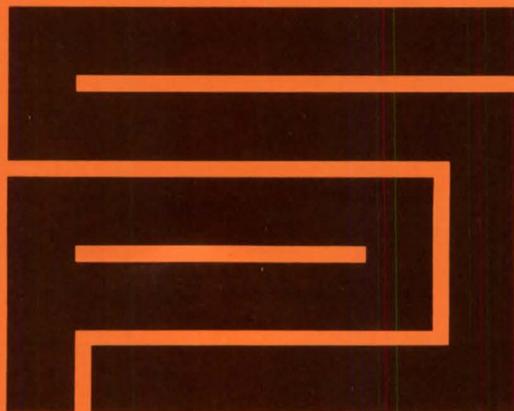
# take one giant step

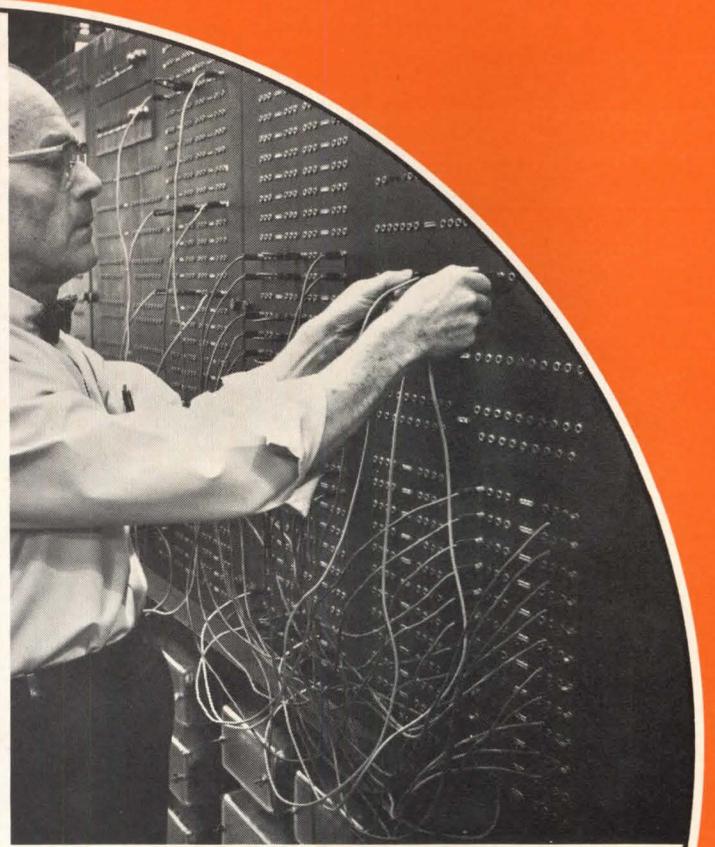
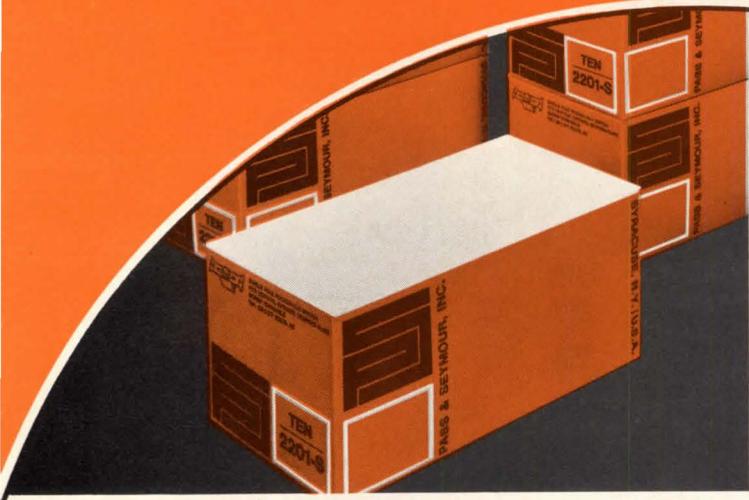
Your reputation rides with every electrical project you complete. P & S realizes this. That's why we insist our electrical controls exceed *by far* the required minimum standards of performance. When you select P & S products, you don't have to worry about call-backs or failures—because you picked the best to begin with.

To top it all off, P & S brings you fast delivery, an expanding sales organization for infield service, better packaging to protect your purchases.

If you're not already using P & S, how about it? Isn't your reputation worth the step up to P & S?

*Wherever only the best will do . . . use P & S.*





PASS & SEYMOUR, INC. | SYRACUSE, N.Y. 13209 | U.S.A.

BOSTON | CHICAGO | LOS ANGELES | SAN FRANCISCO | In Canada: RENFREW ELECTRIC CO., LTD.

On Readers' Service Card, Circle No. 367

REINHOLD PUBLISHING CORPORATION'S  
ANNUAL P/A  
**DESIGN**  
AWARDS  
PROGRAM FOR  
PROJECTS  
NOT YET BUILT

**PROGRESSIVE ARCHITECTURE** announces the seventeenth annual Design Awards Program. Awards will be made to U.S. architects and their clients for projects now in the design stage to be built in 1970 in the **United States**. Any building or group of buildings will be eligible.

**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.

**FIRST DESIGN AWARD, AWARDS, AND CITATIONS** may be given by the jury listed below to the best projects chosen 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.

**JURY** will be composed of the following architects, planners, and engineers: CHARLES WILLIAM BRUBAKER, Design Partner, The Perkins & Will Partnership, Architects, Chicago; WILLIAM J. MOUTON of William J. Mouton, Structural Engineer, New Orleans, Associate Professor, School of Architecture, Tulane University; JAMES STIRLING, A.R.I.B.A., London, Charlotte Shepherd Davenport Visiting Professor of Architecture, Department of Architecture, Yale University; ROBERT VENTURI, Partner, Venturi & Rauch, Architects, Philadelphia, Charlotte Shepherd Davenport Professor of Architecture, Department of Architecture, Yale University; THOMAS R. VREELAND, JR., Professor, Head, Architecture and Urban Design Programs, University of California, Los Angeles.

**JUDGMENT** will take place in New York during September 1969. 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 1970 P/A. As in the past, P/A will arrange coverage of winning projects in news media, particularly those in the localities of all the Award and Citation winners.

**SUBMISSIONS** do not require filling of an application blank. For each project you submit, simply send:

1. On a 5" x 8" card, type the client's **name, location, and proper name** of project; **name and address of the architect**; and identify all items included in the submission.
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 plans; basic building plans; pertinent sections and details.
5. Perspective or model photographs.
6. A statement that: (a) the project is now in the design stage and that construction is anticipated in 1970; and (b) that submission of a project for judgment gives **PROGRESSIVE ARCHITECTURE** first rights in the architectural field to publish both the project and the finished building if it receives an Award or Citation.

It is preferred that you submit 8" x 10" prints, photostats, or photographs bound in a folder. **Original drawings, actual models, or mounted exhibit panels will not be accepted and no material is to exceed 11" x 17" in size.** Each project is to be submitted under separate cover.

**DEADLINE FOR MAILING** is August 31, 1969. Address entries to Awards Editor, **PROGRESSIVE ARCHITECTURE**, 600 Summer Street, Stamford, Conn. 06904.

P/A will guard and return all submitted material.

Stuff the block,  
quiet the building.



Pouring Zonolite® Masonry Fill Insulation into masonry walls reduces sound transmission to a murmur.

Increases fire ratings of two-hour rated block to four—count them—four hours.

Doubles the insulating value of the wall to prevent chills and sweats of the occupants, while inducing a state of euphoria over low heating and air conditioning bills.

What more do you want for as little as a dime per square foot?

Remember. When you specify a block, specify Zonolite Masonry Fill for quiet's sake, safety's sake and comfort's sake.

Also remember to mail coupon right now for complete info.

ZONOLITE CONSTRUCTION PRODUCTS DIVISION  
**GRACE** W. R. Grace & Co., Dept. PA-07  
Cambridge, Mass. 02140

Gentlemen: Please send me complete information on your comforting, quieting, saving, fire-resisting Zonolite Masonry Fill Insulation, with complete technical data and specifications.

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

# MFRS' DATA

## The sticky business of bonding materials

Complete line of bonding products for architectural and construction uses include "Tuf-Grip" panel and drywall adhesives, ceramic tile adhesives, contact bond cements, calks and sealers, and butyl, polybutene and plastic compound tapes. Hadley Adhesive & Chemical Company, 514 Calvary Ave., St. Louis, Mo.

Circle 200, Readers' Service Card

## Techniques and technologies of building automation

A 28-page illustrated handbook describes various functions of automation and how to apply them to air-conditioning control, equipment surveillance, security and fire protection, and programming and systems analysis. Basic systems described range from small central control panels to consoles and computers for the largest building systems. Honeywell, Commercial Div., 2727 South 4th Ave., Minneapolis, Minn. 55480

Circle 201, Readers' Service Card

## Spray-applied concrete cleaner

Product is said to quickly remove oil and grease stains from concrete, brick, stone, stucco and marble. The non-acid material can be spray-applied, poured, brushed or rubbed into the stain, and then flushed with water. The Franklin Glue Company, Packaged Products Div., 2020 Bruck St., Columbus, Ohio 43207

Circle 202, Readers' Service Card

## Facsimile system sends graphics material

The "Transceiver Facsimile Network" can send or receive any graphic material by phone to more than 200 cities in less than 6 minutes, at a cost of about 50¢ per minute of transmission. Transceiver Corporation, 707 Kirby Bldg., Dallas, Tex. 72501

Circle 203, Readers' Service Card

## High performance and special-purpose doors

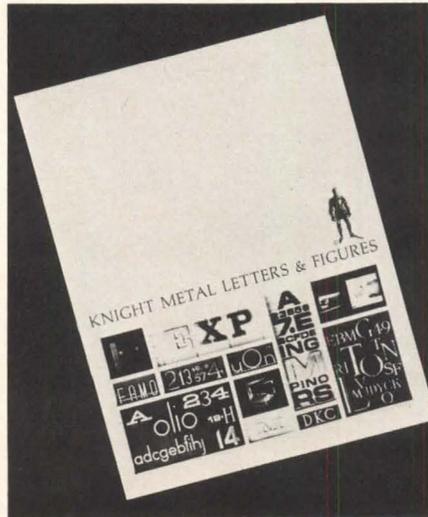
Details on high performance and special purpose doors include specs and a design selection chart. Test results on acoustical doors of varying thickness also included. Overly Manufacturing Company, 574 W. Otterman St., Breenburg, Pa., 50602

Circle 204, Readers' Service Card

## Sound control from hardwood partitions

Booklet gives data on use of hardwood partitions for sound control in new construction and remodeling of spaces. Test results included. 8 pages. American Hardboard Association, 20 North Wacker Dr., Chicago, Ill. 60606

Circle 205, Readers' Service Card



## The ABC's in metal letters

Ten new letter styles are among 22 different styles of alphabets and figures for interior or exterior use illustrated in catalog. Custom-fabricated letters and designs, large-size fabricated aluminum letters, sculptured symbology, special castings of product trademarks and medallions are described. All styles are available in solid bronze or aluminum with enameled, polished, or satin finishes. H. W. Knight & Sons, Inc., 25 Chestnut St., Seneca Falls, N.Y. 13148

Circle 206, Readers' Service Card

## Electrical wiring devices with a 25-year guarantee

Hundreds of specification-grade switches, receptacles, and wall plates, combination and interchangeable devices, and high power receptacles are described in "25-Year Guarantee of Performance Catalog." Technical data and dimensional drawings included. Leviton Manufacturing Co., Inc., 236 Greenpoint Ave., Brooklyn, N.Y. 11222

Circle 207, Readers' Service Card

## Membrane reinforcement fabrics

Brochure features technical information and principal uses of cotton, jute, and glass reinforcement fabrics for bituminous roofing and waterproofing systems. Reinforcement fabrics are described, including asphalt and tar-saturated cotton; asphalt, tar and resin-coated woven glass-fiber fabric; and asphalt saturated jute or burlap. Building Materials Dept., Organic Materials Div., Koppers Company, Inc., Pittsburgh, Pa. 15219

Circle 208, Readers' Service Card

## Plumbing and heating valves

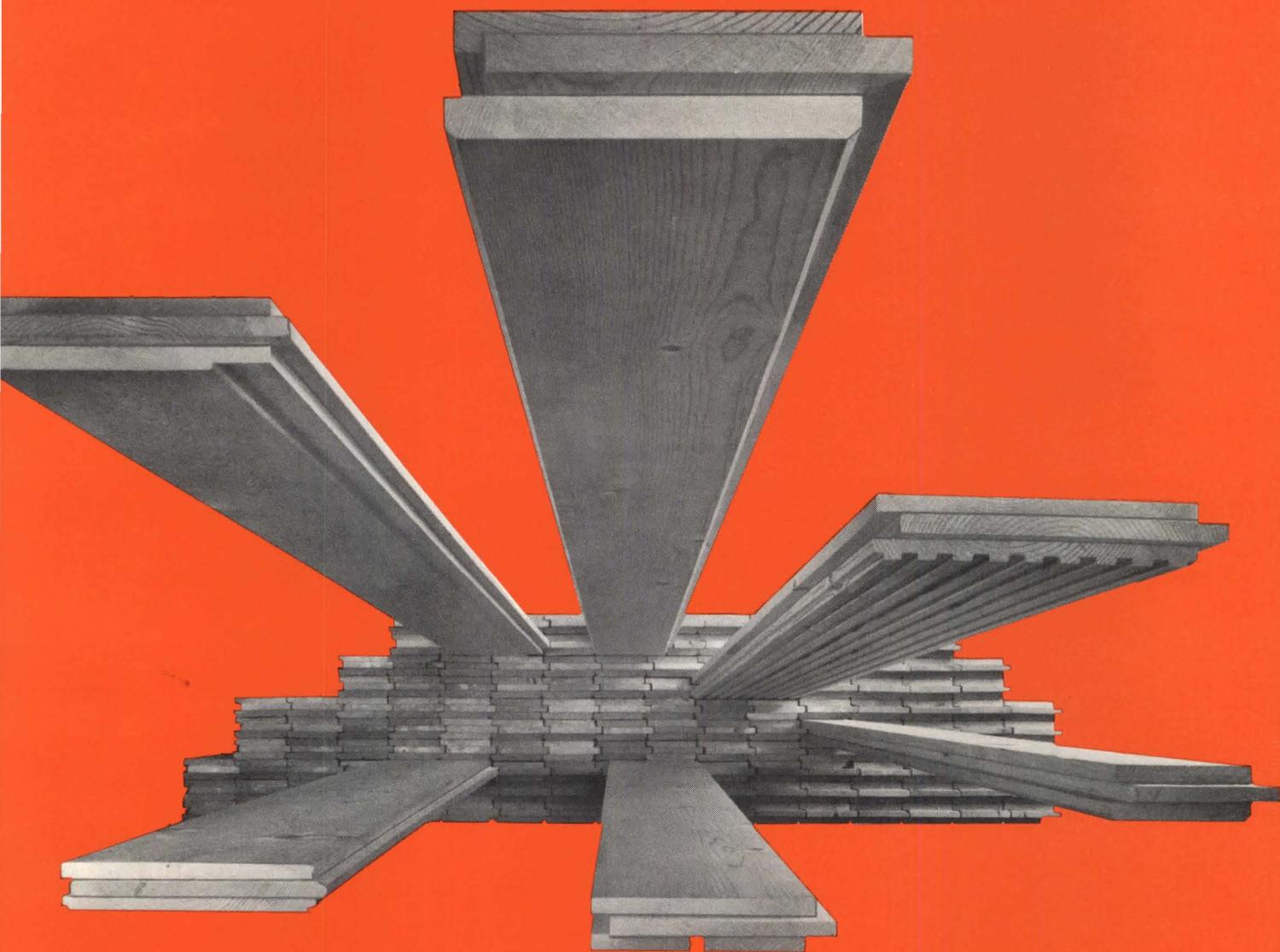
Data on complete line of angle-stop valves, angle-stop and waste valves, automatic stop and waste valves, boiler drains valves, check valves, flared tube valves, gate valves, sillcocks, U-valves, and water meter valves. Specs included. 22 pages. Anaconda American Brass Company, Dept. 395, Waterbury, Conn. 06720

Circle 209, Readers' Service Card

## Open-web steel joist data

A new color catalog includes general information as well as design data and load tables for "H-series" open-web steel joists. Includes load and spacing tables, specs, and recommended codes of standard practice adopted by the Steel Joist Institute. Laclede Steel Company, Marketing Dept., Arcade Building, St. Louis, Mo. 63101

Circle 210, Readers' Service Card



## Just six of many ways Weyerhaeuser helps to make your deck designs a little more exciting.

Weyerhaeuser has broadened the design choice in laminated decking with more options than ever in surface textures, thicknesses and appearance grades.

And we've added Ponderosa pine, our cedar and hemlock lines. Now you can specify Ponderosa in 8, 10 and 12-inch widths that go down to 1/2 inch thick and look stunning.

In addition, we're introducing a custom staining service. We're offering standard Olympic® stain tones for

hemlock and pine, with a custom-matching staining service available, too. With this service you can enjoy the efficiencies of factory finishing, and at the same time get an exact match on site-finished trim.

Your local Weyerhaeuser Architectural Specialty Dealer can give you the full story on our laminated products and the services that go with them. In the meantime, send us the coupon for complete technical data.

To: Weyerhaeuser Company, Box B-5739  
Tacoma, Wash. 98401

Please send me complete details on your complete line of laminated wood products.

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_



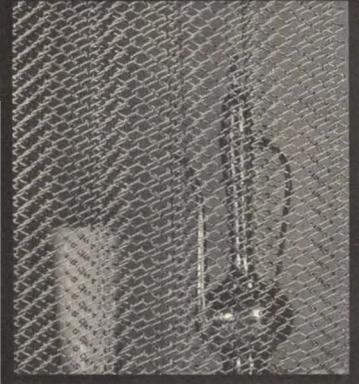
**Weyerhaeuser**

On Readers' Service Card, Circle No. 308

# PACIFIC DRAPERY FUNCTIONAL METAL MESH FOR

## NIGHT CLUBS

10,000 sq. ft.  
1/4" anodized  
aluminum,  
Casino, Freeport,  
Bahamas



## AIR PORTS

La Guardia Airport,  
New York  
1/4" anodized  
aluminum

## YOUR DESIGN

The new texture  
of wire for  
Dividers / Windows

**PACIFIC DRAPERY** is available in a steel, or aluminum anodized wire mesh / It is custom finished and woven to meet each individual requirement / It is painted or anodized in a spectrum of decorator colors / Pacific Drapery is woven in one-eighth, one-quarter, and one-half inch mesh / Pacific Drapery Wall is easy to install and maintain / Write for actual sample of this new product. We will also send prices.

**XP**  
**PACIFIC**  
**DRAPERY WALLS**

2235 S. E. 11th Avenue  
Portland, Oregon 97214  
Area Code 503-233-4661

On Readers' Service Card, Circle No. 366

# MR. JACUZZI KNOWS HOW TO TREAT A LADY!



## LUXURY ROMAN WHIRLPOOL

BATHS BY **Jacuzzi**  
WHIRLPOOL BATH®

Famous Jacuzzi water massage built-in to 5' and 6' colored, contoured tubs and loaded with custom features. Shipped as complete unit with all fittings, piping, timer, etc., ready to install as easily as an ordinary tub.



**FAMILY SPA** an entirely new dimension in luxury, pleasure and health.  
Big enough for the entire family.

Your next project will sell faster when you include JACUZZI. WRITE US FOR DETAILS.

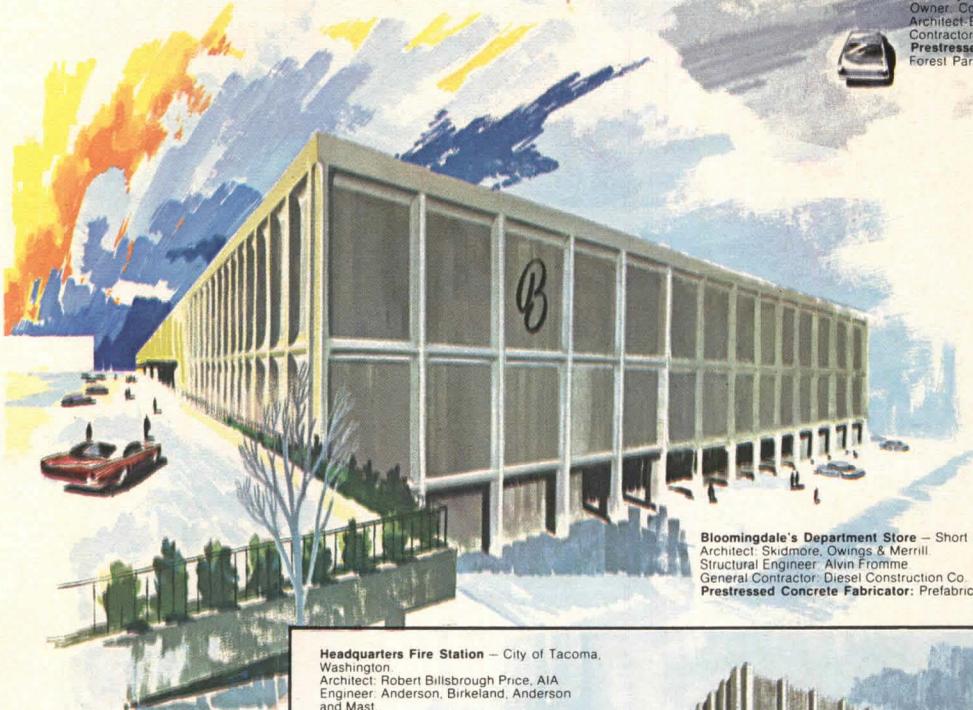
**JACUZZI RESEARCH, INC.**  
1440 San Pablo Avenue, Berkeley, California 94702

On Readers' Service Card, Circle No. 348

# considered prestressed?

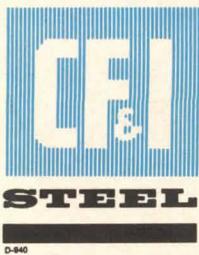


**Trailways Bus Terminal** — Atlanta, Georgia.  
 Owner: Conbus Corporation  
 Architect-Engineer: Edwards and Portman  
 Contractor: George A. Fuller Co.  
**Prestressed Concrete Fabricator:** Concrete Materials of Georgia, Inc., Forest Park, Ga.

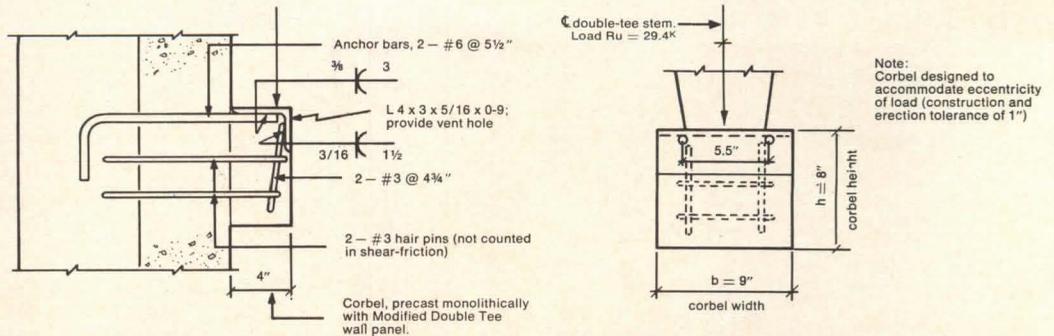


**Bloomingdale's Department Store** — Short Hills, New Jersey.  
 Architect: Skidmore, Owings & Merrill  
 Structural Engineer: Alvin Fromme  
 General Contractor: Diesel Construction Co.  
**Prestressed Concrete Fabricator:** Prefabricated Concrete, Inc., Farmingdale, N.J.

**Headquarters Fire Station** — City of Tacoma, Washington.  
 Architect: Robert Billsbrough Price, AIA  
 Engineer: Anderson, Birkeland, Anderson and Mast  
 Contractor: McKasson Bros. Construction, Inc.  
 Prestressed Erection: Pacific Crane and Construction Co.  
**Prestressed Concrete Fabricator:** Concrete Technology Corporation, Tacoma, Washington

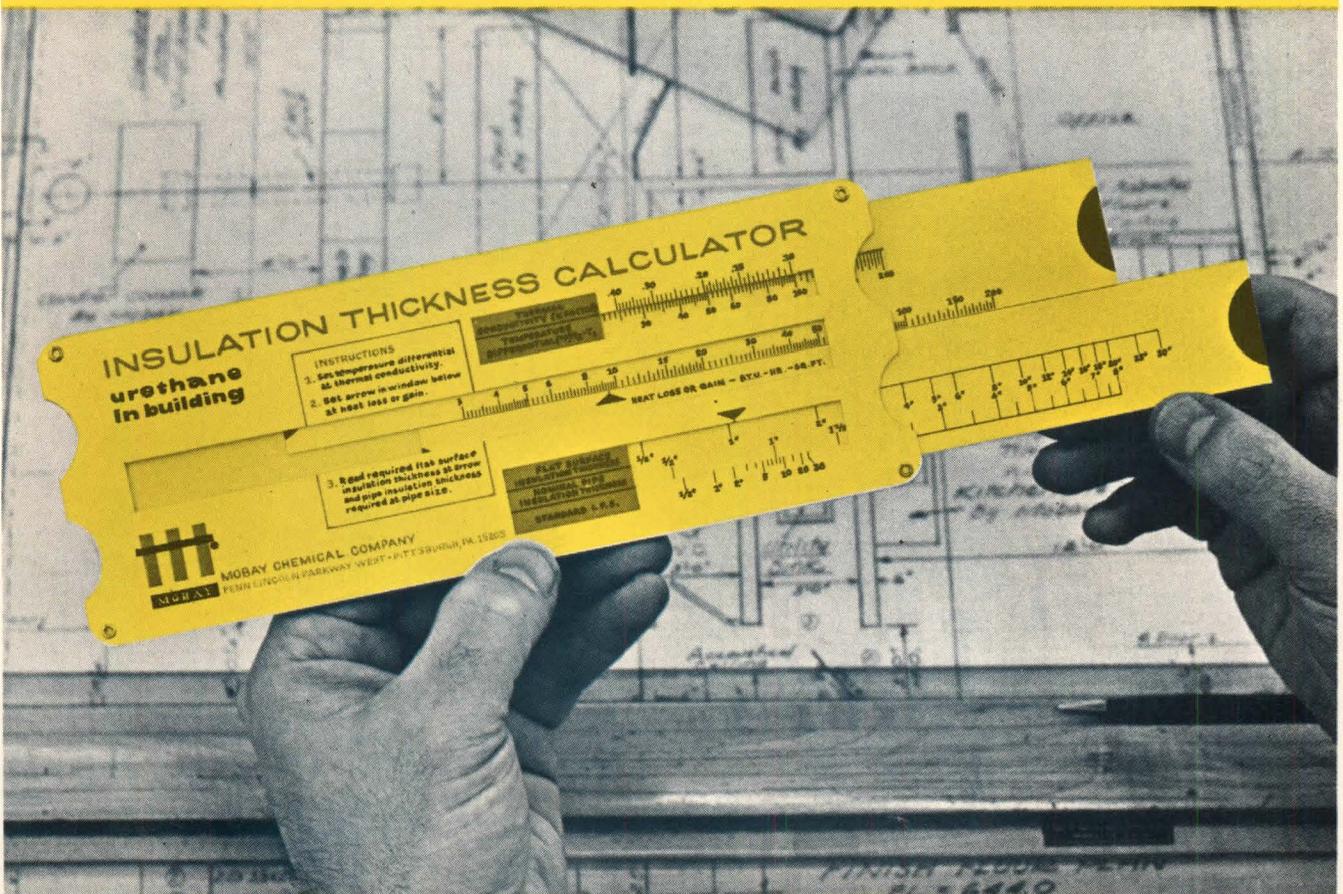


### CONNECTION DETAIL — DOUBLE TEE FLOOR UNITS TO MODIFIED DOUBLE TEE WALL PANELS



BASIC DATA AND REFERENCES AVAILABLE UPON REQUEST: CF&I STEEL CORPORATION, P.O. BOX 1920, DENVER, COLO. 80201

# You can compute your insulation requirements in 3 minutes or less with this Golden Rule

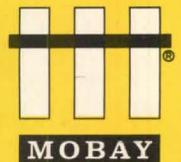


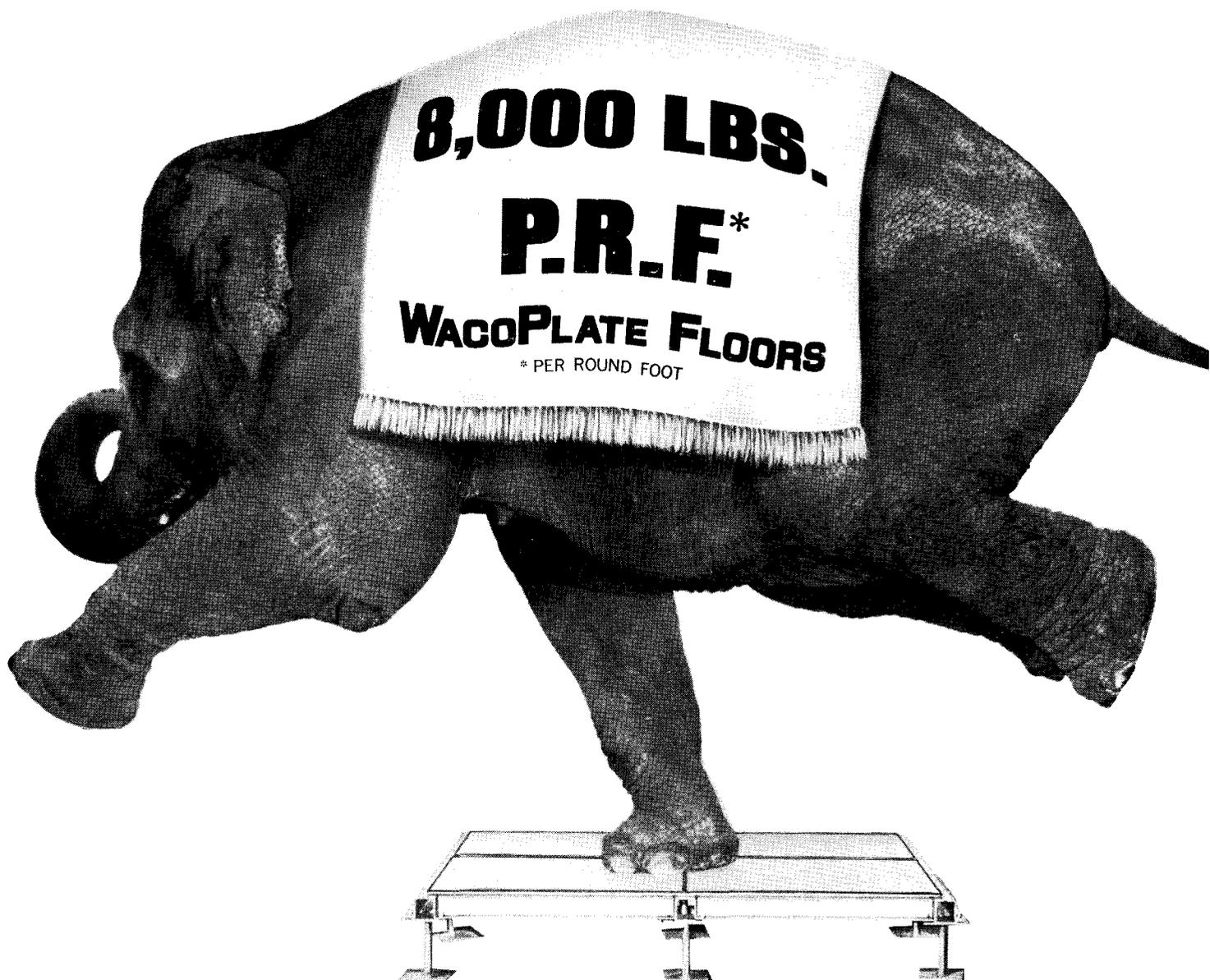
Zero in on your rigid urethane foam specs fast with this double-barreled Golden Rule Calculator from Mobay. With a flick of the wrist, you can read out density required to yield a specific k factor; water absorption rate; compressive, impact, tensile, shear and flexural strengths; and coefficient of expansion. A second calculator gives you a range of k factor levels for flat and curved surfaces, based on known Btu loss and temperature differential factors. Every time you use this handy dandy pocket tool, you'll be making money or saving it. Write for your Golden Rule on your letterhead and win a bonus of the two latest specification reports on insulating gypsum wallboard and masonry walls with slab and sprayed-on rigid urethane foam (now on the press). Limited quantity.

**MOBAY CHEMICAL COMPANY**

Code PA-79, Pittsburgh, Pa. 15205

engineering  
plastics  
and  
chemicals





## OK, load our raised floor with 8,000 pounds on one foot!

(but don't try it with any other floor)

WacoPlate Raised Floors provide two advantages you won't find in any other floor. Anywhere.

One is more strength than any other floor. You avoid problems like deflection and dimpling, or costly reinforcement to meet later — possibly unforeseen — requirements.

Why do other floors lack the strength of WacoPlate? Can't be because a weaker floor avoids problems. Or saves you money. WacoPlate prices are competitive.

The second exclusive advantage of WacoFloors is that they provide complete accessibility without sacrificing stability. The explanation is our Snap-Lok Rigid Grid System. The stringers in this grid system give the floor rigidity, strength and stability, yet they are easily removed and replaced. No loose fasteners are required.

**WacoFloors are installed with panels of steel or wood core. For complete details, dial direct or write.**



Stringers are easily removed from the exclusive Snap-Lok Rigid Grid System.

## WACOFLOORS

WASHINGTON ALUMINUM CO., INC.

Knecht Ave. at Penna. R.R. • Baltimore, Maryland 21229  
301 / 242-1000

*There is no equal to a WacoFloor*

Supreme Court Building, Austin, Texas  
*Architects:* Jessen, Jessen, Millhouse  
& Greeven/Mackie and Kamrath/  
Page Southerland and Page.  
*Granite:* Sunset Red, polished and  
natural cleavage.

*Cold Spring  
Granite Company*  
Cold Spring, Minnesota

*subsidiaries:*

*Lake Placid Granite Company  
Jay, New York*

*Texas Granite Corporation  
Marble Falls, Texas*

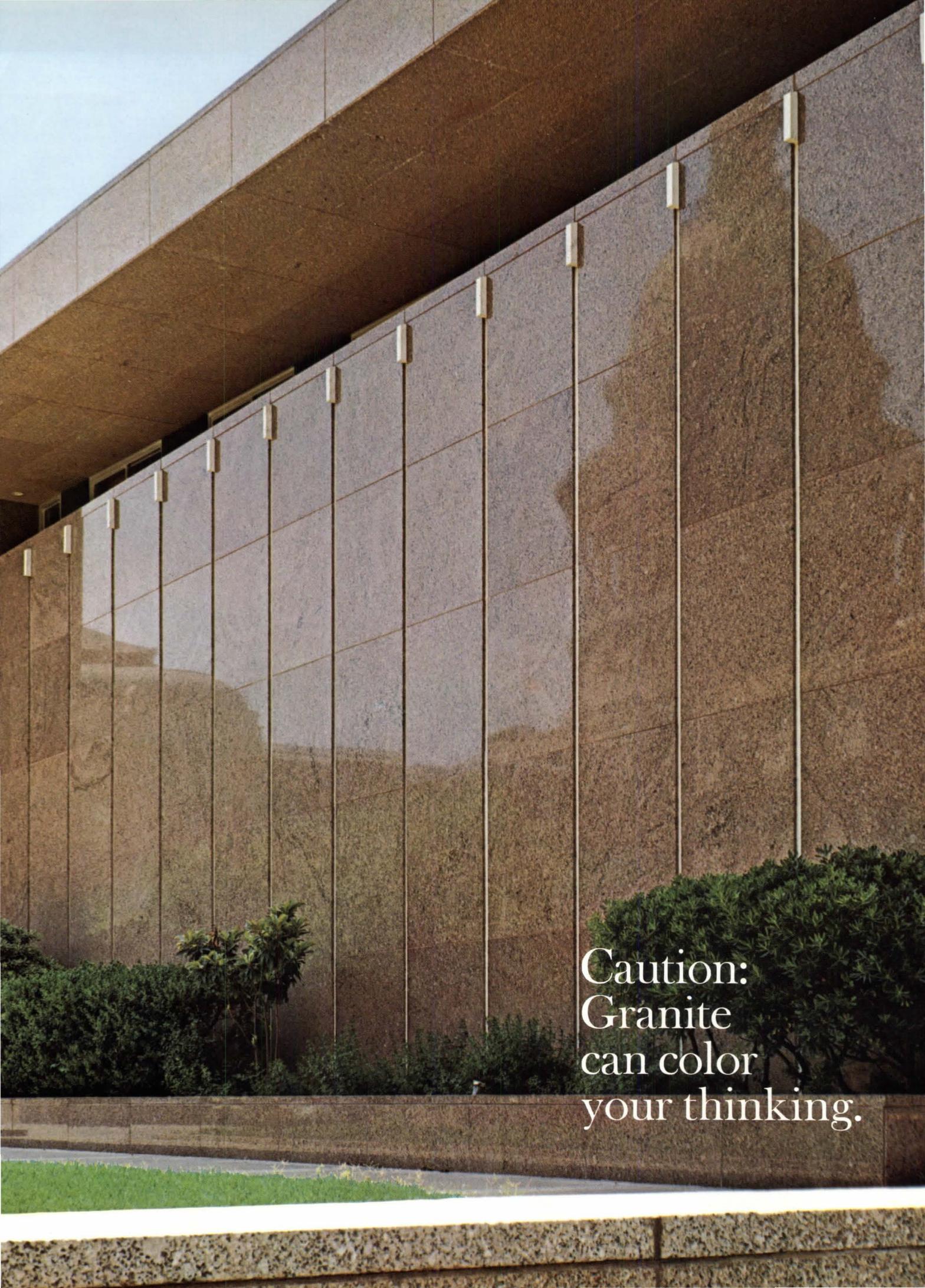
*Raymond Granite Company  
Raymond, California*

*Cold Spring Granite (Canada) Ltd.  
Lac Du Bonnet, Manitoba*

*over 20 producing quarries*

See us in Sweets, File No.  $\frac{6a}{Co}$ , or write.





Caution:  
Granite  
can color  
your thinking.

## MFRS' DATA

### Guide aids in planning pre-engineered building systems

Pre-engineered building systems planning guide for commercial and industrial buildings includes data on 6 structural systems, 4 integrated wall systems, accessories, and a facade that offers a flat-roof appearance. 12 pages. Star Manufacturing Company, P.O. Box 94910, Oklahoma City, Okla. Circle 211, Readers' Service Card

### Square light pattern eliminates dark corners

A square light distribution lens said to eliminate lighting overlap and shadowy corners inherent in conventional round distribution lenses, is described in a folder. Available in decorative "Drop-regress" or functional concave design and come in four lens sizes. The Edwin F. Guth Company, 2615 Washington Blvd., P.O. Box 7079, St. Louis, Mo. 63177 Circle 212, Readers' Service Card

### Engineering data on gas infrared radiant heating

Two 12-page bulletins describe low intensity and high intensity gas infrared radiant heaters. Each bulletin describes application, insulation, ventilation, air combustion, controls, wiring, etc. Examples of heat loss calculation forms are shown, as well as heater placement and gas piping tables. Bulletin SOL/ED-1 and DH-ED-1. The Barber Manufacturing Co., 22901 Aurora Rd., Bedford Heights, Ohio 44146 Circle 213, Readers' Service Card

### Textured fiber surface coating is applied electrostatically

The "Epoxy Suede-Tron Electrostatic Process" for applying colored fibers to achieve a textured suede-like surface is described in brochure. Included are sample swatches, a color selector, process explanation, and illustrations of applications. Co-Polymer Chemicals, Inc., 12350 Merriman Rd., Livonia, Mich. 48150 Circle 214, Readers' Service Card

### Details for glass construction

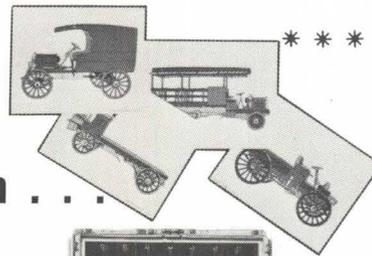
Three technical catalogs include selection tables, specs, suggested glazing methods, strength data, and transmittance values for various flat glasses. One catalog details complete line of architectural glass. The other two describe spandrel glass and tempered glass doors. Also included are description of hardware, fittings, and color choices. Public Relations Dept., Libbey-Owens-Ford Company, 811 Madison Ave., Toledo, Ohio Circle 215, Readers' Service Card

### Air curtain fans provide insect and thermal barrier

Two types of centrifugal air curtain fans are detailed in a 4-page bulletin. One is a thermal barrier for refrigeration doorways that prevents temperature and humidity losses from cooling plants. The other provides an air velocity powerful enough to repel dust and flying insects. Bulletin DBI-203C. ILG Industries Inc., 2810 N. Pulaszki Rd., Chicago, Ill. 60641 Circle 216, Readers' Service Card

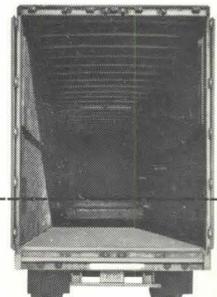
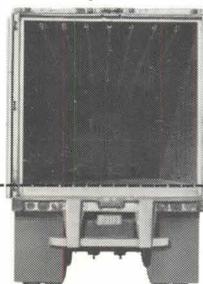
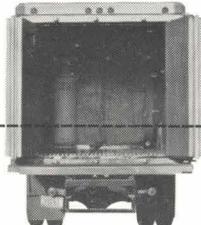
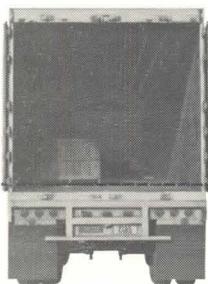
# 50 YEARS AGO

\*\*\*\*\*  
trucks and docks didn't match . . .



Get these  
**COLOR prints Free.**

Add these full color antique truck illustrations to your office, den, rec room. They're on heavy stock. Ready for framing. Clip and mail this coupon today for your set.



**they still don't!**

No matter how high you design a dock, it won't match most trucks. You can solve the problem by equipping your client's docks with Kelley Permanent Adjustable Dockboards. Only Kelley offers a complete line of dockboards with the size, type,

capacity and operating features your client needs to safely and efficiently service trucks from 12" above dock level to 12" below. For the complete story, and your set of antique color prints, fill in and return the coupon.

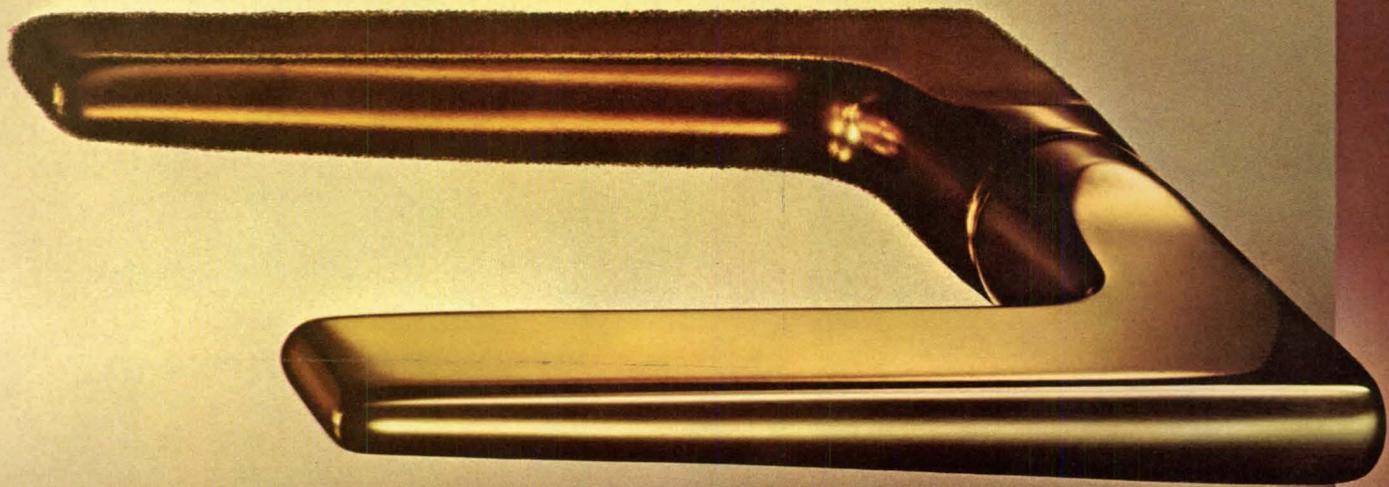


**KELLEY COMPANY, INC.**  
6760 N. Teutonia Avenue  
Milwaukee, Wisconsin 53209

Please send me complimentary Antique Truck illustrations. 55-364

Name \_\_\_\_\_ Title \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

On Readers' Service Card, Circle No. 351



 **SARGENT**®

*A complete line of advanced architectural hardware, including the Sargent Maximum Security System  
New Haven, Connecticut • Ontario, Canada*

**HARTER**  
**MSH**  
**900 SERIES**



New MSH seating by Harter. Superbly crafted yet modestly priced. (And even more comfortable than they look!) Available in 6 swivel and conference models. Now on display at Harter showrooms in New York, Chicago, Denver and Los Angeles. Send today for MSH brochure.



**HARTER CORPORATION**

717 Prairie Avenue  
 Sturgis, Michigan 49091

Please send me the MSH 900 Series seating brochure.

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

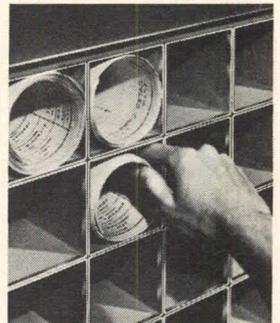
On Readers' Service Card, Circle No. 345

Tired of  
 tattered  
 plans?



Keep them neat... the **PLAN HOLD WAY!**

Original drawings should be filed, not defiled! **PLAN HOLD** Square Tube Files are the answer! Completely enclosed rolled plans stay neat and clean in square tubes indexed for easy retrieval. Square corner spaces let you grasp the roll. No binding against sides as in round tube files. Choose from 3 tube sizes for rolled plans up to 60" wide, in steel cabinet styles for any need you have. **WRITE FOR CATALOG**



**Plan Hold**  
**CORPORATION**

P.O. Box 3458, Torrance, California 90510.

On Readers' Service Card, Circle No. 372

**SPECIALTY  
 TILE FROM**

**Latco®**

VENEZICO • GRANADA  
 AZULEJOS • JEWELS  
 WATERWAVE • FACET  
 CANDYSTICKS • VALENCIA  
 OSTARA • WELSH PAVER

Latco is a **specialist** in tile! With unique designs from all over the world and an inventory from all the great tile centers, Latco offers a treasurehouse of dramatic textures, special configurations, unusual motifs and rich colors. Interior or exterior, commercial or residential... Latco provides out-of-the-ordinary tiles for every purpose.

**Latco® PRODUCTS**  
 3371 GLENDALE BOULEVARD • LOS ANGELES, CALIF. 90039  
 TELEPHONE: (213) 664-1171

On Readers' Service Card, Circle No. 353



Incline High School, Washoe County School District, Washoe County, Nevada

Architect: Edward S. Parsons, A.I.A., Reno, Nevada

## Safety is your first big plus with Plexiglas<sup>®</sup> all-purpose glazing

Plexiglas acrylic plastic is the preferred safety glazing material because it gives you the breakage resistance you need plus added benefits.

Solar control, for example. In addition to colorless sheets, Plexiglas is available in five densities of transparent gray or bronze tints, and a variety of thicknesses that do not vary in color value. Choose any combination of solar heat reduction, glare control and breakage resistance you need.

Plexiglas is easy and economical to cut to size at the job site. Its breakage resistance lends

safety to interior door and partition glazing. Plexiglas can even be cold-formed to permit gentle-radius curved glazing.

Plexiglas meets the performance specifications for safety glazing established by the United States of America Standards Institute and has broad building code approval.

For technical, specification and installation data on the full range of uses for Plexiglas in glazing and other areas, write for our catalog, "Plexiglas in Architecture."

®Plexiglas is a registered trademark of Rohm and Haas Company

On Readers' Service Card, Circle No. 378

Plexiglas is made only by

**ROHM  
AND  
HAAS**   
PHILADELPHIA, PENNSYLVANIA 19105



**Save money  
with the best  
money can buy...**

**USS Ultimet**

USS ULTIMET is in a class by itself. For appearance, performance, cost, quality and ease of erection there's no other curtain wall system like it.

For your next curtain wall, window wall, entrance or lobby design, consider one of the following three types of ULTIMET:

**USS ULTIMET in Stainless Steel.** For the first time, you can provide clients with the life-time beauty and durability of quality stainless steel curtain walls, including windows and doors. The cost? You'll find ULTIMET is competitive with systems utilizing materials of less strength and durability.



**USS ULTIMET in COR-TEN High Strength Steel.** Here is a new dimension in curtain wall design which combines the simplicity of ULTIMET and the natural beauty of bare USS COR-TEN Steel — the renowned weathering steel that protects itself with its own handsome oxide patina.

**USS ULTIMET in Color-Coated Galvanized Steel.** Bronze, black, white, blue—or just about any other color you want. A combination of heavy zinc coating and an applied coating of a high quality, pigmented fluorocarbon resin based material, assures long life, excellent part-to-part color match

and outstanding resistance to fading. For a copy of our new catalog on USS ULTIMET, contact a USS Architectural Products Representative through the nearest USS Construction Marketing Office, check your Sweet's, or write to U. S. Steel, Box 86, Pittsburgh, Pennsylvania 15230.

USS, COR-TEN and ULTIMET are registered trademarks.

**USS** **Ultimet Wall Framing Systems**  
 Stainless Steel • Cor-Ten Steel • Color-Coated Galvanized Steel

# Koppers super woods make good building ideas.

Good ideas usually generate more good ideas, which is one reason why Koppers family of super woods has been growing larger every year. These outstanding building materials are the result of pressure-treating wood with chemicals, or laminating—two great ideas that make wood today's most exciting and functional building material. Pressure-treated wood performs outstandingly where resistance to decay and insect attack is essential. It's ideal for such applications as patio decks, outdoor stairs, docks, subflooring and even lighting standards. Koppers laminated wood has bred a new world of design

possibilities for structural framing in residential and light commercial construction. In addition, Koppers fire-protected super woods keep their structural integrity under severe fire conditions. We hope the ideas shown here turn on some great ideas for you, too. Write for our portfolio of Catalogs on materials for building construction. Forest Products Division, Koppers Company, Inc., 815 Koppers Building, Pittsburgh, Pa. 15219.

MP-10



Beautiful, distinctive red cedar Shakes and Shingles give this Dental-Medical Clinic, located in the Grosse Pointe Woods section of Detroit, desired compatibility with the neighborhood's contemporary and Colonial exterior architecture . . . carry a Class "C" U. L. rating. For added fire protection, interior structurals (plywood roof decking, studs, wall plates) are Non-Com® fire-protected wood.



Charcoal gray Light Riser®, laminated lighting standards blend with the "old Philadelphia" atmosphere in new town house development, Willingboro, N. J. Cellon® pressure-treatment protects wood against termites and decay.



Wolmanized® pressure-treated lumber, because it is resistant to rot and termites, is the ideal lumber for decks, boat docks, for any application where wood members are in contact with ground or masonry. Weathers to a natural drift-wood gray.



All interior structural components of this attractive, new Gammon's Restaurant near Pittsburgh, Pa., are Non-Com fire-protected lumber and plywood. Use of Non-Com wood saved an estimated \$1,000 on insurance premiums, annually.

**KOPPERS**  
Architectural and  
Construction Materials



**They've  
arranged a  
marriage of  
convenience.  
For clock-  
watchers.**

Not your ordinary clockwatcher, but the extraordinary architect, contractor or owner who wants the convenience of a truly reliable master clock system in his installation.

Such a system has been born of a Swiss-American marriage arranged by Mr. Henri Stern, President, Patek Philippe, S.A., Geneva, and Mr. Dana J. Blackwell, Lewis Engineering Company, Naugatuck, Connecticut.

The arrangement is simple. Through its Electronic Division, Patek Philippe manufactures the world's finest, most reliable master clock systems. Through its newly created Horological Division, Lewis will plan, market and service these masterpieces of Swiss craftsmanship in the United States and possessions.

Now is the right time to include the right time in your building plans. Call Mr. Nicholas, Sales Manager at Naugatuck, Connecticut, 203-729-5253.



Baystate West  
 Architect: Pietro Belluschi & Eduardo Catalano-Architects,  
 early preliminary design.  
 Engineer: Francis Associates, Inc.



Linkletter Natatorium, Springfield College  
 Architect: Munson & Mallis  
 Engineer: E. M. Sullivan



Forbes & Wallace Department Store  
 Designer: 1. Strobel and Rongved, Engineers  
 2. Herman Blum, Consulting Engineers



Springfield Newspapers  
 Architect: Lockwood Green Engineers, Inc.  
 Engineer: Lockwood Green Engineers, Inc.

# How the architects of "new" Springfield planned for the future with All-Electric design.

A reconstructed and revitalized Springfield, Massachusetts, is rapidly taking shape. New buildings, new complexes, new developments are going up all over the city. Seven out of nine new buildings are built with All-Electric design. They're built to meet the needs of the future, and will still be modern for years to come.

All-Electric design gives architects greater design freedom. They don't have to plan around boiler rooms, flues, fuel storage and handling areas and unsightly smokestacks. All-Electric design gives tenants the ultimate in modern environmental comfort, and gives owners economical first costs and operating costs, and lower maintenance costs.

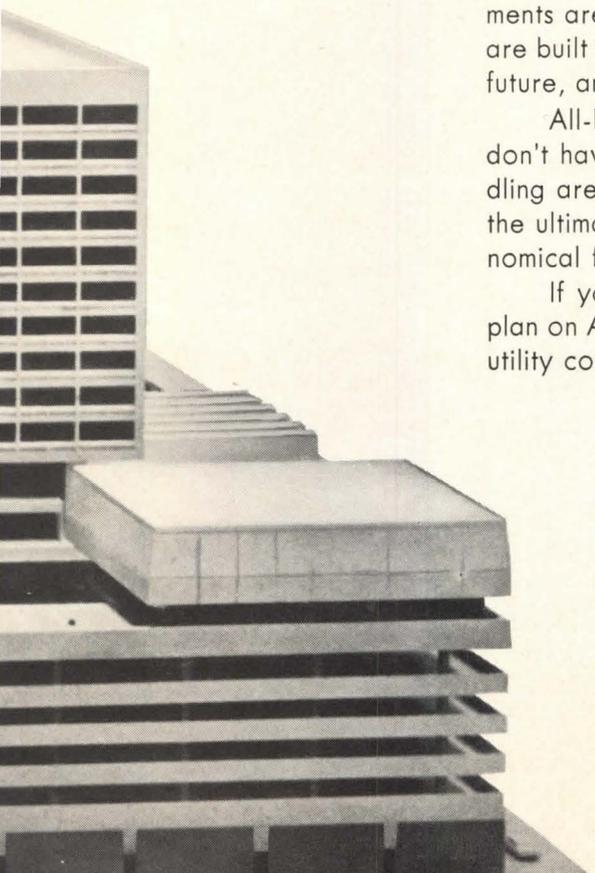
If you're planning a building to meet present and future needs, plan on All-Electric design. For more information, contact your electric utility company.

## All-Electric design



**Live Better Electrically**

Edison Electric Institute  
750 Third Ave., N.Y., N.Y. 10017



Holiday Inns of America  
Architect: William Bond, Jr. & Associates, Inc.



Eastfield Mall  
Architect: Daverman Associates, Inc.  
Engineer: Daverman Associates, Inc.



Stephen J. Collins Elderly Housing "Twin Towers"  
Architect: Caolo & Bieniek Associates  
Engineer: Greenleaf Associates

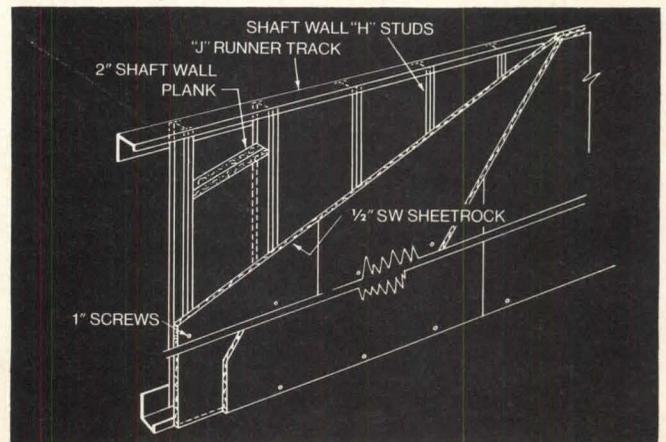
# Fast new dry shaft wall reduces deadload up to 64%

**New USG® Dry Shaft Wall System weighs only 16 lbs. per sq. ft. compared to masonry shaft walls that weigh up to 45 lbs. per sq. ft. Saves tons of structural steel.**

Other system features: Faster, all-weather installation for shaft completion ahead of schedule. One-, two-, and three-hour fire ratings. Sound control characteristics to meet code requirements. Savings on space. Savings on material and labor. Designed for wind pressure loading from 5 to 15 lbs. per sq. ft.

Consider this high-performance system for plumbing and air shaft enclosures, stairwells, mail chutes, elevator shafts, and equipment rooms. See your U.S.G. Architect Service man for details, specs, design data. Or write us at 101 S. Wacker Dr., Chicago, Ill. 60606, Dept. PA-91.

In non-bearing assembly, laminated gypsum coreboard 2" thick is installed between metal H-studs or C-channels; 24", 16", or 12" o.c. J-runners anchor panels to floor and ceiling. SHEETROCK® SW Gypsum Wallboard is screw-attached to coreboard.



World Trade Center, New York. Owner: The Port of New York Authority. Architects: Minoru Yamasaki and Associates, and Emory Roth and Sons. General Contractor: Tishman Realty & Construction Co., Inc. Drywall Contractor: Star Circle Wall Systems Inc. Shaft Walls: U.S. Gypsum.

## UNITED STATES GYPSUM

On Readers' Service Card, Circle No. 400

by the creators of VICRTEX® vinyl wallcoverings

Our designers are making the design scene again. With the most exciting, stimulating collection of prints, textures and patterns. They're here to be appreciated. Ask your Vicrtex Wall-expert Man — or come in soon to one of our nice big idea-filled wall-covering showrooms.



New VICRWALL Sample Book available on request.

# WONDERFUL NEW EDITION! Vicrwall®

## LIGHTWEIGHT VINYL WALLCOVERINGS

**LE CARPENTER**  
AND COMPANY



A DAYCO COMPANY

EMPIRE STATE BUILDING, NEW YORK, N.Y. 10001 LONGACRE 4-0080 • MILL: WHARTON, N.J.

In Canada: Shawinigan Chemicals Limited

see our  
catalog in  
Sweet's



All VICRWALL  
Fabrics  
U/L Rated

Patterns © L. E. Carpenter & Co.

DISTRIBUTED IN PRINCIPAL CITIES FROM HAWAII TO THE CARIBBEAN, BY: VICRTEX SALES DIVISION: New York, Chicago, Detroit, Philadelphia, Los Angeles, San Francisco, Boston / DWOSKIN, INC.: Atlanta, Houston, Dallas, Miami, Washington, Charlotte, Oklahoma City, St. Louis / HOWELLS PAINT CO.: Salt Lake City / RATTAN ART GALLERY: Hawaii / R. B. ADLER, INC.: Santurce, Puerto Rico

On Readers' Service Card, Circle No. 332

IF YOU THINK  
GLASS BLOCK  
STILL LOOKS  
LIKE THIS



YOU'D BETTER

An exciting new show is in for a long run at the deux ciné theatre\* in Corpus Christi, Texas—glass block by Pittsburgh Corning.

The architects, Kipp and Winston, took advantage of both the design and functional elements of this beautiful Chiaro pattern. Panels of modern sculptured Chiaro were alternated with panels of

plate glass to create a striking illusion of openness. Chiaro allows the light to enter, while keeping the noise and dust out. Heating and air-conditioning costs are also substantially reduced.

Find out how you can get your show on the road with Chiaro, Intaglio and many other interesting glass block patterns. Write for our free catalog: Pittsburgh Corning Corp., Dept. PA-59G, One Gateway Center, Pittsburgh, Pa. 15222.

\*Built and operated by United Artists Theatre Circuit Inc.



LOOK AGAIN

PITTSBURGH  
**pc**<sup>®</sup>  
CORNING

# Keene versatility structural

Architect: Brodnax—Phenix & Associates  
General Contractor: J. A. McDermott  
Owner: Dan M. Moody



# expresses itself in Speed-Steel.™

The seventy-four buildings of this Town and Country Shopping Center range in design from French Provincial to Early Spanish to English Tudor to contemporary. Each has the look of permanence that is real. A look that suggests solidity and a long time a-building.

Yet it took only three men three days to raise the skeleton, shown here, on which the building was formed. The secret: Keene Speed-Steel. Lightweight and easy to handle, this framing system has the highest work to weight ratio of any building material available. So designs can easily incorporate exterior walkways, balconies, cantilevered roofs.

Competitive in cost with wood, this steel system can be erected faster. And there are the added advantages of being vermin and fire-proof. What's more, Keene Speed-Steel framing studs are nailable. So any conventional material can be used for interior or exterior surfaces. Here at the shopping center, for example, the mansard roof has wooden shingles.

But this versatility of design is not confined to one-story structures. At the recent San Antonio Fair, Keene Speed-Steel proved the ideal material for the soaring Confluence Theatre, Federal Pavilion as well as 15 other buildings.

And Speed-Steel is even being used in town houses and garden apartments. In nursing homes. In sports arenas. All-in-all its uses are limited only by the imagination.

To find out more how our versatility can help your imagination, write: Keene Corporation, Metal Construction Products Division, Parkersburg, West Virginia 26101.

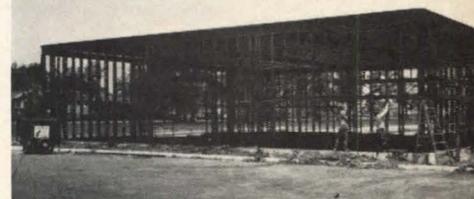
**KEENE**  
CORPORATION

Erection of structural steel framework for building 54 of the Town and Country Shopping Center, Houston, Texas took only three days. This is one of 74 such buildings in the Center using Speed-Steel.

FIRST DAY



SECOND DAY, NOON



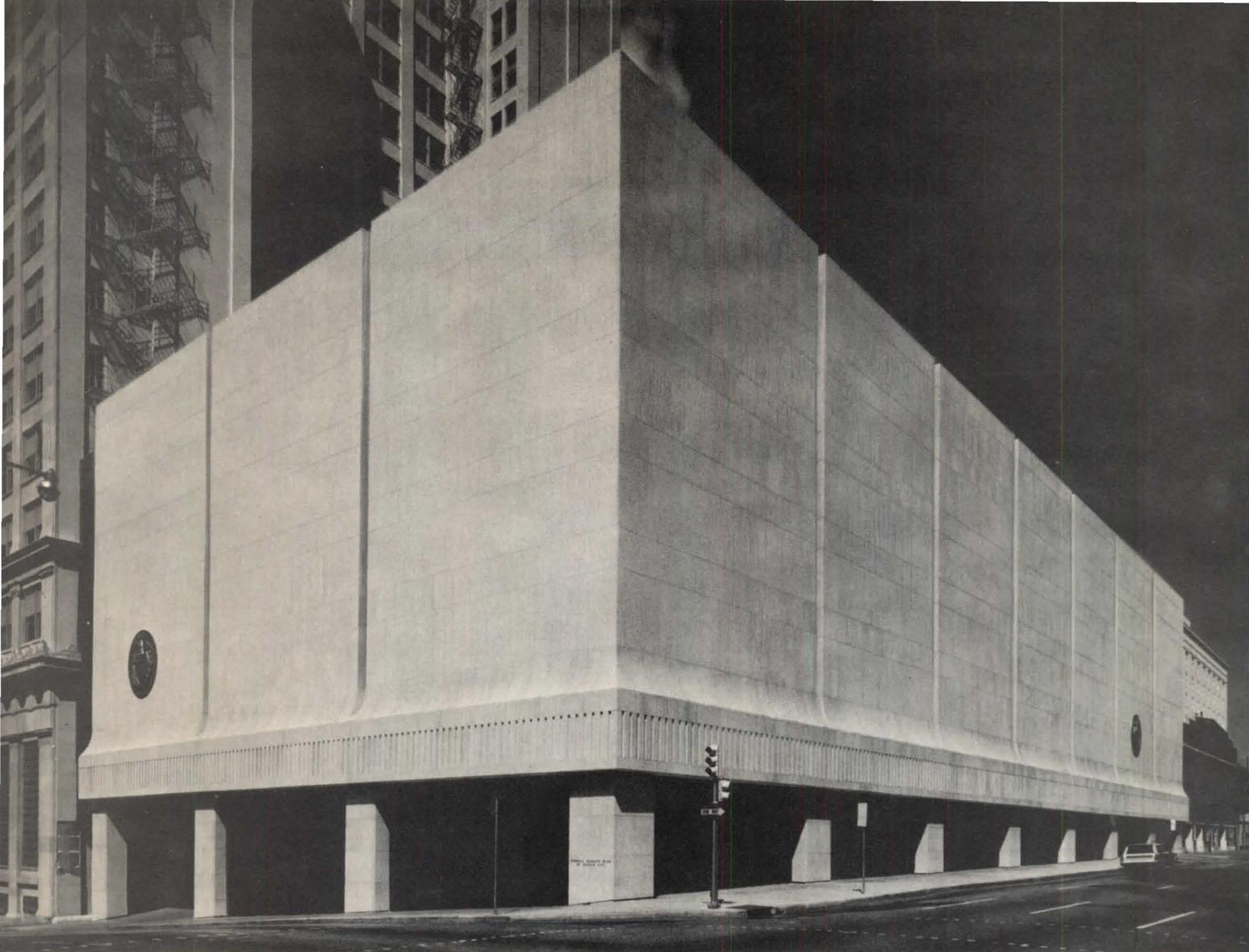
END OF THE THIRD DAY



READY FOR THE NEXT PHASE



**We've just begun to grow.**



**Architect:** Kivett and Myers, Kansas City—Vice President in Charge: William Love **Structural Engineer:** Bob D. Campbell & Co., Inc., Kansas City **General Contractor:** Sharp Brothers Contracting Company, Kansas City  
**Post-tensioning materials supplied by American Stress Wire Corporation, Englewood, Colorado**

## The Federal Reserve Bank of Kansas City... a bulwark of security built with prestressed concrete

The new addition to the Federal Reserve Bank of Kansas City is designed for complete security control. A master control center houses the latest security devices including closed circuit television, alarms and traffic control. The lower two floors of the building are atomic blast-resistant; the basement level qualifies as a fall-out shelter, having its own stock of provisions and stand-by electrical generator.

The building also contains a 13-level parking garage for 450 cars. Prestressed concrete helped solve structural design problems here. Efficient traffic flow necessitated a minimum of interfering columns. Prestressed concrete's high length-to-depth span ratio was used to bridge long distances between columns while keeping the deck within depth limits for adequate vehicle clearance.

Another problem was solved by using post-tensioned prestressed concrete to cantilever one parking bay next to the wall of an older building where supporting columns could not be placed. The design for this addition to the Federal Reserve Bank was granted an Honor Award by the Kansas City Chapter of the American Institute of Architects.

As the producers of dependable Union Wire Rope TUFWIRE® and TUFWIRE Strand for prestressed concrete, we would like to show you other examples of prestressed concrete's versatility. Write for a free copy of our booklet *Prestressed Concrete: a Growing Concept in Construction*. TUFWIRE and TUFWIRE Strand are made by Armco Steel Corporation, Department W-1079, 7000 Roberts Street, Kansas City, Missouri 64125.

**ARMCO STEEL**



# Textured Plywood:

Notice how you see it  
on more and more of today's really  
stunning commercial buildings?  
For examples, look inside.

# Another very good thing about textured plywood: You can use it as combination siding- sheathing and cut costs by 40% or more.

**1.** Architects Callister and Payne used Texture One-Eleven® plywood stained in basic earth tones of buff, brown, red, for siding on this sophisticated condominium community: Hiller Highlands, Oakland, Calif. Plywood is strong enough to use without an additional layer of sheathing—a great time-saver.

**2.** Rough sawn plywood, with battens at joints every four feet, is a good choice for any situation where style, simplicity and economy are essential.

**3.** Paul Wilson Bosholm, A.I.A., designed his own small office building in Palo Alto

with an ingenious use of rough sawn plywood siding and closely spaced battens.

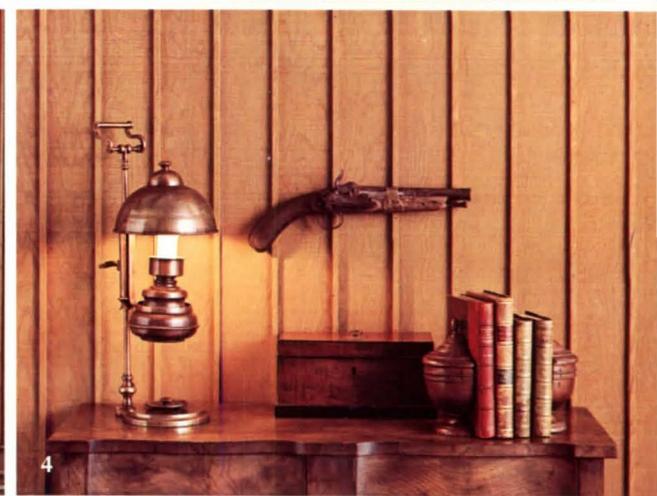
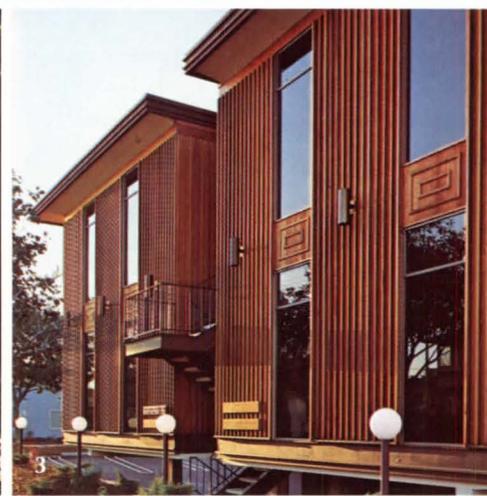
**4.** Rough sawn plywood paneling with narrow battens every four inches gives a look of richness to this library's rare-book room.

**5.** When you use textured plywood for interiors, it's important to specify your supplier's top-of-the-line grade if you want clear paneling with a minimum of knotholes and natural wood characteristics. These new plywoods come in different appearance grades, and you'll

want to be sure of the right material for the job in hand.

**6.** Fellowship Hall at a Methodist church in Cedar Rapids combines rough sawn T 1-11 with other strong, natural materials. Architects: Brown, Healey and Bock.

**7.** Plywood siding, applied directly to studs without sheathing, makes sense for any commercial or industrial building, even huge warehouses. It can save days in construction time. It's neat and easy to maintain. This is T 1-11 on a passenger terminal of a small airport. Architects and Engineers: Seifert, Forbes and Berry. (More ideas on next page.)



# A few more design ideas with textured plywood —from townhouse to office building.



**8.** Rough sawn plywood, reverse board-and-batten style, on a group of townhouses.

**9.** This office uses 2' x 8' panels offset from black frames.

**10.** Maintenance-free aggregate-surfaced plywood on a Salt Lake City building designed by Roger Van Frank, built by Alan Brockbank.

**11.** T 1-11 may be used horizontally, too, with vertical battens on 4' centers.

For more on styles, systems and availability and a new report on qualified coatings for plywood, send the coupon.



**American Plywood Association, Dept. PA  
Tacoma, Washington 98401**

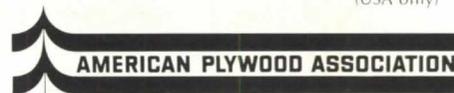
Please send free portfolio on textured plywood, with design ideas, sidings guide, qualified coatings directory.

Name \_\_\_\_\_ Title \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
(USA only)



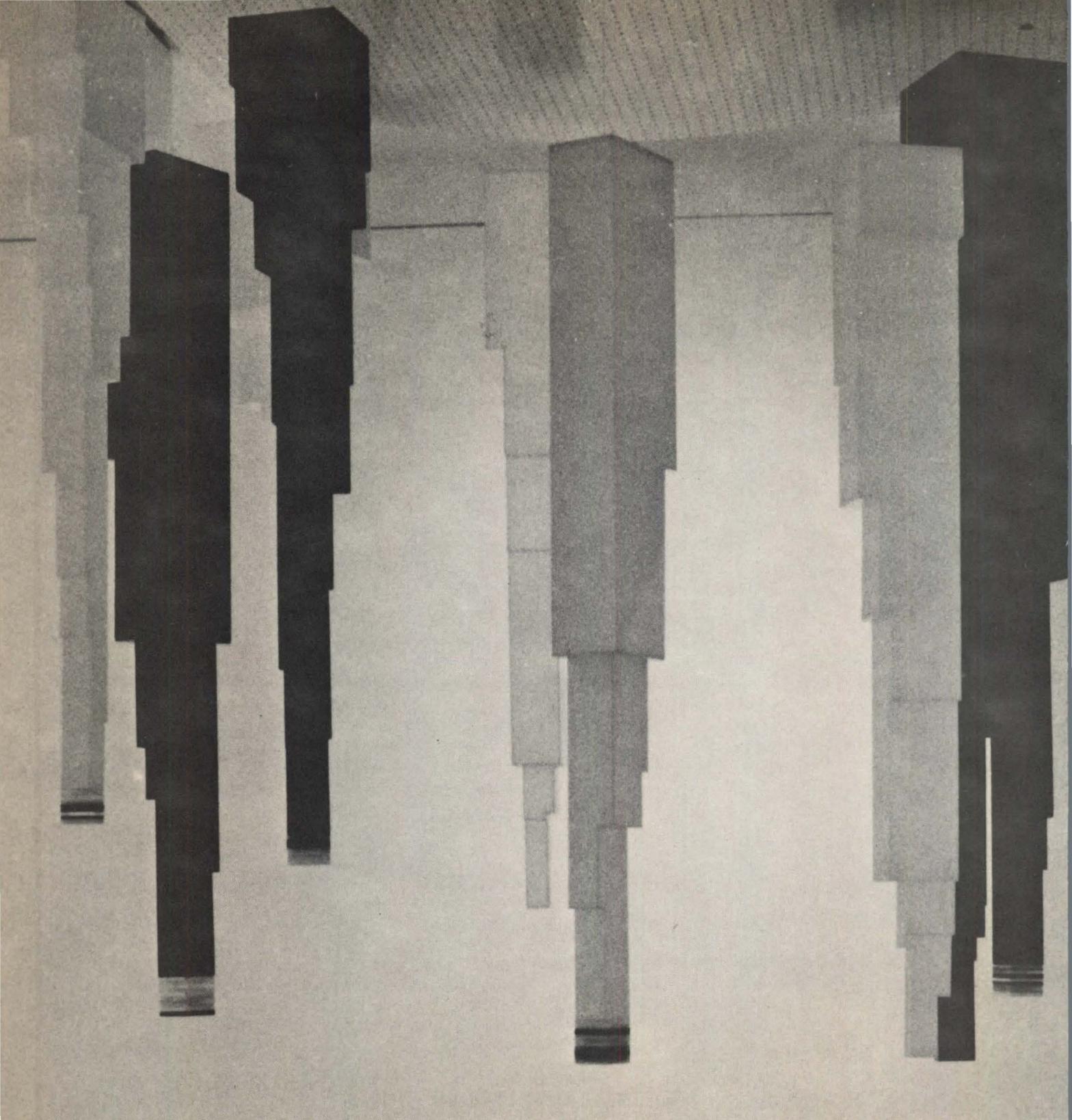
Plywood quality-tested by the Division For Product Approval



JULY 1969 **PROGRESSIVE ARCHITECTURE**

*“The fixation and stagnation of form may lead to an antiquated social policy, where the means, to some extent, determine the aims, instead of the contrary. The preposterousness of this fact has made it obvious to society that it is necessary to revise the whole social policy.”*

From PROJECTING AGE NEEDS, published by the  
Institut For Centerplanlaegning, Denmark

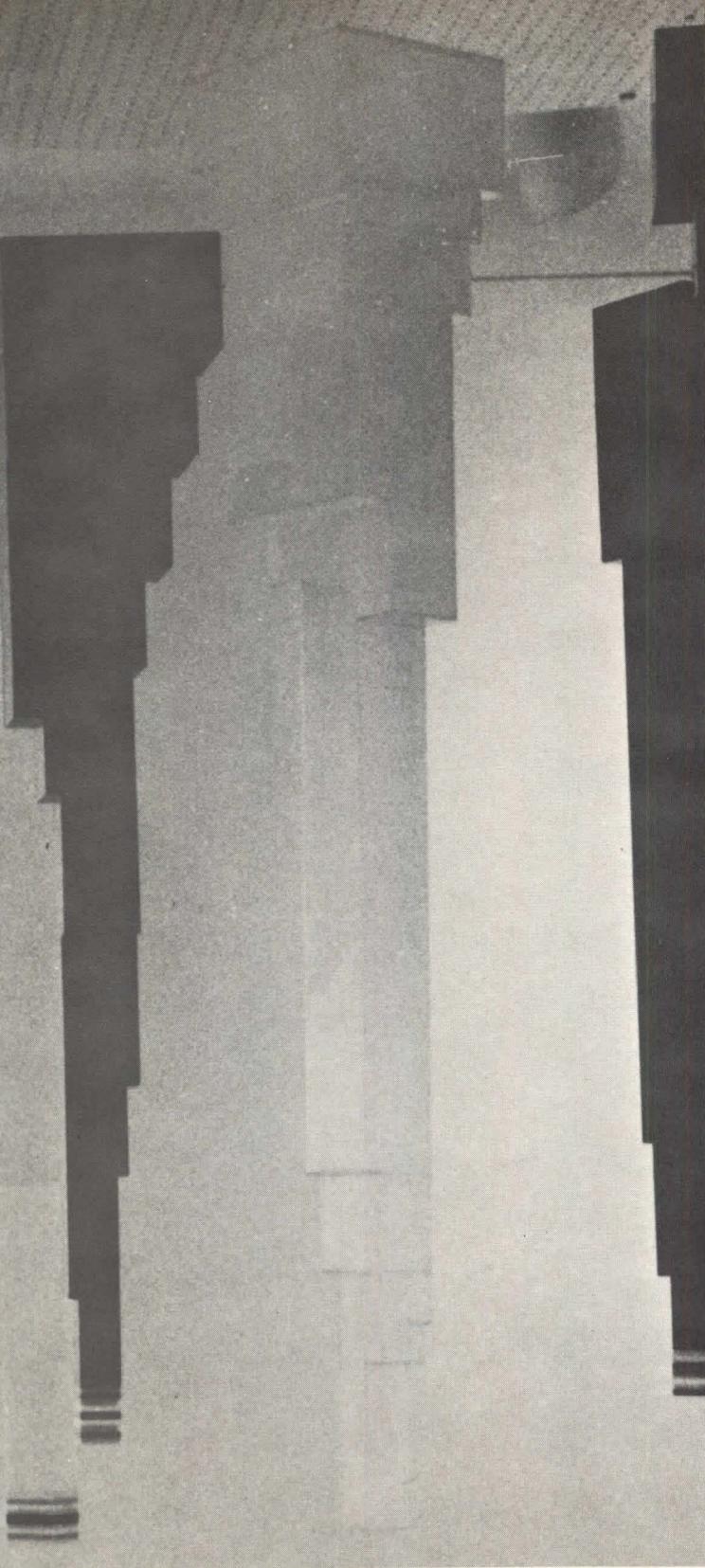


## EDITORIAL

## **THE WORLD IS BEING TURNED UPSIDE DOWN**

by those striving to make history while ignoring its lessons. A frightening lack of understanding of the lessons of history was displayed in the recent Congressional enactment of punitive measures against university student dissidents.

From the Boston tea tax to Prohibition, Americans have resolutely demonstrated their right to oppose laws they consider unjust. As a matter of fact, this right was written into our Constitution: "Governments are instituted among men, deriving their just powers from the consent of the governed;



English Sculpture David Carr expressed the voids between the setback buildings in city skylines with plastic volumes suspended from the ceiling of the Bertha Schaefer Gallery. (Photo: Gerald Jacobson.)

nesses recruit hippies — provokes young activists into the simplistic expedient of nihilistically attacking the entire Establishment. The result is the rapid erosion of those institutions that have traditionally upheld the rights of personal dissent, the law, the church, and the university. Students seem ignorant of the lesson of history that destruction of the authority of a social fabric invariably presages the rise of tyrants and despots. In the two centuries since American independence, we have seen the police states of Napoleon, Mussolini, and Hitler rise out of the chaos created by such conditions.

This month, we include an article on that prime target of dissidents — education. It is written by a young architectural school graduate, Peter Brill. Brill knows what he is talking about; he went the entire route — honor student, graduate study, and study abroad. He demonstrates an understanding of contemporary history in that he sees clearly that the major events of our time have occurred in the technological and not the social order. Brill demands an education that will equip architects to use technological tools.

Architectural student radicals such as Brill seem to be choosing a path between the cathartic of chaos and Establishment containment. Their protests are based on the moral values of traditional institutions. The architectural profession has, these students claim, a moral obligation to enforce and uphold the very basic tenets of our culture and they have demonstrated time and time again their willingness to stand behind their beliefs as militantly as any member of the SDS.

It is significant that, amid the chaos at Columbia University last year, the architectural students joined the protests as a profession, impelled to protest through a moral commitment.

In many instances, architectural students are demonstrating a stronger belief in the ability of the architect to create an equitable human environment than many of those who oppose them both inside and outside the profession. We should not allow this message to be drowned out by the surrounding chaotic din.

Our students must be listened to, if for no other reason than history is on their side. "I hold it, that a little rebellion, now and then, is a good thing, and as necessary in the political world as a storm in the physical," said a well-known radical, university founder, and architect, also quoted earlier — Thomas Jefferson.

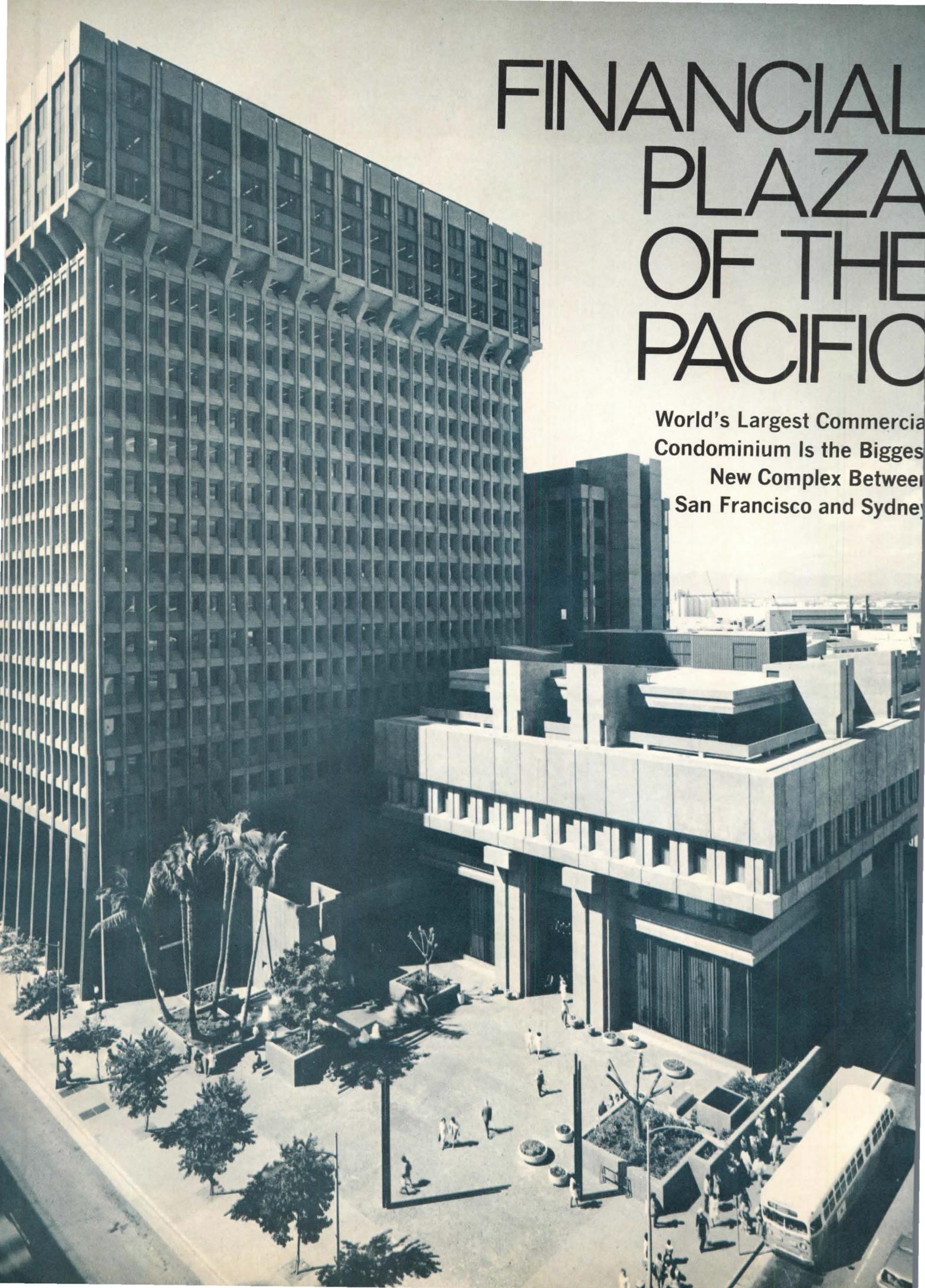
*Forest Wilson*

and whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it." The firm belief in this principle has sparked more student opposition to repressive administrative and police action on the campus than SDS agitation. History should have taught today's Congressmen that respect for authority is voluntary; it cannot be enforced.

On the other hand, vociferous students seem no more aware of the past than the lawmakers. The ability of the Establishment to contain its critics — foundations finance revolutionary studies and busi-

# FINANCIAL PLAZA OF THE PACIFIC

World's Largest Commercial  
Condominium Is the Biggest  
New Complex Between  
San Francisco and Sydney



BY JAMES T. BURNS, JR.

To design "the world's largest commercial condominium" for four major owners who insist on their separate visual identities and to have it come out looking somewhat all of a piece is a pretty good accomplishment. To do it and have the result as imposing and important to the community as The Financial Plaza of the Pacific is a gratifying urban achievement indeed.

There will probably be those who will complain that Leo S. Wou's design for the Honolulu megastructure (actually a mini-megastructure — three distinct buildings grouped together on a city block) is too "Mainland," not indicative enough of Hawaiian culture. That may be, but people looking for derivations of traditional island themes in modern dress can always go a few blocks away to see John Carl Warnecke's pleasant new state capitol. For possible visual comparisons of Financial Plaza, one's thoughts stray world wide — to Milan's Torre Velasca (the Castle & Cooke Building) and Boston's City

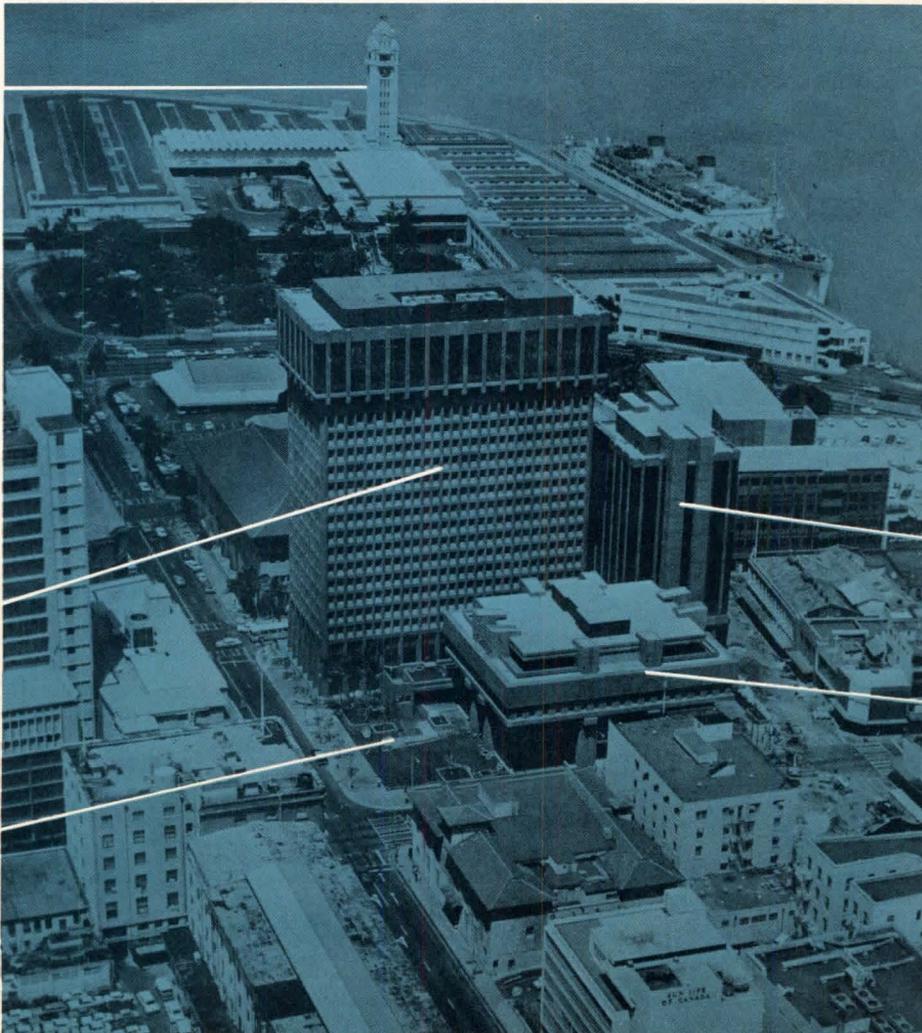
Hall (the Bank of Hawaii Building). Comparisons are perhaps odious in this case, at any rate, since the Financial Plaza represents one of those rare things, imaginative urban renewal accomplished completely through private means, and that is the major message it gives us. For a similar venture, the original Rockefeller Center is perhaps most germane, although its "expansion" into second-rate commercial buildings along the Avenue of the Americas in recent years does not, one hopes, presage a similar fate for the neighborhood around the Honolulu complex. More recently, John Portman has sparked a somewhat similar private planning revolution in Atlanta, and, together with New York's Rockefellers, is now zeroing in on downtown San Francisco.

The Honolulu Financial Plaza was brought about by local interests. Alfred Boeke of Sea Ranch fame, who is Vice-President of Oceanic Properties, Inc., the land development subsidiary of Castle & Cooke,

ALOHA TOWER

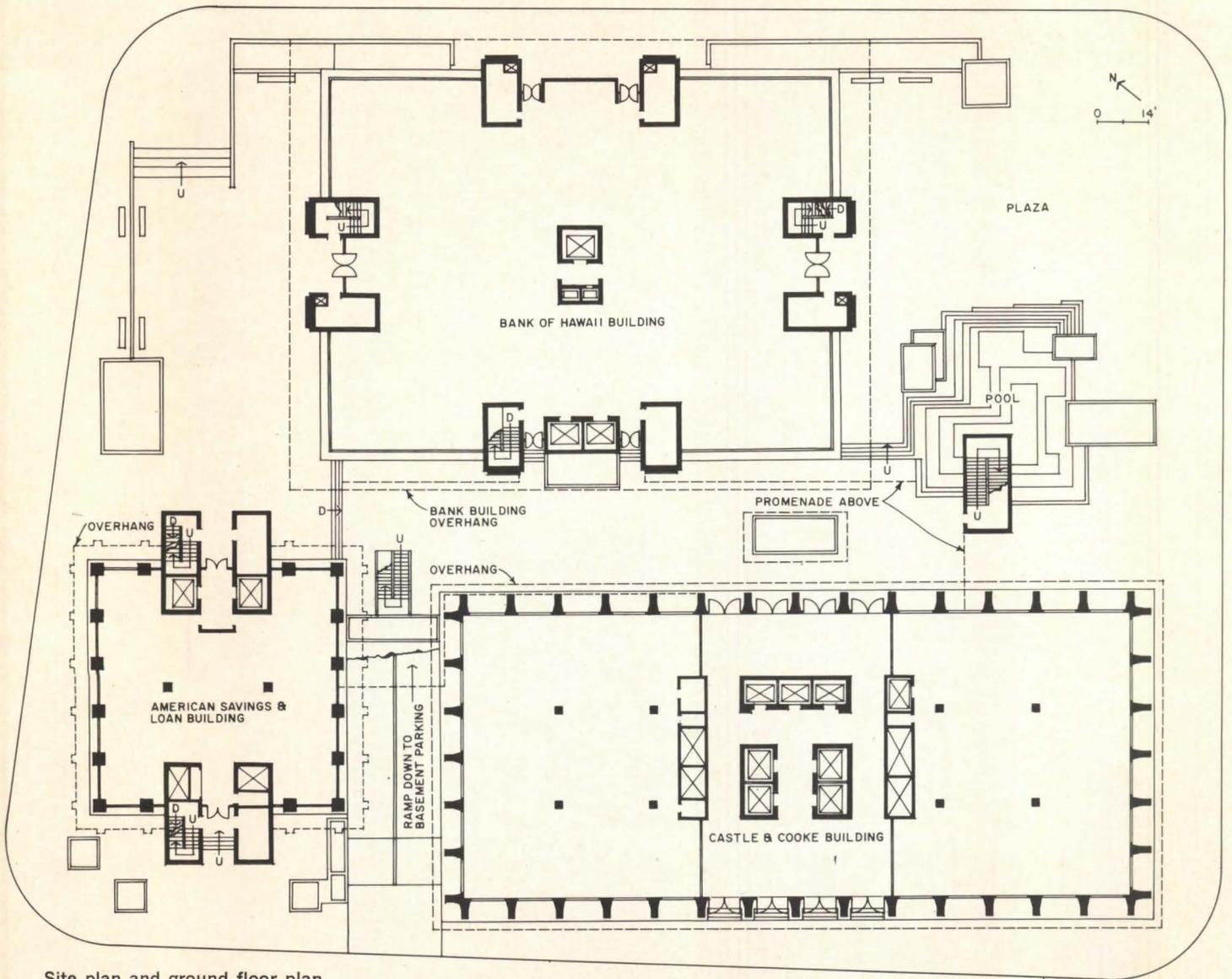
CASTLE & COOKE  
BUILDING

FINANCIAL  
PLAZA



AMERICAN  
SAVINGS & LOAN

BANK OF HAWAII



Site plan and ground floor plan.

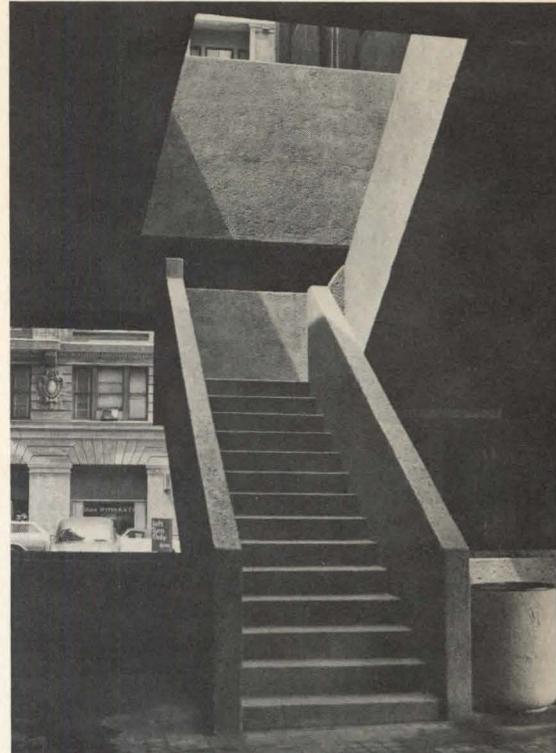
Inc., reacted to a 1962 downtown Honolulu master plan by Leo S. Wou & Associates by realizing that at least part of the commercial area should proceed under proper timing, coordination, and creative sponsorship. He accordingly arranged a four-block study by Victor Gruen Associates, from which the present block was chosen for initial development. The owners in the condominium are, in addition to Castle & Cooke, the American Savings & Loan Association, the Bank of Hawaii, and the Wilcox Development Corporation. The last named does not occupy the complex, but uses its holdings as rental space for income purposes. The entire project architecturally became a joint venture of the two origi-

nal planners, Leo S. Wou & Associates and Victor Gruen Associate, Inc.

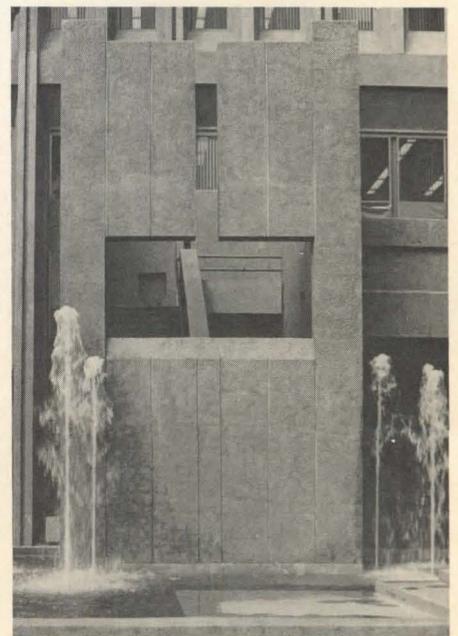
The group of buildings on its fountained plaza that can be seen from Alhoa Tower by tourists disembarking at Ala Moana consists of the 21-story Castle & Cooke Building, the 12-story American Savings & Loan Association Building, and the six-story Bank of Hawaii Building. These are set on a terraced brick plaza designed by Lawrence Halprin & Associates. The plaza is accessible to an interconnecting second-story pedestrianway via a sculptural staircase in front of the Castle & Cooke Building (this is a muscular concrete structure, recalling that Wou once worked with Louis I. Kahn.)



Victor Gruen's Fort Street Mall has joined Financial Plaza as connective tissue to the rest of redeveloping Honolulu.



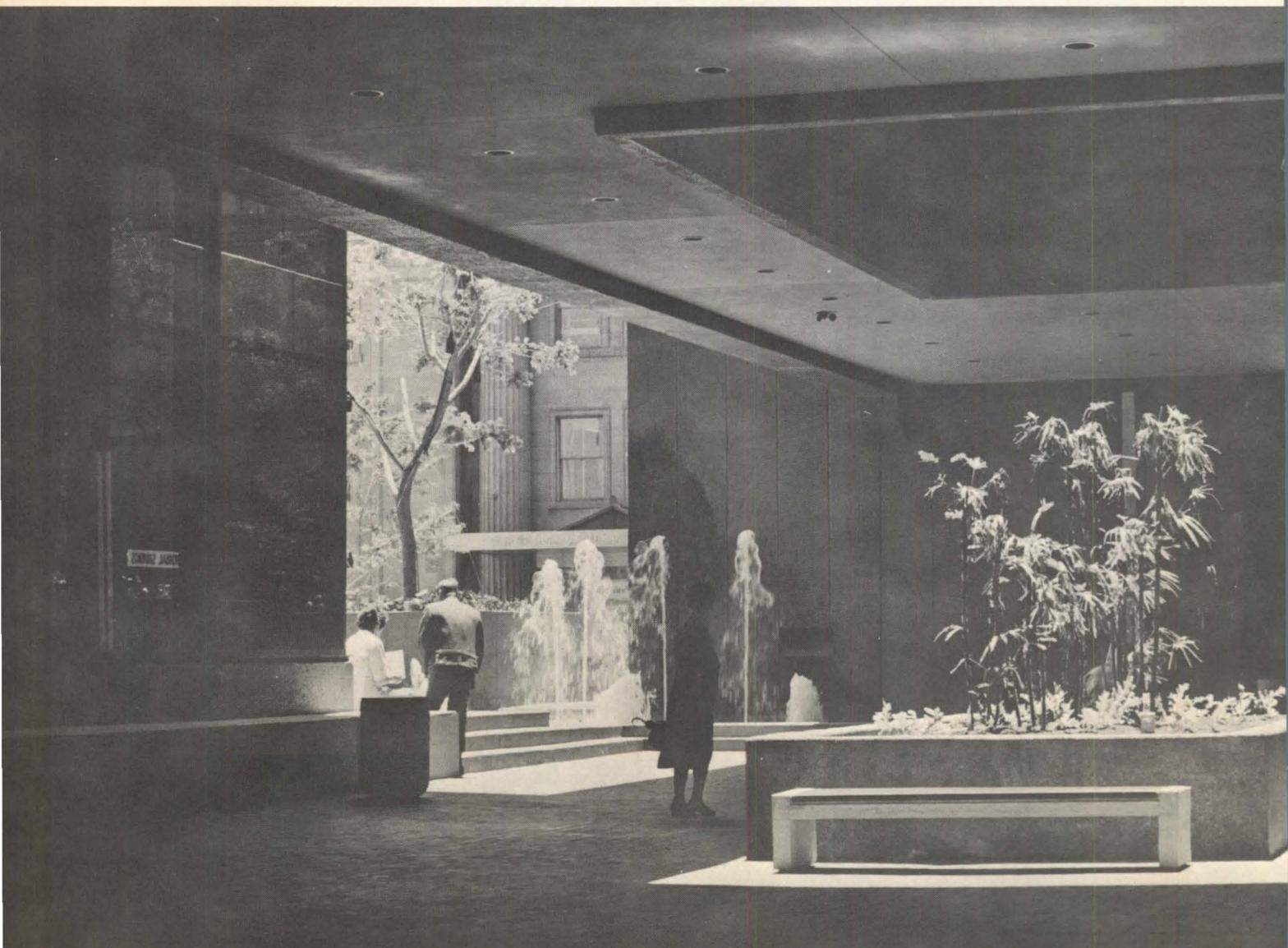
Stairway up to elevated promenade connecting the three buildings (inside, above; outside, below) forms a sculptural object to reflect in Halprin's fountains.



The treatment of promenade and plaza levels tends to break up and make less threatening the somewhat overpowering forms of the buildings, particularly Castle & Cooke and the Bank of Hawaii. Some observers have objected to these buildings as being overdesigned, but the use of connective space; a playful fountain and other, smaller "happenings" in the over-all environment; use of reflective glass and light and shadow; varying textures of concrete, brick, planting, water, metal, glass; and judicious native landscaping (to become more luxuriant and more softening in the future) all conspire to bring the experiences of Financial Plaza down to an individual, more human scale. When seen from afar, Financial Plaza does dominate the skyline, as it was no doubt designed to do, but direct experience with the group of buildings leads to a series of spatial

and textural adventures rather than a sense of oppressiveness in the midst of Hawaii's commercial monoliths.

The architect, as previously noted, was torn between the Scylla of visual integration of the project and the Charybdis of client desire for individual identity. Fortunately, like Odysseus, Leo Wou passed safely between these conceivably opposing interests to emerge with a complex that, for the most part, is visually integrated *and* composed of distinct parts for the three major occupants. Use of similar materials and related architectural expressions in the three buildings, plus the connective tissue of plazas and elevated promenade, makes Financial Plaza hang together as a visual and spatial entity. Variations of forms and heights responding to individual client's needs and programs answer the need for sep-



Relief from the south Pacific sun is gained in arcades at street level. Punctuated with planting, seating, fountains, and light shafts, the arcades have become popular lingering places.



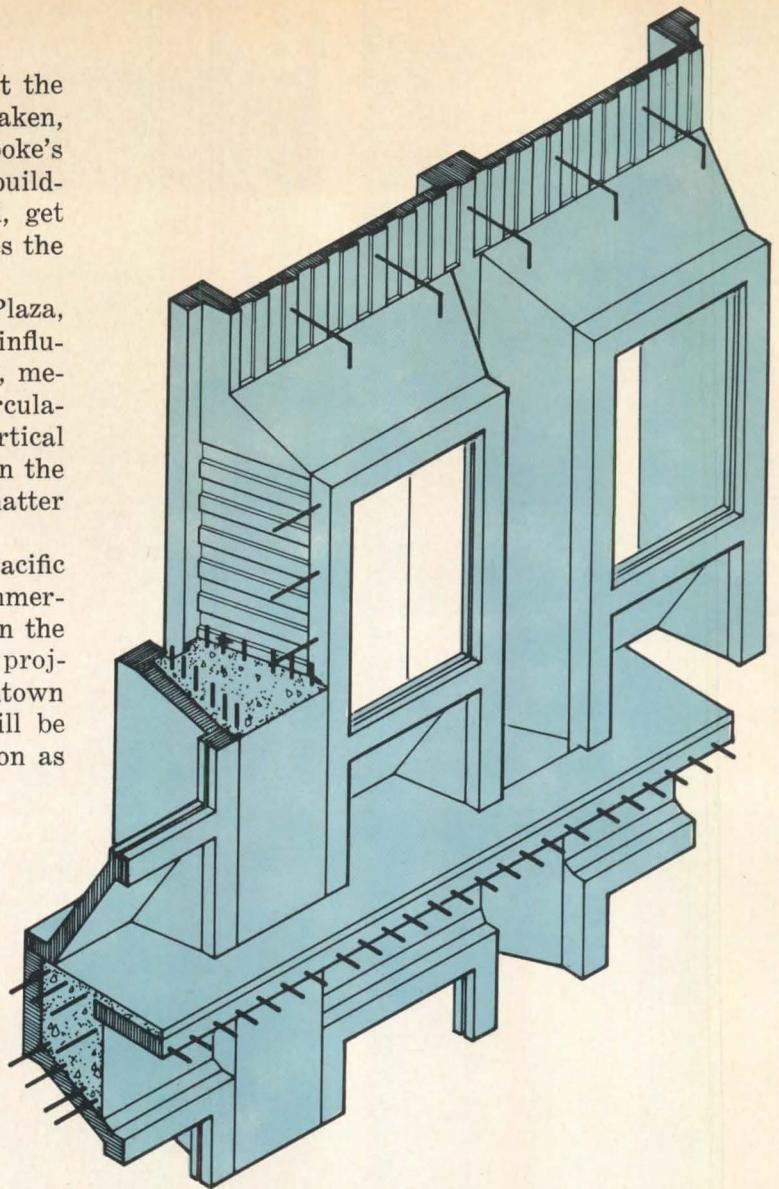
Viewed from the main chamber of the Bank of Hawaii, the elevated promenade can be seen as a connection between the bank and the Castle & Cooke Building.



arate "images." There might be some cavils at the final forms some of these differentiations have taken, notably the conceit of making Castle & Cooke's three headquarters floors on the top of their building a castellated cantilever (Castle-castellated, get it?), but, for the most part, the design achieves the unity in diversity that was the goal.

The structural systems used in Financial Plaza, particularly in the Bank of Hawaii, strongly influenced the resultant visual effects. In the bank, mechanical and electrical facilities and vertical circulation elements are organized into four sets of vertical shafts on the exterior. There are no columns on the interior — none, per se, in the building, as a matter of fact.

Since its completion, Financial Plaza of the Pacific has been joined by the Fort Street Mall, a commercial urban renewal gesture similar to efforts on the Mainland (Minneapolis, Fresno, etc.). If these projects touch off other measures to juice up downtown Honolulu, Financial Plaza and its creators will be able to indulge in some merited self-satisfaction as the progenitors of the revival.



Detail of precast concrete double window units for Castle & Cooke Building. They are 12-ft wide by 3-ft deep, and carry air conditioning duct shafts in the center mullions.

FINANCIAL PLAZA OF THE PACIFIC, Honolulu, Hawaii. **Architects:** Leo S. Wou and Victor Gruen Associates, Inc., Associated Architects (Leo S. Wou, Principal in Charge of Design; Edgardo Contini, Principal in Charge of Engineering; Sydney H. Brisker, Project Coordinator). **Site:** Full city block in downtown Honolulu bounded by King, Bishop, Merchant, and Fort Streets. Selected as pilot project in four-block renewal plan of area made by Victor Gruen Associates (which came after overall downtown renewal study by Leo S. Wou & Associates). **Program:** Provide headquarters for four clients: American Savings & Loan Association, Bank of Hawaii, Castle & Cooke, Inc., and Territorial Savings & Loan Association (a fifth client, Wilcox Development Corporation, does not have quarters in the complex). Commercial condominium to be developed with appropriate visual distinction for each owner, yet act as a cohesive force in city's commercial area renewal. **Structural System:** Two taller buildings on high capacity prestressed concrete piles. Shear walls in all three buildings used to resist lateral forces. The lower

three floors of the Castle & Cooke Building are supported on full height solid precast columns. At typical floors, the exterior elements are precast concrete frame units, 12-ft wide by 3-ft deep, divided into two window openings (see detail drawing). Air-conditioning duct shafts run in the center mullions of these units. Where they are joined, the precast shape serves as exterior forms for cast-in-place columns and spandrels and also guides the window-washing tracks. Typical floor system is prestressed planks with concrete topping, requiring only a 10'-6" floor to floor height for an 8'-6" interior room height. Top and bottom three floors of the 21-story tower are curtain wall construction similar to the American Savings & Loan Association Building (the most modest and retiring of the group). The top three floors cantilever 8 ft beyond the building. American Savings & Loan Building uses combination of precast and cast-in-place concrete; two main towers in building are cast-in-place with sandblasted finish to match precast units. Column shells are precast concrete, and floors are precast prestressed concrete

planks similar to Castle & Cooke Building. Transition occurs at third floor where exterior columns step outward 6 ft; the upper columns are supported on large prestressed girders at third floor level. Structure of Bank of Hawaii Building is carried by four post-tensioned, cast-in-place concrete Vierendeel girders forming exterior walls of the building from the fourth to the sixth floor. All floors are either framed into these girders or hung from structures carried by them. Floor construction is prestressed concrete I beams and 4½" cast-in-place slab. Each 28' x 146' girder is supported at third-points by two cast-in-place concrete shaft structures. The girders cantilever 50 ft beyond these shafts, which contain elements such as stairways, elevators, toilets, and mechanical equipment rooms. **Parking:** Underground parking under site, plus arrangement with nearby interests to construct a parking structure/office for 200 automobiles. **Mechanical Systems:** The tall buildings are air conditioned by 10 central high velocity double-duct systems using mixing boxes for each thermostatically controlled zone. Most of the



Castle & Cooke Building provides a new-look, mainland-type backdrop for more traditional island architecture and foliage.

air is taken back to the fan systems through vertical voids in the concrete façade of the Castle & Cooke Building. The Bank of Hawaii Building is air conditioned by 21 multizone units located in voids at each floor; light troffers used for air distribution. Centrifugal chillers located in Castle & Cooke penthouse supply chilled water for virtually the entire complex.

**Major Materials:** Sandblasted concrete with volcanic aggregate exterior; drywall plaster and exposed concrete interior. Floor covering of travertine-style vinyl asbestos tile, ceilings of 12" x 5" fissured acoustical tile. Drywall and movable wall partitioning. Windows bronze plate in bronze anodized aluminum. **Cost:** Bid, \$14,300,787; Actual, \$17,162,480. **Consultants:** Lawrence Halprin & Associates, landscape architect; Ayres & Hayakawa, mechanical; Frumhoff & Cohen, electrical; Financial Plaza Contractors, a joint venture of Hawaiian Dredging & Construction Co., Ltd., Sonsor, Pacific Construction Co., Ltd., and Swinerton & Walberg Co., general contractor. **Photography:** R. Wenkham.



# THE CHALLENGE TO TRADITION: A STUDENT VIEW

BY PETER BRILL

*The following article was written by a recent graduate of an architectural school and is presented here not as a comprehensive statement, but as an articulate expression of the student point of view — one that, given the widespread unrest in our schools today, deserves the attention of the profession. The author received a Bachelor of Architecture degree, with University Honors, from the University of Illinois; was a member of Scarab, the architectural honorary fraternity; received the Earle Prize for architectural design; and was awarded a fellowship to study at Moscow University, U.S.S.R.*

Although the traditional evolution of specialized training in our schools of architecture seems to be undergoing considerable revision, its basic core structure remains unchanged. The majority of schools are set up in such a fashion that they are able to maintain a flow of personnel to the existing architectural offices without having to take the initiative in restructuring their curricula to meet the complex and ever-changing needs of the users of the environment.

Specialized vocational training for a slot in a "well-established factory" cannot meet this challenge. Modifications in the curriculum — the six-year program; new titles for old courses; additional courses in the humanities; establishing extension schools in Europe; extending building hours, adding a com-

puter scientist to the faculty; and many other patchwork measures applied to an inadequate structure imposed by the National Council of Architectural Registration Boards — are the current preoccupation of the "new school" committees.

Architects, and therefore students of architecture, are losing their once-sacred hierarchical status, as new tools and theories are developed by other professionals — ones that deal more effectively with the scale and complexity of the exploding environment (see MAY 1969 P/A). Architects continue to remain completely aloof from the major decisions that affect our environment, such as Government policy and building regulations. Computer scientists, systems engineers, sociologists, and others are ignoring the profession — partly in response to the inadequacy of architects in dealing with the broader aspects of the environment.

Because of the inadequate reforms, many students are protesting and trying to force their schools to become advocates of change. The students not only want their schools to make curricula changes; they want their schools to make moral judgments on local, national, and international issues. In order to bring about these changes successfully, the students are demanding an equal share in the decision-making power of the administration and the faculty. This new-found student power has the ability either to change the profession of architecture or to start a new profession more responsive to the needs of man. The universities have the necessary resources to bring this change about: capital, time, machinery, and manpower. Academia can be a working community that can mold this new profession, and, with a responsive administration, schools of architecture can compete effectively with the profit-oriented architectural offices.

At the same time, there is a growing resentment and apathy among students, who see the world outside the campus as a well-established system that cannot be changed so abruptly. Therefore, they follow the prescribed course leading to a large drafting room to "bask in the comfort of historical precedent," never stopping along the way to evaluate their position. Unfortunately, it takes the innocent freshmen with their preconceived ideas of becoming another *Fountainhead* architect a long time to understand themselves and the predicament that is engulfing the profession. Perhaps this article can hasten the pace to nirvana.

At a time when there are drastic social issues to be resolved, the architecture student sees himself channeling his energies with an Exacto knife and cardboard in one hand and a soft lead pencil and yellow tracing paper in the other — the prescribed tools that he is applying to the design of "cities for people" in preparation for a "meaningful professional role." Frustrated, they justifiably want to get involved in "real-world problems." This much-maligned phrase is defined by students in terms ranging from the planting of trees to the Vietnam war.

Frustration leads to anxiety, and anxiety leads to action. Rather than having to face an explosion of these pent-up frustrations in the form of a strike, many departments of architecture are allowing students to "do their own thing," some without faculty participation. The following are some methods of appeasement used at various schools of architecture:

*The Student Demands*

*"We would like to participate in policy decisions."*

*The Chairman Responds*

*"Fine, you are welcome to join our committee meetings."*

An invitation to a committee meeting is insufficient, as Professor George Borowsky of the State University of New York in Buffalo explains: "The processes for participation in the decisions that affect his life as a student are almost entirely unresponsive to his demands and expressed desires. He is a student after all, and while in school is not given much credit for mature thinking; his faculty are busy practicing as consultants in their own offices; he has no opportunity to help define what he should study or how it should be studied; and when he tries to exact attention on behalf of the administration or faculty, at best he will be offered a committee 'to study the problem.' From the desire to push his soon-to-be-profes-

sion in the direction the student perceives to be most important, through his own desires to be meaningfully engaged himself, to the petty manner in which his education is being conducted by patronizing faculty, insufferable red tape, irrelevant curricula and all the rest, the student is essentially not responded to." Nevertheless, at Pratt Institute in Brooklyn, N.Y., the students have an equal voice with the faculty on policy decisions, but the overriding decisions are still made by the board of trustees. The students are now attempting to initiate steps that would challenge this power of the board of trustees.

*The Student Demands*

*"We want real world problems to solve."*

*The Chairman Responds*

*"Fine, let's design a prototypical city of 500,000 people in 4 months for an undesignated site."*

Many architectural school project assignments have moved from the design of vacation retreats on a far-away island to the design of complex, urban scale operations. Likewise, the professors are being switched from Beaux Arts specialists to environmental specialists, without any period of self-educational adjustment. The models the students present are quite impressive — that is, if one evaluates them purely

## PETITION: ARCHITECTURE AND NUCLEAR PROTECTION

We the undersigned architects, planners, students of architecture and planning, and related environmentalists declare that we oppose and will take no part in the planning or design of radiation protection shelters for the following reasons:

1. The designer of radiation protection shelters accepts the use of nuclear weapons as a valid instrument of national policy. In so doing, he is contributing to the upward spiral of the international arms race. The building of radiation protection shelters is in no way different from the building of ABM. Both accept nuclear war as if it were inevitable and suppose that the spending of billions of dollars to reduce the resulting death and destruction by a small percentage is a significant accomplishment. This we cannot accept.
2. We believe that in pushing a shelter program, the Government is misleading the American public into believing that it can survive a nuclear catastrophe. The consequences of this actually occurring are so monstrously horrid as to be almost unimaginable. We will not lend our professional skills to the creation of a false security.
3. We reject nuclear war as totally unacceptable. We believe that the only way to achieve peace is to make peace, and not to prepare for war. In signing this statement, we are upholding our professional responsibility to the public and are making clear that we will not mislead the American public by creating a false security.

One of the petitions issued by The Architect's Resistance (TAR).

“Specialization is in fact only a fancy form of slavery where the ‘expert’ is fooled into accepting his slavery by making him feel that in return he is in a socially and culturally preferred, ergo, highly secure, lifelong position.” **Buckminster Fuller**

“A system is made by individuals, and if you say that you have established a sensibility from which a system can come, then it is not dead.” **Louis Kahn**

“Architects think they make decisions. That is a joke. They’re called after the decisions have already been made and are told to decorate the basic decisions.” **Bruno Leon**, Dean, School of Architecture, University of Detroit

“It’s the vulgarity of the adults that I would like to explore as a means, possibly, of understanding the problem of the vulgarity of the young.” **Prof. James M. Fitch**, Columbia University

“Students need an outlet for expressing their frustrations, if structural means are not available, the results are inevitable.” **Jack Swing**, Chairman, Department of Architecture, University of Illinois

“All people must have the right and power to control their own lives. Like any other profession, architecture is not an end in itself, but part of a political process. Because we believe human values are more important than material values:

— We will only use our skills as tools for liberating oppressed peoples.

— Architect’s only responsibility is to the people who use the environment.

— We will work for the equal distribution of economic power.

— Work against such U.S. activities as the war in Southeast Asia, or any imperialistic or racist exploitation at home and abroad.

— Work against those who exploit people and land for their own power and profit.” **Yale University Student**

“Students have wide-ranging concerns and perhaps more commitment than we expected, or than

we know how to handle.” **Robert Harris**, Head, Department of Architecture, University of Oregon

“I don’t like beards and I don’t like long hair, but I think a person has a right to wear it if he wants to. I get kind of tired to look across campus and not be able to tell whether it’s a male or female. It really kind of baffles me. But I thought about it and, like I say, I think the student ought to be given a lot of freedom, very definitely, but I also think there ought to be a certain amount of discipline. If it just means sitting around, fooling around, doing nothing, then I don’t agree.” **Prof. Richard Lilliot**, Department of Architecture, University of Houston

“We have little sympathy for those who, in challenging the appropriateness of past standards, would merely weaken the standards in pseudo-corrections. They would destroy the profession.” **Murlin Hodgell**, Director, School of Architecture, University of Nebraska

“I feel that the potential of the school is very great, that we are floundering and on our face right now.” **Prof. A. Linnstardter**, Department of Architecture, University of Houston

“We have been in the midst of student revolt and in my opinion will continue to be so for a long time. It is one sign of an active, concerned student body. Their main push is ‘relevant education’ and in architecture this takes two forms. To one group it means physically building structures and to another it means working on and producing community development projects, all for academic credit.” **Kenneth Cardwell**, Acting Chairman, Department of Architecture, University of Calif., Berkeley

“No architect worth his salt would accept the vox populi as his client.” **Kingman Brewster, Jr.**, President, Yale University

“Even though the architect is a decorator, he is still looked upon as a master-mind.” **Harvard University student**

as pieces of sculpture. Crowding the drafting rooms are models of megastructures in the mountains, over existing cities, in the water, under the water, and, of course, they are flexible enough to expand in any direction. This trend is extending into the profession, as Serge Chermayeff of Yale comments: "It is becoming evident even to the practitioners themselves that their procedures have become obsolete, organized as they are in splinter groups of specialty: architect, industrial designer, landscape architect, city planner, et al. Yet all are becoming self-appointed generalists, always prepared to cross the boundaries of their own making, at the drop of a telephone receiver to operate at any scale with any medium, in the environment-shaping process. Such excursions into the unknown more often than not wind up in exercises distinguished by aestheticism, historicism, scientism according to individual taste, and, mostly collectively, in simplicism."

### The Community Workshop

In a *New York Times* article (March 23, 1969), Dr. Nathan Pusey, president of Harvard University, asserted that thousands of students are "on fire" to go to work to help solve urban problems. But he cautioned that "if there is no one to pick them up and put them to work in the field, they would suffer the same frustrations that overtook missionaries of an earlier day." Therefore, to avoid bitter student frustrations, Yale, Penn State, Pratt, University of Southern California, Rensselaer, University of Michigan, University of Oregon, Columbia, Berkeley, and a few other schools of architecture have integrated into their curriculum a community workshop.

In general, the community workshop is an effort to involve the school in the needs of the community at the "simplest and most needy level. It involves the establishment of a studio in a vacant store in an urban area and provides help and counseling to those members and agencies in the community who, without financial means, aspire to recreate a part or whole of their present environments."

Most of the community workshops are student initiated and organized, and most lack the necessary faculty and professional support to make them work effectively. For political, traditional, and financial reasons, some universities shy away from any community involvement.

Private corporations, private foundations, and public agencies are now pumping funds into the university for the study of the blighted city. For example, the School of Architecture of the University of Southern California, with the financial support of Pacific Mutual Life, is participating in a year-long project to redesign entire city blocks in the immediate neighborhood of the university. "This is an opportunity to do a thorough study of the possibility of renewing somewhat blighted housing areas without employing the provisions of urban renewal," comments Sam Hurst, Dean of the School of Architec-

ture. "The study will be anchored directly to the community, and the financial support will allow us to do a more thorough job." An unusual feature of the Pacific Mutual Life's financial support of the project is the awarding of two full-time scholarships to Black or Mexican-American students recruited from the neighborhood.

Another financially supported student project is the Pearl River Study for Jackson, Miss., sponsored by the Pearl River Basin Development District, the Jackson Chamber of Commerce, and the Jackson Planning Board, which are furnishing funds for student expenses and supplies and providing technical assistance for the project. The students of the School of Architecture and Fine Arts at Auburn University in Alabama developed an environmental study of Pearl River and the urban growth of Jackson and vicinity in eight weeks. In this short period of time, the study "was planned to acquaint architectural students with a real-life example of a large-scale environmental problem."

### Student Teams Make Town Survey

Auburn University is engaged in another project in conjunction with Tuskegee Institute, using the community as an educational laboratory. The Hobson City Joint Planning Project is to "develop a professional analysis acceptable to the Office of Housing and Urban Development for a small town in Alabama." The students, divided into teams, "conducted a physical survey of the town, which has 300 homes on 983 acres. They took pictures of every home, the downtown area with its one industry employing 36, and a model Federal housing project. All were assessed based on standard housing. Then the students made a door-to-door survey with a questionnaire developed by them with assistance from Tuskegee's Department of Behavioral Sciences. Answers furnished statistics on population, economic and educational levels, attitudes, and the city's needs. A final visit to Hobson City included presentation of the students' findings, recommendations, and the workable plan, a neighborhood analysis and comprehensive plan for Hobson City."

There is a danger, however, that recommendations to the community will never be built for a variety of reasons, basically, lack of depth of study, producing an atmosphere of disillusioned expectations.

Although some students are playing with the *what* and the *how*, there are others who are concerned with the *why*. For example, a group of architectural students and practicing architects organized The Architect's Resistance (TAR). This organization is devoted "to seeing that the architectural profession has the responsibility to the public which goes beyond the immediate architect-client relationship and the pursuit of profit. Before engaging in any project, the architect should fully consider all the implications and consequences of a given project and what interests are being served." TAR's first project was

“Strangely enough, the objections came from the same professors whose courses had been objected to in the past; who were men with tenure, hiding behind philosophies 25 years out of date, who were less willing to up-date their ideas than up-date their courses.” **Columbia University Student**

“A revolution in architecture would only be meaningful if there were a revolution in our entire social structure and our economic structure.” **Prof. Ze-manek**, Department of Architecture, University of Houston

“Fools criticize intuitive architecture on a rational basis.” **Harvard University Student**

As men entering a profession, we are concerned with the relevance of that profession to developing a society based on fundamental human values.

The AIA seems to embody a lack of an honest concern for people, and is symptomatic of the failure of the profession as a whole to demonstrate this concern. Instead, the AIA has become an irrelevant club perpetuating an antiquated myth of a professional elite.

By dealing in operational terms and not in value terms, the AIA has separated itself from people and built a system based on essentially non-human concerns.

**WE BELIEVE ACTION MUST BE BASED ON DEPTH OF COMMITMENT, NOT ON SIZE OF COMMISSION.**

The AIA has helped develop a professional aesthetic unrelated to the real needs of people that permits sociologically disastrous housing projects and racist universities to be built.

**WE BELIEVE ARCHITECTS MUST BEGIN TO REALIZE THEY ARE SOCIALLY RESPONSIBLE FOR THEIR ACTIONS. THAT BY DESIGNING BUILDINGS FOR OPPRESSIVE INSTITUTIONS, THEY REINFORCE THOSE INSTITUTIONS.**

The AIA has failed even in its own terms: it has falsely tried to make people believe it is a legitimizing agent, but does not police even its own members. Worse still, it has used its own definition of expertise to stifle creativity or new input toward more meaningful social involvement.

**WE BELIEVE REAL CONCERN FOR PEOPLE MUST BE MANIFESTED IN REAL WAYS:**

— not in paying lip service to human values that is never reflected in policy or lobbying practice.

— not in once-a-year self-purging at expensive conventions discussing fashionably relevant issues.

— not in using money for banquets and plush quarters when many people of our cities cannot afford good food or decent housing.

**WE BELIEVE THE REAL URBAN CRISIS IS HERE WITH THE SHALLOW MORALISM AND SELF-RIGHTEOUSNESS OF THIS CONVENTION.**

**WE BELIEVE THE ARCHITECT MUST NO LONGER BE RESPONSIBLE ONLY TO THE INDUSTRIAL AND POLITICAL POWERS, THE FINANCIERS, THE KINGS OF TODAY: NOR TO THE PROFESSIONAL ACCLAIM OF THE MAGAZINES, BUT TO THE USERS, THE PEOPLE WHO INHABIT THE ENVIRONMENT.**

The architects cannot wait until personally affected to act, cannot remain aloof from people and communities, afraid to acknowledge that other men also know something about their environment, and afraid to lessen their professional distance and learn from the users.

**WE BELIEVE THAT WHATEVER CONSENSUS IS REACHED HERE OR ANYWHERE BY PROFESSIONALS IS UNJUST AND MEANINGLESS WITHOUT REAL AND EQUAL PARTICIPATION OF THOSE AFFECTED BY DECISIONS.**

**Student Statement** before 1968 AIA Convention in New Haven

There exists at our Institute a dangerous feeling of cynicism and apathy among the students, engendering an unproductive attitude and limiting creativity. Having stated this in the past, the Administration has repeatedly backed away from the problem with its usual flurry of promises and tokenism which merely indicates an unfortunate failure to perform their jobs. As a result, nothing was accomplished; good teachers resigned, good students — stifled — withdrew. We, the students, now refuse to let anymore students take the punishment for the incompetency of the administration.

**Student Petition**  
Pratt Institute  
Brooklyn, N.Y.

to protest SOM's work in South Africa, because of the "enormous profits being earned from apartheid slave labor." Another project was to stop the setting up of campus workshops on nuclear defense design sponsored by the Office of Civil Defense, the AIA, and other organizations (see petition).

"Why was Yale Architecture building a community center sponsored by HUD in Kentucky?" This question was posed by the same skeptical students who helped form The Architect's Resistance (TAR). To quote from a recent article on the Grassy Branch Community Center in the Yale student publication *Novum Organum*: "As architects working for the government we have failed; our technologism can barely solve its own problems, much less evolve from physical to social, from spatial to psychological, from visual to emotional problems. As architects working for the community we have also failed, perhaps erecting barriers in the process which will prevent future communication, barriers which did not exist before they trusted us. We have furthermore failed as students of human society by refusing to question the motives of either of our employers and by refusing to question our own motives. We can no longer delude ourselves about the worth of this project." At the opposite pole, there are some students who participated in the project and are quite satisfied with their egotistical achievement of leaving a monument to their skills.

### The New Schools of Architecture

Steeped in tradition and tenure, it is very difficult for the existing schools of architecture to undergo a complete surgical operation. Therefore, the new schools of architecture that are without any traditional ties, such as the University of California in Los Angeles, the University of Wisconsin in Milwaukee, and the New York State University in Buffalo, have the opportunity to be more responsive to the environment and man — that is, if the state university systems will not hinder their goals.

The new schools of architecture that are developing are being heavily influenced by the AIA-sponsored Princeton Report on environmental education. But rather than attempt to encompass the 216 tasks of total environmental design as defined by the Princeton Report (see diagram), the new program at the State University of New York in Buffalo is based on the premise that it is impossible to cover all these potential goals in a new school. John Eberhard, dean of the new School of Architecture and Environmental Design and a former Director of the Institute for Applied Technology of the National Bureau of Standards, U. S. Department of Commerce, places emphasis on certain tasks within a phased program of development: Phase I: Graduate and Continuing Education; Phase II: Undergraduate Program; Phase III: Urban Systems and Doctoral Program. The first program, Building Systems Design, will emphasize the design of building sys-

tems more than the design of individual buildings or complexes. "The student projects will be oriented toward *processes* of building, rather than buildings as *products*." This encompasses the "conversion of raw materials into building products, the distribution of such products within the economy, the organization of skills and equipment for erecting its shelters, transportation systems, waterfronts, etc., and the maintenance and operation of the finished product are all to be considered. A final and important step is the evaluation of existing systems in order to provide feedback for future decisions."

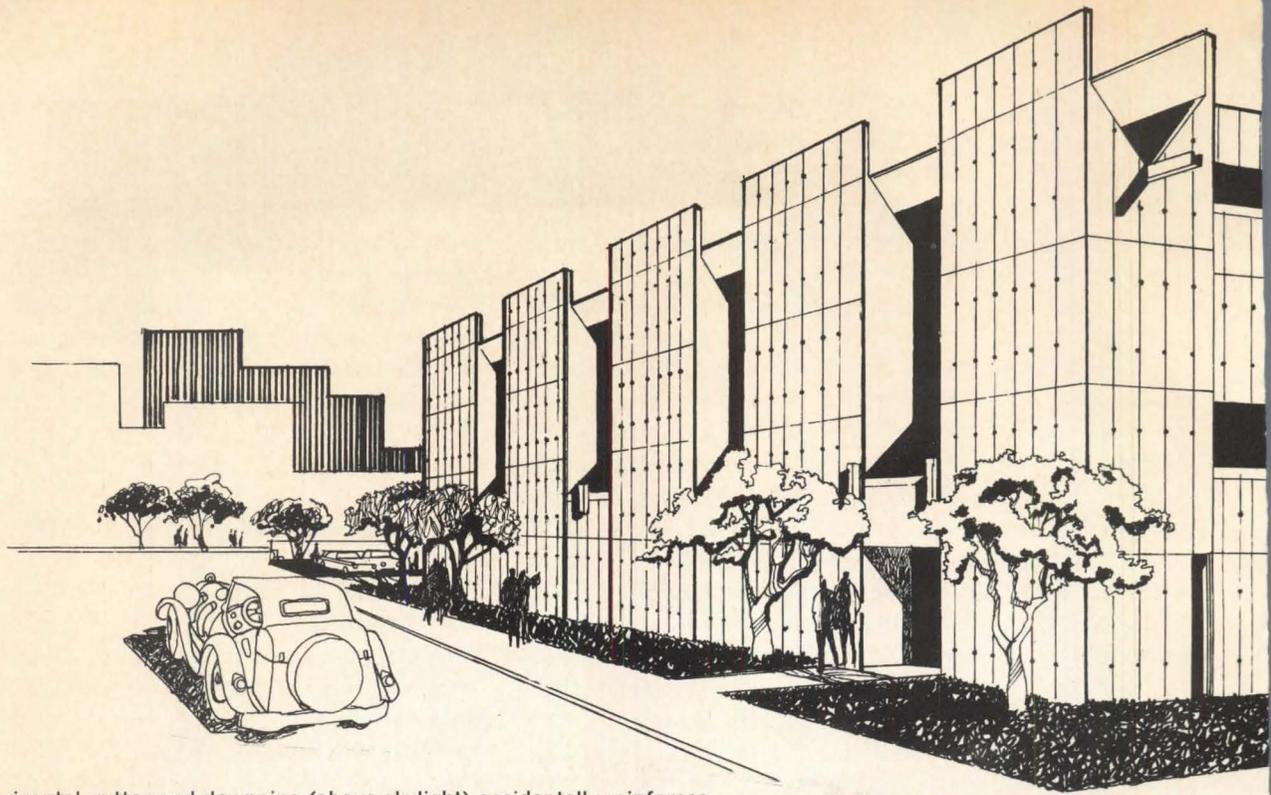
### New Flexibly Structured Lab Course

The core of the initial two-year program will be the Practicum, a flexibly structured laboratory course organized around the analysis and development of real problems accepted from outside sponsors such as government bodies, civic organizations, university planning offices, industrial firms, and so on. One of the major purposes of the school, as stated by Eberhard, is "to provide its graduates with intellectual tools that will enable them to approach problems with as much rigor and systematic analysis as the state of the art will allow. This will mean a research effort that includes the development of design systems and methods in association with the faculties of Engineering and Applied Sciences and an effort to expand the knowledge base with respect to man and his environment in association with the Faculty of Social Sciences."

Tom Vreeland, head of the new School of Architecture and Urban Planning at the University of California in Los Angeles, hopes to produce in his program a student who is "exposed to a much wider range of experiences and of people than the studio and the sole presence of his peers can offer him. He must have the chance to listen and to talk with leaders of the black community, NASA engineers, speculative developers, state university construction fund administrators, building equipment manufacturers, and radical critics of today's society."

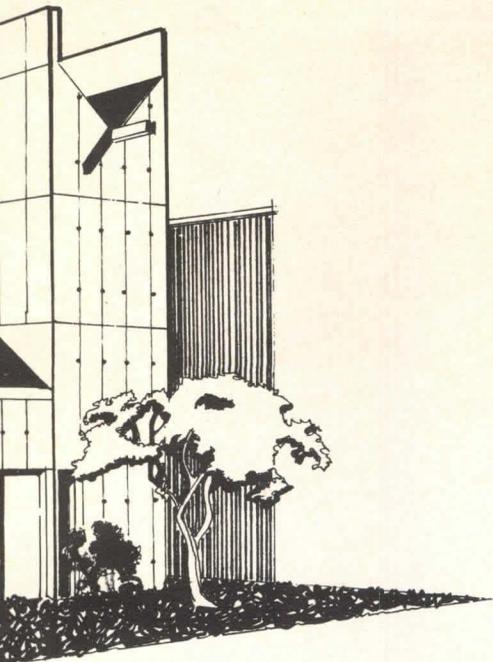
If these new schools can adapt themselves to the winds of dynamic and radical change in general, and evade the omnipotent influence from established institutions such as university administration, big business, and government, which are too bound by money and are resistant to change, then these schools will provide a new generation of professionals equipped to serve society today and in the future.

What if a "valid" student of architecture appears today? Will he be able to meet the traditional requirements of the National Council for Architectural Registration Boards? Is there a place for him in the existing building industry and related fields? Perhaps he will have to sit in a large drafting room with his soft pencil and yellow tracing paper, and wait till the profession catches up to him? Or perhaps these graduates can band together and a new profession will be born.



Cross formed by horizontal gutter and downpipe (above skylight) accidentally reinforces quiet monastic air of art school.





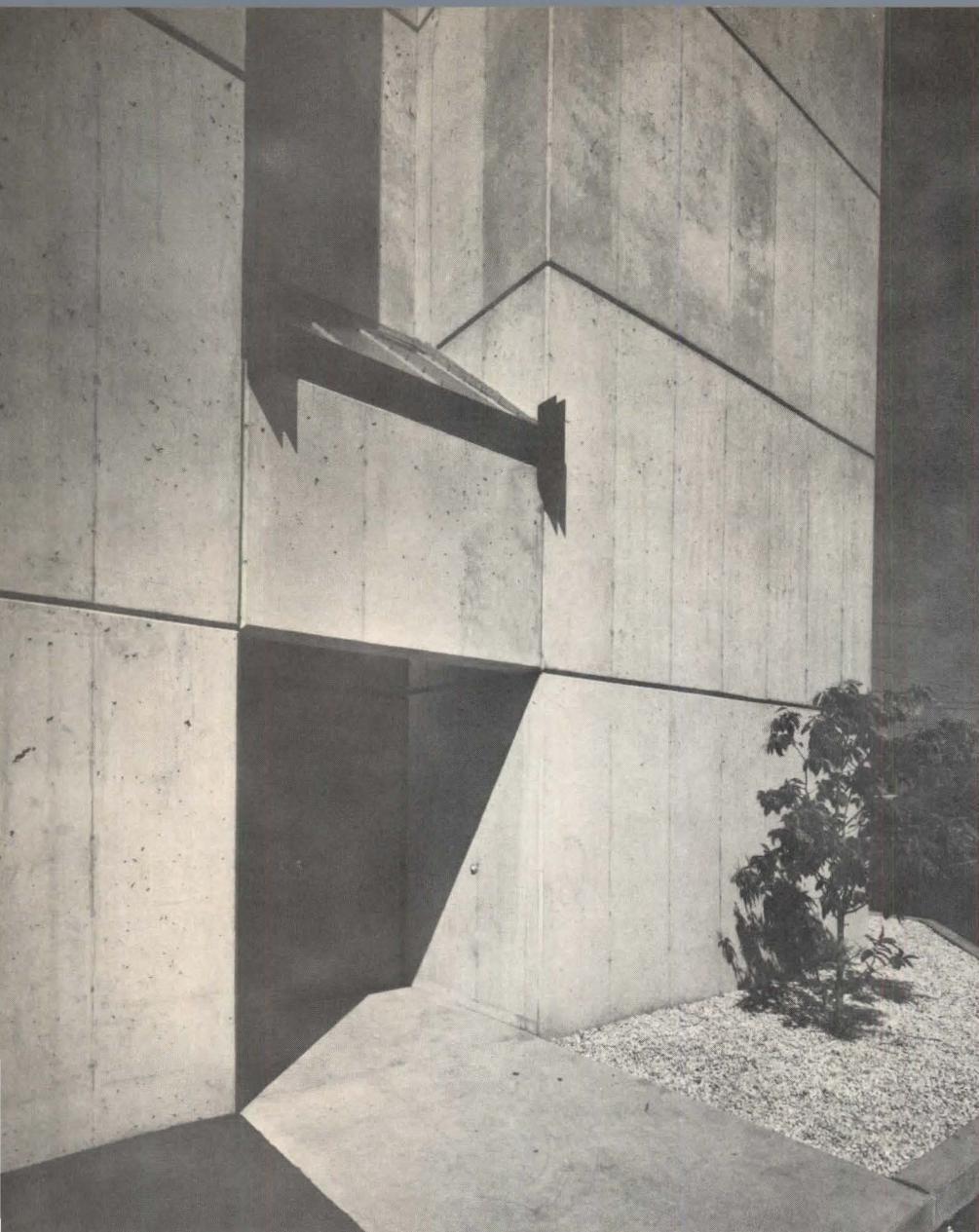
Painting class overflows central space into alcove tower (rear of photo) flanked by smaller skylit bays.

# DISCRETE CONCRETE

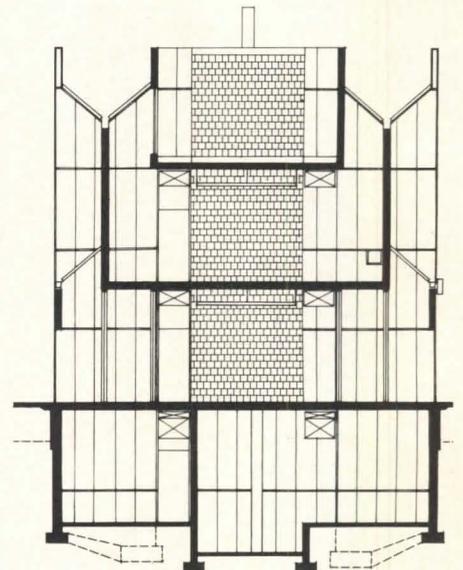
Tired of texture? After considering the true nature of the liquid medium, together with the vocabulary of the building industry, architect Peter Vercelli rejected bushhammering, sand-blasting, acid-etching, and rough board forming. The usual process, in his view, is to “build a wooden building with rough planks or textured material, pour it in concrete, and then throw away the wooden building.” He feels that a more honest approach is the one he used in designing a building for the Paier School of Art in Hamden, Conn. Re-usable steel-ply forms (plastic-coated plywood forms on steel frames) are a standard part of the construction business — no special sizes, shapes or textures. Only the pour marks are emphasized by beveling with diagonally cut 1 x 1 strips. What texture there is, comes from the usual random honeycombing. Only two form sizes are used throughout the building: 2' x 8', supplemented with 2' x 4' forms over doors or under skylights.

The small building is worked out around central “naves” on each floor serving primarily as open teaching spaces, flanked by 10' x 14' bays or towers. Natural light comes entirely from skylights fitted between — and at the top of — towers. Standard skylight units have 2 ft panels, matching the concrete forms. Skylighting is traditionally the best kind of light for easel work, and it offers the added advantage of privacy for life classes. Outdoor studio space for warm weather sculpting on the roof is protected from the street and nearby houses by a 12 ft wall.

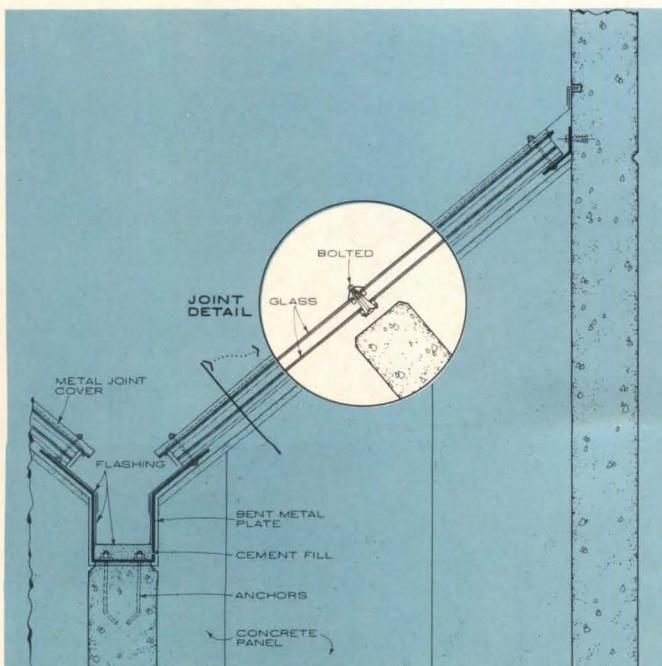
The Paier school was founded 23 years ago by Mr. and Mrs. Paier in a rented loft with an investment of \$300. Since that time, it has merged with another



Side entrance to school is tucked under a skylight.



SECTION A-A.

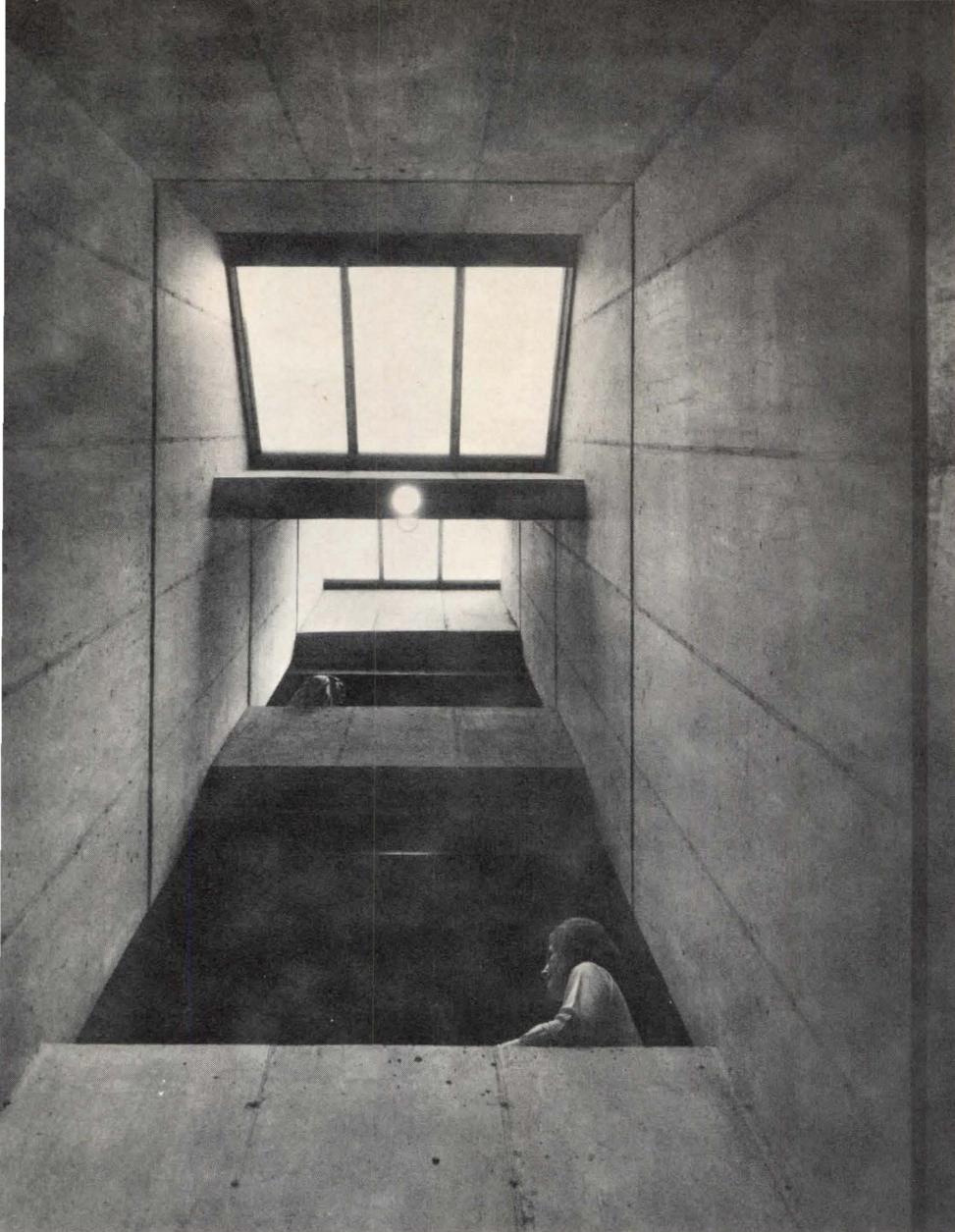


Standard manufactured skylights at top of building (see sections) are attached to specially fabricated gutter.

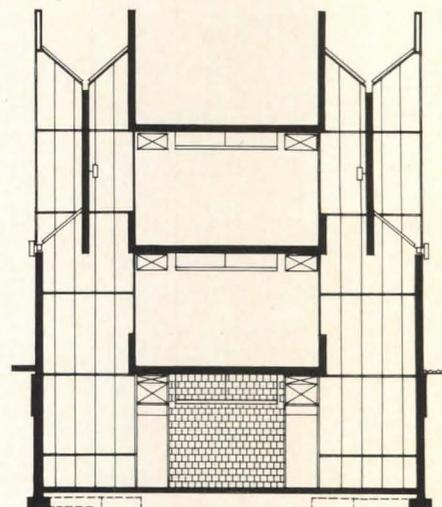
art school and grown to an enrollment of 525. Vercelli's painting and drawing building is its first new structure on a small campus of converted residential and industrial buildings. It was designed "to provide the school with a strong identity" and as a prototype for future construction on the campus. The development of a well thought-out system in the beginning was, therefore, doubly important.

The system has been worked out with a great economy of means and a satisfying neatness of detail. Specially designed air ducts, for example, fit between jutting tower walls and lighting fixtures over the main space, and terminate in a grille over doorways at the end of the run. The four smaller center bays are open from basement to top floor and act as supplemental return air ducts. The four corner towers are closed and serve as faculty studios, offices, toilets, and storage, or sinks for painting classes.

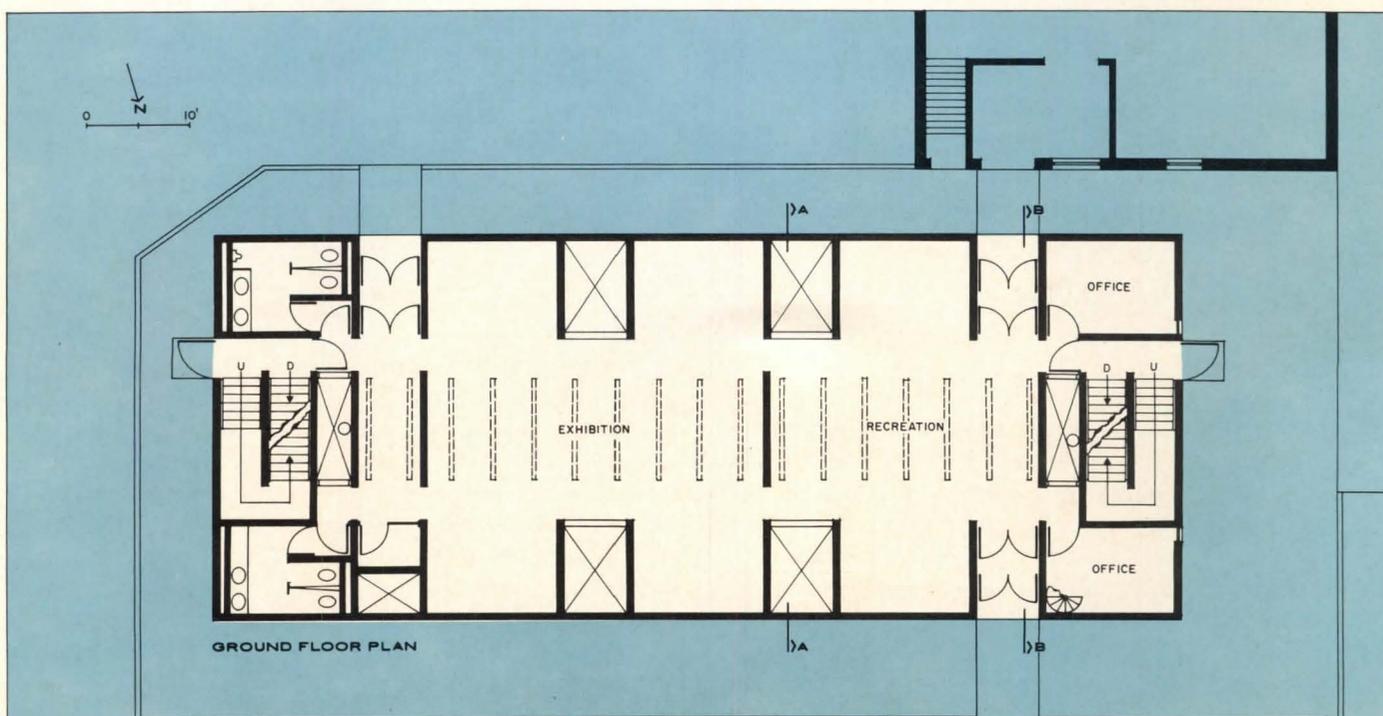
The strong monolithic exterior gains its freedom from the repetition of small and large bays, beveled pour marks, and the only elements that might be considered decorative — steel-channel gutters and gargoyles. — AR



Lookouts on first and second floors open onto small bays. (See Section B-B and plan.)



SECTION B-B.



GROUND FLOOR PLAN

# CENTRAL WELL BECOMES INTERIOR FOCUS OF COLLEGE COMMONS

The Commons Building for Cornell College, a small coeducational liberal arts college, was designed to accommodate almost all social and extracurricular functions for the student body within a single structure. It provides "de-institutionalized" spaces, separate yet interrelated, in which virtually all aspects of noninstructional life take place.

Designed by Harry Weese & Associates, the building is an ordinary example of functionalist architecture — that is, architecture that expresses the social purpose of the building in its structure. The Commons follows this distinction in that it is shaped around many interior functions that determine the major divisions of the building's exterior.

These exterior divisions vary in shape and proportion. The back and side wall divisions are related to the placement of lounges and dining halls on the interior. Though the divisions on the front portion of the building seem unrelated to the interior, they still suggest the diversity of functions provided for within the structure.

The Commons, which is located on a wooded hillside between the men's and women's residence hall areas, harmonizes with the surrounding old and new buildings and does not appear to dominate the campus. The building has ground level entrances on all three floors, but its main entrances are on the hilltop level.

The top level provides main entrances to the lower levels of the building, as well as quick access to the dining area. The 1000-seat dining area is divided into smaller scaled spaces with re-entrant angles. Glazing is restricted to these re-entrant walls (with the exception of the south façade) to rejoin the dining areas and visually bring trees into the building.

The students may encounter a diverse "de-institu-

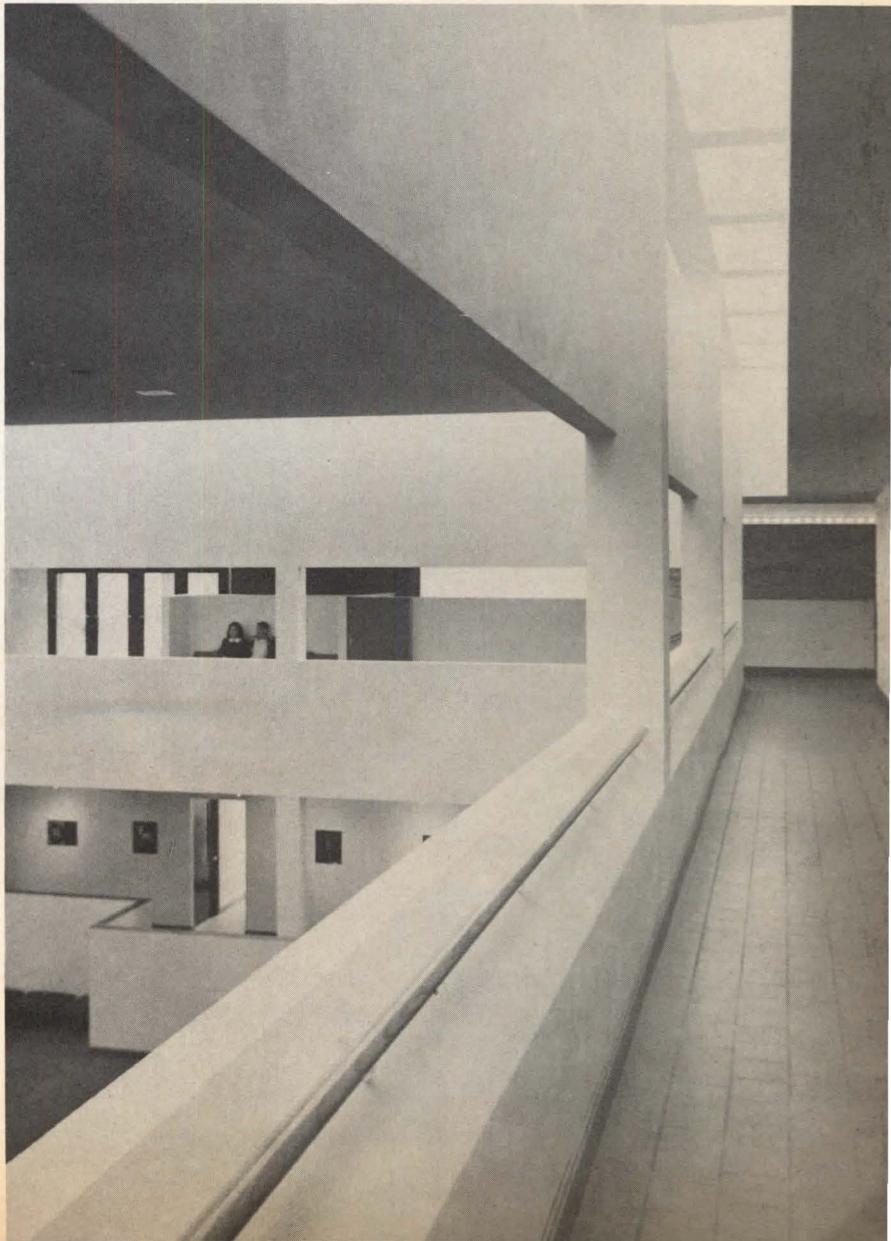
tionalized" dining experience by rotating dining room use. The rooms differ in lighting and décor. Materials, sizes, and shapes of tabletops vary within each room. Sizes and shape of rooms themselves differ.

Also on the top level is the cafeteria service. Meals are served from a self-service "scramble" area — separate stations for various types of food — where a student can select his food in any sequence he chooses. The scramble-type system eliminates the problem of long waiting lines, and can serve 35 students per minute so that all of Cornell's 1000 students are served and fed in one hour.

On the second level, the architects departed somewhat from a totally functionalist design by the inclusion of a central "well," the Hilltop Lounge, which is a two-level gallery lounge. The lounge and its well effect give unity to the interior spaces, and serve as a focal point for the building's interior. Although the gallery lounge is chiefly intended to house art exhibits, it is also used for a variety of other purposes: fashion shows, musical jam sessions, alumni receptions, political debates, and similar functions.

Although the architect envisioned the well to be a place where students would gather informally before and after meals, they do not use the space for this purpose. "Despite this," the architect explains, "the lounge serves a legitimate purpose. It is more than an artificially created area. Even when people are standing in line for meals, they must unconsciously look toward the well as a focus point that pulls the building together. The well is actually the soul of the building — a focus for life within the building. In the abstract, it is a symbol of the building."

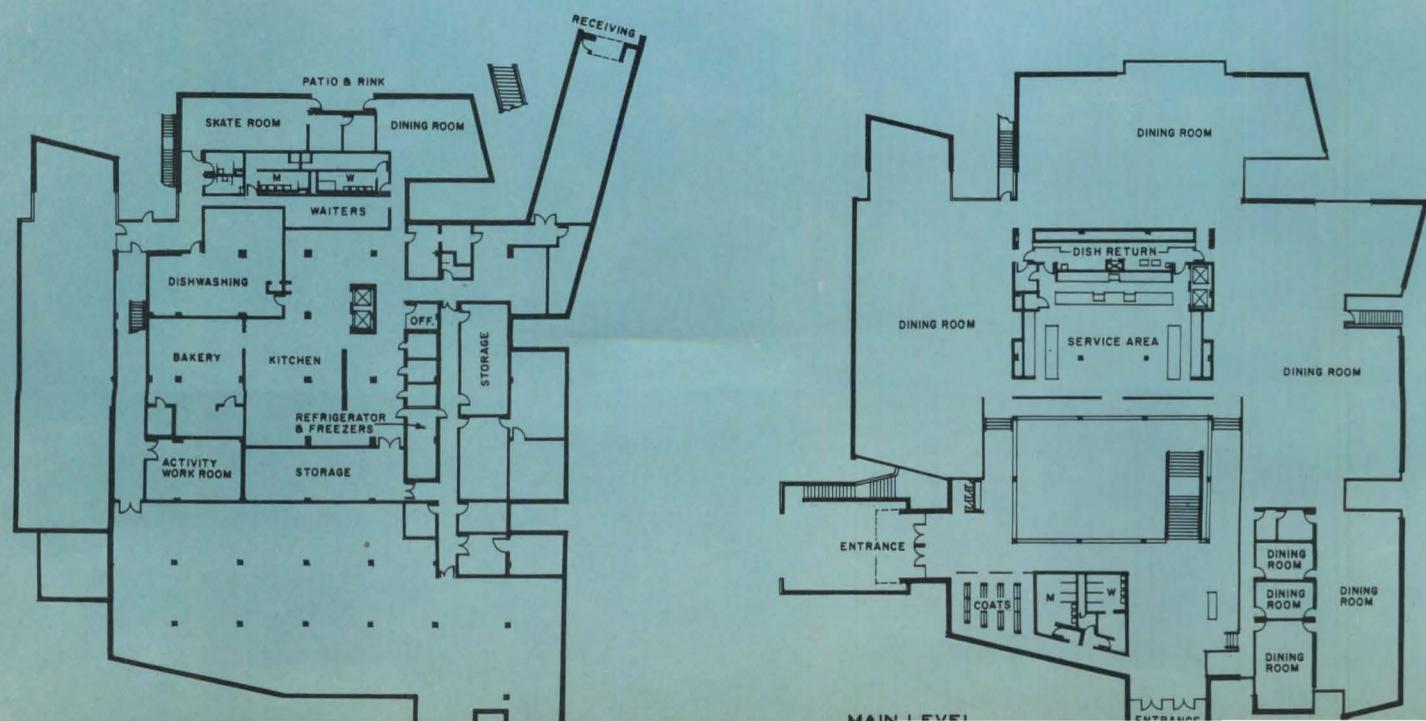
An interesting feature of the Hilltop Lounge is the



The Commons has ground-level entrances on all three floors, but the main entrance is at the hill-top level (top). The two-level "well" (above and right) serves as a focal point that unites the building's interior.



The gallery-lounge is lit by large clerestories that admit daylight, which is then diffused around a false ceiling (top of photo) and reflected down the inside faces of the well.



lighting. Natural lighting during daylight hours is used in much the same way as indirect artificial lighting. Above the well, large clerestories admit daylight, which is diffused around a "false" ceiling that is 20 ft below the clerestories and suspended 3 ft away from the walls. The light is then reflected down the inside faces of the well. The subtle underplaying of natural light reflected on the wall space in the corridor galleries around the well provides an excellent display area for art and exhibits.

To the west, on the second level, is one of the most versatile of the Commons' recreational areas, the Palisades Room, which can be converted from a game room to a movie room complete with projection booth. Portable stage facilities make it possible to convert the room for theatrical presentations. In addition, for events requiring a larger space, the movable walls of this room can be folded back to allow this space to be joined to the Hilltop Lounge.

All offices on the second level are so arranged that they can be isolated from the rest of the building

after hours, so that, using their own hillside entrance, the students can use the facilities at any time.

The lower level of the Commons is devoted almost entirely to food preparation and service areas. Facilities include a complete kitchen with a bakery and a charcoal broiling room.

Also at the lower level, on the outside, is an ice-skating rink, which, in the summer, serves as a patio. Lights and loudspeakers for the patio/rink are concealed in surrounding tree wells.

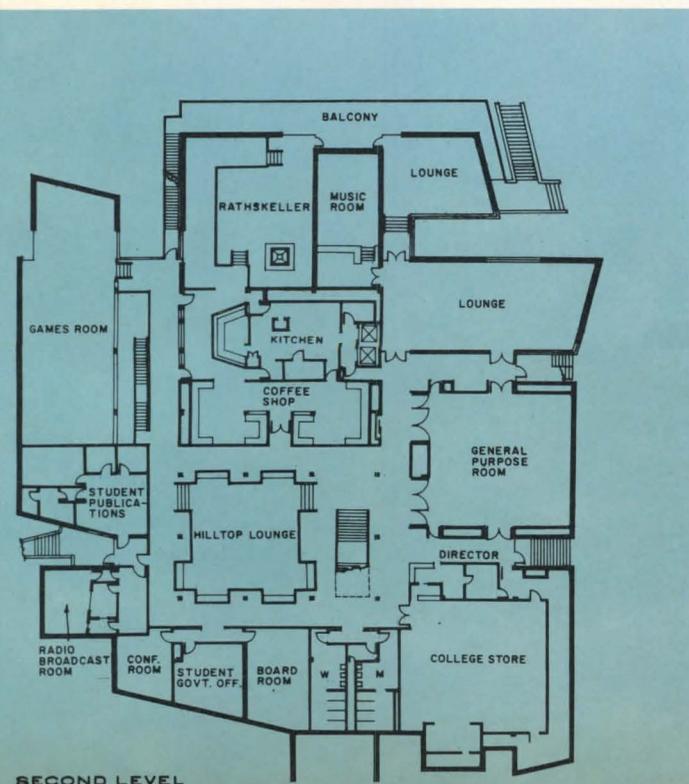
As for maintenance and repair costs, these are expected to be held to a minimum due to the use of high-quality fabrics and carpets and because some of the furniture was custom-designed.

In sum, then, considered as a piece of architecture, the Commons, while standing as a fairly typical example of functionalist trends in contemporary architecture, is nevertheless a practical and efficient tool that meets the needs of the entire campus and helps vitalize student life. — CM

COMMONS BUILDING, Cornell College, Mt. Vernon, Iowa. **Architects:** Harry Weese & Associates. **Client:** Cornell College; Charles Cochran, vice-president. **Site:** Old (1850's) and new buildings on ridges of rolling site in small quiet town. Trees from Commons site to be replanted. **Program:** Commons building for a small college campus that must serve the social and extracurricular needs of the student

body. President Arland Christ-Janer and student committees were important in determining program and function. **Structural System:** Steel frame, loadbearing brick exterior walls, concrete floor slabs, steel open web joists. **Mechanical System:** Air conditioned. Dimmed incandescent lighting. **Major Materials:** Lead-coated copper and brick on the outside, and brick, quarry tile, carpet, and plaster on

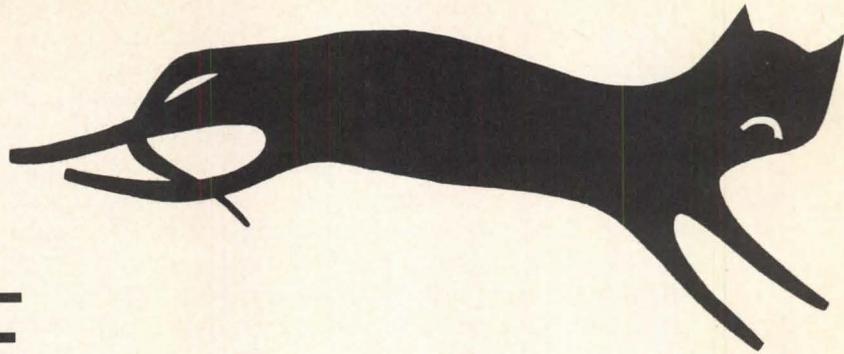
the inside. **Costs:** Budgeted, \$1,520,835; bid, \$1,604,277; actual, \$1,620,732; or 71,900 sq ft at \$22.60 per sq ft. **Consultants:** Delores Miller & Associates, interior designer; Franz Lipp, landscape architect; S. R. Lewis & Associates, mechanical; The Engineers Collaborative, structural; Flambert & Flambert, food consultants; Ahrendt Engineering, ice rink engineers; **Photography:** Harr, Hedrich-Blessing.



The south façade looks out over the skating rink, which, in the summer, is used as a patio.

## The Nixon Administration on Housing:

# A CHESHIRE CAT IN SEARCH OF A SMILE



Although the motivation of the Nixon Administration is to do the best job it can for the nation, given its viewpoint, many of its operational workings could confuse someone with as unusual a mind as Alice of Wonderland fame or any other ordinary citizen. This is especially true in housing and urban affairs.

But once one returns to Wonderland and puts things in the Lewis Carroll context, the picture gets clearer. In the classic tale, you will recall, Alice confronted a cat that could do all sorts of wondrous gyrations. The best of these was to fade completely from sight — except for its smile, which remained floating up in the tree by itself. The Nixon Administration appears to be the same breed of cat — with one exception, that is. Where the Cheshire cat showed only its smile, you can see everything about our Government **except** the smile. This may be because there is so little to smile about, although Administration aids will claim that the important thing is to have a framework upon which to hang the smile when the smile is to be called for later.

As with the Cheshire Cat, however, the smile is the essential thing, for it expresses what is really happening. *For too long*, Carroll's feline magician has stood for facetious clouding of the issue, when its purpose (so admirably carried out) was to present a McLuhanesque visualization of the very gut operation. P/A has investigated several potential smiles to attach to the Administration image while pondering the programs and approaches it takes to housing. Herewith, smile by smile, is a compilation.



DRAWINGS: FORREST WILSON

---

## The Anti-Smile

*(To be used when discussing the National Housing Goal)*

The uninitiated might take this for a frown. It is not. It is modeled after an expression used by Housing and Urban Development Secretary George Romney when he hears someone like Wisconsin Senator William Proxmire tell him he "threw in the towel too early" in pessimistically fearing the National Housing Goal could not be met. But Romney continues to use this smile, as when he said: "Attaining the National Housing Goal goes well beyond what's in this budget," when he was discussing the Nixon revision of the Johnson budget for fiscal year 1970.

Romney should not be misunderstood on this point, however. In late March, he told a group of businessmen assembled for a nationwide U.S. Cham-

ber of Commerce closed-circuit telecast: "Over the next nine years, we shall need over 26 million new or rehabilitated houses. It is not only our biggest underdeveloped market, but it is the most effective way of meeting our social and racial crises. This is the job I've made my number one priority as Secretary of Housing and Urban Development." So he *does* believe in the need.

Publicly-assisted housing was being built at a rate of 45,000 units per year in 1967, which was raised to 70,000 units by October 1968. President Johnson, in one of his last acts before leaving the White House, sent a message to Congress setting the housing goal for publicly-assisted units at 233,000 in fiscal 1969, which was half over at the time. This may be why Romney smiles an anti-smile when talking about it. Still, how does one begin to go after such a goal? This brings us to the next smile.

---

## The Toothless Grin

*(To be used in discussing mass production and aerospace technology for housing)*

This smile looks the way it does, because, although there may be some teeth in there somewhere, no one has seen them. This expression is an outgrowth of smile Number One, because everyone knows the Middle Ages system of putting things together of tiny hand-made parts is unsuitable for a great upsurge in production. Surely, industry or space science can automate the process.

HUD has let a \$2,900,000 contract for research to Kaiser Engineers, but they are in the middle of researching now, and no units will come from their work in the immediate future. During the Johnson Administration, a great to-do began when a tough whip-cracker from the Department of Defense, Thomas F. Rogers, was made Director of Urban Technology and was unleashed on the construction industry with instructions to make it heel aerospace-wise. It may comfort the mediocally-minded to know that construction used its fragmentation to confound any measures meant to update it. And it was not Rogers' weaknesses that lost; the Nixon Administration was quite happy to keep him in HUD if he wished to stay. But a new knight was brought

in to assail the fortress in the person of Harold Finger, who was named Assistant Secretary for Urban Technology. Perhaps the higher rank will help Finger tumble the walls where Rogers failed.

Romney has another idea, based perhaps on his experience with automobile markets when he was president of American Motors. The marketing approach goes on the assumption that if you isolate any market big enough to justify profit by amortizing the cost of an assembly line, some profit-minded fellow is going to figure he will make money if he *does* set up the plant. The only thing you have to do is show him there is a market there.

HUD officials will make an informal inventory of housing needs in major cities and states with the help of mayors and governors. When these figures are tallied, HUD will contact giant corporations, such as U.S. Steel, General Electric, Alcoa, Boise-Cascade, or the Fruehauf Corporation and ask: "What can you produce for this market?" Competitive, but not official, bids would be invited. These "bids" would be passed on to the local governments, which *might* do something about awarding contracts. The trick here, of course, is to get a firm such as General Electric interested in investing time in an off-the-cuff transaction when it has already investigated community development on its own and shelved the idea.

If all else fails, there's smile number three.



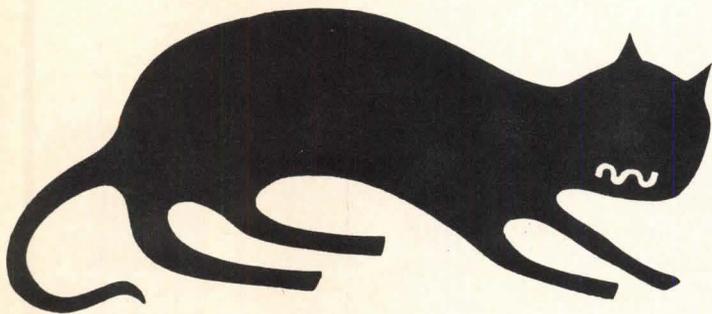
## The Straight Smile

*(To be used while spreading the responsibility and maybe the blame)*

This smile comes from the fellow who does not want to tip his hand and show what cards he is holding, but who wants to keep things going all the same. He may raise the bet exorbitantly, then ask for a new deal.

Shortly after Romney took office, he said the Model Cities Program had not been “completely thought out.” It is true that Romney picked up a set of conditions that former Secretary Robert Weaver dealt to himself. While it was not possible to ask to start all over again, Romney does have the option to play things his way — win, lose, or draw.

William B. Ross, a Deputy Undersecretary of HUD and the highest ranking official to make the transition between the Johnson and Nixon administrations, says both Secretaries — Weaver and Romney — are practical men, “but Secretary Romney is



## The Crooked Smile

*(Not necessarily bad, but hard to figure out; used in curbing inflation while saying the economy will not slow down much)*

This is the smile assumed while tightening money at the same time you say it will not have much effect and what *does* happen will be gradual. Builders have known since 1966, if they didn't know it before then, that to function at capacity they have to get mortgages as badly as they must get buyers. They had all the buyers they needed in 1966, but the credit crunch kept them from financing their houses.

The Nixon Administration has set the stopping of inflation as its principal domestic goal. Its methods are twofold — fiscal and monetary — but the mone-



## The Ginger Smile

*(To be used while walking on eggs, when you are not really sure they will hold you)*

President Nixon has gone further than any President of recent times in officially seeking outside opinion to guide him in making decisions. Where the Cabinet was once the principal group of advisors and later national security grew so complex a separate panel was formed for that, the President has added and keeps adding new advisory groups.

The first was the Urban Affairs Council, created by an executive order on the same level as the Cabinet and presided over by the President. It has nine subcommittees, each chaired by a Cabinet member. These are: Future of the Poverty Program and the

more anxious to get volume. He's willing to sacrifice small initiatives to get results. Secretary Weaver was more willing to experiment with variety. Secretary Romney has bought the basic Weaver strategy, and it is the right time to have a production-oriented individual take over."

The first real example of differences in style of operation came from an all-Administration move, though. President Richard M. Nixon ordered a major reorganization of Model Cities that changed it from a program to build scattered but drastically altered "showcase" neighborhoods into a program of wide application to all poverty areas with local officials deciding what is to be done (or *not* done).

If the program shift is coupled with the Administration's cut of \$75 million from the Model Cities budget to a total \$675 million, the surface intent would seem to be to spend less money in a wider area; the program is thus considerably watered down from what it was to become in the eyes of the originating Johnson Administration. Previously, no more than

tary has taken precedence, and it is the one that hurts building most. By monetary control, we mean the raising of interest rates and tightening the supply of money. By fiscal control, we mean higher taxes and less Government spending.

The National Housing Goal calls on the private sector of the housing industry to supply 1,450,000 units in 1969 — a not impossible feat in a good year. But the 1966 tightening saw privately developed housing plummet to barely more than a million units produced, and much less than a million if mobile home totals are removed. The rule appears to be that you cannot have tight credit and full housing production, both of which the administration wants to have.

Through control of discount rates and liquidity requirements for financial institutions, the government has a decided if not overwhelming influence on

Office of Economic Opportunity, Future of the Model Cities Program, Minority Business Enterprises, Welfare, Crime, Voluntary Activity, Internal Migration, Surplus Food and Nutrition, and Mass Transit. Then the President formed the Office of Intergovernmental Relations, to be run by Vice-President Spiro Agnew, and to supervise the workings of governments at all levels with one another. The office grew out of the Urban Affairs Council, but is independent of it. In the formative stage when this article was being prepared was the Office of Voluntary Activity, which was intended as a group to attempt to get maximum participation in uplift programs by private groups without official Government ties.

Secretary Romney chairs two of the Urban Affairs Council subcommittees — Model Cities and Volun-

10 per cent of a city's population would be included in model neighborhoods, and the focusing of all Federal programs in these areas was to show what radical changes were possible in the total environment. Now, the local official will decide what constitutes his poverty area and he will receive a block grant to spend for whatever services or facilities he deems necessary. When Romney was asked if local citizens would participate in decisions, he said final authority must rest with local officials, and "if the local citizens don't think it is wise, they can get rid of the local officials." Model Cities under the Johnson Administration did not build buildings, did not get garbage picked up, and accomplished little outside of forming new plans and establishing a new bureaucracy. Time will tell if the Nixon approach works any better.

For those who may think the Model Cities treatment works at cross-purposes with the original intent, we have a much better example of this in smile number four.

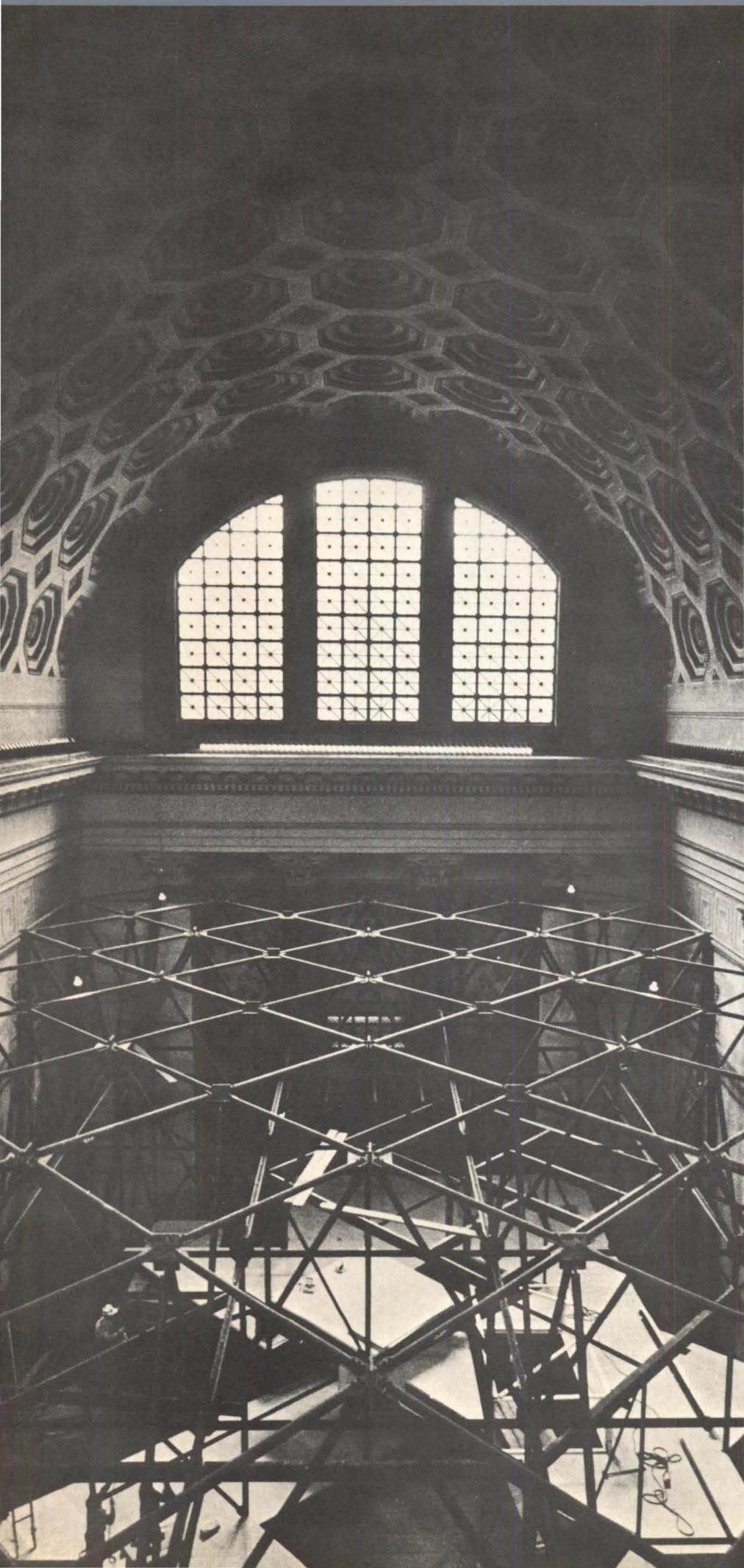
both the interest rate and the supply of money. Interest has been kept high and money supplies tight. Fiscally, renewal of the 10 per cent income tax surcharge has been sought. The Administration keeps watch for a slowdown that might signal the end of inflationary trends without an overswing into recession or high unemployment. When it gets the "right" indicators, it will ease the restraints it put on the economy. Even though the prime rate (the interest banks charge their best customers) rose to the fantastic all-time high of 8.5 per cent in June, other economic indicators showed a slowing trend, and continued cooling might make it possible to ease monetary policy by the end of this year. That's the *hopeful* outlook.

Perhaps the last smile is a good one to sum it up with.

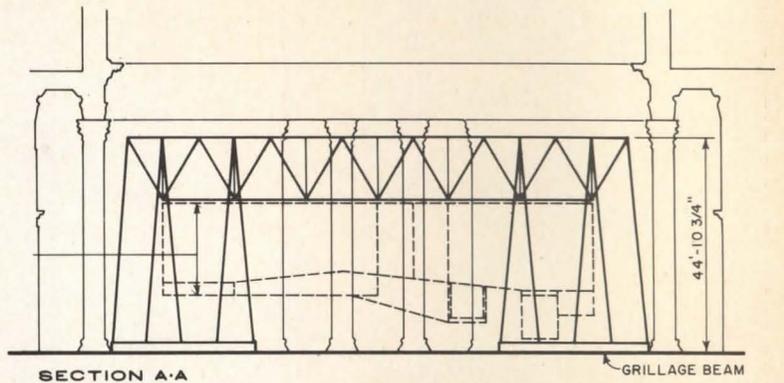
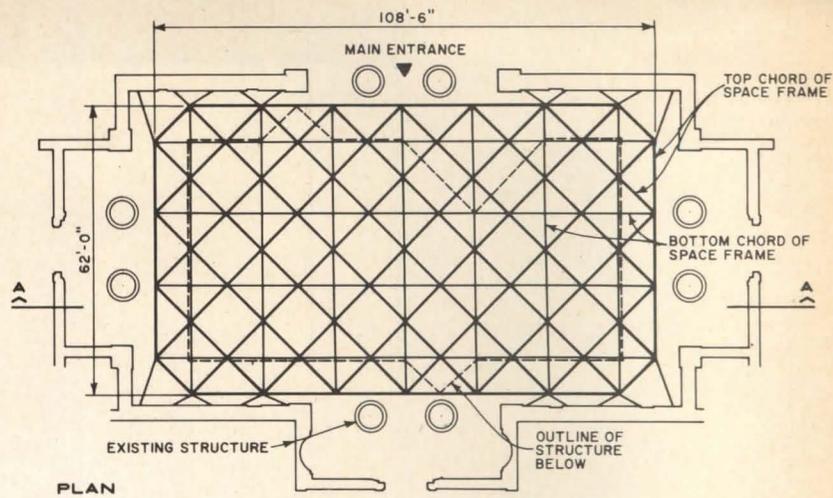
tary Activity — and was expected to be a key participant in the Office of Voluntary Activity.

When the Urban Affairs Council was formed, it was to duplicate no function of government or take over any activity of Government. It was to be purely advisory, and most of the President's domestic decisions have come after consultation with it. But it has changed. When the new Model Cities approach was announced, the council was given the responsibility for "interdepartmental policy affecting Model Cities."

Perhaps a sixth smile would be appropriate — a hopeful smile. But the cat's eyes should probably reflect *this*, because there is an element of hope behind all of the expressions covered. It is a hope that when the smiles are run up the flagpole, Alice will smile back. — RAW



## **MUSEUM HANGS NATURE'S GRIM TALE FROM A SPACE FRAME**



SECTION A-A

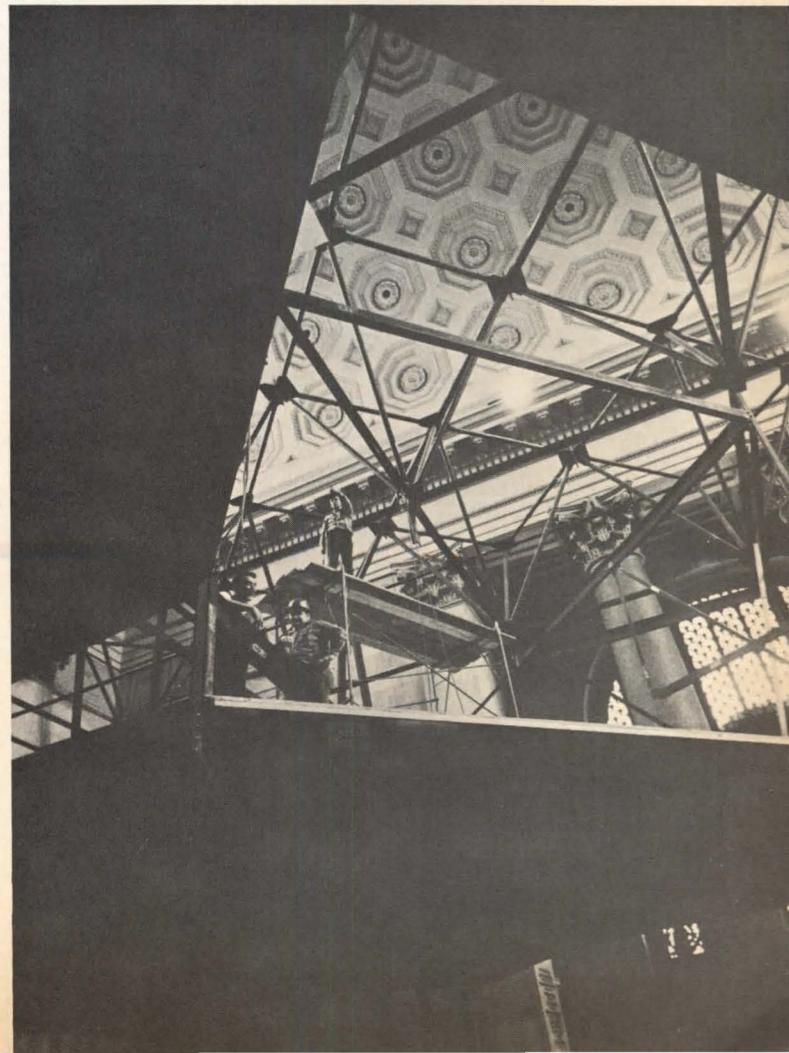
Space frame carries 110-ton 'Can Man Survive?' exhibit in old museum hall. The lightweight space frame derives strength from its geometry of square grids at top and bottom chords that are set at an angle of 45° to each other and are connected with diagonal members. Corner columns transfer loads to the original footings of the 62-ft wide hall.

The advantages of a new space frame designed and developed by Takenaka Komtuen Co., Ltd., of Osaka, Japan, result from its geometry. The top chord members of the Takenaka Truss lie on a 10'-11<sup>3</sup>/<sub>8</sub>" square grid, and the bottom chord members on a 15'-6" square grid that is rotated 45° in relation to the top grid. Diagonal members connecting the joints in the two planes form inverted square pyramidal elements. Thus, the compression member on top is shorter than the tension member on the bottom, taking advantage of the material and thus reducing the weight of the structure. Another advantage is that it is constructed of fewer members than other space trusses.

The first Takenaka Truss in the United States supports the "Can Man Survive?" exhibit in the classical Roosevelt Hall of the American Museum of Natural History in New York City. Because of the special loadbearing conditions of the 110-ton exhibit, Professor David Geiger of Columbia University, the engineering and architectural consultant to Dimensional Communications, Inc., of Paterson, N.J., the designers and builders of the exhibit, used a Takenaka Truss with its own supporting pipe columns to carry the exhibit and transfer the loads directly to the existing footings. The truss covers an area 110' x 62'.

Geiger simplified the Japanese welded joint system by using field-bolted joints and simple gusset plate connections. (For aesthetic reasons, tubular members were used for the top chord and diagonal members, instead of the more economical steel angles back-to-back.) "If the space frame for the UCLA Fieldhouse by Welton Beckett & Associates used the Takenaka Truss," Geiger estimates after a computer analysis of the truss (April 1968 *Engineering Journal*), "it would have reduced the cost (\$4 per sq ft) by 25 per cent. If one spans 600 ft with this system, the estimated cost would be \$9 per sq ft with a required depth from 1/10 to 1/30 the span."

The economics of the Takenaka Truss geometry have led Geiger to study its application in concrete — which would satisfy fire codes — for the New York City school system.

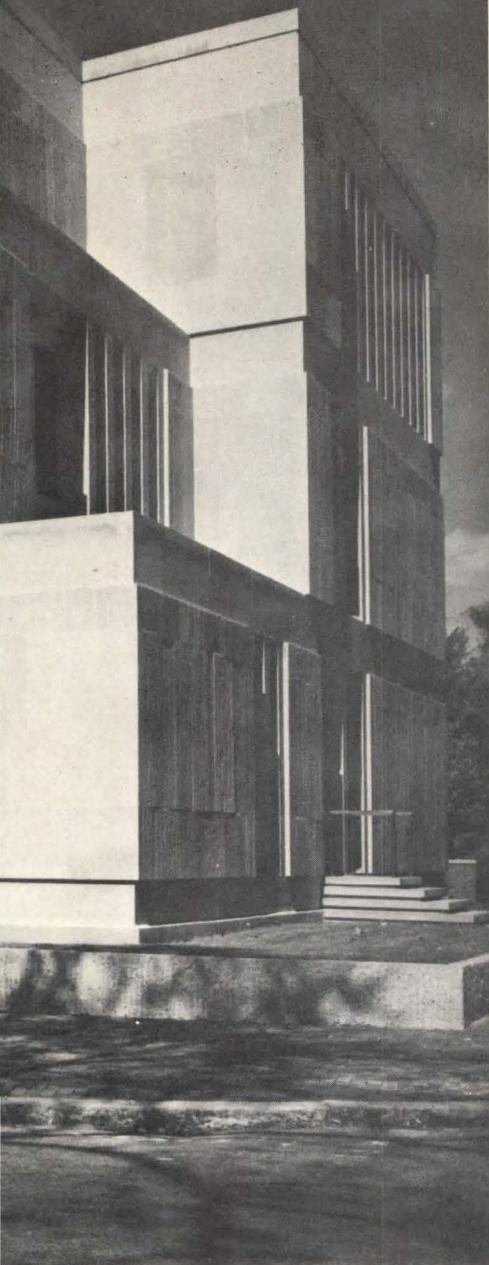




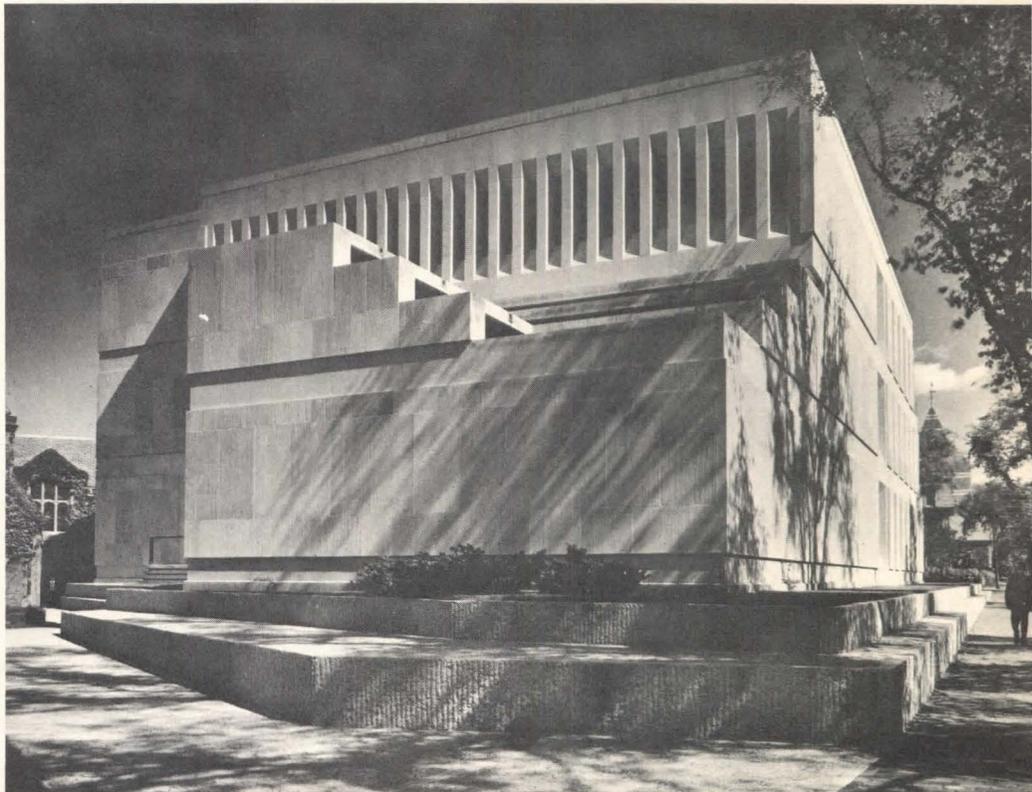
# NEGATIVE SPACE GIVES FORM TO LIBRARY

Despite the solid impact of limestone-faced walls, fenestration defines the form of a Campbell, Aldrich & Nulty library in Cambridge, Mass.

Deeply canted window reveals act as prime form-giver, together with story-high setbacks.



Irregular concrete platform pulls building from sidewalk into campus (below). Slight cantilever of top two stories quietly announces entry (bottom).



In a familiar architectural paradox, form is made manifest not so much through the massing of volumes as by the spaces in between. For the Episcopal Theological School's library, those spaces happen to be window openings. The asymmetry of stepped-back ziggurats and shallow cantilevers is reinforced by fenestration that is as regular as a soldier course at some points, seemingly random at others, and totally absent along large expanses. The deeply canted, shadow-catching reveals are of two basic shapes: the vertical slot and the rectangle. In general, large rectangles mark large spaces, while narrow slots let light into the small study carrels.

With a medieval unity of design, the semi-random pattern of window openings is carried into the three-story interior court where walls rise clifflike beneath a large skylight. Flat, rough-troweled plaster replaces limestone, but the rationale remains the





Library's interior court echoes exterior forms.

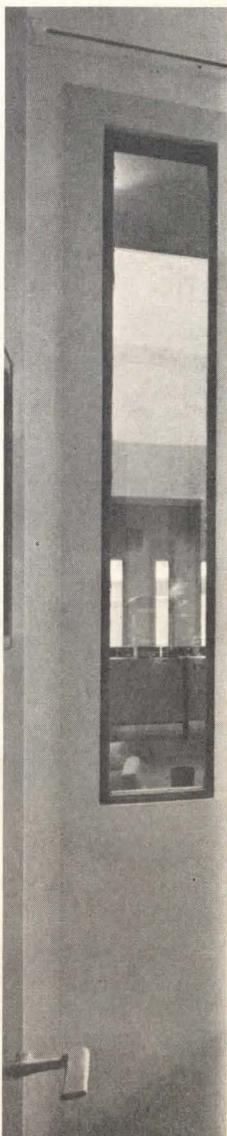
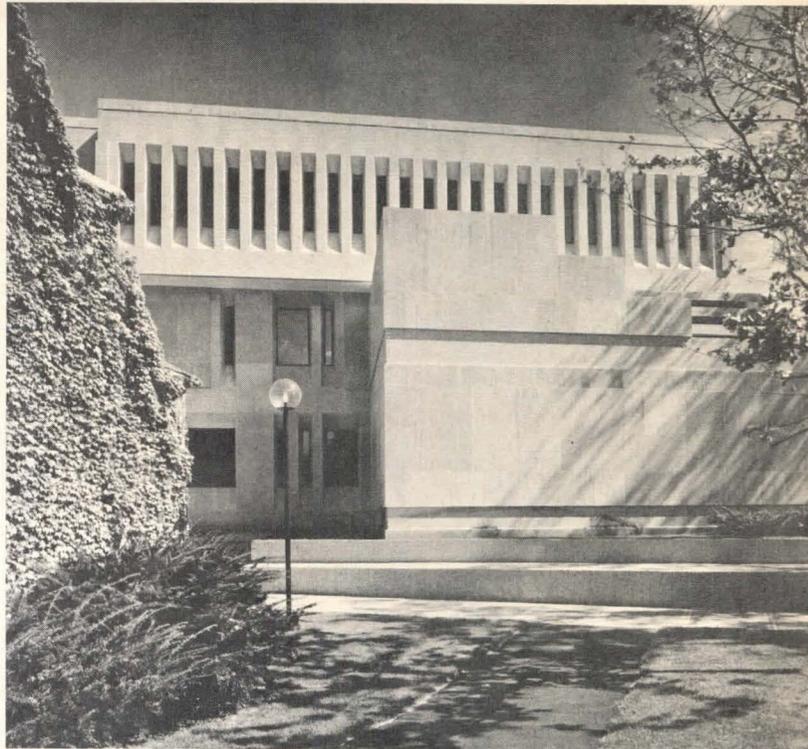
same. Slots in carrels bordering the court are glazed; larger rectangles next to stacks and open reading areas on each balcony are unglazed and afford a look-out into the chasm, or pleasant vistas of students reading and talking on the other side of the court. The small, narrow frames provide particularly enticing glimpses of the outside world crowding in on the library — 18th- and 19th-Century stone, brick, and clapboard across the narrow Cambridge street or an adjacent ivy-covered chapel.

The densely populated campus, a five-minute walk from Harvard Square, posed a problem of scale in relationship to both the campus and surrounding houses. Since it had been decided to integrate the library with the school's teaching facilities, a building of substantial proportions was needed. The only piece of land large enough to accommodate such a structure was at the triangular east end of the campus, already hemmed in by other academic buildings. The library was shoehorned into a space between the old chapel and a rather large contemporary building, its basically rectangular shape running parallel to the street. Since no attempt was made to distort the angles to fit the site (*a la* the Flatiron approach), the spaces left between it and the other buildings have a certain haphazard quality that clearly expresses the familiar problems of an expanding institution on a restricted urban site. And to the true urban dweller, such nooks and crannies have a welcome, if untidy, charm.

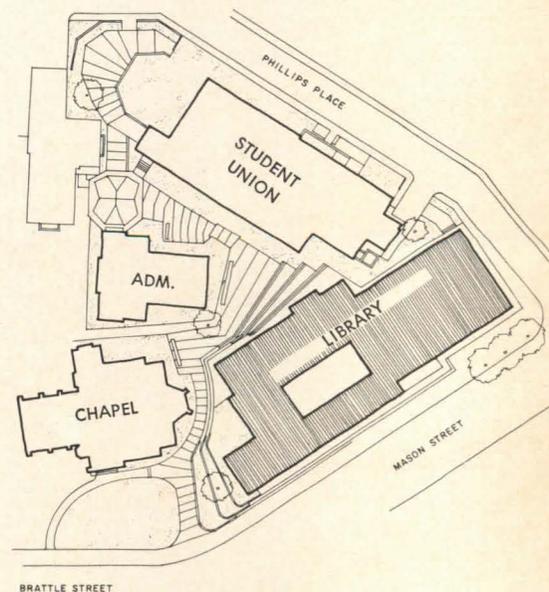
On the ETS campus, odd bits of leftover space are pulled together with platforms, steps and walkways that fan out from the building and gather together at the main entrance, leading by implication to the major interior space. The stepped platform on which the library rests pulls it from the sidewalk into the rest of the campus and also makes the transition between high and low points of the sloping site.

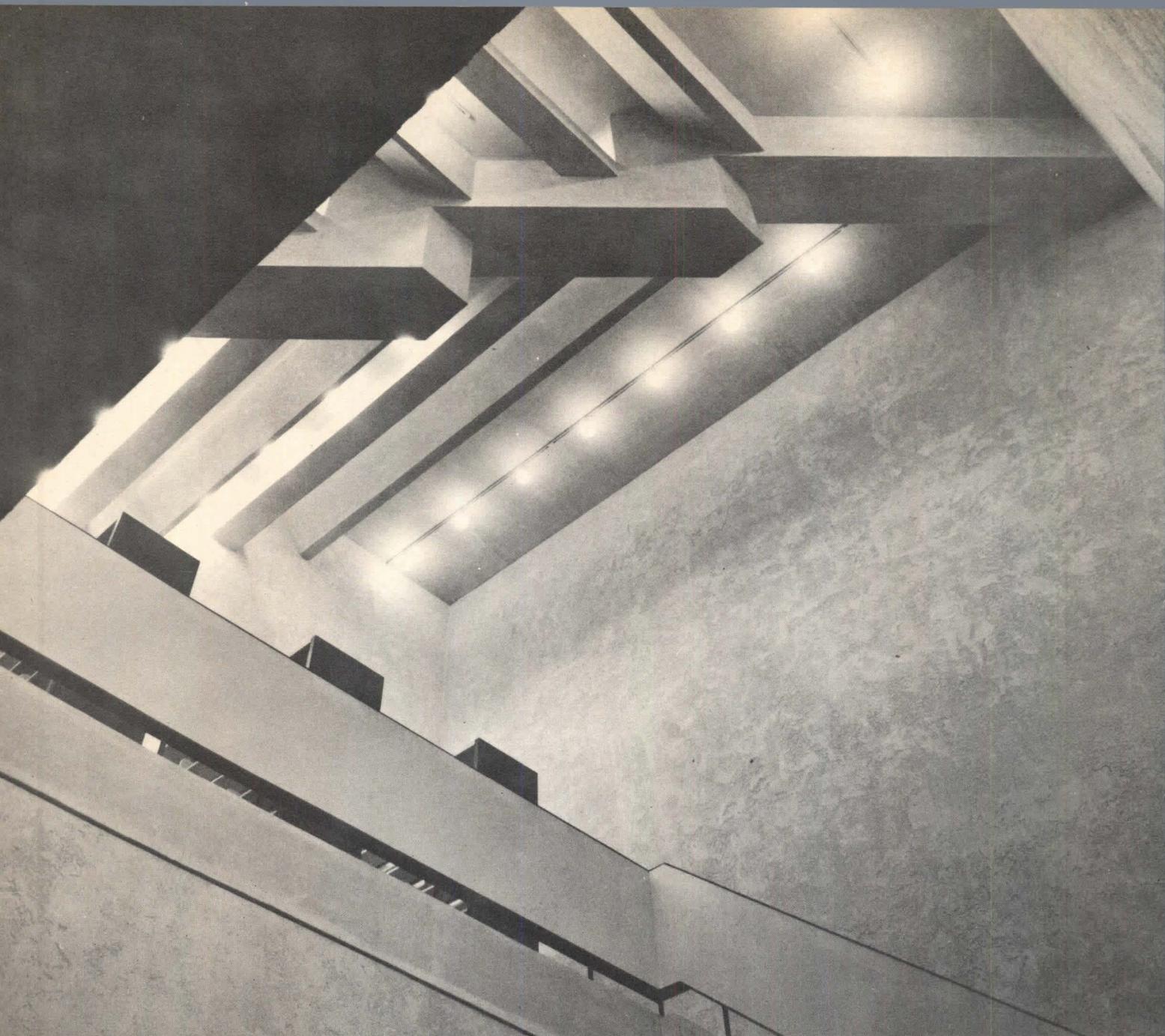
An important element in subduing the building to its rather modest surroundings is one that will take some time — the weathering of its limestone skin. Although it now tends to be something of a glistening white monument, "it will look a lot better when it gets cruddy," designer Glenn Merithew remarked in an offhand moment. As an alternative to the smooth and shot-sawn limestone facing (over concrete block), precast concrete was considered, but was found to cost more. On the interior, plaster and steel studs proved less expensive "than any other material."

Another device used to reduce the scale were the stepbacks on each face of the building. On the east and south façades, this merely changes the number of carrels or the size of lecture rooms. But next to the entrance, a handsome staircase is created below the narrow rooftop "shelves" that are spliced together with clerestories. It is strongest in the Rare Books Room, where the L-shaped clerestory steps are carried on an overlapping concrete beam spanning diagonally across the room (see photo). It is such a powerful ceiling, as a matter of fact, that one



Regimented fenestration of top floor (above) contrasts with random openings below. Carrel window (left) looks out on interior court. Site plan below shows how walkways and platforms (changed slightly during construction) integrate building with rest of campus.





Concrete beam over Rare Books Room supports step-back ceiling. Lighting pattern imitates natural light from clerestories.

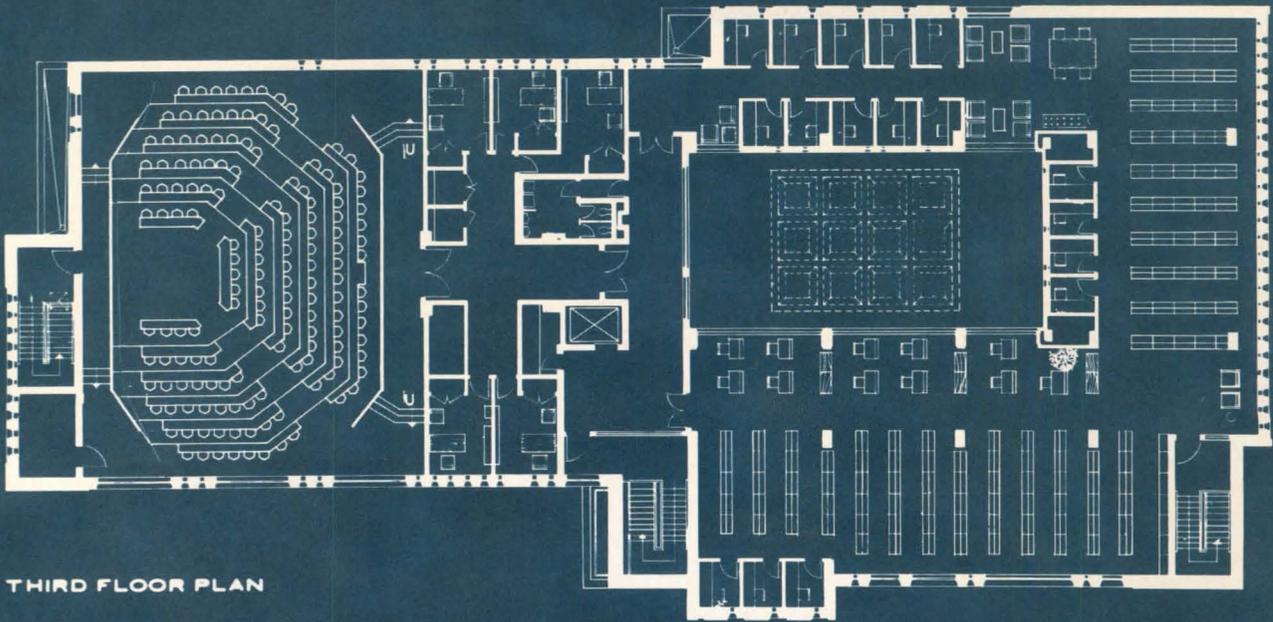
wishes the space might have been more open, or larger, to fully exploit it.

To be more accurate about the rectilinear box mentioned earlier, there are really two basic boxes, which express the two functions of the building: book learning and lecture or seminar learning. About half the building is devoted to teaching facilities. Faculty offices, three large lecture rooms, and seminar rooms bring life to the solitary, contemplative activities of the library and keep it from becoming an isolated element in the learning process. This aspect of the program, however, is slated for eventual change. When the 120,000-volume capacity of the library is reached, as client and architects foresaw it would be, the library will expand into the teaching half of the building. Thanks to the ecumenical spirit, that day is now imminent — barely three years after completion. The collection of a Jesuit seminary has been absorbed into the school's stacks, bringing them

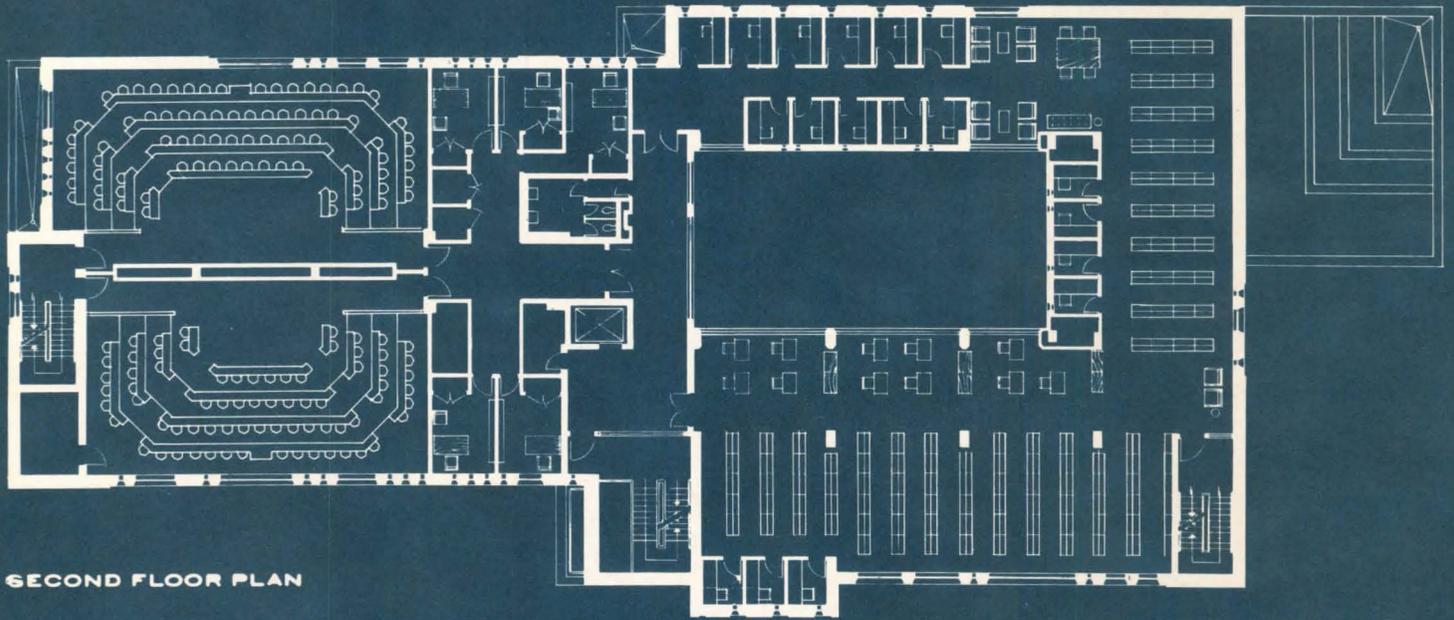
to near capacity in one quantum leap — the kind of unpredictable event that makes today's architectural programmer about as secure as a building atop the San Andreas Fault.

It is difficult to assess the functioning of the library amidst the present disruptions that have resulted from suddenly tripling the number of books, but the stack/reading balconies around the central court work particularly well. Seminar rooms are cheerful, and the trapezoidal table sections in each seminar room are portable in fact, as well as in theory, giving students the liberty of putting their mark on the environment day by day — or class by class. It is a liberty pursued with enthusiasm.

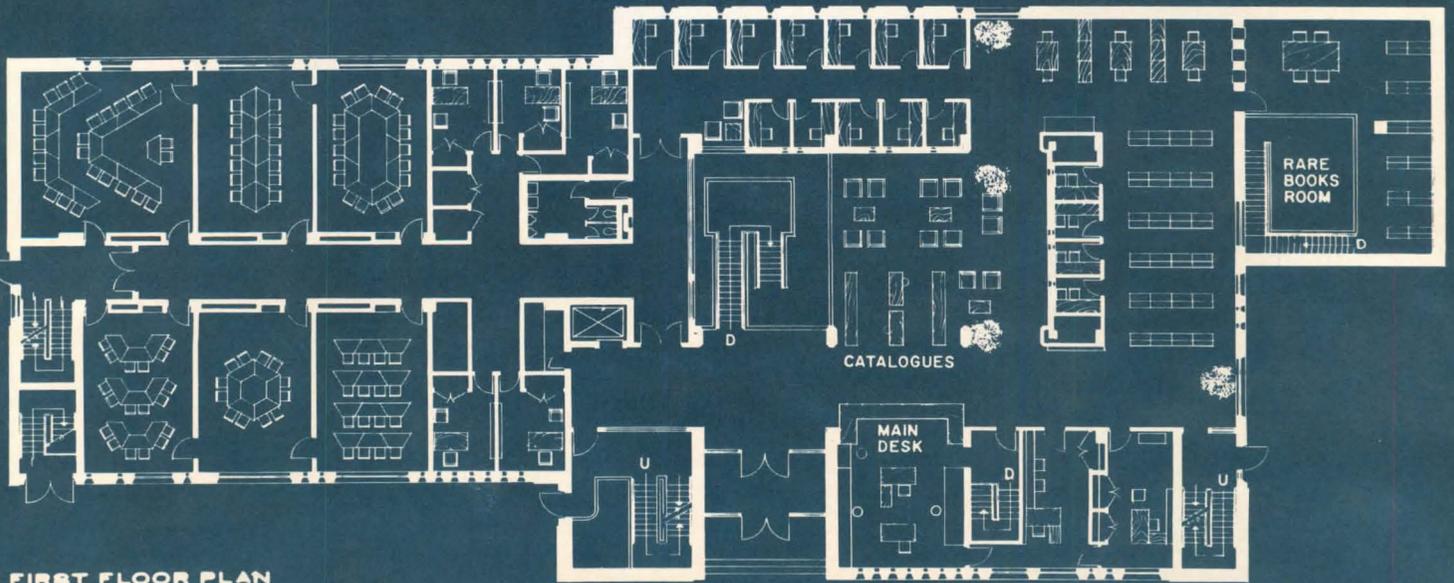
Although it has very little to do with architecture in the purest sense, it might be said in conclusion that the building is beautifully maintained — something for which many architects would be willing to make significant concessions. — AR



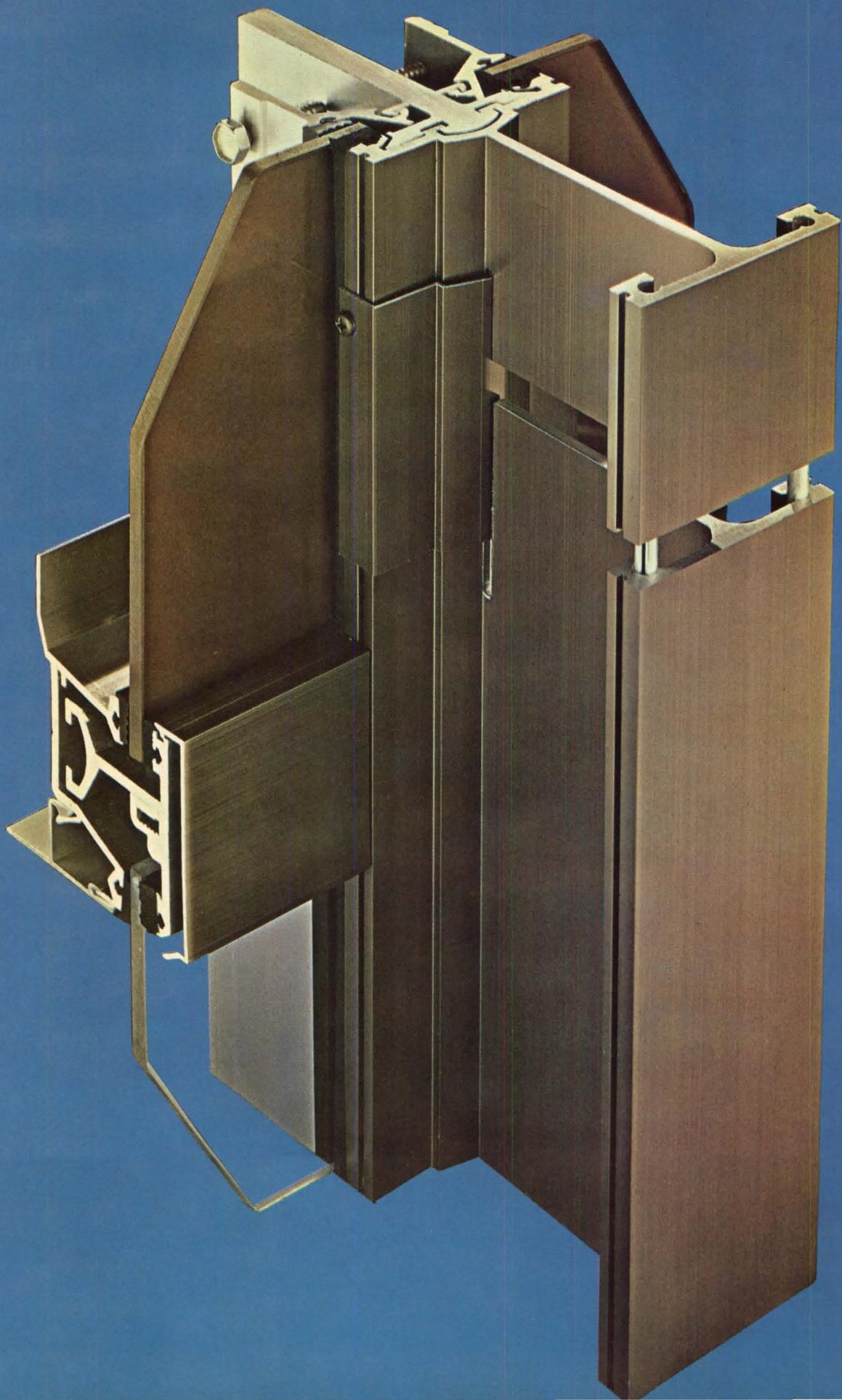
THIRD FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN



# Unfortunately, we can't tell you exactly how much money you'll save with the new Pittco Seventy-Five Curtain Wall.

Until we know your specifications, we can't even predict how much extra design freedom you'll enjoy, or how many construction days you'll save. Or just how many tenants you'll gain with Seventy-Five Curtain Wall's rainscreen system.

Seventy-Five Curtain Wall's five anodized aluminum colors are coordinated with Pittco® entrance systems and storefront metals. And it accommodates any thickness of glass or spandrel. Lets you build a beautiful building inexpensively, without compromising your design.

It's interior glazed to save you

expensive days of glazing and erection. A controlled-pressure glazing system cushions and seals glass tightly between neoprene strips to minimize breakage. It also makes Seventy-Five Curtain Wall foolproof.

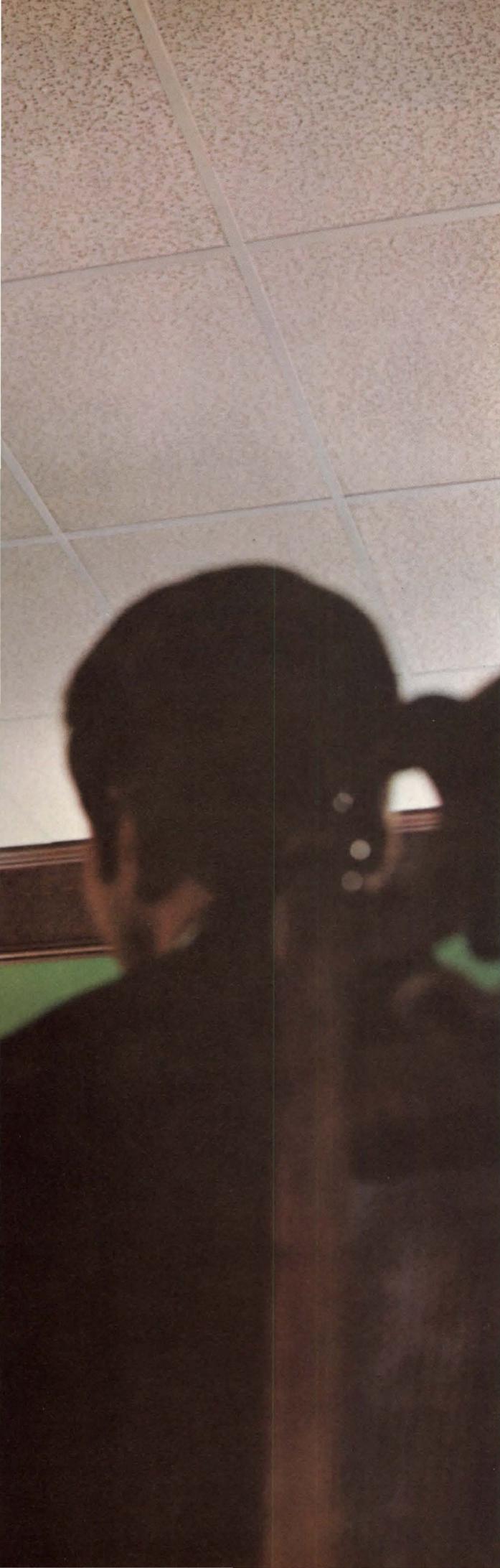
We've put Seventy-Five Curtain Wall through a fierce series of performance tests, too. (It's met all the requirements of NAAMM Tests A, B, C-1 and C-2, for example.)

The competitive price is the big surprise. When you give us your specifications, we'll tell you exactly how much money you'll save with the new Pittco Seventy-Five Curtain Wall.

Consult Sweet's File 20a/Pp (see Pittco 7500 Curtain Wall), or write: Pittco Architectural Metals, Box 930, Kokomo, Indiana 46901.







# New Gold Bond Solitude Ceiling has absolutely no sense of direction.

Nondirectional Solitude avoids the linear look. No matter which way the acoustical ceiling panels are laid into the grid.

The high style of the richly textured surface helps add an air of elegance to any interior.

Panels are  $\frac{5}{8}$ " x 2' x 2' and 2' x 4'. With square edge detail.

They're noncombustible. Have a NRC range of .60-.70 and a 35-39 STC range.

Gold Bond® Nondirectional Solitude comes in two factory-applied finishes. A washable vinyl acrylic coating or a scrubbable acrylic plastic coating for areas where cleansing maintenance and resistance to staining is a factor. A special Self-Sanitizing feature is also available with both coatings.

## Keeping up appearances is a National responsibility.

Gypsum Company



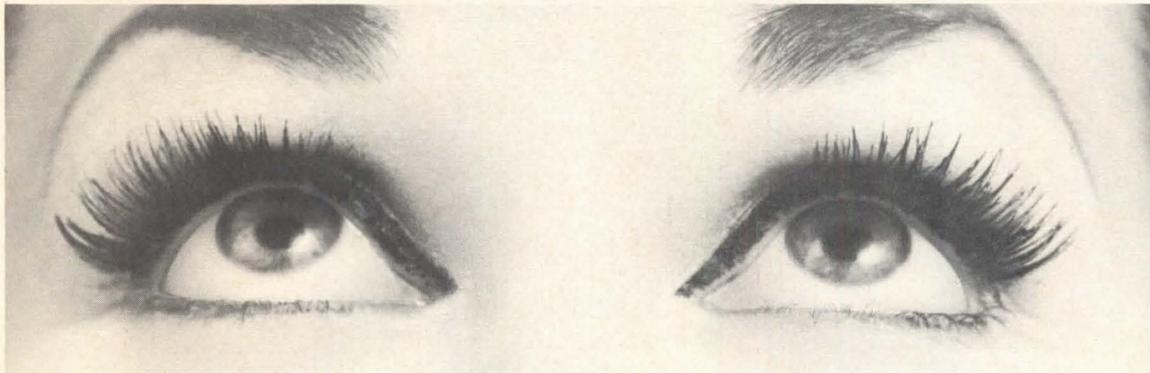
The name Gold Bond identifies fine building products from the National Gypsum Company. For more information on Nondirectional Solitude, write Dept. PA-79C, Buffalo, New York 14225.

# the eyes have it

PL-21— 3/16" square based prism

PL-28— 1/4" square based prism

PL-35— 3/8" square based prism



## how prismatic lenses look

may concern you as much as how they perform—maybe more. Prism detail can be obtrusive or understated, dependent on luminaire dimensions, shape or surrounding architectural features.

**plaskolite's** family of prisms—three discrete prismatic steps—gives architect, engineer and designer another degree of design freedom by matching prism size to esthetic requirements without affecting lighting performance.

No matter how small or large your luminous element choice, 1'x4' or 4'x4', one or more members of **plaskolite's** prism family will fit your lighting scheme.

Send for our prism family data now. Be convinced that **plaskolite** is your best design/performance buy.

 **plaskolite, Inc.**  
1770 Joyce Avenue, Columbus, Ohio 43219

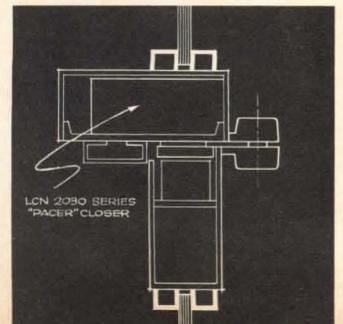


Overseas Operating Center, American Telephone and Telegraph Company—Long Lines Department, Jacksonville, Florida. Reynolds, Smith and Hills, Architects—Engineers—Planners; Jacksonville.

### Overhead concealed Pacer® Closers from LCN

were chosen for this new A.T.&T. Building in Jacksonville, Florida. These compact closers fit in a 1¾" x 4" transom bar, yet provide all the superb control for which LCN is famed. Install LCN "Pacers"... make the simple initial adjustments... then forget them. They get along nicely without a lot of help. LCN Closers, Princeton, Illinois 61356.

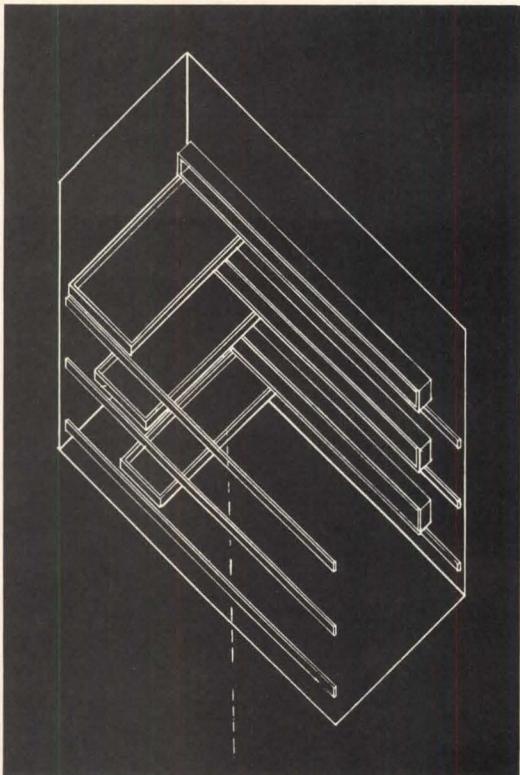
On Readers' Service Card, Circle No. 354

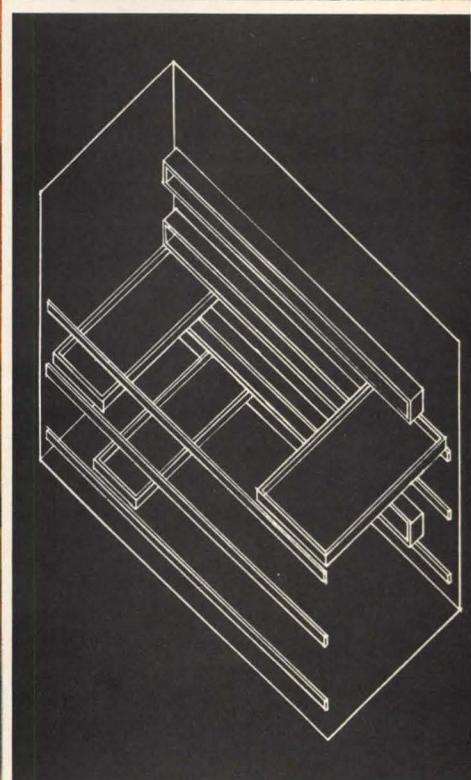


# MULTI-FORM BEDROOM

When writing about Systems, space imagery is not usually easy to muster, but the system that Yale-architecture-trained Michael Hollander designed for a bedroom-study really blasts out of gravity tradition into a new field.

We have been saying that the new spaced-out designers may find the key to using human activities as the true organizers of designed interiors. Hollander's New York bedroom-study design for a room in a brownstone — a room with one window, an 8' x 12' space with the door opposite the window — is clearly based on interleaving the activities of a study-office with those of an overflow space for entertaining and those of a bedroom.







His systems-furniture for these multiple functions is a layered series of three floating, room-width platforms that slide on wall-hung rails from one end of the room to the other. Conventional ball-bearing casters mobilize the plywood platforms, which Hollander calls "trays."

For sleeping, the bed on the uppermost platform is moved to the window end and the two lower platforms are arranged as steps up to it; file cabinets serve as intermediate steps.

For work and study, the bed is moved out of the way toward the other end of the room and the middle of the platform, which holds the desk and table space, is moved near the window and its sunlight. In this arrangement, the bottom platform supports a chair at the proper height; it also keeps all furniture off the floor and allows the scheme to be continuously mobile.

When entertaining, and the adjacent living room gets crowded, all three platforms are moved to the window end, clearing the floor for as many people as possible and making the lower platform available as a bench.

The scheme, as Hollander's isometric drawing indicates, has the imagery of a discontinuous Bauhaus project to which the architect has added a kinetic aspect. But imagery was not the basic determinant of the scheme. For this multiple-activity space, flexibility is the determinant and it produces a multi-form bedroom. (The phrase and the approach have been most frequently applied to theatre design, where similarly portable elements have been employed to reshape "multiform stages" and "multiform auditoriums.")

Several unexpected advantages accrue from the system: First, functionally, the bed platform, which has ample head room to scramble around in, is easier to make up, since it is sufficiently elevated to make up while standing first on one side, then, by ducking under, completing the other side. Second, the rails of the sliding trays serve as display racks for drawings and plans when the space is used for work and study. Then, psychologically, the layered arrangement both permits an office free of bedroom appearance and, conversely, permits its occupant to put all work out of sight merely by climbing up to the lofty perch and hiding the uncleaned cluttered desk-tray beneath it. Incidentally, there is a bird's-eye view of the street through the top of the window from the upper berth.

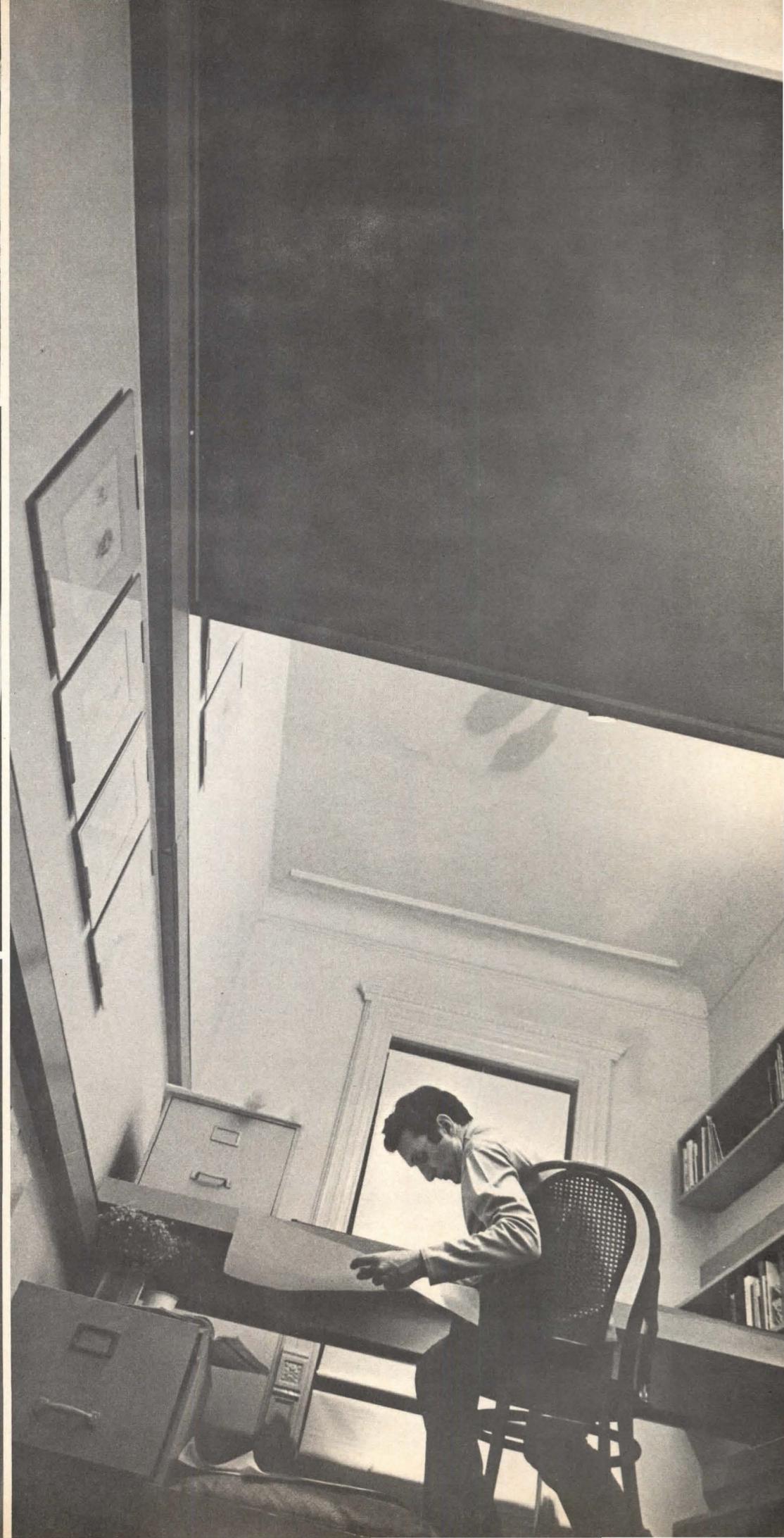
The system, actually, is a room within a room — a contemporary device of architects. Hollander points out that the lower platform is needed "both compositionally and ritualistically" to show the complete independence of the system from the actual room in which it is housed.

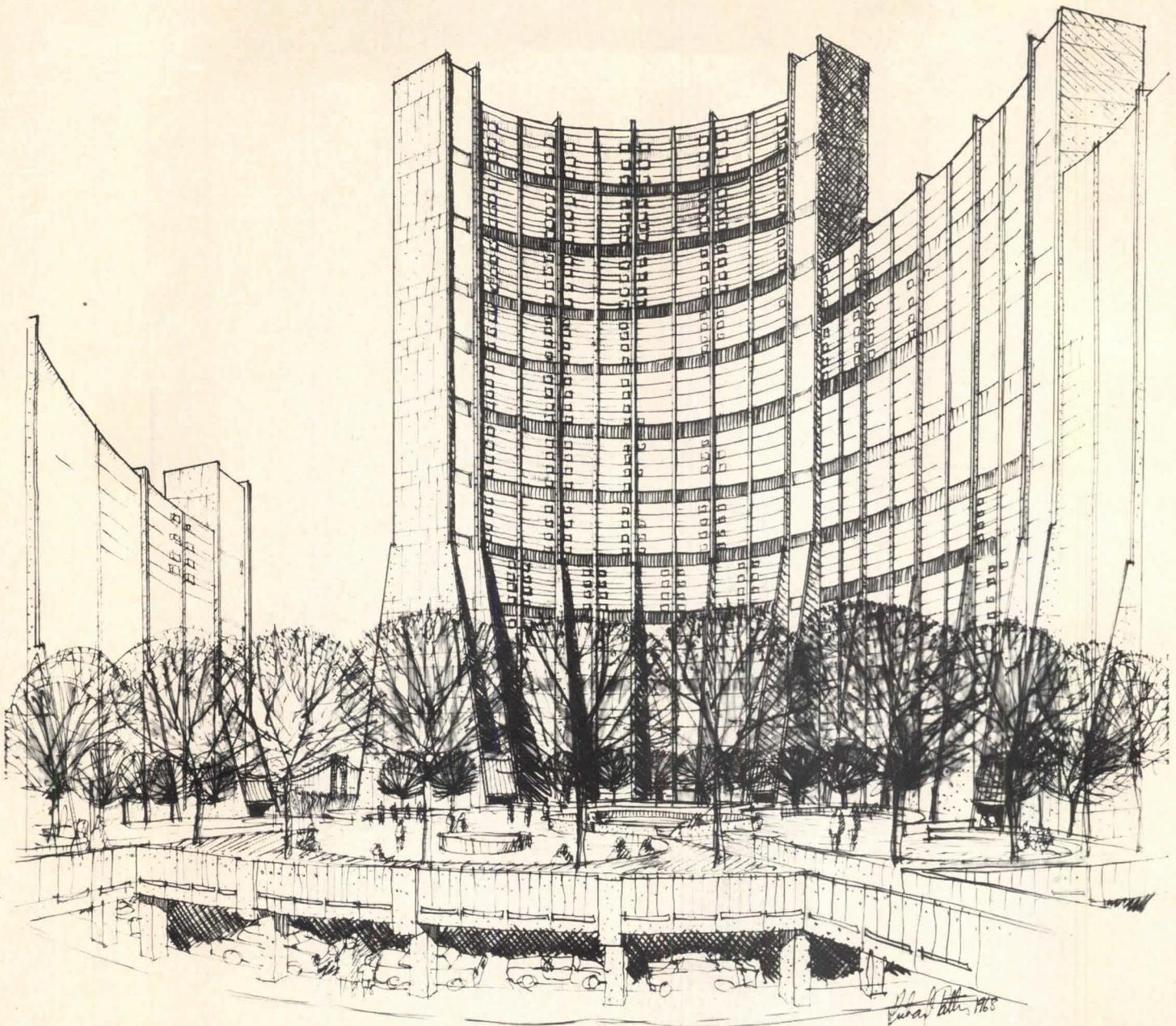
"This recreating of the actual space in a contrapuntal restatement," Hollander explains, "puts a new world inside the larger world. By recreating the floor level on a slightly higher plane, the system of sliding platforms is liberated from the enclosing space and conjures up a feeling of being free of gravity."

Mechanics are as unsmooth as might be expected of a gravity-affected prototype: the wall tracks on the brick party wall are hung on a lead sleeve bolted to the wall; on the other side, they hang on hefty toggle bolts. Metal ball casters (1½ in. in diameter) carry the trays along the metal-lined tracks somewhat noisily but efficiently. Hollander now feels that a conveyor assembly hangar mechanism should be investigated for future improvements.

The colors of the room also make it of our day, though this is paradoxical, since the colors used — a pink ochre with stucco-gray trim reminiscent of the colors of 1870 Italian Palazzi — provide an anachronistic contrast that associates the liberated scheme with historical tradition. This paradox makes the color selection contemporaneous.

Here, then, is an imaginatively innovative system, liberated from tradition, yet at the same time recalling our colorful historical traditions, and also liberated psychologically from gravity, suggesting weightlessness. — CRS





# DOWN BY THE RIVER

Urban project will be omnibuilding for black community.

BY JAMES T. BURNES, JR.

A proposal to rebuild a 45-acre portion of West Harlem will, if support can be obtained from national, state, and city governments, provide housing for 3000 families in a multiuse omnibuilding also containing recreation, shops and stores, a museum of black culture, an auditorium, parking for 2500 cars, and space for commercial, research, and light indus-

trial development. The complex also will serve to tie the city to the Hudson River across Riverside Drive and expressways.

Originally a mutual enterprise of the Negro Labor Committee and Columbia University, Riverside Park Plaza is now under the sole sponsorship of the committee. Columbia, finally stung by repeated charges of "land-grabbing" expansionist tactics on various projects at the expense of underprivileged

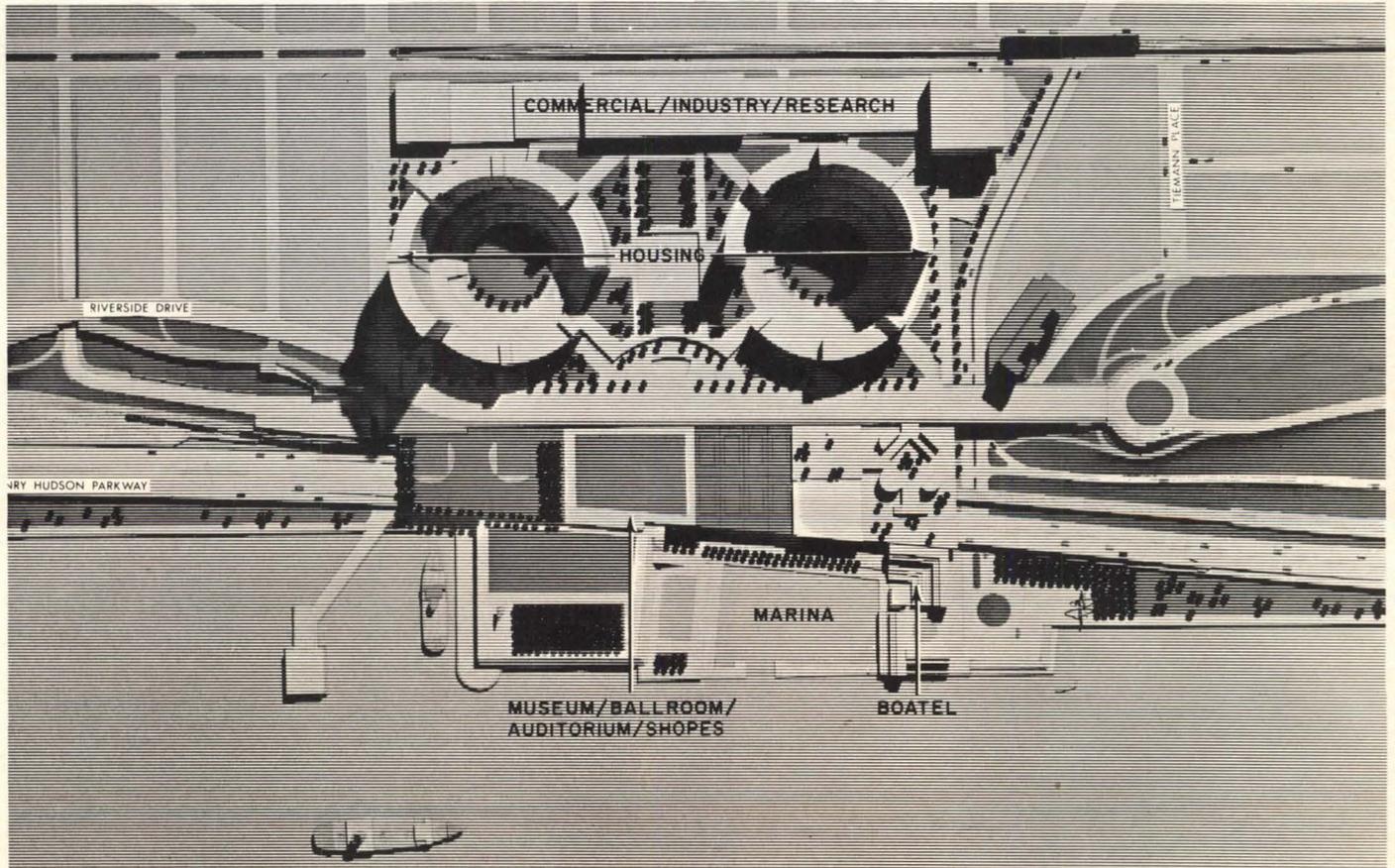
north Manhattan residents, deemed discretion the better part of valor and removed its name from this undertaking, although Courtney Brown, Dean of the School of Business, will continue in his role as a consultant and collaborator, according to the *Columbia Daily Spectator*. L. Joseph Overton, Executive Director of the Negro Labor Committee, stated, "I feel that Columbia made a mistake in withdrawing from the project." The withdrawal places all fund-raising responsibilities on Overton's organization.

The development, as conceived by Richard Dattner (associate is Henri LeGendre; site planner is Clark & Rapuam), will consist of two circular apartment complexes rising from a base containing the other facilities, which will extend from Broadway (where Praeger-Kavanagh-Waterbury originally developed preliminaries for the Columbia commercial-research-industrial project) to the river, culminating in an "amphitheater" on the water overlooked by boatel, ballroom, restaurant, studios, and retail spaces. A marina will furnish water-oriented recreation. Commercial and light industrial interests will be able to utilize the services of a projected

rail spur at the eastern edge of the site and a proposed deep-water docking facility on the river.

The housing will be in two round structures surrounding 420-ft-diameter courtyards. To de-emphasize the monolithic appearance inherent in such large-scale structures, and to provide many varieties of views up and down the river and over Manhattan, Dattner has fragmented the towers into variously-heighted elements, stepping from 14 to 54 floors. The attempt to give a sense of community not only resulted in creation of the courtyards, but also in connecting these two great spaces and making them accessible by pedestrianways to the amphitheater and the riverside. Apartments will be studio and one-, two-, and three-bedrooms, with estimated down payments ranging from \$675 to \$700 per room and carrying charges per month from \$19 to \$51 per room. Frame and shear walls will be reinforced concrete with infill panels of brick, edge of floor slabs to be exposed and expressed. The towers will be supported on shear walls 40-ft on center, with three intermediate columns between shear walls. The shear walls will taper wider at bottom to handle increased

Model photo: Louis Checkman



moment due to wind loads, the configuration of the taper to depend on the height of the supported segment. Support of higher towers will continue through the platform; that of the lower elements is expected to be handled on the plaza level.

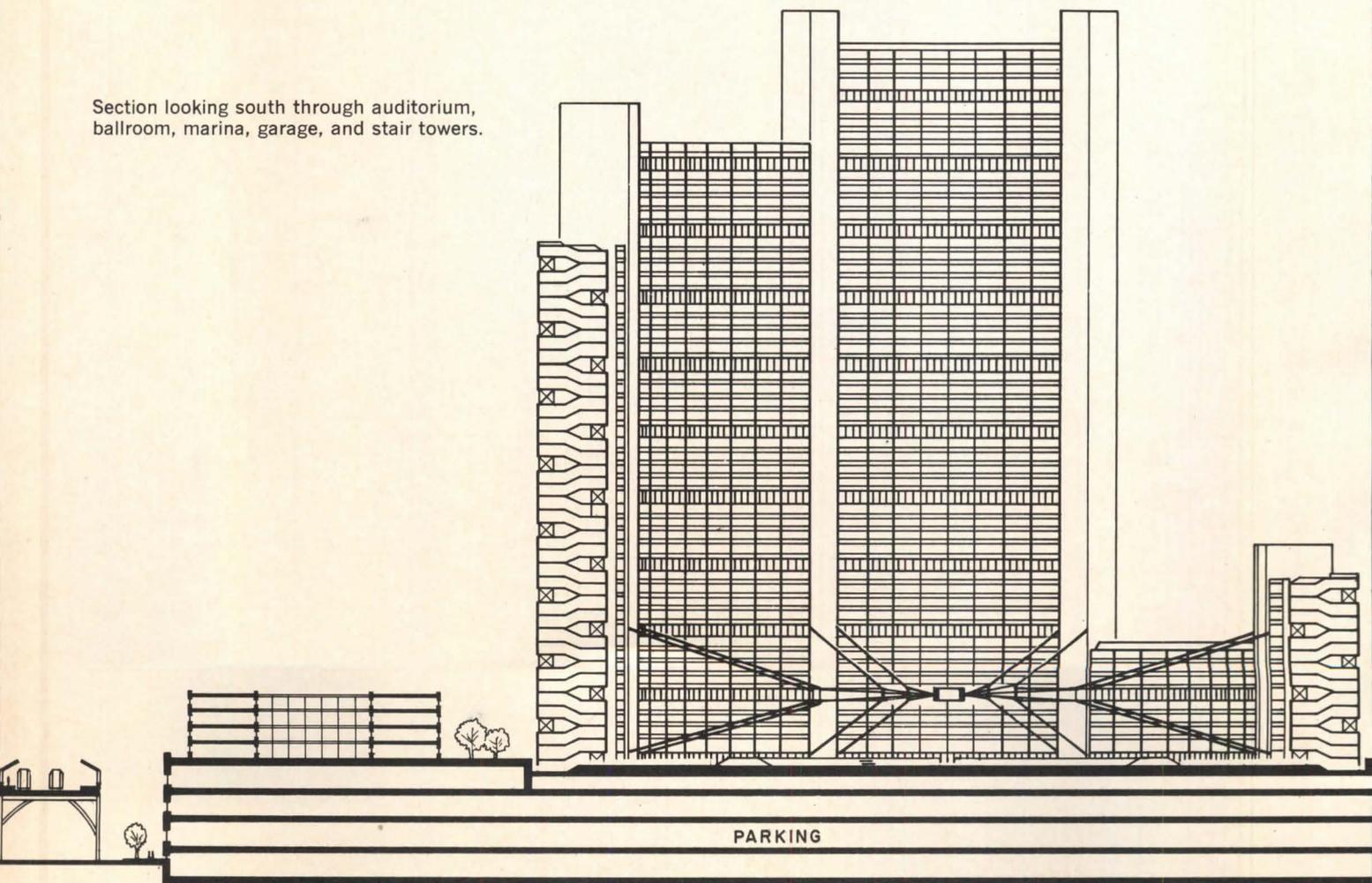
All apartments except one-room studios will be through units with two exposures. Elevators will stop every two-and-a-half floors, tenants to ascend or descend a half floor to their apartment entrances (several special floors are being planned for the elderly or handicapped). The elevator and stair cores will be structurally expressed as dividing elements between the tower fragments. In addition to the two large, interconnected plazas, there will be terraces on the roofs of most of the lower buildings, and apartments will have small viewing balconies.

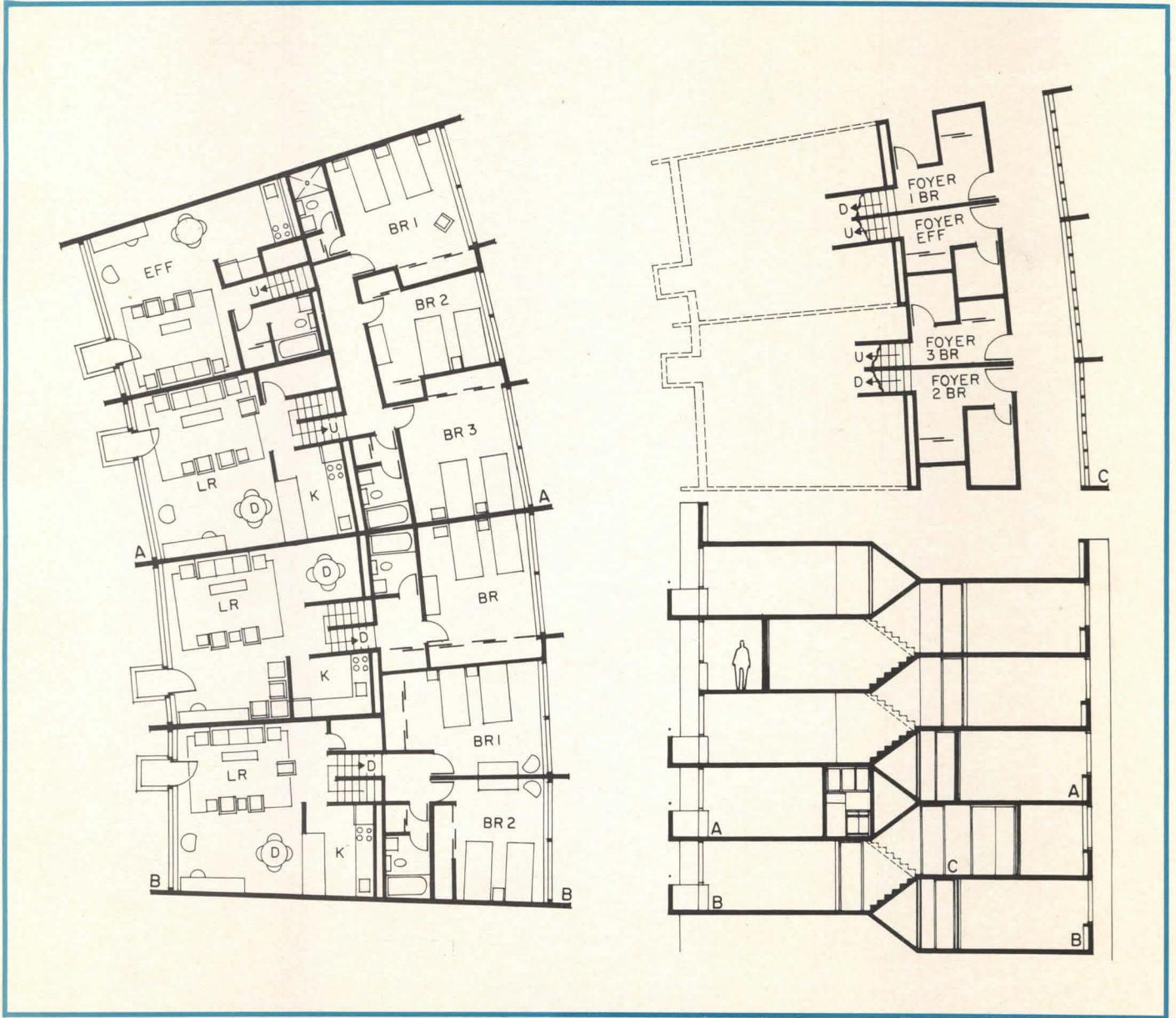
The interracial aspect of the project (Dattner is

white, his associate is black) extends to the contractor — Winston A. Burnett Corporation, a Negro-owned organization that will be general contractor with the Thompson-Starrett Corporation. Emphasis will be put on the use of unskilled labor on the project — 60 to 70 per cent, hopefully — in order to increase skills of ghetto residents and make entry into building trades unions easier, an entrée that is not gladly suffered by many of the tradition-hobbled unions at present.

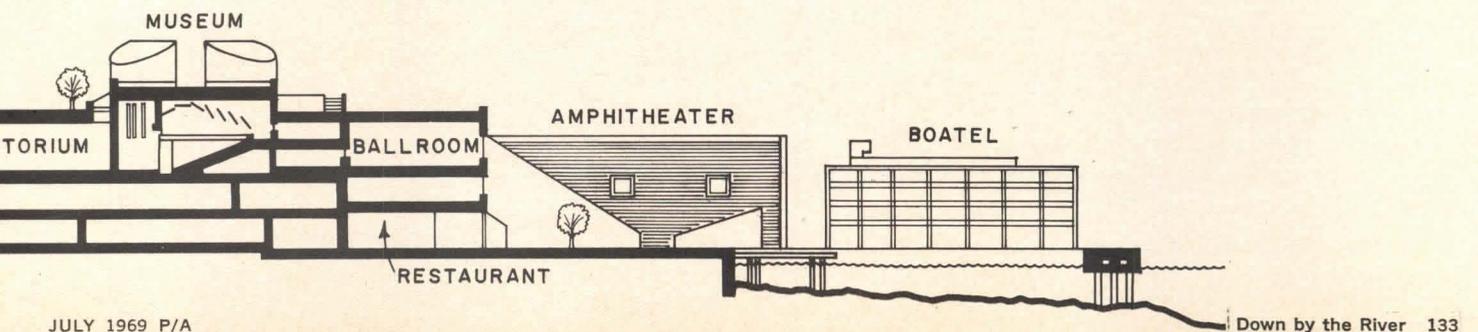
Riverside Park Plaza shows a commendable mix, both in its omnibuilding aspect of housing, recreation, commerce, parking, roadways, and industry in a single complex, and in the cooperation of people of various races to create a neighborhood that will benefit disadvantaged people even before its completion through jobs and education in skills.

Section looking south through auditorium, ballroom, marina, garage, and stair towers.



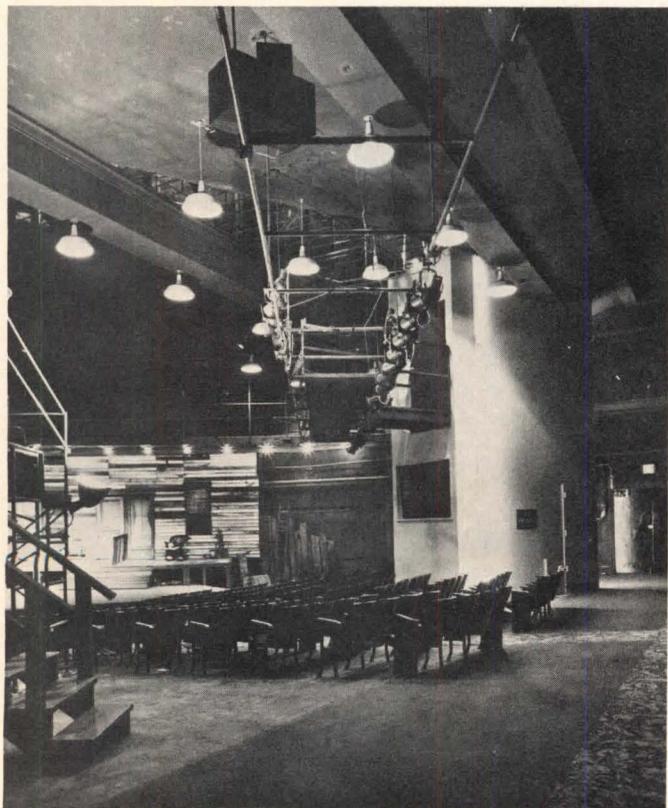
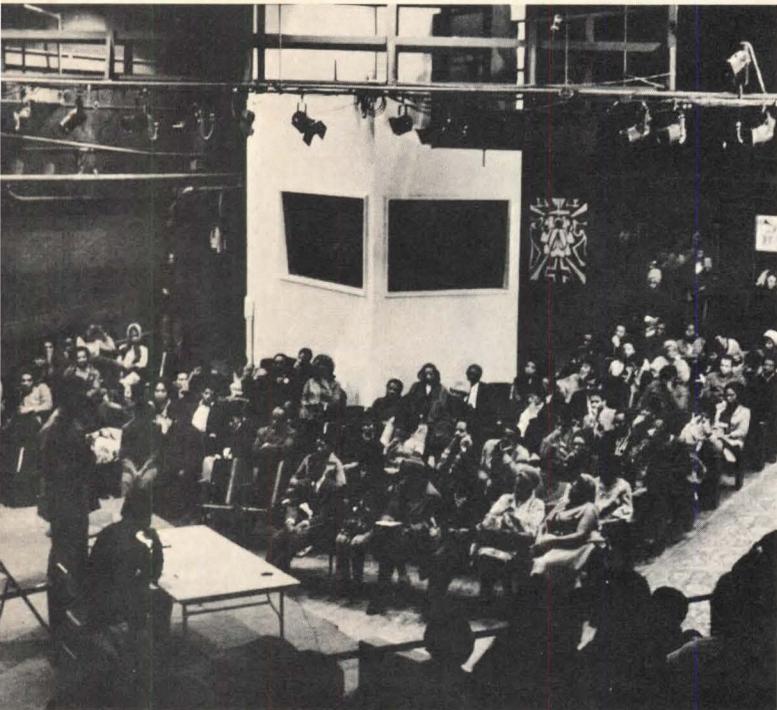


Typical apartment plans and section.



The set is for Ed Bullins' "In the Wine Time." Bullins is resident playwright of the New Lafayette Theater.

Photo: Doug Harris



Photos, except as noted: Norman McGrath



# ENVIRONMENT FOR EXPLORATION AND PARTICIPATION

The New Lafayette Theater Can Be a  
Stimulus for Audience-Actor Involvement

BY JAMES T. BURNS, JR.

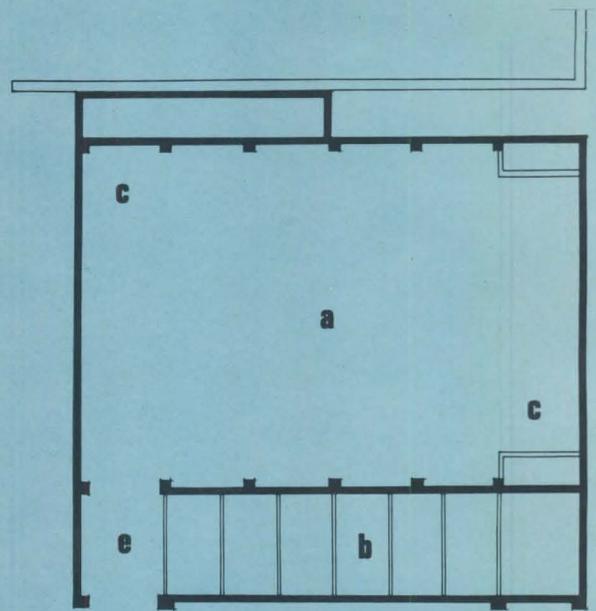
In its "statement of architectural purpose" for Harlem's New Lafayette Theater, the architectural firm of Hardy Holzman Pfeiffer Associates stated that the theater "will require an environment of exploration and participation." The attempt was to consider audiences and actors not as one group of people sitting and watching another group perform, but to get both sides involved with each other "as one total community." Whether this will happen performance after performance and production after production will depend on New Lafayette director Robert Macbeth, who certainly has the drive and determination to make the thing work. For a physical environment, he has been given a notably *involving* space by his architects, so he is off to a strong start.

The New Lafayette Theater might more accurately be called the *new* New Lafayette Theater, since it replaces Macbeth's first facility, which was burnt out in January 1968 after only two productions. (The original theater was named after an historic legitimate playhouse in Harlem.) Its new home is the renovated and remodeled Renaissance Theater, an old movie house on Seventh Avenue and 137th Street. Budget limitations (total cost was \$100,000) permitted no elaborate transfiguring of the exterior, a matter which was of no particular importance to Macbeth or the architects, anyway. (The main exterior symbol they would really like is a great clock for the corner of the building, if any potential donors are reading this.) All of the creation went into the fashioning of a powerfully molded interior.

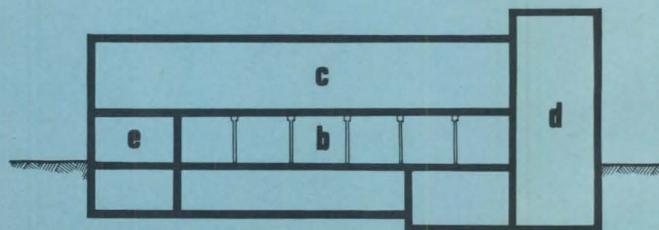


**Plan and sections** (below): (A) auditorium; (B) gallery/offices; (C) places where performer action can originate (D) dressing, two levels; (E) entrance, lobby.

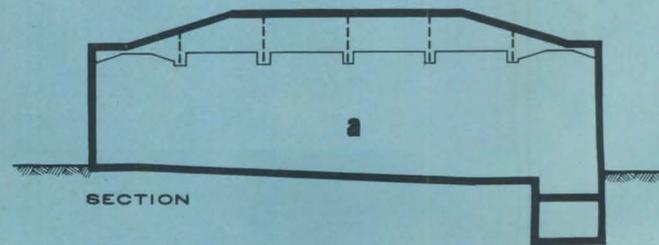
The plans (facing page) show the development of the spatial arrangement. At bottom are two preliminary studies showing the attempt at a variety of acting spaces. Norman Pfeiffer says, "We had the pieces, but it wasn't working." Then the architects combined and overlapped previous schemes to come up with the three-dimensional space shown in the final plan (top).



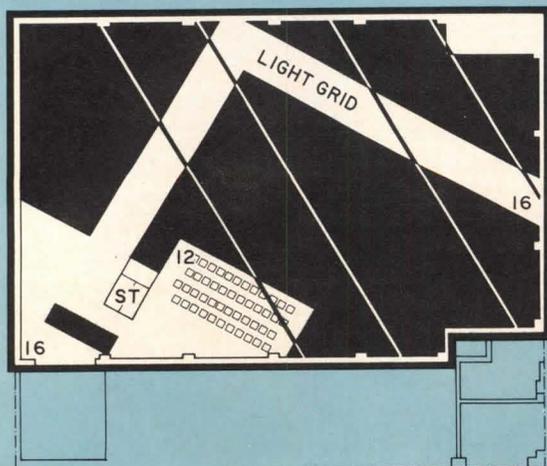
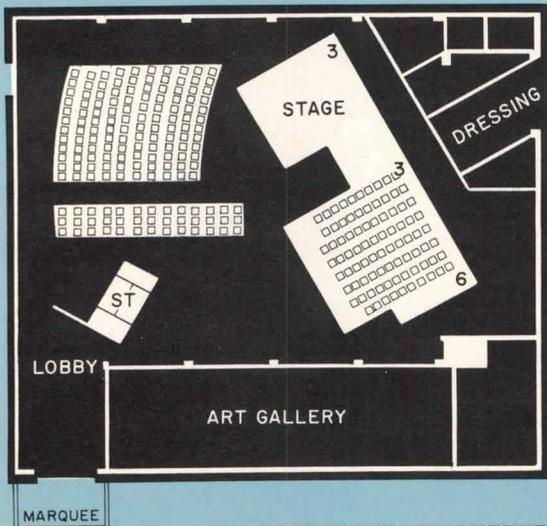
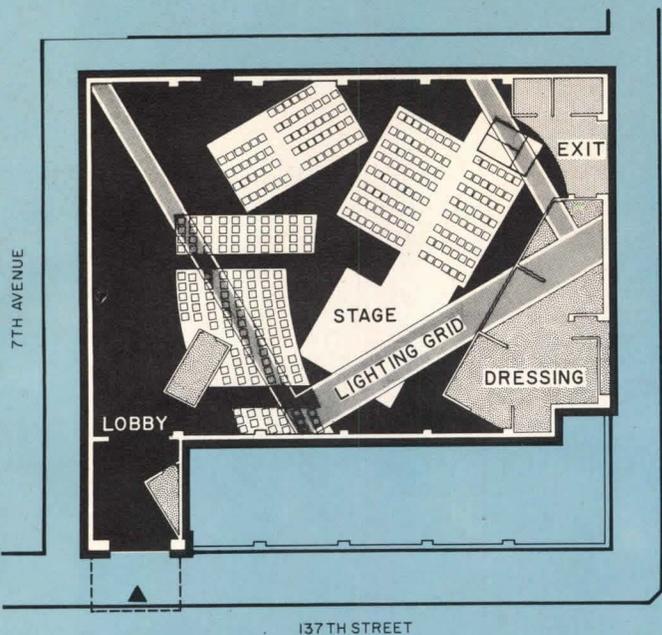
PLAN



SECTION



SECTION

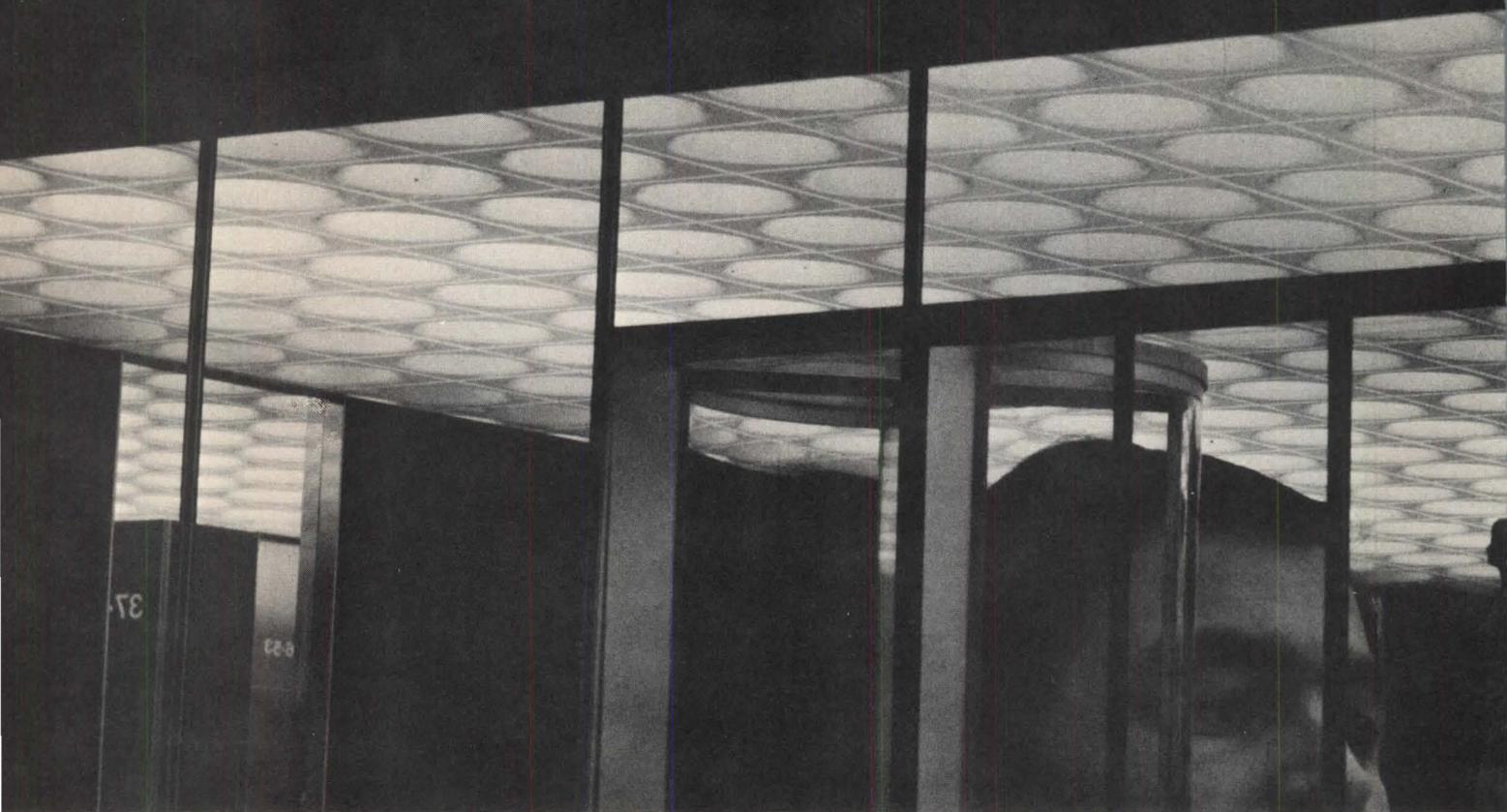


Hardy Holzman Pfeiffer ruthlessly tore out most of the seats in the old cinema, leaving only a large section standing. To bring the total to about 300 seats (expandable in future to 500), they then added two more sections, one lifted halfway to the ceiling on steel pipe riggings, another standing over concealed dressing areas. The seating is thus fragmented and islanded in the overall space of the auditorium, bounding the main playing area triangularly. "Main" playing area is quite accurate, since action can take place almost anywhere in the room: in interstices between seating areas, on the catwalk formed by the lighting grid, even from below in sunken pits formed by dropping through to unused basement space. This provides the opportunity for some truly multidimensional theater experiences, and, needless to say, gets the audience right in there where the action is. Even intermissions can be an event, since the "lobby" has not been segregated from the rest of the space, but rather allowed to merge into it and simply be denoted by carpeting, lower ceiling, and the presence of posters, restroom doors, refreshment dispensaries, and the like. An art gallery for the display of black art, which doubles as a meeting room, fronts on the Seventh Avenue side. Offices are up in the old projection room, dressing rooms are tucked in behind the main playing area, and lighting and electronic effects are managed from a control tower that effectively blocks the performance area from the entrance.

All efforts at the New Lafayette Theater were directed toward providing a space that would say *involvement with dramatic experience*, and aesthetic fripperies like crystal chandeliers from Austria, supersized Nadelmans to put down the audience, or sumptuous red velour upholstery, were rightly boycotted. The result is a theater that has the capability to impel viewers into the center of the dramatic event. That is something with relevance for the way events happen today, and is something completely lacking in the marmoreal dowagers downtown in Lincoln Center.

Office Interiors:

# DESIGNING WITH LIGHT



The kinetic electric environment we presented in last October's discussion of lighting (pp. 128-202, OCTOBER 1968 P/A) is not confined to individual residences, to special exhibits and show-places, or to the work of any particular group of designers. As we pointed out then, any number of factors have been responsible for bringing artificial light into the forefront of interior design, and these factors are as hard at work in the world of big business as they are in smaller, more personal environments. The only difference seems to be that, because of its sheer size and complexity, the business world moves more slowly, making the process one of evolution, rather than revolution.

What is this process? Partly, it is the explicit rec-

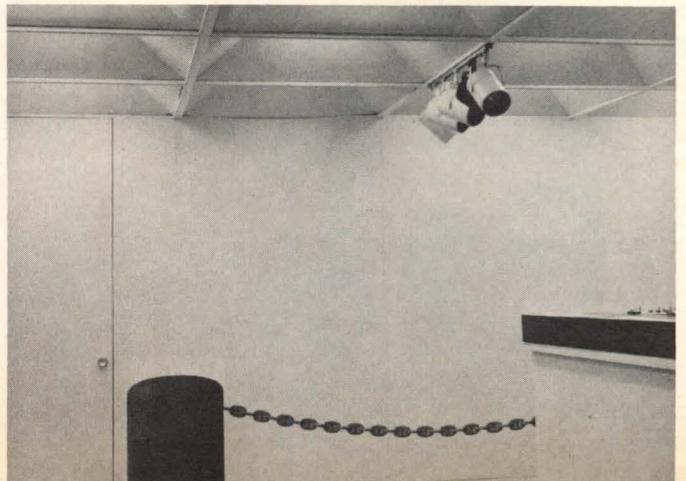
ognition, long overdue, of the importance of the synthetic office environment, in which millions of workers, from file clerk to company president, spend most of their waking hours. There is also the realization that light, next to air, is probably the most important single element of any environment. The building and controlling of an environment is what today's design is all about; no wonder, then, that designers in all fields are eager to experiment with light. But more than that, the process that is bringing light to the fore as a design medium is one of changing aesthetics accompanied fortuitously by corroborating psychological and technical research.

Aesthetically, the trend is a reaction to the bare simplicity of the International Style, to the Miesian



box. Or, in more positive terms, it is a tendency (observable early in the 60's) toward the romantic, even the fanciful, or (a slightly later development) the complex, the varied. Marvin Affrime, director of the Space Design Group, a New York firm with corporate clients large and small, summarizes the trend: "People are bored with the big business environment — big, bored, and overlighted as it is. It has become quite insensitive. We are going through a romantic period; in architecture, we have a newly discovered freedom of shape, form, materials. It's a reaction to the simplicity and sterility of modern industrial and commercial design." The results of this reaction are an emphasis on freedom — freedom such as that exemplified by Supergraphics; that is,

"The future of office lighting is in coffered ceilings," declares John Fuchs of Syska & Hennessey's Lighting Laboratory, "because we're tired of flat, dull ceilings." But, he continues, "That's not merely an aesthetic judgment. The reason why coffered ceilings are preferable is that they prevent you from seeing the brightness; you see only the light." A coffered ceiling, such as this model of the new U.S. Steel Building in New York (above) molds the ceiling somewhat, making it a part of the rest of the space. Below is a mock-up of a lobby with coffered ceiling.



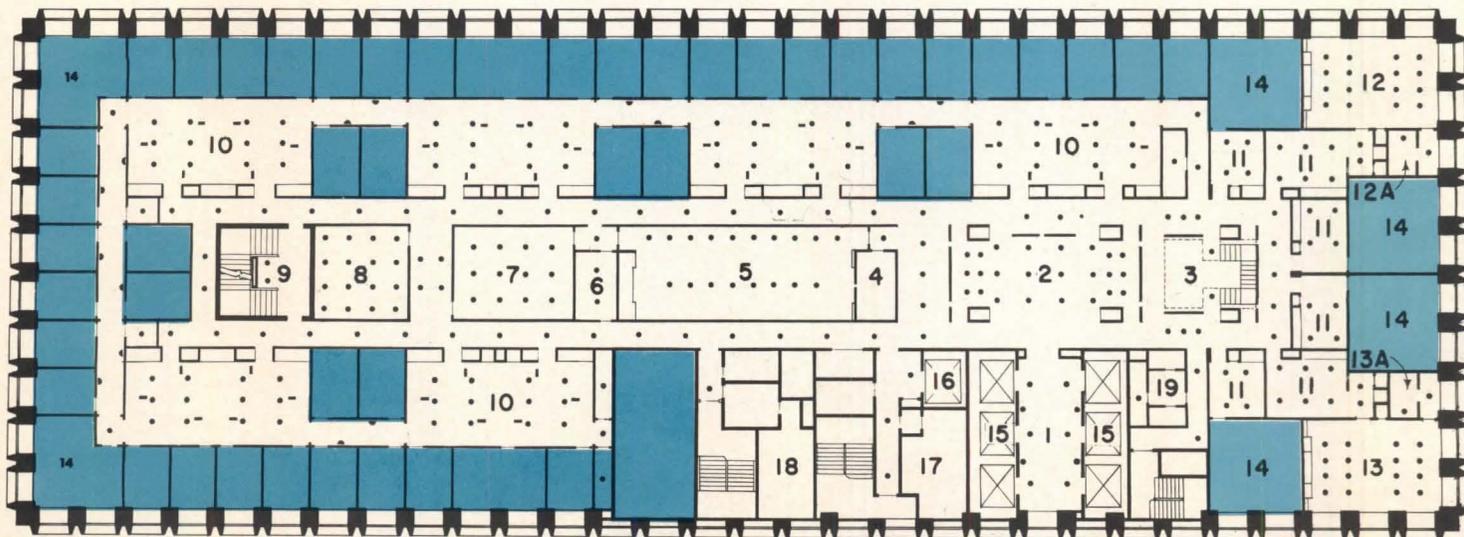
the freedom to destroy the rigidity of form in order to gain impact, excitement. Even if we would not care to see the rectilinear proportions of, say, the Seagram Building thrown out of joint by a patina of Supergraphics, we can thank this kind of development, says Affrime, for a willingness on the part of corporate clients to entrust their designers with a good deal more freedom than they have had in the past. "Clients respond to the excitement without necessarily understanding it," Affrime believes.

All this discussion of freedom and romanticism boils down to a greater emphasis on the individual worker and the quality of his working space. In this context, light can be far more than a functional necessity. It becomes a definer of working space (more flexible than partitions and highly suitable to Bürolandschaft designs), an enhancer of architecture, a creator of mood or atmospheres. "Light can make dull spaces look interesting," asserts William Warfel of Bolt, Beranek & Newman's Lighting Division.

Personalized lighting effects in office spaces are also the result of research supported and recognized by both commercial clients and designers. This research has forced clients to recognize the importance of giving to even the lowliest worker the best obtainable quality in his surroundings. "Therefore,"

notes John King, who is vice-president in charge of the New York office of ISD Incorporated, "our special lighting jobs aren't always for top executives, the upper echelons of the company. For example, we've done an employee cafeteria with dimmers, so that the artificial lighting can be adjusted to the kind of daylight coming in."

With the goal of lighting shifting from that of obtaining the highest number of footcandles at a maximum predetermined cost to that of providing the best quality *and* quantity of light for the tasks being performed, another kind of research takes its place in support of the changing aesthetic. Whereas, a short time ago, all concerned were agreed that too much "glare" was undesirable, today there is wide concern about the definition of glare, and of all the other factors that can affect lighting quality. Researchers at the Institute for Research in Vision at Ohio State University, the Illuminating Engineering Society, Southern Methodist University, the University of Rochester, and the New York State University Construction Fund are developing criteria for featuring the *quality* of light. Presently, although several means of measuring quality factors have been developed, they are not widely known, and standards have not been adopted within the industry.



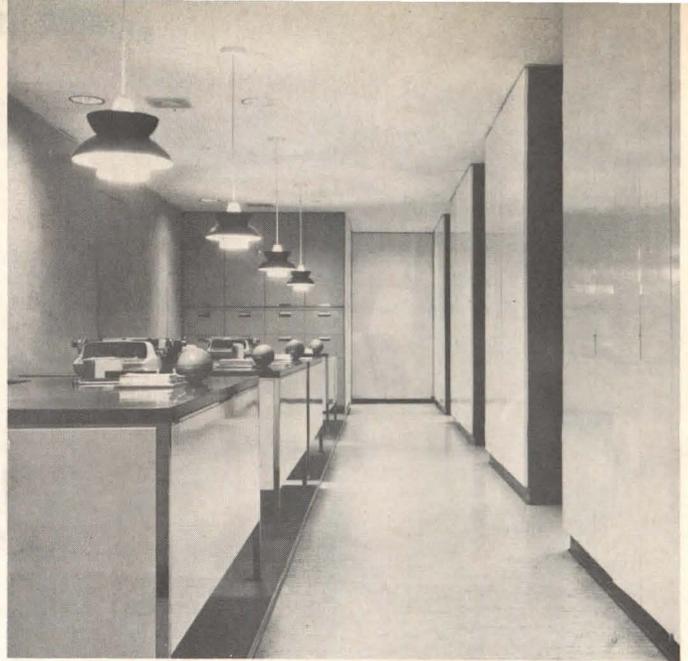
For one large client, the Space Design Group is designing nine floors of offices using no fluorescent lighting at all (plan, right). Investigation of workers' present office space showed that, although ceiling light is plentiful, they prefer to use only desk lamps, ignoring the main source of light in the building and often working with insufficient light. In the new offices, the designers decided to give the workers the softer, more

romantic effect they desired without sacrificing good lighting. Floor and table lamps were placed where they were needed, and people were put in control of them — given the ability to influence the mood and intensity of light in their own space. The designers had to obtain permission from the building owners to eliminate ceiling lighting from their design; nine floors at the top of the building deviate from the visual pattern of the exterior.

- |                                     |                            |
|-------------------------------------|----------------------------|
| (1) Elevator lobby                  | (12a) Private washroom     |
| (2) Reception                       | (13) Chairman of the board |
| (3) Inner reception                 | (13a) Private washroom     |
| (4) Projection                      | (14) Director's office     |
| (5) Board room                      | (15) Passenger elevator    |
| (6) Pantry                          | (16) Service elevator      |
| (7) Lounge                          | (17) Men                   |
| (8) Conference room                 |                            |
| (9) Interconnecting tenant stairway |                            |
| (10) Secretaries                    |                            |

Private offices (shaded areas) will be illuminated by table and floor lamps only. Secretarial areas (10) are illuminated by both recessed incandescent fixtures and custom-designed hanging fixtures over each typing pedestal. Wall brackets will be used in the elevator lobby and in the corridors which connect secre-

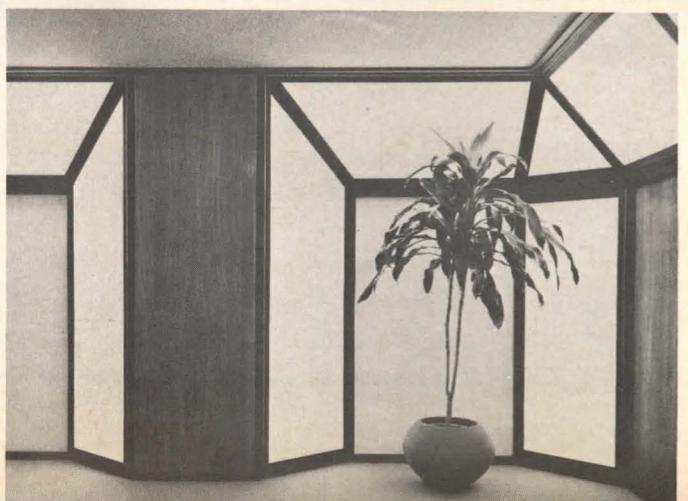
To architects and designers, designing with light is a challenge; it represents a whole new medium to be explored and developed. It challenges not only their creativity, but also their willingness to learn. Lighting is, after all, a highly technical field, one that must be thoroughly understood if the designer is to control it and its function in the total environment. "Is lighting going to become an undisciplined medium?" wonders lighting designer Abe Feder, who, ironically, has for years been the chief advocate of the unrecognized potential of lighting design. Today, he is worried about the effects of experiments by overenthusiastic but undereducated designers. "Now that we recognize light as a separate and special medium, how are we going to discipline it, make it work for us?" he asks. According to Feder, the need is for greater technical and visual training among architects. "Kids tend to see special lighting effects in terms of a light show, without paying attention to how these effects are achieved, or how they can be put to use," he feels. If the architect is to remain in control of the environment he creates, he will need an education that will enable him to understand the visual and technical requirements of lighting and give him the vocabulary to communicate with those who specialize in the field.



"The desire for individuality, for variety in lighting is fine in an office, but what do you do with a public space?" asks Marvin Affrime. He answers his own question with this corridor (above) in the offices of Jack Tinker & Partners, New York. Bounded by offices on both sides, the corridor has wall brackets for lighting fixtures (not shown). Clerks and secretaries have alcoves off the corridor, lighted by incandescent lamps suspended over each desk and supplemented by recessed ceiling lamps. Light is beamed onto floor and ceiling to mold the space and soften its angularity. "It's a bit unexpected in an office, and all the more welcome," says Affrime. "Not only is each person in his own piece of light, but something in the space itself distinguishes working spaces much more subtly than a wall."



Artificial lighting is basic to the design of a totally synthetic environment — here, an underground room (above and right). For the Bank of Texas in downtown Houston, Burdette Keeland, Jr. & Associates created a basement board room that seems to be soaked in sunlight. To do this, they came up with what they think may be the world's largest lighting fixture: four fluorescent tubes running around the room's perimeter and down the columns. Above a height of 6 ft, walls slope to accommodate mechanical ducts and wiring, and the lighting fixture's acrylic covering is accordingly coped to meet the 8 ft ceiling. Against the contrasting solidity of oak detailing, airy colors and artificial luminescence seem to open the room beyond its actual dimensions.



# GRAPHIC COMMENTARY



FROM TIME TO TIME, WE FIND THAT ONE PICTURE IS WORTH A THOUSAND WORDS — or even a thousand crumpled fenders. For this reason, we are instituting this environmental series, which will be tucked away somewhere in these pages. Readers who are appropriately stimulated are urged to send the Editor their own graphic, ecologic comments.



## *SPECIFY*

safety, durability...and beauty

# **FLAMESHIELD**<sup>®</sup>

CERAMIC-LIKE WALL COATING

- Incombustible glazed wall coating with the beauty of ceramic tile . . . at a fraction of its cost.
- U.L. rated. **Smoke developed: Zero.** Won't contribute smoke . . . the number one cause of death in fires.
- Meets Class "A" flame-spread requirements established by many code authorities.
- Tough, seamless surface resists abrasion, scuffing and staining . . . provides virtually maintenance-free service.
- Available in a wide range of decorative colors.

For information on FLAME SHIELD ceramic-like wall coating and FLAME SHIELD fire-retardant intumescent coatings, technical assistance and names of authorized distributors, write to our Architectural Division.



**M. A. BRUDER & SONS, Incorporated**  
52nd & Grays Avenue  
Philadelphia, Pa. 19143

On Readers' Service Card, Circle No. 331

Aston Vo.-Tch. School, Aston, Pa./H. A. Kuljian & Company, Engineers and Architects

# Concrete is good for you



## Cars up. Costs down.



**Construction costs: rising. Land costs: rising.  
Real estate taxes: rising. The inevitable answer: roof deck parking.**

The logic of this simple concept is overpowering.  
Less land is needed. Therefore land costs are cut.

The need to build large parking areas is eliminated.

Therefore total construction costs are cut.

There is less improved land. Therefore taxes are cut.

There are other advantages as well.

Greater employee and customer convenience.

Lower fire insurance rates. A stronger, sturdier building  
in which concrete is the basic material.

You see, concrete is good for you.

For complete information on the roof parking concept,  
write us. Portland Cement Association, Dept. A7-25,

# Protecting Architectural Concrete

Clear coatings can preserve the appearance of exposed concrete, but architects must choose carefully from among the available products. Rosen is Chief Specifications Writer for Skidmore, Owings & Merrill, New York City.

The increasing use of concrete for exterior facades has exposed some problem areas that were not too apparent to designers and specifiers when they first started using this material. The areas of concern include the following: the temporary mottling and darkening of the surface after a rainstorm; the accretion of dirt and soot on exposed aggregate surfaces; the change in color of the matrix due to attack by atmospheric pollutants; and the etching of gray and bronze glass when alkalis leach from the concrete onto the glass.

To overcome these problems, specifiers have been specifying the application of the clear coatings to preserve the initial appearance of exposed concrete. Generally, the preferred coating should be clear, water repellent, and a breathing type. They function primarily as follows: by reducing water penetration, they minimize mottling and darkening due to rainstorms; by reducing water penetration, free alkali in concrete is not leached out to the same extent as on uncoated concrete; they tend to make the surface self-cleaning, reducing the accumulation of dirt; they tend to reduce atmospheric attack on the cement matrix; and the breathing qualities provide for uniform weathering.

Many coating types have been marketed by manufacturers as a panacea for the problems outlined above. However, they are not without their own contributory problems. Some have a relatively short life span. Some actually attract soot. Some develop a glossy ap-

pearance that changes the architectural effect. Some darken the exposed aggregate and the cement matrix considerably, thereby altering the architectural appearance.

The ideal coating should be clear, nondiscoloring, long-lasting, and should not make any discernible change in the color of the aggregate or in that of the matrix either.

The Portland Cement Association investigated a wide variety of clear coatings, and published its findings in Bulletin D137, 1968, "Clear Coatings for Exposed Architectural Concrete." Sixty products were investigated to determine their effectiveness in protecting exposed aggregate concrete and smooth concrete surfaces against the elements. These coatings consisted of acrylics, polyurethanes, polyesters, silicones, waxes, epoxies, styrenes, and in some products, mixtures of these chemical formulations.

In the accelerated tests, the PCA found that by and large, the coatings based on a methyl methacrylate formulation provided better protection on exposed aggregate surfaces than other types of coatings. The laboratory test results were confirmed by the outdoor weathering exposure. Similarly, on smooth concrete surfaces, methyl methacrylate coatings with a higher solids content gave better protection. Generally, the polyurethanes, polyesters, and epoxies tended to cause a glossy appearance, and created a yellowing or darkening effect.

The results of the PCA test program put architects in a better po-

sition to use architectural concrete as a design medium, since specifiers now have a choice of several materials that will protect exposed concrete from the elements. Also, manufacturers can improve their products since they have a test program that can be applied for testing their own products.

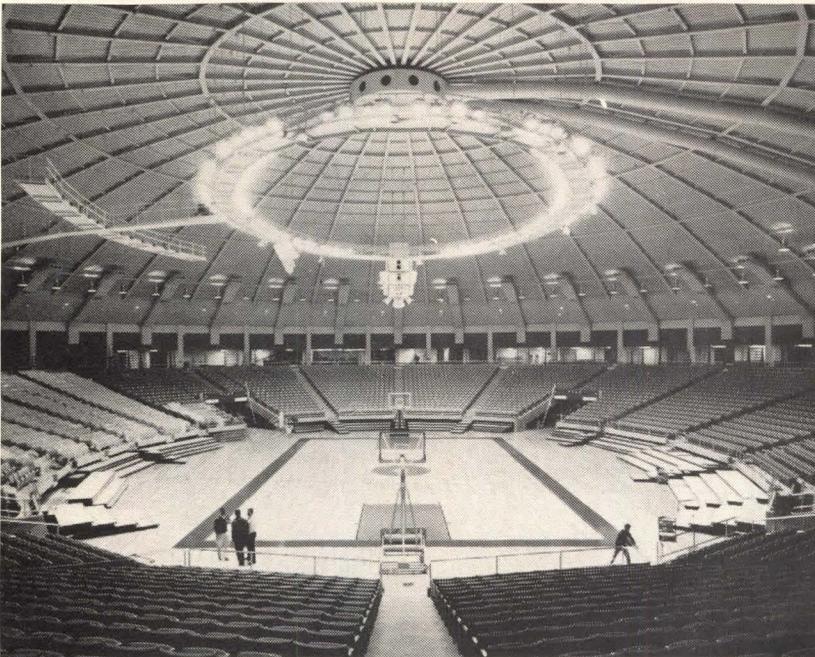
In a nonindustrial area with little or no air pollution, a coating may not be required. The only consideration in a suburban environment would be a designer's decision as to whether temporary darkening due to rain was sufficient reason to require the application of a proven clear, water-repellent coating to prevent it. In this same non-industrial environment, a specifier might elect to specify a water-repellent coating if gray or bronze glass is used where water running off the face of the concrete might wash onto the glass surface. A water-repellent coating will reduce water penetration into concrete, thereby minimizing the possibility of dissolving free alkali and leaching it onto the glass surfaces. The leaching will result in noticeable etching of the glass.

In industrial areas, the use of exposed aggregate concrete is questionable because the surface is sure to entrap industrial pollutants. In these climates, smooth concrete surfaces or very lightly sand-blasted surfaces are preferred, provided they are protected with a proven clear, water-repellent coating.

Copies of the PCA Bulletin D137 may be obtained from any local PCA district office.



ELLERBE ARCHITECTS, *architect* • SLUTSKY PLUMBING & HEATING CO., *plumbing contractor* • NATIONAL MILL SUPPLY, INC., *plumbing wholesaler*  
 AMERICAN STANDARD, *fixture manufacturer*



## Notre Dame's Athletic and Convocation Center

*Twin-domed complex  
houses sports, trade shows,  
conventions,  
simultaneously,  
—rain or shine*

■ Weather's no problem in South Bend. Not at Notre Dame's fabulous new sports arena and convention center which can house as many as 15 activities at one time beneath its cavernous 10.5 acre roof.

Developed through cooperation of the University and the South Bend business community, this fantastic eight-and-a-half-million-dollar facility provides complete physical education facilities, as well as a trade show and convention center of unique and comprehensive design.

A big time hockey and year 'round ice skating rink, a ten lap per mile special composition running track, a gigantic basketball arena, a baseball infield, four gymnasiums, classrooms, meeting rooms and offices—embrace activities to keep the center open from 7 A.M. to 11 P.M.

Buildings at Notre Dame are built with minimum maintenance in mind—one very important reason why the flush valves in this beautiful new complex are Sloan. Sloan Quiet-Flush II Flush Valves are famous for quality, dependability, quietness and low maintenance costs. Your building, too, can have these same extra advantages which are Sloan. Just be sure you specify and insist on Sloan Quiet-Flush II Flush Valves. Most people do.



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

## Error and Omission Insurance

**If a legal claim is asserted against an architect for reason of faulty design, does the architect's "error and omission" insurance cover errors and omissions that occurred prior to the effective date of the insurance policy?**

Most architects and engineers would agree that "errors and omissions" insurance is a business necessity. However, as claims have increased, the expense of such insurance has escalated and the area of available insurance coverage has narrowed. The leading insurance carrier in the architectural malpractice field originally provided coverage for errors and omissions that occurred prior to the date when the insurance was obtained. Later, this company discontinued such coverage in order to reduce its area of exposure. Accompanying this reduction of available coverage is a tendency on the part of the insurance carriers to narrowly interpret the scope of their policies. Illustrating the foregoing is the case of *Lapierre, Litchfield & Partners v. Continental Casualty Company*, 297 N.Y.S. 2d. 976.

The architects involved in this case had designed a school building that was sufficiently completed by September 1958 to permit its use by the students. However, at that time there were many meetings, letters of complaint, and expressions of dissatisfaction by the owner in connection with various items in the building and with the efforts of the architects and engineers to correct these items. The three main complaints were poor ventilation, causing classrooms to be either too hot or too cold, inefficient operations of the boiler and incinerator, and inadequate lighting in the parking areas. The architects did not admit to any errors or omissions, contending that the difficulties encountered were not due to faulty design.

It was not until 1962 that the owner made a definite claim

against the architects for errors and omissions and demanded arbitration. The architects turned to their insurance carrier to defend the claim under the insurance policy they had obtained in September 1959, about one year after the building had been opened. This policy insured the plaintiff architects against claims caused by errors, omissions, or acts in the performance of their professional services. Under the policy, the insurance company undertook "to defend any suit, or Arbitration Proceedings against the insured alleging such error, omission or act and seeking damages—even if such suit is groundless, false or fraudulent." The policy applied only to errors or omissions that occurred during the policy period or that occurred prior to the effective date of the policy, provided that the architects had no "knowledge of any such prior errors, or acts at the effective date of the policy."

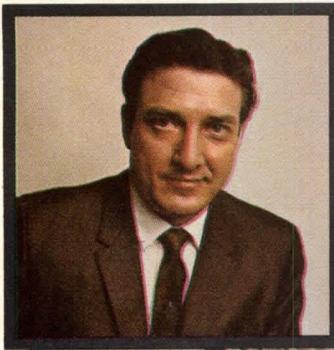
The insurance company disclaimed liability and refused to defend the claim, contending that the alleged errors and omissions occurred prior to the effective date of the insurance policy, and that the architects had knowledge of such errors and omissions prior to the time they had secured the policy. It was the position of the insurance company that, since for approximately one year prior to the securing of the insurance, the owner and architects had been involved in discussions of various complaints and dissatisfactions of the owner, the architects were chargeable with knowledge of the alleged errors and omissions, thereby precluding coverage under the policy. As a result, the architects were compelled to retain

their own counsel, who successfully defended the claims asserted against them. Subsequently, the architects instituted suit against the insurance company to recover the legal fees and disbursements they spent in their successful defense of the claim.

The trial court awarded judgment to the plaintiff architects, holding that knowledge by the architects of possible claims did not constitute knowledge that they had committed errors, omissions, or acts within the exclusion provisions of the policy. The Court stated:

"The policy relieves the insurer from coverage on work performed by the architect prior to the inception of the policy where claim is filed thereafter only if there was knowledge of errors, omissions, or acts by the architect, prior to the inception date of the policy. We are faced, then, with a situation where the plaintiff knew that its client was dissatisfied and that there were some problems that still needed attention. However, (to use the language of the policy) did the plaintiff have 'knowledge of . . . (a) prior error, omission or act'? Ordinarily, the question of whether a party to an action had or had not knowledge is a question of fact. . . . In the case at bar, however, the record is devoid of any evidence upon which the defendant could base a claim that plaintiff had the 'knowledge' contemplated by the policy. It must also be borne in mind that we are not here dealing with the question of whether or not there actually was an 'error, omission or act.' That would bear on the insurer's duty to pay—a matter quite apart from its duty to defend which is here at issue. . . . There was no evidence that the complaints received by the architect were such as to charge him with knowledge that they would ripen into a claim or that the insured had committed an 'error, omission or act' contemplated by the policy. The policy in this case does not say knowledge of a claim or possible claim; it does not say knowledge of a complaint or of client's dissatisfaction."

This case is presently on appeal, and we will make a further report on it when the appeal has been determined.



# The Commander.

He commands carpeting from Sequoyah.



His name: Dan Tipton, Administrator of the South Community Hospital in Oklahoma City. His assignment: Selecting 9,000 yards of a unique, functional, and performing carpet. His choice: Carpeting of A.C.E.<sup>®</sup> (Allied Chemical Engineered) nylon fiber from Sequoyah Carpet Mills, for high durability, low maintenance, and exceptional resistance to flame-spreading which qualifies it under the Hill-Burton Act. His pattern: Marathon in rich gold tweed for the patients' rooms and deep blue-green tweed for the halls. Allied Chemical backs carpeting carrying its A.C.E. label with a solid three-year guarantee. Become a Commander. Write Allied Chemical Corp., Fibers Div., One Times Sq., N.Y., N.Y. 10036.

**SEQUOYAH**

*Wear Guarantee*

This carpet is guaranteed by the Fibers Division of Allied Chemical. If it is properly installed and maintained and the surface pile in any given area wears more than 10% within 3 years, it will be replaced at our expense. The guarantee does not cover tears, burns, pills, cuts or damage due to improper cleaning agents or methods.

ALLIED CHEMICAL CORPORATION  
NEW YORK, N.Y. 10036

# BOOK REVIEWS / Commendable Undertaking

BY GEORGE L. WRENN, III

THE GOTHIC REVIVAL AND AMERICAN CHURCH ARCHITECTURE: AN EPISODE IN TASTE, 1840-1856. By Phoebe B. Stanton. *The Johns Hopkins Press, Baltimore, Maryland, 1968. 350 pp., \$12.95. The reviewer is the Director of The Society for the Preservation of New England Antiquities.*

The Johns Hopkins Press is to be commended for undertaking to provide some much-needed illumination for a still somewhat neglected subject through its new series entitled "The Johns Hopkins Studies in Nineteenth-Century Architecture." This book is the first of the series and it gets the whole project off to an excellent start. Certainly it is no easy task to trace the sources, documentary or architectural, stylistic or spiritual, of any of the various revivals that left their mark on the American scene in the 19th Century, and the Gothic Revival is no exception.

It is Professor Stanton's contention that the Gothic Revival of the period with which she is dealing had some influence on the development of modern architecture in a way that the preceding classic revival did not. This influence took place, one might say, both by action and by reaction. Inherent in late medieval Gothic architecture, and therefore inherent in the closely studied revival of that style, were some ideas such as the honest and expressive use of materials and the expression of interior functions in exterior design that were introduced to and became widely known in America at the time. These ideas were at first developed within the revival itself, which accounted for the construction of the many finely designed churches of the period, a good number of which remain today. In a short time, however, a reaction set in, and the ideas introduced to the consciousness of mid-19th-Century American architects through the medium of the Gothic

Revival and of the Ecclesiological Societies that sponsored it became freed from their narrow background and applied in new ways as the American architect searched for the proper architectural expression of different functions and developed the use of different materials. For some architects, the Gothic Revival was a dead end; for others, it became a stepping-stone that contributed something to their knowledge and approach to architecture, but which they left behind as the search for an ideal and a native architecture was pursued.

In some measure, the Ecclesiologists lost what influence they had gained by being so wrapped up in one idea and, for the most part, so inflexible about its application that they could not help but alienate people. Perhaps to an increasing number of their contemporaries, their strictures and intergroup quarrels must have seemed as irrelevant as they do to us now.

One of the many interesting points made by Professor Stanton relates to the connection between the medieval idea of the architect as it was introduced through the Gothic Revival and the foundation of the AIA in the late 1850's. Through the writings of the Ecclesiologists, the medieval architect became known as the central figure in the creation of the magnificent cathedrals of the time, a person of responsibility and obligation. The American architects of the mid-19th-Century, who were just achieving professional status, had but to make a comparison to see what a disadvantage they were at. One of the obvious ways to improve their status was to organize, which, in 1857, they proceeded to do. All the credit for this, of course, cannot be given to the Gothic revival.

I wonder, however, if it cannot be given more credit in other ways than is implied in Professor Stanton's choice for a subtitle, "An Episode in Taste, 1840-1856." The implication of the words "episode in taste" is of something of little

or no lasting consequence, of something of fashion that came and went and was soon forgotten. In part, the Gothic Revival was just that, but in part it was more, as Professor Stanton is at some pains to point out.

A further point concerning the subtitle is the use of the dates, 1840-1856. These are so specific that they clearly imply something started in a given year and ended in a given year, which was not the case. To pick out a certain period as more important than another period, and to give full credit to the Gothic Revival for its importance, the subtitle might read "Its Flowering in the Mid-19th-Century and Its Subsequent Influence."

Finally, the book itself deserves comment. It is a handsome production with an attractive dust jacket illustrating a painting by Robert Weir. The illustrations in the book itself are well spaced and easy to refer to as one reads along and they make their points well, though, unfortunately, the quality of the reproductions is not high. Despite this drawback, however, Professor Stanton has set a high standard in this first book of the new series on 19th-Century architecture. It is to be hoped that the succeeding volumes will measure up to it.

---

## Preserved Within A Book

BY H. ALLEN BROOKS

THE IMPERIAL HOTEL: FRANK LLOYD WRIGHT AND THE ARCHITECTURE OF UNITY. By Cary James. *Charles E. Tuttle Company, Rutland, Vermont, 1968. 150 pp., illust., \$7.50. The reviewer is Associate Professor of the History of Art at the University of Toronto, and a former president of the Society of Architectural Historians.*

Cary James presents us with a splendid photographic essay on  
*(Continued on page 156)*



## Robertshaw's new miniature thermostat—discreet elegance for distinctive buildings.



(Actual Size)

Robertshaw's new miniature pneumatic room temperature controller is a dramatic innovation in the art of climate control. The handsome brushed satin case is small enough to fit perfectly on a 2" partition divider. Using ultrasonic manufacturing techniques, the logic module is encapsulated in a tiny 2" x 2" package—smallest in the industry but big in reliability and performance. It's ready now, for your commercial, industrial or institutional building.

# Robertshaw



ROBERTSHAW CONTROLS COMPANY  
Executive Offices, Richmond, Virginia

Complete automatic control systems engineered and installed for the air-conditioning, heating and ventilating of office, industrial and apartment buildings, schools, hospitals, hotels and stores.

On Readers' Service Card, Circle No. 399

**Rule: All windows must be one story high.**

It's very simple: Just pick out a standard window design, and multiply it by several hundred.

Presto! You've designed a building that avoids all verbal controversy. And any visual excitement.

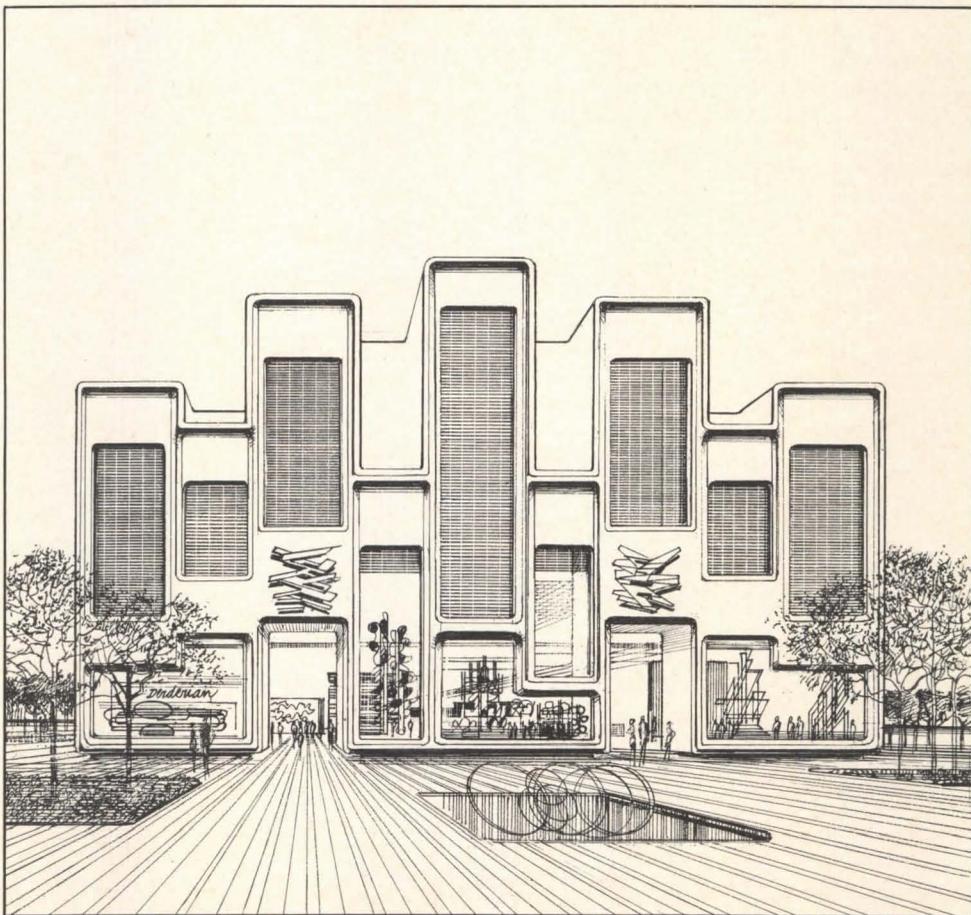
Well, if that's what you consider architecture, go back to your cookie cutter. We want to talk to men who can send their imaginations soaring. And to those dreamers, we say...

Create your glass-enclosed minarets and sky-high lobbies. We can screen them for you, with the most efficient, light-and-privacy-controlling window covering ever known. And the most beautiful blinds ever seen.

Cascade those blinds, several

stories at a time if you like. We'll raise them for you when they get too heavy. With motors, if necessary.

Go on. Have your dreams.  
We'll help make them come true.



**Levolor Blinds. For architects  
who break the rules.**

ARCHITECT ARA DERDERIAN USED MOTORIZED CONVENTIONAL LEVOLOR BLINDS IN HIS VISUALLY EXCITING COMMUNITY ARTS CENTER. JUST IMAGINE WHAT YOU CAN DO. NOW THAT YOU KNOW YOU DON'T HAVE TO WORRY ABOUT THE WINDOWS. □ TELL US ABOUT IT, BEFORE SOMEONE WITH LESS VISION TELLS YOU IT CAN'T BE DONE. □ LEVOLOR LORENTZEN, INC., 720 MONROE STREET, HOBOKEN, NEW JERSEY 07030

On Readers' Service Card, Circle No. 355

# HERITAGE HOUSE

## When steel goes up... costs come down.

Here is a lesson in building low-cost housing. Representatives of the St. Louis Teachers' Association, St. Louis Suburban Teachers' Association and the Missouri State Teachers' Association joined their efforts to build a retirement center and town club for teachers. The architects and structural engineers determined through design analysis that a steel frame would be quicker and less costly to erect, and offer more flexibility for the layout of utilities than any other structural material. The structural engineer analyzed eight different schemes, four in steel and four in concrete, before settling upon the final selection of a 4" concrete slab composite with a steel floor deck and steel beam. Cost was of primary consideration. The composite slab and beam construction was responsible for a considerable savings in steel tonnage.

### STRUCTURAL ARRANGEMENT

The building utilizes 14" columns in ASTM A441 steel (USS TRI-TEN brand). The floor beams are 10" and 12" WF&B sections. Wind bracing is provided through K bracing from the second to nineteenth floor. Architectural considerations dictated the use of moment connections below the second floor. The composite design permitted a reduction in the size of the steel beams.

### STRUCTURAL REPORT

This is just one of the many ways to keep costs down with steel. Used imaginatively, steel usually wins out in the first cost compared with other building materials. In the long run, there's no question. Only steel-framed buildings can be altered economically when it comes time for major remodeling or modernizing.

If you're planning a new building, take a lesson from these teachers. And do your homework: get a copy of our "Structural Report" on this building by contacting a USS Construction Marketing Representative through the nearest USS sales office. Or write U. S. Steel, Box 86 (USS 6225), Pittsburgh, Pa. 15230. USS and TRI-TEN are registered trademarks.



Architects: Pearce and Pearce, Inc., St. Louis, Mo. Structural Engineers: Bergmeier & Siebold, Inc., St. Louis, Mo. General Contractor: Kloster Co., Inc., St. Louis, Mo. Structural Contractor: Mississippi Valley Structural Steel Company, St. Louis, Mo. Steel Erector: Ben Hur Construction Co., St. Louis, Mo.



 **United States Steel**



Los Robles Hospital, Designed by C. H. Jones, A.I.A.

**Franciscan Terra Floor—  
A contemporary ceramic tile for contemporary designs**

*The new family of Franciscan ceramic tile products which has emerged from the modern movement in the design studios of INTERPACE is typified by the "Flashed Walnut" color of Franciscan Terra Floor. This glazed ceramic tile in a nominal 12" x 12" modular size is distinguished by rich earthy textures and colors.*

*Striking, unconventional floor beauty is only one of the advantages offered by Franciscan Terra Floor. Other characteristics which add value to any building are its rugged durability and minimum maintenance. It can be used in a wide variety of exterior and interior applications in all types of climate. Most important—Franciscan Terra Floor is competitive in price with many less desirable materials.*

*Join the modern movement in tile by specifying Franciscan Terra Floor on your next project.*

**Franciscan Terra Floor**  **INTERPACE**®

2901 Los Feliz Boulevard, Los Angeles, California  
1275 Harrison Street, San Francisco, California  
945 Elliott Avenue West, Seattle, Washington  
260 Cherry Hill Road, Parsippany, New Jersey

Obtain complete information from Sweet's Catalog

On Readers' Service Card, Circle No. 403



Mums in Olive



Pebble in Brown



Floral in Antique White

(Continued from page 150)

the Imperial Hotel, now demolished, a building that its architect, Frank Lloyd Wright, perhaps cherished more than any other. It was among his largest commissions, and the only major work he completed outside the U.S. Perhaps most important to him, it withstood the devastating earthquake of 1923, and thereby vindicated Wright's claim to engineering, as well as architectural, prowess.

The author's photographs introduce the building in 63 full-page plates, mostly details, offered in a handsomely bound and

presented book at a moderate cost. A short, spirited introduction by Cary James describes the building, emphasizing the unity of the design and how it fulfills the best ideals of Wright's architecture. Then follow 24 pages of quotations extracted from Wright's *An Autobiography*. In the first section, the architect discusses his principles of organic architecture; in the latter section, he recounts the exciting episode of building the Imperial Hotel and the anxious moment of its supreme test by earthquake. The plates follow, interspersed with a few short quotes, and at the end

are gathered six fold-out pages with an elevation, section, and four floor plans of the hotel.

*The Imperial Hotel*, therefore, is intended as an appreciation book, dealing with a timely and topical subject. It brings together and preserves numerous detailed photographs — and this is its real contribution. The main text can be as easily read in *An Autobiography* (pp. 138-49, 213-23). All of Wright's buildings must be physically experienced to be appreciated, and although photographs provide only a second-hand form of appreciation, the author has tried to convey some sense of the architect's spatial complexities, and, more successfully, a feeling for Wright's sensitivity to detail. Indeed, it is the details that seem the most rewarding. Unfortunately, because of the surrounding buildings, panoramic views of the hotel are lacking in the present book.

The limited objectives of this book are fulfilled, yet one regrets that the objectives were so limited; as a picture book, it is a document, but it could have been much more. Drawings, diagrams, and old photos showing the early designs for the hotel would have been enriching. An analysis of the design and its place in Wright's *oeuvre* would have been equally rewarding. Historical background is almost entirely lacking, and one of the few facts given is incorrect. The design was not begun in 1915, as the author states; Wright exhibited plans, sections, and elevations of the Imperial Hotel at the Chicago Architectural Club's annual exhibition in April 1914, and the first design is probably as early as 1913. Critical and sociological questions might also have been raised: how was the building viewed by its users? The author says, "It is our failure of understanding which has doomed it," a statement that would be fascinating to document with quotes from guests and architectural critics.

In sum, therefore, *The Imperial Hotel* preserves a visual image of this now-demolished building, an image that is both sensitive and sympathetic. For this we are most grateful. Further than this, unfortunately, the author failed to venture.

(Continued on page 174)

# THE UNITED NATIONS

**...where ZERO weather stripping  
has earned international acceptance.**

Weather stripping, sound proofing, light proofing, thresholds . . .

ZERO's line is complete.

And everything is top-quality.

That's why it was specified for the U.N.

Deliveries?

ZERO's reputation for dependability is the envy of the industry.

Capping all is this fact:

ZERO backs its products with 45 years of solving customers' problems.

ZERO products are used in schools, hospitals, airline terminals, apartment houses, shopping centers—practically everywhere.

Write for the 1969 ZERO Catalog, with its 177 full-size drawings; you'll quickly see why ZERO has earned international acceptance.

Our 45th year of service to architects.

**Zero Weather Stripping Co., Inc.**

415 CONCORD AVE., BRONX, NEW YORK 10455, (212) LUDLOW 5-3230

On Readers' Service Card, Circle No. 391



# An immortal hinge?

(Stanley comes close with LifeSpan™)

A totally new concept in hinge design and bearing construction so extraordinary the LifeSpan hinge\* is guaranteed for the life of the building.

Slimmest barrel in the industry, three knuckles, with only two horizontal lines and flush tips and pins — the handsomest hinge made!

Stainless steel rust-resistant pin — through-hardened and precision polished.

No ball bearings! New LifeSpan™ Bearing consists of a stainless steel bearing part, precision flat and super finished — against Stanite, a new self-lubricating bearing material that requires no oil, no grease, no maintenance.

Lateral load is taken between stainless steel pin and surface of Stanite bore.

Vertical load is taken between stainless steel and Stanite thrust surfaces.

Write for LifeSpan brochure H-463 to Stanley Hardware, Division of The Stanley Works, New Britain, Connecticut 06050

**STANLEY**

helps you do things right

**If you can't equal it,**



# better specify it.

An architect's best friend is a window wall system equal to this one.

Any good window wall system saves time and money, yours and your client's.

## This one does more.

This one has the full-length pressure equalization slot, **and** a full-length patented flapper valve. No siphoning, no draft, no whistle. HS-A2-HP. Any kind of weather, high-rise to any height.

This one is beautiful. Uniform sightlines, no fins, concealed weatherstripping, symmetrical both inside and outside, anodized as you want it. An architectural pleasure.

This one is stronger. Period.

This one costs less, if you can find a par quality.

This one is built to your design, installs fast and easy under all conditions, has every feature you and your client need or want. Allows individual air conditioning without extra reinforcing.

## Is this really a "no-equal" product?

Judge for yourself. The check list is on this page. And don't forget the cost.

We only know that Ador A-70 is invariably chosen whenever it is in competition for any high-performance architectural window or window wall design. We haven't seen anything to equal it yet.

Next time, specify Ador A-70 and find yourself a new standard in time and money savers.

# Ador A-70

*windows/window-wall systems*

And for equally outstanding sliding glass doors, specify Ador A-80, the architectural door which complements the Ador A-70 system

- ✓ Proven, for many years, in all types of installations.
- ✓ HS-A2-HP, hurricane rated, AAMA, with a 16' wide unit, 8' center panel!
- ✓ Can be installed in front of, between, or behind columns.
- ✓ Both width and height compensation for faulty openings.
- ✓ Both thermal and mechanical contraction or expansion allowed for.
- ✓ Any combination of fixed or sliding panels, custom to your designs.
- ✓ Architecturally clean, uniform sightlines, no fins.
- ✓ Symmetrical both inside and out, for easy stacking or joining.
- ✓ Adjustable mullion for continuous runs before columns of varying widths.
- ✓ Full tubular sections for horizontal mullions, extra strength and rigidity.
- ✓ Quadruple wedge interlocks, extra strength, no rattling.
- ✓ Full length pressure equalization slot, no siphoning.
- ✓ Full length patented flapper valve, no draft, no whistle.
- ✓ Double weatherstripping throughout.
- ✓ Weatherstrip concealed in panels, clean appearance, easy replacement.
- ✓ Slides right or left.
- ✓ Bypass for high-rise cleaning.

- ✓ Fixed panels glazed from interior or exterior, for high-rise convenience.
- ✓ Full screen or half screen for either single or double slide windows.
- ✓ Anti-lift-out blocks, no unauthorized removal.
- ✓ Standard lock can be placed at any height (above childrens' reach).
- ✓ Optional tumbler type locks.
- ✓ Stainless steel reinforced locking plungers.
- ✓ Adjustable, heavy-duty, nylon-tired rollers.
- ✓ Sealed, permanently lubricated rollers.
- ✓ Clear or color anodized, to your specification.
- ✓ Air conditioning units in lower panel without extra reinforcing, to 12' wide.

All this . . . and a lower price, from one of the nation's largest producers of quality fenestration.

Shown in Sweets, 1969, as Rusco A-70 . . . 19a  
Write to Ador/Hilite for a free packet      Ru  
of full and 1/4 size details, windload charts, other information.

**MAIL THIS COUPON!**

### Divisions and Subsidiaries of RUSCO INDUSTRIES, INC.

ADOR/HILITE Fullerton, California Aluminum Doors and Windows  
LOOK/HILITE Milton, Georgia Aluminum Doors and Windows  
MAJESTIC/HILITE Denver, Colorado Aluminum Doors and Windows  
RUSCO/STEEL Pandora, Ohio Steel Doors and Windows  
RUSCO/CANADA Toronto, Canada Steel Doors and Windows  
HARVARD MFG. Bedford Heights, Ohio; Benicia, California Metal Bed Frames  
RUSCO/FINANCIAL Los Angeles, California Financing  
SPERLING MANUFACTURING Glendale, California Precision Machining  
RUSHELL SYSTEMS Los Angeles, California Personal Identification Systems

## ADOR ARCHITECTURAL

California • Colorado • Ohio • Georgia • Toronto

Architectural Products from  
Ador/Hilite, Division of Rusco Industries, Inc.

2401 W. Commonwealth Avenue, Fullerton, California 92633

ADOR/HILITE 2401 W. Commonwealth Avenue, Fullerton, California 92633

Please send your packet of full and quarter size details, catalog and other information on the Ador A-70.

name \_\_\_\_\_

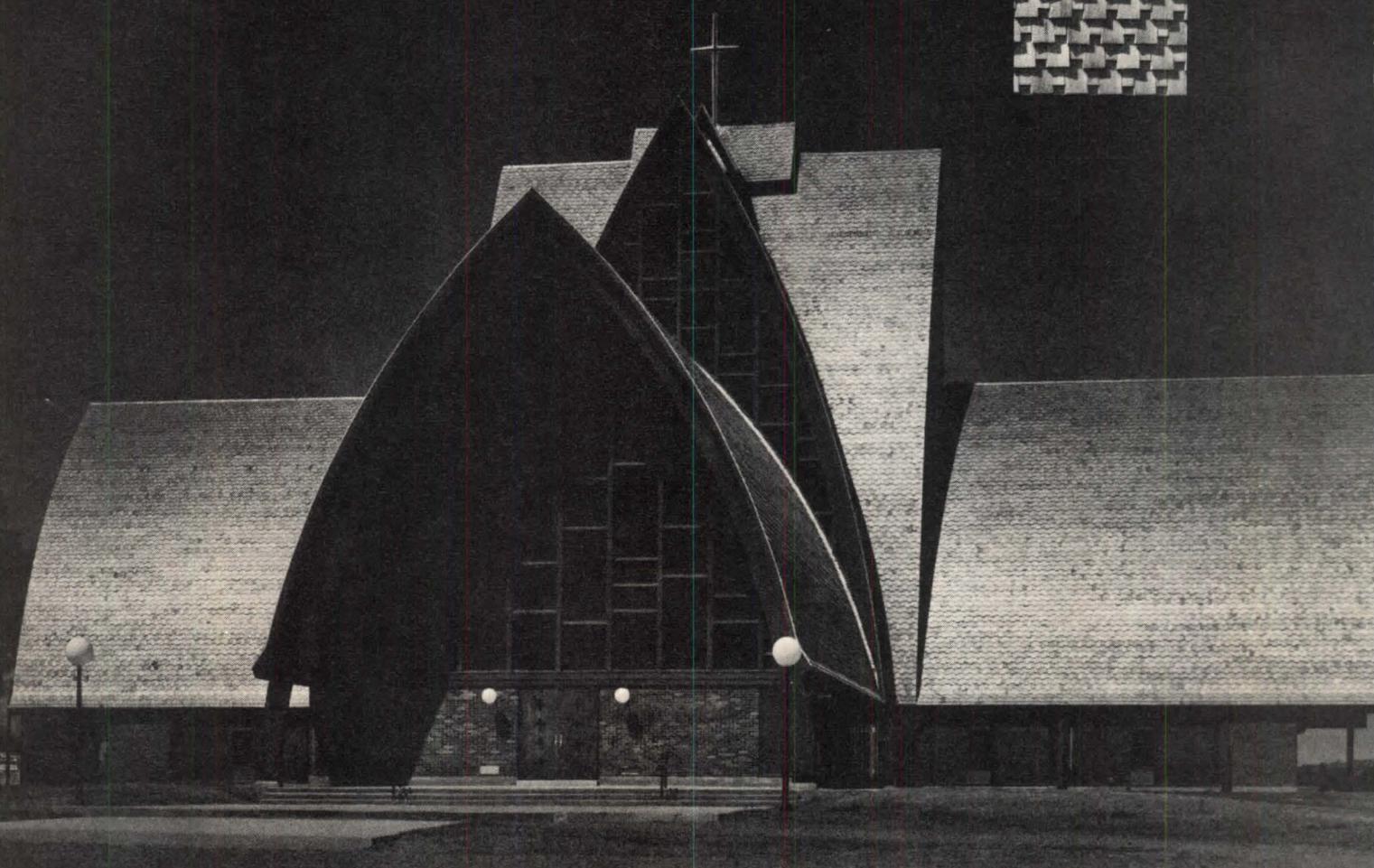
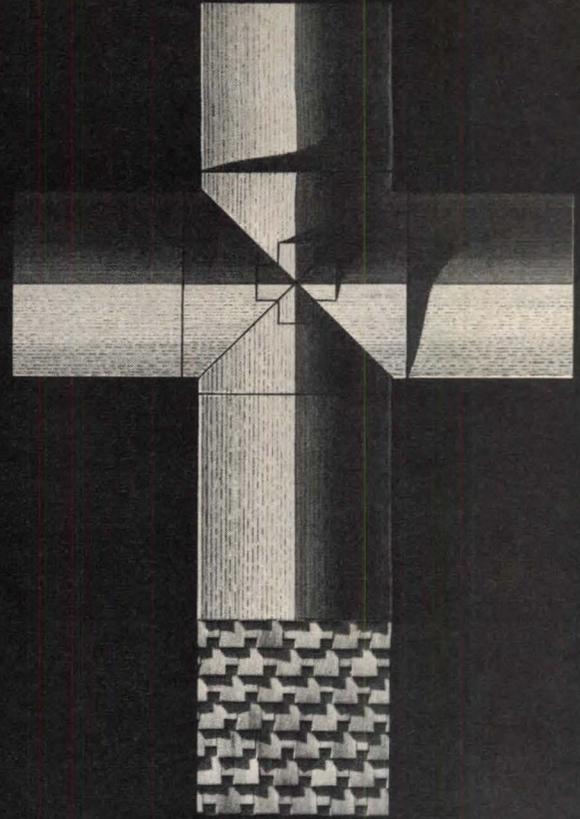
position \_\_\_\_\_

company \_\_\_\_\_

address \_\_\_\_\_

On Readers' Service Card, Circle No. 320

Calm. Beautiful. Eternal. Honest.  
 Nothing defines the character  
 of a church better than  
 an exterior of  
 red cedar shingles.



Certigrade Dimension Shingles; #1 Grade, alternating 3" and 6" widths, buttlines staggered, 3" and 6" to the weather.  
 Saint Joseph's Church, Camillus, New York; J. Anthony Cappuccilli, architect.

All successful buildings should evoke some sort of positive emotional response in the observer, but few have the unique visual requirements of a church.

Perhaps that's why so many architects and church building committees today are selecting red cedar shingles and handsplit shakes for their churches' exteriors. Red cedar has a rare ability to link history and

modernity; to convey a feeling of tradition while dressing a structure in the clean, contemporary lines and subtle, rich colors of the present.

Shingles and shakes are among the most practical materials available, too. Low in maintenance. Naturally insulative. Completely weather resistant. Beautifully compatible with a wide range of

other building materials.

For natural beauty and lasting practicality next time insist on the real thing: Certigrade shingles or Certi-Split shakes. They're worth it.

For details plus money-saving application tips, write: 5510 White Building, Seattle, Wash. 98101. (In Canada 1477 W. Pender St., Vancouver 5, B.C.)



## Red Cedar Shingle & Handsplit Shake Bureau

One of a series presented by members of the American Wood Council.

On Readers' Service Card, Circle No. 375



Madison Square Garden Center ARCHITECTS: Charles Luckman Associates

Architects are accepting the invitation to High-“T” — TITANALLOY — the alloy of good taste and substance. Job-captains and specifications writers, too, appreciate its four-squareness that seems to match the design, the construction, the permanence, the practical-cost considerations of their most critical building assignments.

In every ounce, this zinc-titanium-copper alloy couples a designer's leverage with an engineer's conscience for “what's right.” In every pound, TITANALLOY presents a cost, less than many metals which serve with far less distinction on the job.

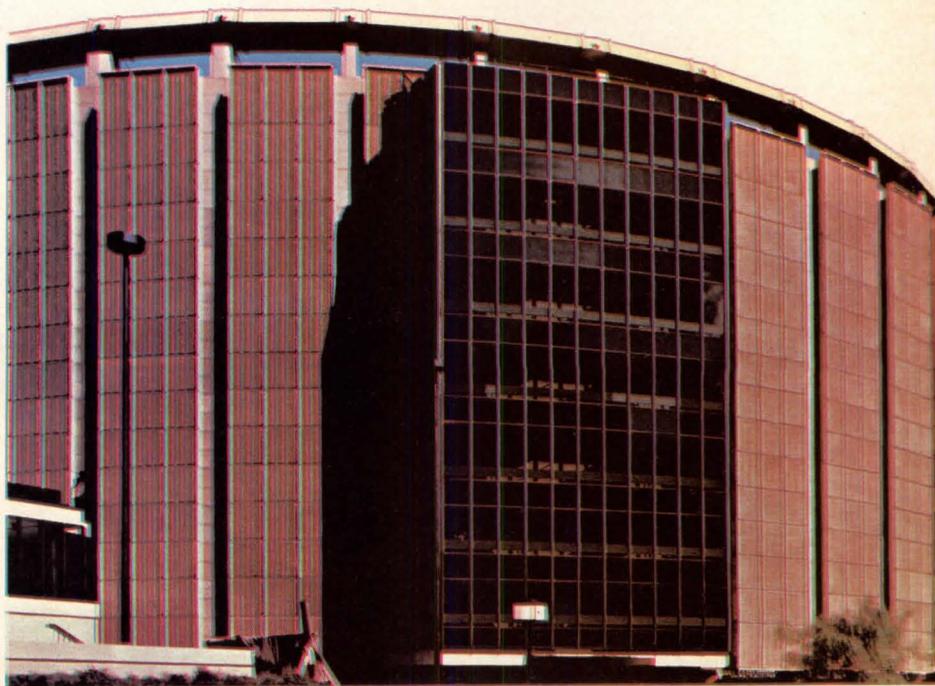
This utterly corrosion-resistant alloy has no peer for roof, flashing, valley, gravel-stop or thru-wall applications. Forms easily and solders in the shop or roof-site.

Both time and the elements are kind to TITANALLOY, which weathers to a delicately-distinctive even-dark-grey patina consonant with all architectural styles. Won't streak or stain adjoining materials and requires no maintenance after installation. Superior to aluminum and galvanized sheet under extreme corrosive coastal atmospheres.

High on the architectural “spec-writer's” list. TITANALLOY is available to meet pressing building schedules. To become more fully acquainted, phone us for an Architect's File of data and samples or check in the pages of SWEET's under 21g

mat.

# HIGH “T” IN THE GARDEN



## MATTHIESSEN & HEGELER ZINC COMPANY

Main Office

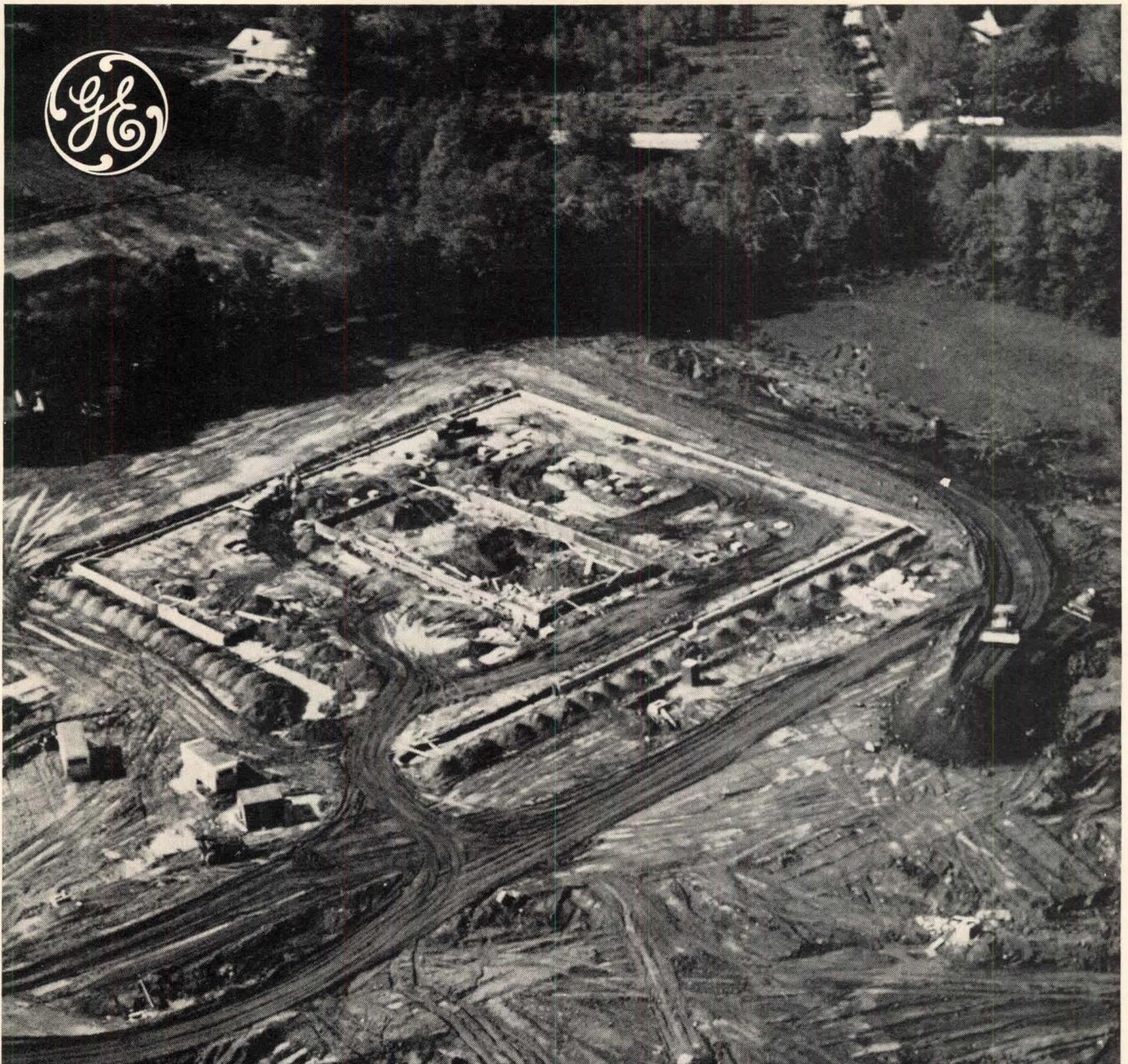
LaSalle, Ill., Phone: 815/223-8600

New York Office

233 Broadway, Rm. 4015, Phone: 212/267-6542

On Readers' Service Card, Circle No. 361

# TITANALLOY THE ARCHITECT'S METAL



## Whatever you design for this site, General Electric can air condition with a unitary system.

Your General Electric central air-conditioning contractor is a visionary.

Tell him your vision and he'll find a way to air-condition it, no matter how high or wide you build it.

Depending on what you have in mind, GE's Weathertron® Heat Pump may be the best. It heats as well as cools.

Or a GE gas/electric combination.

Or maybe rooftop cooling units with built-in electric heaters.

Or for perimeter-type area-by-area cooling and heating, say for a high-rise office building, GE's Zoneline system may be best.

Whatever General Electric cooling or heating system you may buy, be it now or in the future, you can count on it to hold up. For example, the GE Climatuff compressor is quietly

chalking up a phenomenal reliability record in over 200,000 installations.

Your GE central air-conditioning contractor will be glad to work with you and your engineer on system selection—he also can install the system right for good performance.

*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**

# jet-set concourse seating



## AFKA...the new look in waiting area comfort

Airline, bus or rail terminals . . . You can improve public relations with people who have to wait, by seating them in leisurely comfort on Krueger's new AFKA chairs. ■ Strong, comfortable fiberglass shells of Forest Green, Pearl White, Ebony Black or Otter Brown feature deep seat and backrest cushions, smartly upholstered in a choice of Naugahyde Decor 64 or Scotchgard-treated wool/nylon fabric. Either will accept real "people beating" with lasting durability, and both come in a broad range of decorator colors. ■ With or without armrests, seats are securely mounted on a choice of two heavy-duty cast aluminum/steel frame sections—or, on an equally strong floor mounting standard. ■ Combine seats with table sections in standard units up to 5, or any custom number of seat/table combinations you may desire . . . . Write for new Concourse Seating brochure, today.

**KRUEGER**  
METAL PRODUCTS, INC. • GREEN BAY, WISCONSIN • 54306

SHOWROOMS: NEW YORK: 20 E. 46th Street • CHICAGO: 1184 Merchandise Mart • Indianapolis • Dallas • Houston • Los Angeles

upholstered armrest shells, mounted on "D" series base



upholstered shells—Floor mounted base



upholstered armrest shells, mounted on "A" series base



**Nine times out of ten, MONO fills the sealant gap.**

## When it can't, he can.



We know you'd like an all-purpose trouble-free construction joint sealant. □ So would we. But right now, MONO's as close as we can come . . . and it won't do everything, any more than any other types and brands we've tested. □ Sure, MONO's good and works so well under the kind of adverse conditions (dust and moisture) that are common to the job site, that we suspect many construction people actually look on it as an all-purpose sealant. □ But actually Tremco's business isn't based on selling *any* all-purpose sealant. Instead we're a single-purpose company. We're The Water Stoppers and we want to give you leakproof security in every joint on the job. □ So we make not one, but fourteen other sealants besides MONO, like a very good polysulfide (Lasto-Meric), a highly-regarded preformed tape (440) as well as a dozen others with special purposes. □ The only all-purpose item in our catalog is the Tremco Representative. He has been thoroughly trained to provide you the proper sealant for each application and is ready to give job-site assistance before, during and after each project. □ Why not give him a call next time you run into the sealant gap? He'll get you across every time. □

**TREMCO**  
The water stoppers

The Tremco Manufacturing Company,  
Cleveland, Ohio 44104; Toronto 17, Ont.

# wonders

Designer and Builder: John R. Gray, Jr.



# OF WOOD

in Pella standard casement windows



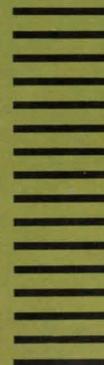
First Class  
Permit No. 1  
PELLA, IOWA

**BUSINESS REPLY MAIL**

No Postage Stamp Necessary If Mailed in the United States

Postage Will Be Paid By Addressee

**ROLSCREEN COMPANY**  
PELLA, IOWA 50219



# The Pella look is the look of inspired design and expert craftsmanship.

If you like the look of PELLA Standard Casement Windows, wait 'til you see how much comfort, convenience and economy they offer!

Sash opens to full 90° so both sides of glass can be washed easily from inside. Inside storm panels and flat aluminum screens stay in place the year 'round. Insulating glass is optional. Removable muntins have horizontal, rectangular or diamond patterns.

PELLA Standard Casement is an all wood wonder window at a moderate price. Wood provides the best insulation against cold and heat, minimizes condensation. Flexible vinyl weatherstripping provides an exceptionally tight seal on all four sides of sash. All exterior surfaces are factory-primed. Slimshade feature is available for solar control and privacy.

For more information on PELLA products, mail card below, or phone your PELLA Distributor (look under WINDOWS in the Yellow Pages), or see SWEET'S Architectural or Light Construction File. **ROLSCREEN COMPANY, PELLA, IOWA 50219**

**PELLA MAKES QUALITY WOOD WINDOWS, WOOD FOLDING DOORS & PARTITIONS AND WOOD SLIDING GLASS DOORS**

# PELLA

**WOOD STANDARD CASEMENT WINDOWS**

Yes, via first class mail, rush me more color photos and information about the following PELLA wood products:

- Windows:  Casement  Double-Hung  Awning  
 Sliding Glass Doors  
 Folding Doors and Partitions



Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

I want fast local service. Telephone: \_\_\_\_\_

Also available throughout Canada.

Printed in U.S.A.



Designer: and Builder: William Binkley



Designer: Edward H. Speer • Builder: Ed Speer Construction

Window Care is So Easy!



With a PELLA Standard Casement all you do is remove inside screen and storm panel. Sash opens 90° for easy washing from inside.

**MAIL CARD TODAY**  
Answered within 24 hours

# TCS

## Why coat stainless steel?

... because proper soldering of stainless steel requires an extra step of pretinning or use of corrosive fluxes. These fluxes must be removed after soldering to prevent attack on the stainless. TCS solders perfectly using a non-corrosive rosin flux. Pretinning is unnecessary.

... because architectural metals are subject to corrosive attack in severe chemical, industrial or marine environments.

TCS enhances the proven ability of stainless steel to resist corrosive attack under these conditions.

... because the reflective surface of stainless steel may sometimes be undesirable in architectural applications.

TCS weathers naturally to a predictable, uniform and attractive dark gray. If color is desired, it can also be painted.

TCS, Terne-Coated Stainless Steel, is 304 nickel-chrome stainless steel covered on both sides with terne alloy (80% lead, 20% tin). It is a product of Follansbee Steel Corporation, Follansbee, West Virginia.

# FOLLANSBEE

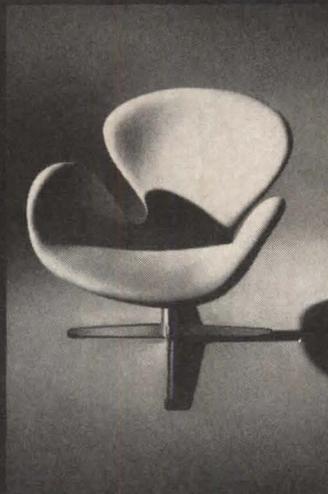
FOLLANSBEE STEEL CORPORATION • FOLLANSBEE, WEST VIRGINIA



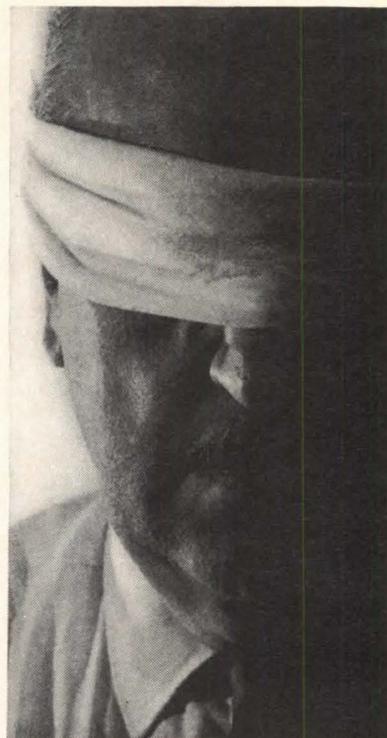
**FRITZ HANSEN**  
979 Third Avenue  
New York 10022

Is there a special way to view Arne Jacobsen's "Swan" chair? Not really. The "Swan" is exciting and

different from every point of view. One of the most versatile chairs ever designed in Denmark. In fabric, leather or vinelle. With Aluminum or teak base. See more of the FH furniture in our catalog.



**There's just one thing worse than finding out about cancer.**



**Not finding out.**

Sure, finding out is a shock. But finding out gives you a fighting chance. And the earlier cancer is found, the better the chances of beating it.

There's one certain way to lose to cancer. And that's not to find out. Until it's too late.

The thing to do is to have your physician give you a good going over now, when you feel great. And then when your doctor tells you that you *are* great, you'll feel even better.

**american  
cancer  
society**



This Space Contributed by the Publisher

← On Readers' Service Card, Circle No. 344



ARCHITECTS  
CAN REALLY  
DO THEIR  
**thing**



PINEWOOD ELEMENTARY SCHOOL  
Jenison, Michigan  
ARCHITECT: J. H. Haveman  
CONTRACTOR: Viking Construction Co.

THOMAS S. JUSTISS ELEMENTARY SCHOOL  
Paris, Texas  
ARCHITECT: B. P. Denney  
CONTRACTOR: M. D. Misso Construction Co.

VOCATIONAL INSTITUTE  
Laconia, New Hampshire  
ARCHITECT: Andrew Isaak  
CONTRACTOR: Harvey Construction Co.

## with FENESTRA Steel Doors, Frames and Pre-Engineered Component Parts

SCHOOLS become more attractive, colorful and functional when Architects use Fenestra doors, frames and pre-engineered component parts. Add the total design flexibility offered by these components to the unique fabricating talents of local Fenestra distributors—and Architects can really do their design THING... all within budgets that appeal to school boards. These unusual entrance "packages" are ideal for any building. Architects design them... the local Fenestra distributor fabricates them. Call him for your next building project. He's listed in the Yellow Pages under "Doors, Metal." Also write for literature or see us in Sweet's Architectural File — 17b/Fe.

FENESTRA IS LOCAL EVERYWHERE



# FENESTRA

DIVISION OF THE MARMON GROUP, INC. (MICHIGAN)  
ERIE, PENNSYLVANIA 16505

On Readers' Service Card, Circle No. 402

# The ubiquitous sealant

DAP® Butyl-Flex® installations are everywhere. It delivers best all-around caulking service in 9 out of 10 installations, staying on the job as long as 20-year sealants in many applications, when applied according to instructions.

Four new buildings for the Dayton, Ohio metropolitan area proposed by Brown and Head & Associates, Dayton. (A) Architect's conception of City Convention Center, consisting of a 50,000 square foot arena and 20-story, 250-room motor hotel. Lorenz, Williams, Williams, Lively and Likens, also of Dayton, were associated architects on the project. (B) Good Shepherd Lutheran Church, Washington Court House, consisting of 300-seat sanctuary, 20,000 square foot education wing, 3000-square foot administrative quarters. (C) City Transportation Center for rapid transit, bus, airline, and rail travelers, conceived for feasibility study. (D) Horticultural Center, including a 180 foot round dome for flower conservatory, single-story structure housing meeting rooms, green houses, and caretaker's quarters.



DAP Inc. General Offices: Dayton, Ohio 45401 SUBSIDIARY OF *Plough, Inc.*

- Please send me Technical Data bulletin on DAP Butyl-Flex butyl-rubber based caulk.
- Please have DAP representative call.

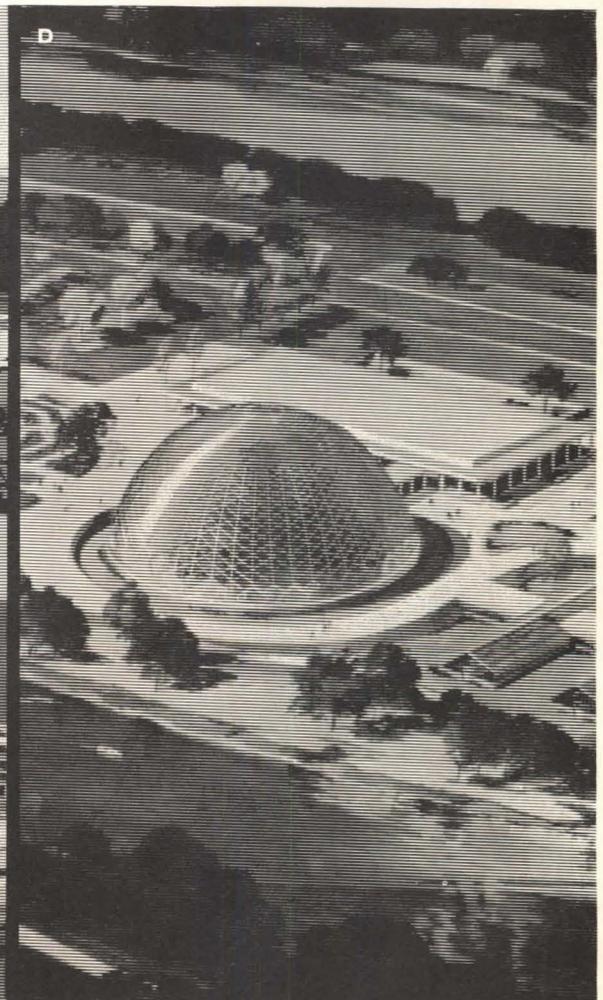
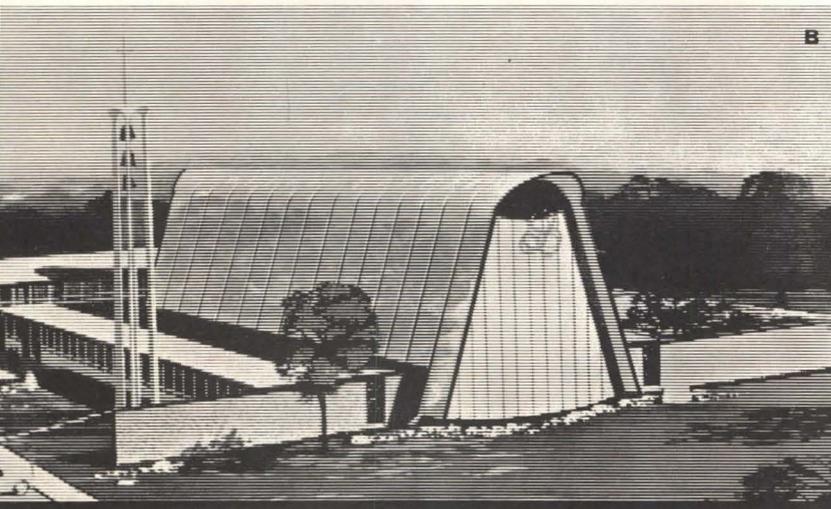
name \_\_\_\_\_ title \_\_\_\_\_ firm \_\_\_\_\_

address \_\_\_\_\_ city \_\_\_\_\_ state \_\_\_\_\_ zip \_\_\_\_\_

DAP Butyl-Flex is an outstanding caulk that can live up to the performance of higher-priced sealants in construction joints where movement is not excessive . . . accounting for 90% of all caulking-sealing applications. DAP Butyl-Flex delivers all the sealant advantages inherent in butyl rubber. It has 50% elongation factor for exceptional flexibility plus adhesive qualities second to none. Makes a long-lasting, trouble-free seal between similar and dissimilar materials such as aluminum, concrete, steel, glass, marble, wood, vinyls, painted surfaces. What's more, Butyl-Flex is easy and fast to use, cutting application time and costs. Guns on without mixing, heating, priming. To receive complete technical information and specifications, please send coupon.



**DAP**<sup>®</sup>  
**ARCHITECTURAL  
SEALANTS**



## Builders know that Crestline's pitch on its new 14-degree sills really won't hold water

Builders whose spirits are a little dampened by sliders that try to squeak by with non-draining, flat sills, should see the new slant we've given an old problem. It's a combination bottom weatherstrip and sill track of heavy, extruded polyvinyl molded in a 14-degree downhill outside direction, with plenty of weepholes to assure draining down to the last drop, out of the track, over the sill and away.

It's attention to little, extra-value things like this that makes the whole big Crestline line such an increasing favorite with builders. Things like our new positive-compression, sash-to-frame sealing, full-length integral pulls, factory-installed sash lock, combination extender-stops that slim-trim windows down to picture frame beauty . . . and the list grows bigger and bigger.

And so does the number of builders who like the way we keep everlastingly at the job of making everything we make better and more salable, at less in-the-wall cost.

Ask that service-minded Crestline dealer near you to come out to *your* next job. He doesn't mind getting wet.



**The wood windows that cut out the callbacks.**

Home office, Wausau, Wis. Plants at Wausau, Ladoga, Indiana, Corry, Penna., and Petersburg, Va.

see our catalog in Sweet's 

A hand holding a flashlight, illuminating a red desk drawer. The flashlight beam is focused on the drawer, highlighting its smooth surface. The background is dark, making the red drawer stand out.

# OKAY. WHO TOOK THE HANDLES?

Please keep them. Our 500 desk is through with drawer handles. Through. Washed-up. Kaput.

We replaced those eyesores with a nice clean face. To open our desk drawers all you do is place one or two fingers behind a rabbeted edge and pull gently. The drawer glides out—on frictionless rollers—silently as a swan. And when our drawer comes out, it comes out all the way. Every inch of it is fully visible and accessible, (another sensible but rare feature).

Our desk top has a solid wood core. That means it can hold on to the surface laminate better than metal does, it can't buckle and it feels warm on winter mornings. In fact, a solid wood core top is so much better, we can't figure out why only Art Metal desks have them.

Office furniture that looks beautiful and works beautifully. A complete line for all your needs. At your Art Metal dealer.



**ART METAL**  
JAMESTOWN NY



## Bohn Rex-Rotary Authorized Dealers

### ALABAMA

Birmingham Church & Stagg  
Office Supply Co., Inc.

### ARIZONA

Phoenix ABC Business Machines

### ARKANSAS

Little Rock Capital Typewriter Co., Inc.

### CALIFORNIA

Covina Stockwell & Binney Stationers  
Fullerton Alferandez Office Equipment  
Indio Stockwell & Binney Stationers  
Los Angeles Bayless Stationers Inc.  
Los Angeles Office Machines Inc.  
Los Angeles Olympic Sales Company  
Oakland DeMello's Office Furniture Co.  
Ontario Newton's  
Palo Alto Delmer Israel Co.  
Pomona Tiernan's Office Machines &  
Furniture

Pomona Stockwell & Binney Stationers  
Riverside Stockwell & Binney Stationers  
San Bernardino Stockwell & Binney Stationers  
San Diego San Diego Office Supply  
San Francisco Guaranty Typewriter Co.  
San Jose Kennedy Business Machines  
Santa Ana Tiernan's Office Equipment  
Santa Barbara C. A. Lund Office Equipment  
Santa Monica Bay Cities Typewriter  
Van Nuys Herron's

### COLORADO

Denver Paul Honour Typewriter Co.

### CONNECTICUT

New Haven ABM of New Haven, Inc.

### DISTRICT OF COLUMBIA

Central Business Machines

### FLORIDA

Gainesville Chesnut Office Equipment Co., Inc.  
West Palm Beach Palm Beach Office  
Supply Co.

### GEORGIA

Atlanta H & B Office Machines  
Atlanta The Tidwell Company  
Decatur DeKalb Office Equipment  
Macon Wilson Typewriter & Adding  
Machine Co.

### ILLINOIS

Champaign Shay Office Equipment  
Chicago Irv's Office Equipment Co., Inc.  
Chicago Precision Equipment Co.  
Chicago United Stationers Supply Co.  
Lincoln Lincoln Office Supply  
Galesburg Dunsworth's Book & Stationers  
Springfield Central Office Equipment Co.

### INDIANA

Fort Wayne Needham's Typewriter Co., Inc.  
Indianapolis Adding Machine Sales & Service  
Indianapolis Rex Business Machines

### IOWA

Burlington The Typewriter Shop  
Davenport Office Equipment Company

### KANSAS

Wichita Wilbur E. Walker Co.

### LOUISIANA

New Orleans Amann Business Machines, Inc.

### MARYLAND

Baltimore Lucas Brothers, Inc.

### MASSACHUSETTS

Boston John W. Murray Co.  
Boston Thorp & Martin  
Cambridge Associated Business Machines  
Worcester A. B. M. of Worcester

### MICHIGAN

Detroit Quist Typewriter Co., Inc.  
Grand Rapids Typewriter Sales & Service Co.

### MINNESOTA

Minneapolis Acme Typewriter Co.  
Winona Winona Typewriter Co.

### MISSISSIPPI

Jackson the Office Supply Company

### MISSOURI

Cape Girardeau Carron Office Equipment  
& Supply Co.  
St. Louis Von Soosten Company

### NEVADA

Las Vegas Business Machines Company, Inc.

### NEW YORK

Mohegan Lake Jensen's Office Equipment  
New York Bruce Business Machines  
New York Empire State Typewriter  
New York Goldsmith Bros.  
Schenectady Dick Typewriter Company  
Utica Johnson Business Machines Corp.

### NORTH CAROLINA

Lincolnton King's Office Supply  
Newton Office Supply Mart, Inc.

### OHIO

Cincinnati Business Equipment Co.  
Cleveland Peter's Office Machines, Inc.  
Columbus Dorsey Office Supply  
Dayton Typewriter Shop  
Toledo Active Business Machines

### OKLAHOMA

Oklahoma City Automatic Business  
Machines Corp.

### OREGON

Eugene Clary Business Machines  
Portland Office Machines, Inc.  
Portland Oregon Typewriter Company  
Salem Valley Business Equipment Co.

### PENNSYLVANIA

Bryn Mawr Noll Business Machines, Inc.  
Harrisburg Phillips Equipment Co.  
Philadelphia A. Pomerantz & Company  
Pittsburgh Milton Wiener Office  
Equipment Co., Inc.  
Reading The Book Mart

### RHODE ISLAND

Providence Woods Typewriter Co.

### SOUTH CAROLINA

Columbia The R. L. Bryan Co.  
West Columbia Calculator Repair Service

### TENNESSEE

Knoxville Add-Rite Business Machines, Inc.  
Memphis S. C. Toof & Co.

### TEXAS

Arlington Brimer Sales Co.  
Dallas S. L. Ewing Co., Inc.  
Garland Heinz Hemmen Office Machine Experts  
Houston Dromgoole's Typewriter Shop  
Lubbock Hester's Office Machines  
San Antonio Maverick-Clarke

### UTAH

Salt Lake City Empire Distributing Co.

### VERMONT

White River Junction Greydon-Freeman Co.

### VIRGINIA

Richmond Office Equipment Rental Inc.

### WASHINGTON

Seattle Seattle Platen Co.  
Tacoma Allied Business Machines Inc.  
Walla Walla Jayne's Business Machines

### WEST VIRGINIA

Charleston C. R. Johnson Co.  
Huntington Morgan's Inc.

### WISCONSIN

Green Bay Bartelt Business Machines, Inc.  
Milwaukee Office Products Inc.

## Lessons in Organic Architecture

BY WILLIAM J. MURTAGH

THE NEW WORLD DUTCH BARN.  
*By John Fitchen. Syracuse University Press, Box 2, University Station, Syracuse, N.Y., 1968. 178 pp., illust., \$12.50. The reviewer is the Keeper of the National Register, United States Department of Interior, National Park Service, Office of Archaeology and Historic Preservation.*

This book fills a need on many counts. First, it is obviously a thorough coverage of a subject not previously presented. Second, it represents the type of detailed, careful study of vernacular architecture long pursued by European architects and architectural historians but conspicuous by its absence in America. Third, in an era that put a premium on honesty of structure and expressiveness of space, it offers a clarion-clear discourse on these elements through the vehicle of the structures examined.

Because of the utilitarian nature of barns, little has been written about them by American scholars, despite their importance to the American landscape and the impressive scale they tend to give to our countryside. Architects, teachers, and historians seem to have systematically ignored, for the most part, those lessons in organic architecture that barn interiors offer. Once the architectural lessons of such structures are discovered, a book such as Fitchen's becomes understandably important. With the knowledge that the author published a volume on *Construction of Gothic Cathedrals* in England in 1961, his interest and cognizance of the importance of barn structure becomes understandable if on no other basis than the similarities between barns and Gothic cathedrals in honesty of construction.

Professor Fitchen discusses such structural considerations as jointing, problems of compression and tension, shear, structural failures, bracing, as well as postulating probable methods of erecting such structures after historical and descriptive sections that

outline the background and characteristics of the buildings involved. A major contribution to the book and to the subject in general is the excellent graphics coverage, including plans, sections, and details in which the various joining methods are made clear and the framing members are labeled. A pictorial section is further appended to the text and graphics with some excellent interior views, which amply reveal the structural quality of the barn interiors. Two maps locating the examples discussed and showing the extent of Dutch settlement in northeastern America readily pinpoint the drawings and photographs to their geography.

The volume is well footnoted. These are rich in additional historical data and bibliographical source material. Further, the excellent index makes the effort an exceedingly useful tool.

From the beginning, it is obvious that this discourse has been written by a scholar who understands structure, and on this basis it is a pleasure to report on a book on architectural history that relies on more than a stylistic comparison for its contribution. One would hope that this study will be an inspiration for others to follow in an area of architectural history that has had too little attention, and, for the most part, in too superficial a manner — those American vernacular structures, such as barns, which contribute so importantly to the flavor of our culture and to the roots of our society.

#### NOTICES

##### NEW ADDRESSES

NEIL R. GREENE, Architects and Planners, 1222 Edgevale Rd., Silver Spring, Md.

##### NEW FIRMS

ABRABEN, BENNETT, JOHN ASSOCIATES, Architects, 3077 E. Commercial Blvd., Fort Lauderdale, Fla.

BERRIDGE, BECKER & JULIN, INC., Landscape Architects, 2 Rowland St., San Francisco, Calif.

BRATTLE STREET ASSOCIATES, INC., Architects and Planners, 15 Brattle St., Cambridge, Mass.

FELONEY & STURGIS, Architects, 2 Central Sq., Cambridge, Mass.

(Continued on page 182)

# WIN ME!



This Great New Bohn Contex 55 Electric Calculator can be yours just by mailing the coupon.

We're giving away  
25 calculators  
Absolutely  
FREE!

The amazing Contex 55 has the industry talking. It's small, tough and compact. Completely portable. Works as well at home as in the office. At \$349.50, this extraordinary machine bridges the performance/price gap. But don't wait for the drawing on August 31, 1969. There's nothing to buy. Winners who purchase any Bohn Contex\* from now to the drawing, will be refunded the full purchase price. Either way, you can't lose. Send in the coupon today. (By the way, good luck.)

\*Contex Calculators from \$139.50

PLEASE ENTER ME IN YOUR FABULOUS CONTEST

No purchase is required to enter contest. Any adult 21 years and older may enter. Decisions of judges are final and all entries become the property of the company. Contest and offer are void where prohibited. Employees and relatives of this company and its dealers are not eligible. Contest starts April 15 and ends Aug. 31. Drawing will be held in N.Y.C. on or before Sept. 30, and winners notified on or before Oct. 15. Names of winners available on request.

**B BOHN REX-ROTARY**  
DIVISION OF VLN, Inc.  
444 PARK AVENUE SOUTH / NEW YORK, NEW YORK 10016

Name.....

Address.....

City.....State.....Zip.....

**\$349.50 Value can be yours, absolutely FREE!**

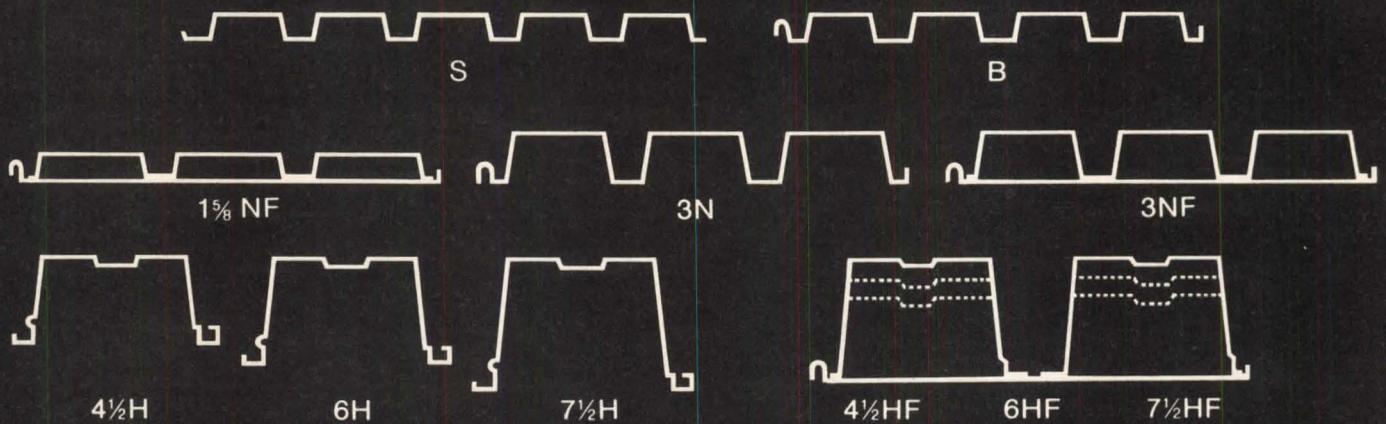
P7

On Readers' Service Card, Circle No. 329

**More spans: 5 to 35 feet**



**More profiles: 11**



## **More choice in acoustical steel roof deck**

If you are looking for a steel roof deck that doubles as an acoustical ceiling, look to Inland-Ryerson Acoustideck®. It's available in more profiles and covers a greater range of spans than any other deck of its kind. You can be sure that there is an Acoustideck to meet every requirement. Get complete information in Catalog 248. Inland-Ryerson Construction Products Company. General Offices: Chicago, Illinois. Address inquiries to Dept. G, 4069 West Burnham Street, Milwaukee, Wisconsin 53201.

**INLAND**   
**RYERSON**  
A member of the  steel family

# Is resistance still a virtue?

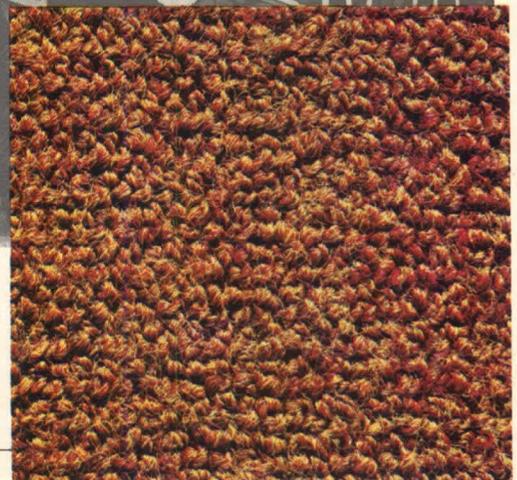


## Tread-Well says yes, with Vectra fiber.

New Tread-Well "Armor" tufted indoor-outdoor carpet made with Vectra® fiber resists stains, fading and wear, but can't resist being beautiful.

It's no secret that for maximum durability, indoor-outdoor carpet is hard to beat. Now from Tread-Well comes a whole new dimension in indoor-outdoor carpet. Beauty. The name is Armor... a fine gauge tufted carpet made with spun yarns of 100% Vectra olefin fiber. Armor... the closest thing yet to the luxury of Nature's own fiber... yet so stain, fade and abrasion resistant you can measure the difference in fewer commercial cleanings, lower maintenance costs. Armor... an indoor-outdoor carpet in the truest sense. But once you see how lush and natural it looks indoors, you may not have the heart to put it outside.

**SPECIFICATIONS**  
 Pile of 100% solution dyed Vectra olefin fiber  
 1/10 Gauge  
 Pile wt.—28 oz. per yd.  
 Pile ht.—1/8"  
 Stitches per inch—8  
 Primary Backing  
 100% polypropylene  
 Secondary Backings  
 (wt. per sq. yd.)  
 9 oz. jute  
 38 oz. high density rubber



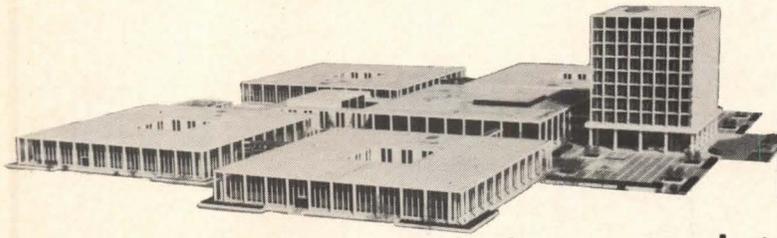
Tread-Well Carpets, Inc. / P.O. Box 825 / Dalton, Georgia 30720  
 Please send me samples and information on Tread-Well "Armor" carpet.

NAME \_\_\_\_\_  
 COMPANY \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_  
 STATE \_\_\_\_\_ ZIP \_\_\_\_\_



Vectra® olefin fiber is manufactured by Enjay Fibers and Laminates Company, Odenton, Maryland, a division of Enjay Chemical Company, Odenton: (301) WO 9-9000. New York: 350 Fifth Avenue, (212) LO 3-0720. Charlotte: One Charlottetown Center, (704) 333-0761. Enjay makes fiber, not carpet.

**Vectra...the fiber that believes resistance is still a virtue.**



Pozzolith concrete  
is good insurance for Allstate



The face of Allstate Plaza is precast concrete panels of Indiana limestone aggregate. Sandblasting creates an interesting texture compatible with the rural surrounds. All precast and cast-in-place concrete contained Pozzolith admixture.

Allstate Plaza, Northbrook, Illinois. Architect: Schmidt, Garden and Erikson. General Contractor: W. E. O'Neil Construction Company. Pozzolith Ready-Mixed Concrete: Vulcan Materials Co., Mid-west Div. Pozzolith Precast Concrete: Crest Concrete.

Allstate Plaza near Northbrook, Illinois, is the spacious new headquarters for Allstate Insurance Company. It's a commercial complex with an eye on the future.

Foresight in planning for tomorrow is reflected in the selection of the building material: concrete — made better by POZZOLITH admixture.

The concrete with POZZOLITH was more workable — easier to place, consolidate and finish — which enhanced the appearance of the hardened concrete. It permitted dense, durable, unblemished surfaces and sharp arrises. Furthermore, POZZOLITH minimized shrinkage cracking, reduced permeability and improved bond of concrete to steel reinforcement.

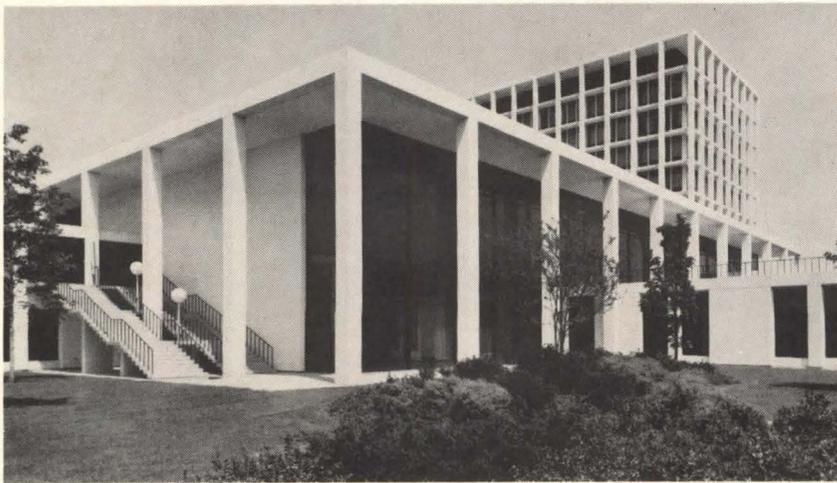
The exceptional uniformity in strength of the POZZOLITH treated concrete during the entire construction period was verified by the low coefficient of variation which ran 10%.

When you plan for tomorrow, plan on POZZOLITH. Your local Master Builders field man can show you how it will contribute to the concrete quality on your job. Call him, or write Master Builders, Cleveland, Ohio 44118.

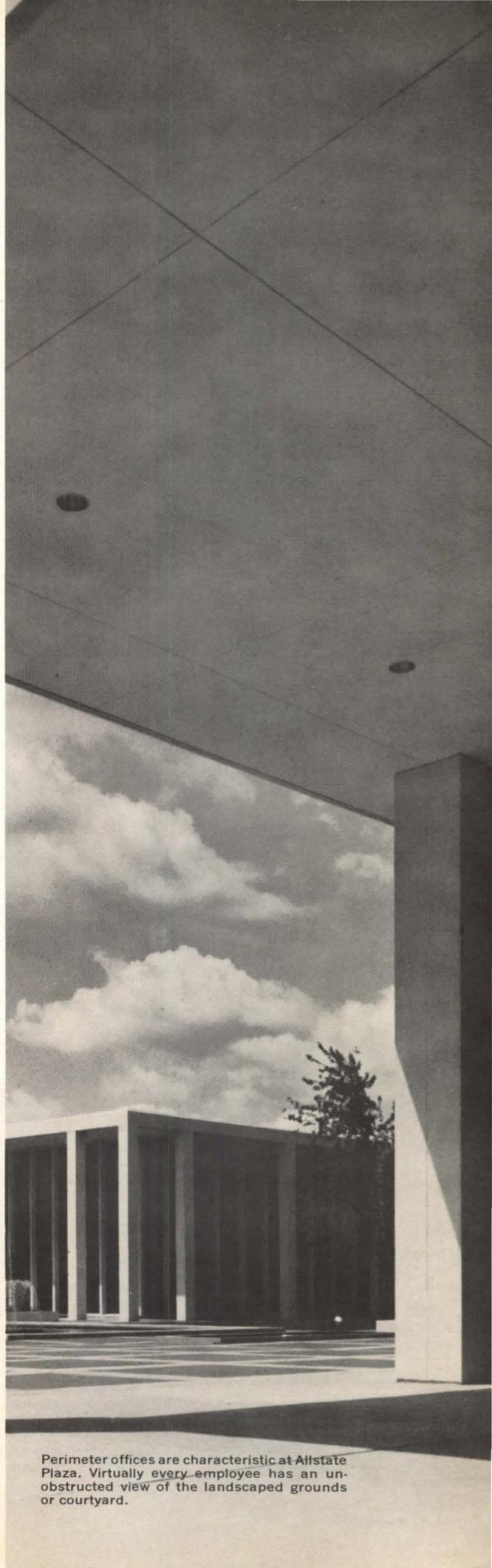
## **POZZOLITH** manufactured by **MASTER BUILDERS**

*\*POZZOLITH is a registered trademark for Master Builders' water-reducing, set-controlling admixture for concrete.*

On Readers' Service Card, Circle No. 360



Two-story precast load-bearing panels of Pozzolith concrete in the departmental buildings (foreground) each measure 10' 6" wide and 27' 0" high. Each weighs 10 tons. Single-story panels in the administration building (background) are 5' 3" x 13' 6" and are non-load-bearing.



Perimeter offices are characteristic at Allstate Plaza. Virtually every employee has an unobstructed view of the landscaped grounds or courtyard.

# motiva

by Cramer



THE 5000 SERIES

DESIGNED FOR SPACE SAVING

Motiva solves space problems ordinary office furniture creates. Imaginative innovations promise efficiency at all office levels. Modular filing innovations give multiple combinations for letter and legal sizes—and all standard card sizes. Motiva has been designed for an effective, functional flow of general office or data processing programs. Motiva will complement your imagination. For full information...



**CRAMER INDUSTRIES INC.**

A Subsidiary of USM Oil Company, 625 Adams Street, Kansas City, Kansas 66105, 913-621-6700

Showrooms in New York/Kansas City/Dallas/Los Angeles/San Francisco

On Readers' Service Card, Circle No. 335

# Korad<sup>®</sup> C

acrylic film for wood surfacing

Korad C acrylic film. It gets in the way of everything except beauty.

Protect the warmth and luxury of fine hardwood veneers with new Korad C—the durable finish.

Korad C, laminated to premium woods, provides a hard, clear, tough acrylic plastic barrier that

shields delicate veneer surfaces from the damaging effects of abrasion, moisture and household chemicals.

Because Korad C is an acrylic plastic, it retains clarity and resists yellowing through years of exposure to natural and artificial light.

Because Korad C is a pre-

fabricated film, there's no danger of thin spots or pin holes. The surface can be varied from dull to glossy, textured to smooth.

Learn more about Korad C and the new design freedom it gives you in the use of lustrous, natural woods.

Send for literature and samples.

**ROHM  
& HAAS**   
PHILADELPHIA, PENNSYLVANIA 19105



**Now you see it.**

**Now you don't.**

# Simple way to get positive roof drainage: The Tapered FOAMGLAS® System.

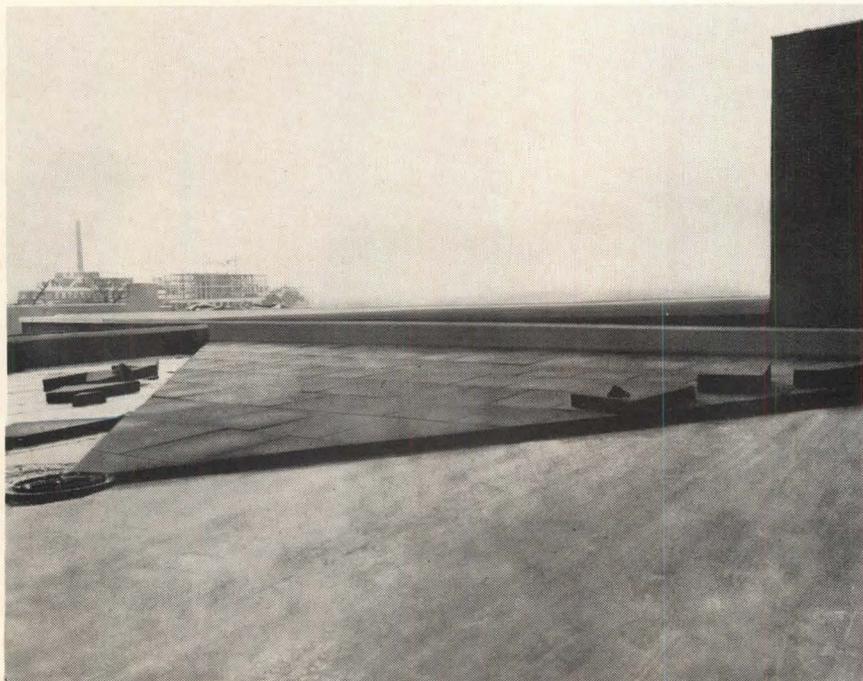
Tapered FOAMGLAS roof insulation automatically slopes a flat deck for positive drainage. The system is simple: the roofer places factory-tapered blocks in sequence and roofs over immediately. No delay or waiting for roof fills to dry. Single-contractor responsibility.

FOAMGLAS is 100% closed-cell glass, so it's completely waterproof and can't absorb vapor from inside the building.

Dimensional stability and high compressive strength make it an excellent base for built-up roofing. And it's the only roof insulation guaranteed for 20 years.

Write for more information and a free sample. Pittsburgh Corning Corporation, Dept. PP-79, One Gateway Center, Pittsburgh, Pa. 15222. In Western Europe, contact Pittsburgh Corning de Belgique, S.A., Brussels, Belgium.

The Insulation People



On Readers' Service Card, Circle No. 369

(Continued from page 175)

BARRETT ALLEN GINSBERG, Architect, 578 Livingston Ave., North Brunswick, N.J.

MACMILLAN, MACMILLAN, SHAWCROFT & ASSOCIATE, Architects, 616 W. Johnson St., Raleigh, N.C.

RICE SCHMIDT ASSOCIATES, Architects and Engineers, Suite 203, Park Plaza Bldg., Mankato, Minn.

TARAPATA-MACMAHON-PAULSEN ASSOCIATES, INC., Architects, 1191 West Square Lake Rd., Bloomfield Hills, Mich.

WALTON, MADDEN, COOPER & AUERBACH, Architects and Planners, 6201 Riverdale Rd., Riverdale, Md.; Branch offices: 2304 Wilson Blvd., Arlington, Va., and 1150 Connecticut Ave., N.W., Washington, D.C.

WEISBECKER & SUSSNA, Architects, 10 Nassau St., Princeton, N.J.

## NEW PARTNERS, ASSOCIATES

CARSON, LUNDIN & SHAW, Architects, New York, N.Y., announce that ROBERT L. THORSON and JORDAN GARY MERTZ have been named senior associates.

JOSEPH A. DONAHUE, Architects, Quincy, Mass., announce that RUDOLPH JOHN HOUK has joined the firm as an associate.

DORMAN/MUNSELLE, Architects, Los Angeles, Calif., announce that CHARLES W. MAGEE has joined the firm as an associate.

EGGERS & HIGGINS, Architects, New York, N.Y., have elected FRANK W. MUNZER a partner; ROBERT L. BIEN and JOHN B. HAYDEN, associates.

HIRSCH, KAESTLE, BOOS, Architects, New Britain, Conn., have named T.J. STOUTENBERG an associate.

ALBERT C. MARTIN & ASSOCIATES, Architects, Los Angeles, Calif., have added six new partners: JOHN DAY, FRED A. DENISCO, KARL C. KLOKKE, ROGER A. LILLICROP, EDWARD J. TEAL and ROY VAN ORDEN.

NEUHAUS & TAYLOR, Architects and Planners, Houston, Texas and New York, N.Y., announce the appointment of four associate partners: CHARLES E. BURGESS, I.M. DURHAM, JR., RICHARD F. FLOYD and L. HERBERT RATHER, JR.; and the promotion of four to associates: JACK L. BELLER, HENRY C. HWANG, WARREN LANCER, SR. and PAUL N. TERRILL, JR.

EDWARD C. JENKINS & ASSOCIATES, Architects, Van Nuys, Calif., announce that NELSON FAY has joined the firm as an associate.

KNORR-ELLIOTT & ASSOCIATES, Architects and Planners, San Francisco, Calif., have named NICOLAY TERZIEV an associate.



**EVANS**  
CEDAR PLYWOOD SIDINGS

**Evans  
cedar siding  
provides design  
freedom  
within any  
budget**



**Evans Cedar sells itself...  
in commercial and residential applications**

Exciting design effects are achieved economically with Evans Cedar Sidings. They combine the bold natural look of the finest Western Red Cedar with the application ease of plywood. Choose from 11 patterns, available natural or factory pre-stained by Evans. All panels have faces and backs of Western Red Cedar. All panels are resistant to weather, decay and termites. Panels may be applied factory stained or left natural to weather

to a beautiful silver gray finish. Cedar-Sawn® faces are available in six patterns, Cedar-Etched® in five. Surface treatments include Reverse Board and Batten, Plain, Horizontal Lap, Channel Groove, Texture 1-11, Saw Kerf and the new San Francisco V-Groove. Panels are 3/8" 3-ply or 5/8" 5-ply, in 4' x 8', 9' or 10' lengths... Horizontal Lap 1' x 8' or 16'. Send the coupon for additional profit detail and name of your nearest Evans distributor.

**World's Largest Producer of Cedar Plywood**

**Evans**  
PRODUCTS COMPANY

Forest Products Division  
1121 S.W. Salmon St., Portland, Oregon 97208  
Please rush samples and details on above

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_



*Series* 8100

*Architectural simplicity is enriched with the warmth of tone and texture. Char Bronze, Mirror Chrome . . . walnut, rosewood, teak . . . mix the finishes as you will to complement the crispness of this design. The options are yours; so are the opportunities.*

**alma**

See the Alma Series 8100 in our showrooms in High Point and Chicago (Space 1140, Merchandise Mart). For a full-color brochure illustrating this and several other Alma Series, write Alma Desk Company, Dept. PA-94, Box 271, High Point, N.C. 27261.

## Macy's Kentile vinyl floor: it's better than brick!

In Macy's busy San Francisco store, a floor has to stand up to a ton of traffic, be easy to maintain, and still face the morning looking fresh and beautiful. Big reasons why Macy's in this—and 3 other West Coast stores—selected Kentile Colonial Brick Solid Vinyl Tile.

(See unretouched photo below.) It's a dead-ringer for natural brick, yet needs no bricklayers. Can't chip or powder. Enhances any interior—commercial or residential—with brick's rugged beauty and texture at far less cost. Superior too, in comfort, quiet, and ease of cleaning. Like all Kentile quality floors, Colonial Brick

resists stains, scuff marks... and it's greaseproof. Comes in Georgetown Red (shown below) and 3 other colors. Samples? Call your Kentile® Representative. Whatever your flooring needs, he's got the objective answer.

BROOKLYN, N. Y. 11215

# KENTILE FLOORS

