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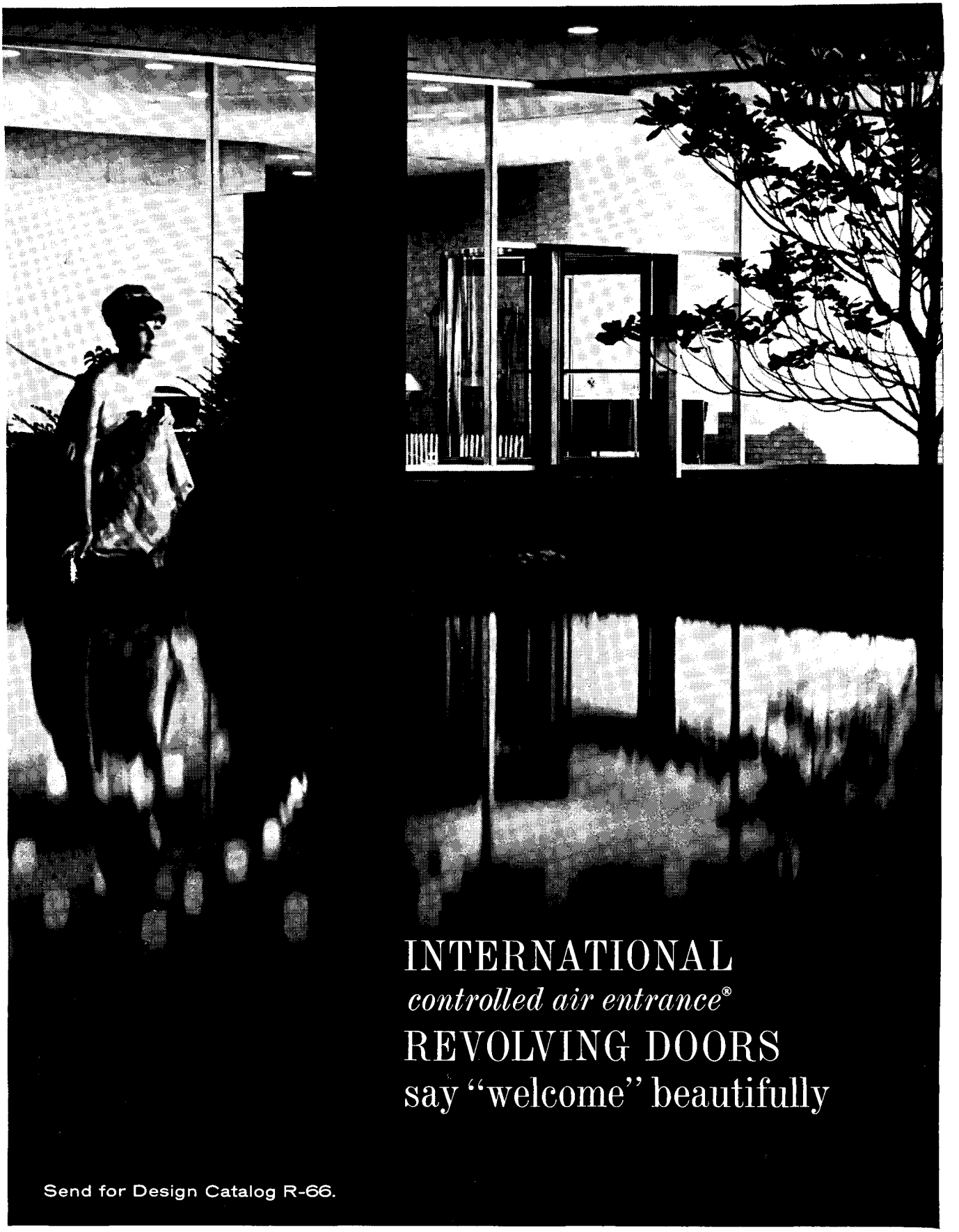

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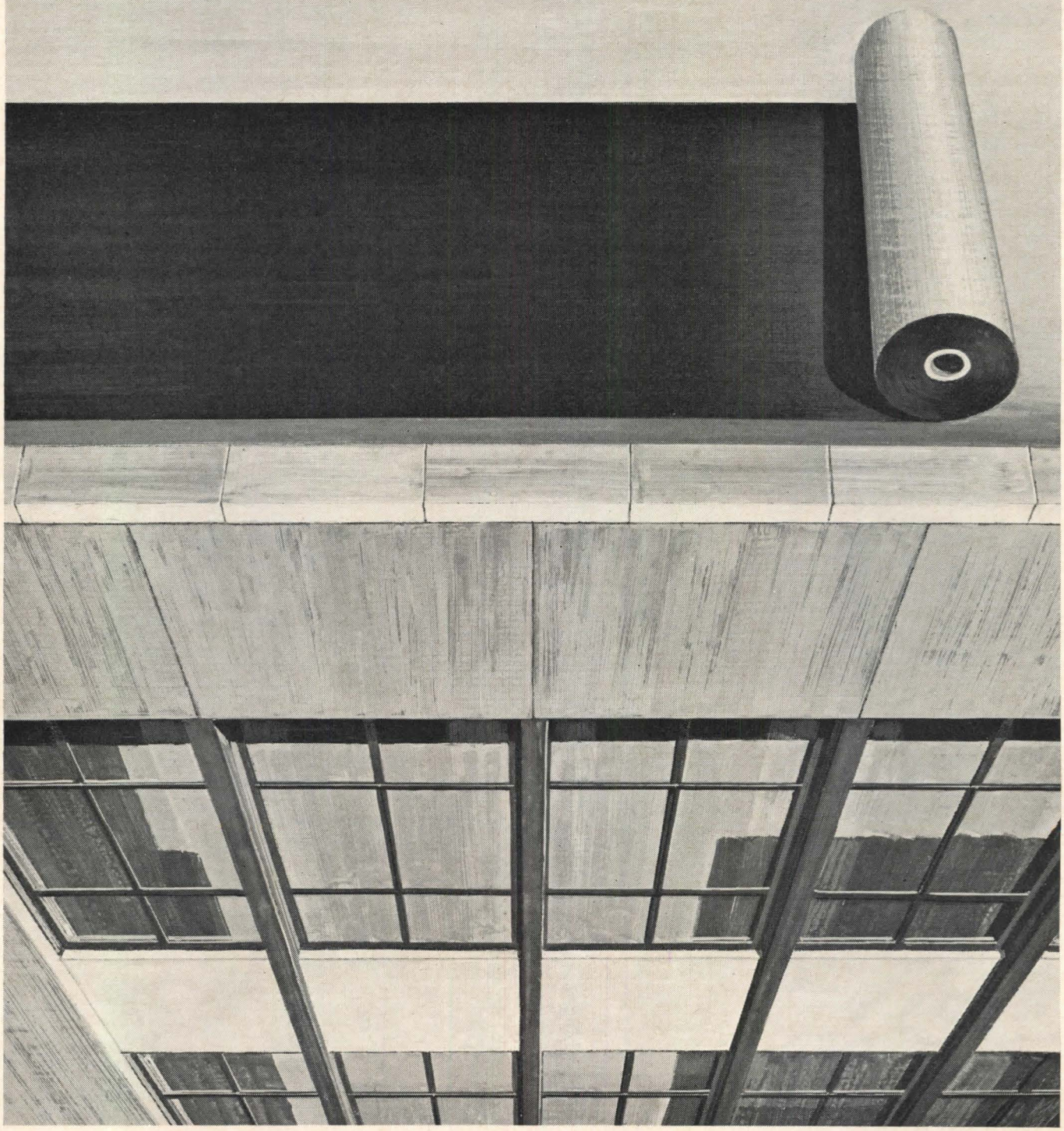
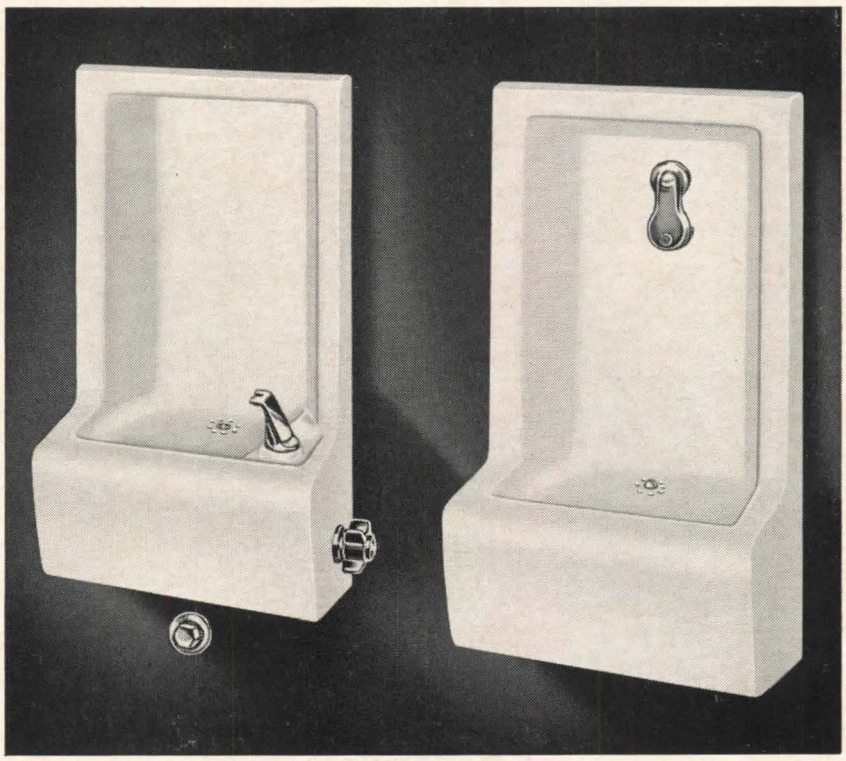


Our wall-hung drinking fountains don't fight students for floor space



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ARCHITECTS ON ARCHITECTURE

(continued from page 69)

dark neighborhoods. It is easy to talk nostalgically of the market squares and plazas of Europe, but what is needed is a firm architectural concept for the major arteries, the true city entrances, and centers, and most important, the individual neighborhood communities."

KEVIN ROCHE

"In our complex society it is almost impossible to grasp the quality of our technology and our economic structure. Architects have tended to turn away from this problem and do the one thing that they can handle. This is not the function the architect should fulfill."

KAHN

"Everyone is a singularity. The city is a melting of singularities. In each is that which expresses fundamental commonness. From others one learns about one's self. This atmosphere of human relations brings about new social needs of learning, of health, of art, of science, of government, of worship. A city is the place of the institutions. Their particular expressions by individuals and their environment in architecture, in the organization of connections, indoor and outdoor, combine to characterize one city from another."

SCIENCE

GOFF

"Wright believed that architecture was on the brink, and science was ruining it as it had ruined religion. I see no more reason why science should ruin us than the machine—provided we can master the machine and think of science as an inspiration."

HERBERT GREENE

"Modern methodology available for the analysis of an architectural problem presents us with enlarged means for understanding and realizing regional values. We are now able to deal with structure, to think about materials, about color, form, plan and purpose, either as separate elements or in related wholes. We should theoretically be able to attain a synthesis never imagined by older civilizations. Such is the power associated with the rise of abstract analysis; yet most of us would admit to a general lack of architectural quality on a par with that of older civilizations. Somehow we have to discover how to put our abstractions together to produce architecture."

PAOLO SOLERI

"The scientific revolution came upon man in all its force, and overwhelmed, he bowed to the new gods—Structuralism, Functionalism, and Rationalism. It is a mistake to deify scientific determinism unless one's ultimate goal is a statistically determined future efficiently interpreted by man. I am concerned for our future in this time of technological change, political upheavals, and the last flaring-up of nationalism. Man is engaged in the transformation of the universe, which to him is statistical, mathematical and scientific, into a human environment. He seeks a post-rational or post-scientific position.

"Science, and possibly religion, may be objective, but the esthetic world is subjective."

ESHERICK

"We need to establish a system having two characteristics: that the system itself does not structure our view either of the environment, formulation or solution of the problem; and that the design and decision processes are embedded in the problem itself, and man-oriented. We ought to generate many divergent thoughts and a number of different alternatives, and then develop some method of selection that is not arbitrary but has a definite criterion."

TECHNOLOGY

GREENE

"Technology is essentially neutral. It is impossible to explain the differences in Roman, Romanesque and Gothic architecture by their masonry technology alone. The state of mind

exerts an organizing influence on the deployment of materials and technology. We may utilize forms 'as found', or we may employ technology to produce new forms to solve new or even old problems. In architecture, our problem is to use technology for human purposes."

ELLWOOD

"Structure is the only clear principle. Form is valid only when it is shaped by structure and possibly characterized by function, region, culture and climate. Structure does not necessarily mean the steel or concrete cage. The three basic elements of construction are solid bodies, slender members and stressed surfaces. The architect has a choice which can lead to vastly different forms, each with structural integrity and clarity. But today we see skeleton and stressed surface construction that appear to be solid construction. We see hyberbolic paraboloid umbrellas enclosed at outer edges with what could be bearing walls. We see fake vaults and phony folded plates. We see decorative columns and simulated structure that carry no loads. An obsession for curvilinear form has led to impure structure, forced to withstand stresses in the least direct way—structure forced to fit any arbitrary form the architect can dream up. . . .

"Form is structure, no matter what other names are given to it, and so structure is architecture."

JOHNSON

"I never really had an interest in structure, and neither has Mies, inside him. It always amused me that he started to design the Seagram Building with a perfectly rational bay system of 27 feet 9 inches, derived from the lot size and the office divisibility module. Then, we arrived at the design of the big double-height rooms in the back (the Four Seasons Restaurant now) and we needed to double the size of the bay. All right, but what happens about the column that would have been in the middle of the bay? Well, take it out. We had to double the span without deepening the beam, wrenching the cost and also the logic. If you start with a bay, you have a repeatable and economic beam. If you take out a column, just like that, you quadruple everything; and yet we had to keep beams within the same depth as the 27 foot 9 inch span because the building had to read the same on every floor. That is what I mean when I say that Mies does not pay attention to what he says. He took the column out for what purpose? To create space. There you come back to the theme that goes through all architecture: to make interior spaces—all architecture is interior spaces."

BEAUTY

GOLDBERG

"The change is here. The words materialism, pragmatism, planned society, regimentation, begin to carry an apology; while spirit, soul, beauty, God, humanity are very 'in' words. When William McFetridge, President of the Janitors' Union (the sponsor of Marina City), said before his bankers, 'We want to pay to make it beautiful,' we are suddenly through the sound barrier of Victorian commercialism and rationalism."

ESHERICK

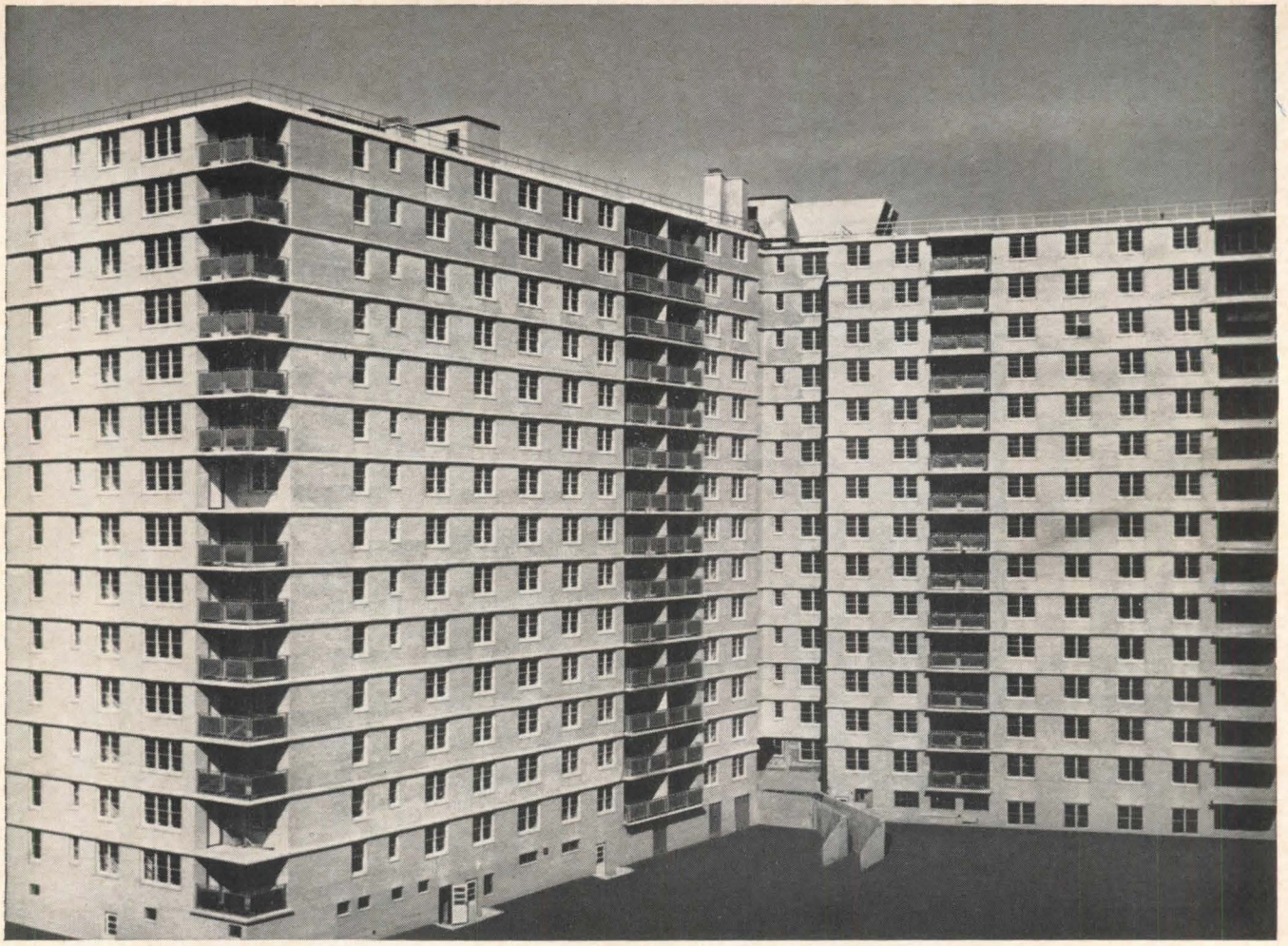
"There is a new cult in architecture, for the most part subjective and trivial, that concerns itself only with esthetics: beauty for beauty's sake, at all costs and no matter how arrived at. . . . Beauty is a consequential thing, a product of solving problems correctly. It is unreal as the goal. Preoccupation with esthetics leads to arbitrary design, to buildings which take a certain form because the designer 'likes the way it looks'. No successful architecture can be formulated on a generalized system of esthetics; it must be based on a way of life."

JOHNSON

"I like the thought that what we are to do on this earth is to embellish it for its greater beauty, so that oncoming generations can look back to the shapes we leave here and get the same thrill that I in turn get in looking back at the Parthenon, at Chartres Cathedral. . . ."

WEESE

"I am embarrassed when architects talk about beauty; like happiness it is only a by-product. A building should be handsome, elegant, strong, lean—beauty is too vague an attribute."



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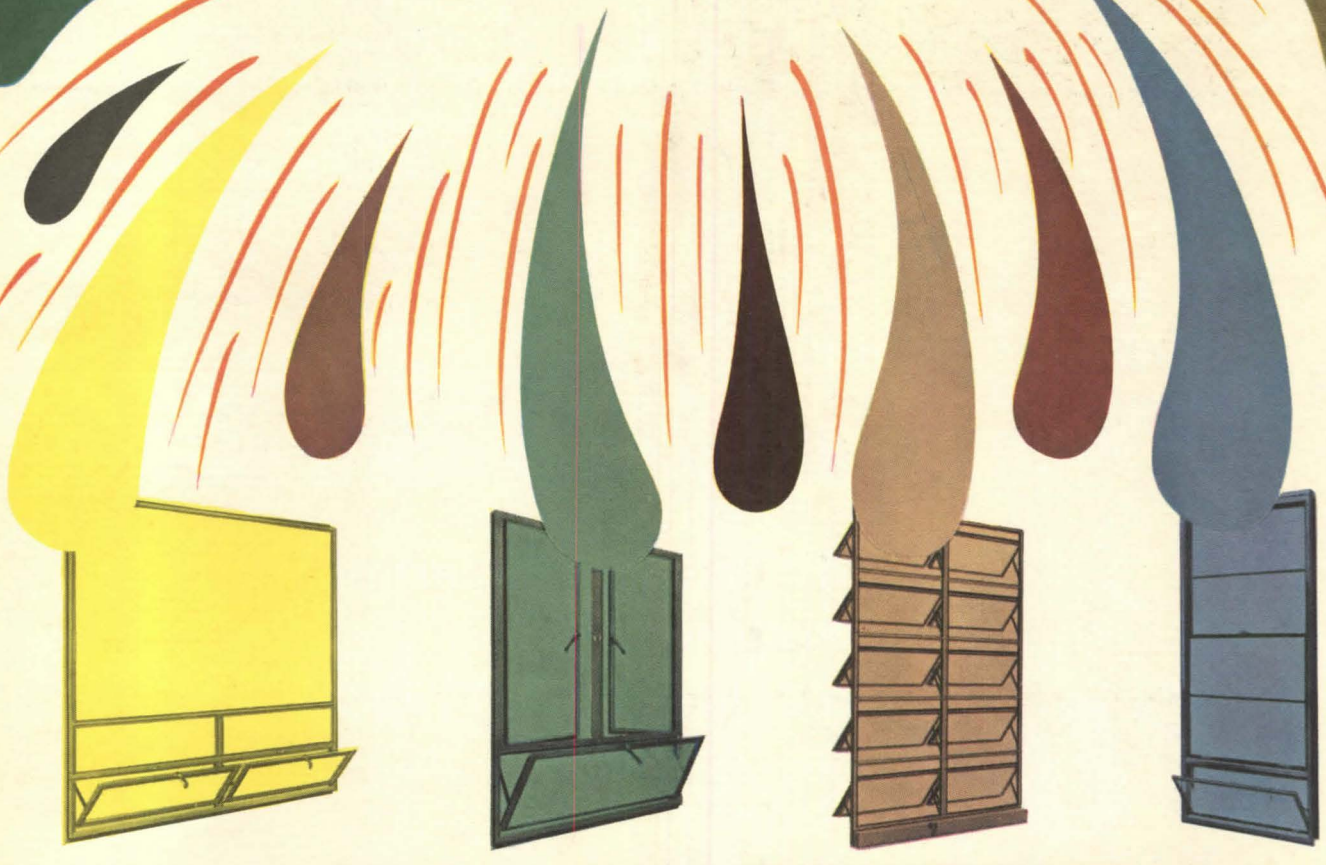

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THE MAN FROM MANUFACTURING*

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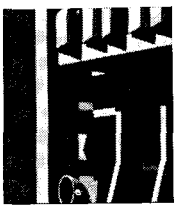

Cover: Design by Peter Bradford from a photo of the Clark library (pages 64-67) by Louis Checkman

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PUBLISHER'S NOTE

Some very significant names have changed in the column to the left. One is the name of the Forum's sponsoring organization, Urban America Inc., which is now additionally "The ACTION Council for Better Cities."

The addition, as some of you undoubtedly have heard, is the result of a mid-December merger of Urban America and ACTION, the 11-year-old citizens' organization for urban improvement. ACTION's more than 70 "Local Group Associates" have been invited to affiliate with Urban America. Its three special divisions —the Urban Development Division in Washington, the Local Development Services Division formed under a Ford Foundation grant to assist nonprofit housing sponsors, and an Urban Transportation Division in the process of organization — are now components of Urban America.

The other significant names are those on Urban America's Board of Trustees, to which are welcomed leaders of ACTION. (I cannot resist a special welcome to Board Chairman Andrew Heiskell of Time Inc. It's good to have his name in the Forum again.)

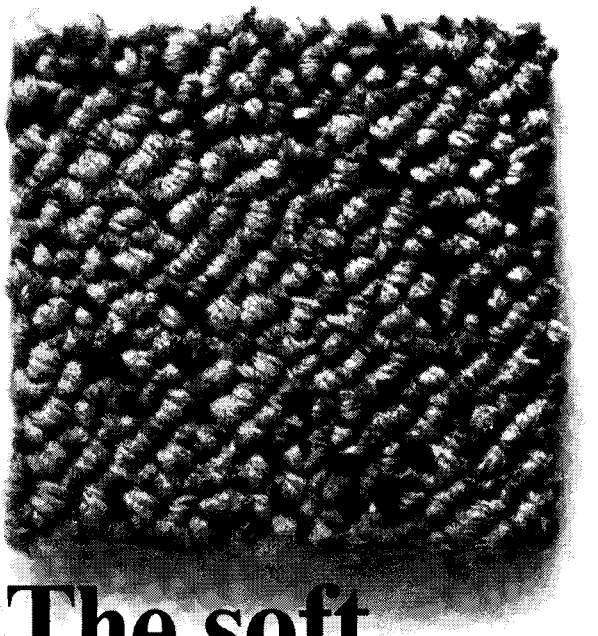
Executive Vice President of Urban America is Jim Lash, whose direction of ACTION has made him one of the most respected spokesmen in the urban development field. With Lash, Urban America's leaders are gearing up for an ambitious program to help make American cities "more livable, more workable, and more beautiful." The Forum's role, both chosen and appointed, will be to continue addressing architects and related urban design professionals, in whose hands rests so much of this task.

* * *

The basic subject matter of the Forum is ideas, whether they are visually expressed, spoken, or written; ideas about architecture, about cities, about technology and about almost every other art or discipline that impinges upon the urban scene. In this issue—specifically, on page 54—we institute a new department devoted to new books in these fields. L.W.M.

Until today there were only two ways to cover a floor.

The hard way.



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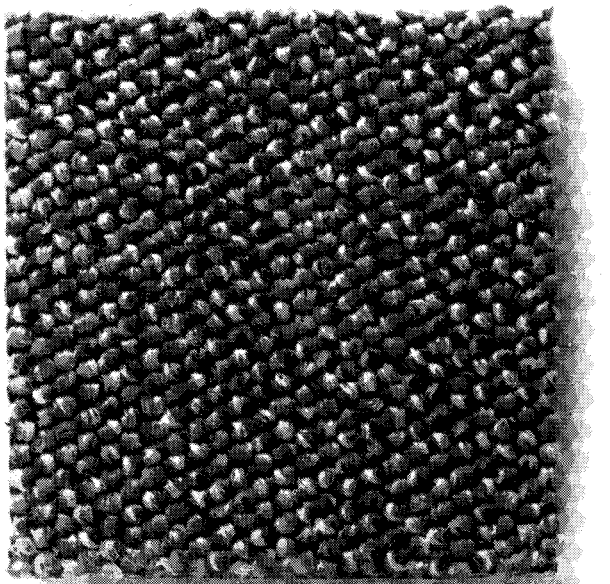

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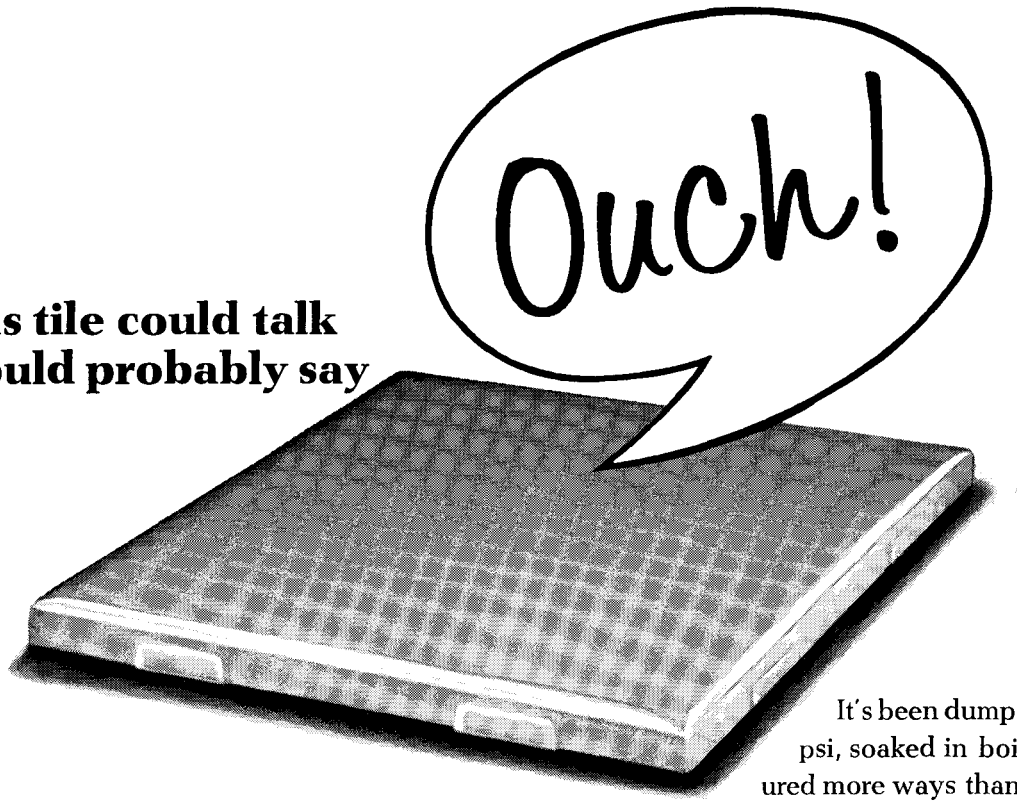

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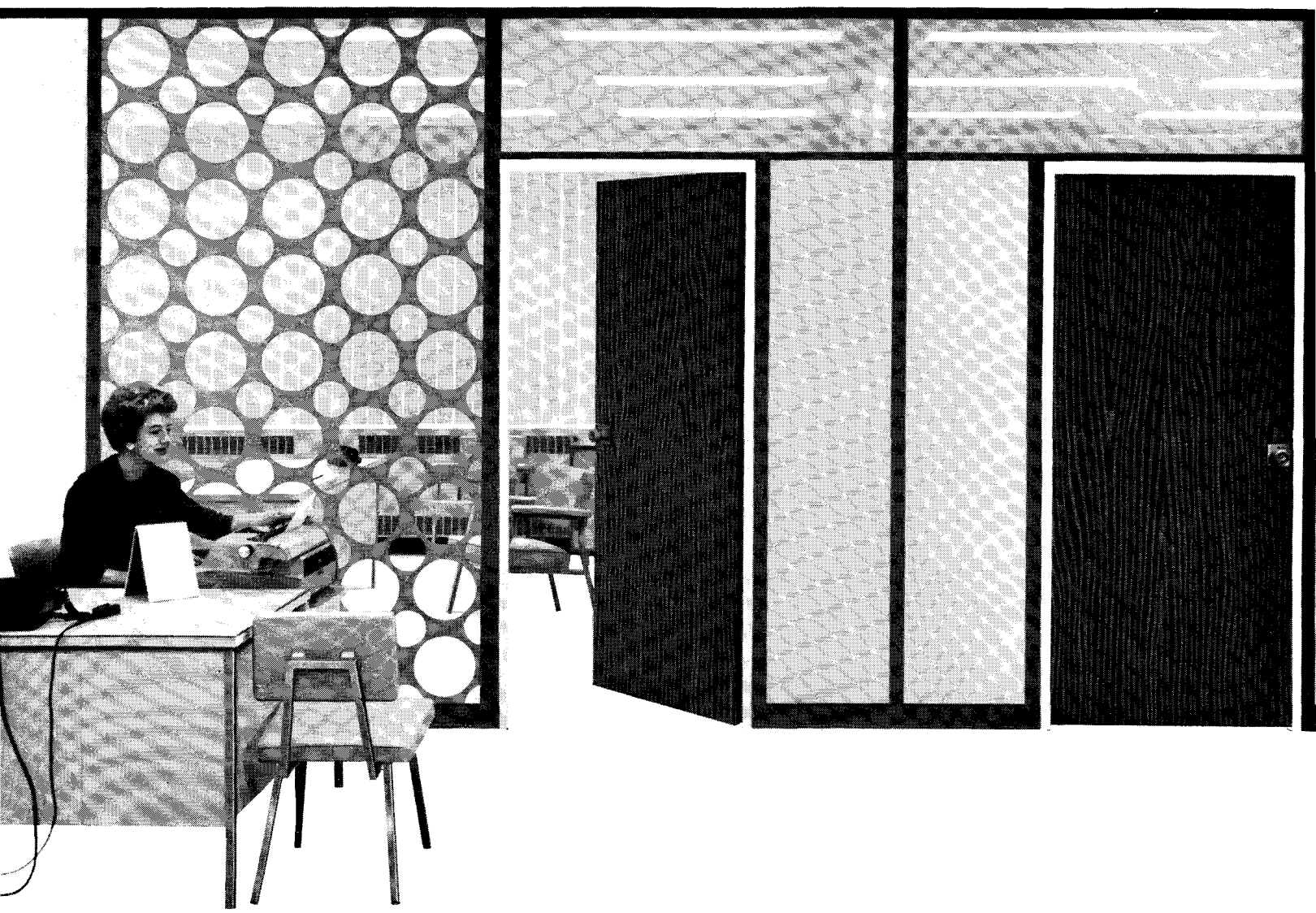

Sensitivity of Definition in the Forecast Series of Movable Walls by Mills *creates rhythmic order in a variety of panel configurations of steel, glass, and wood. The emphatic, single-recess post above is one of twelve different ways Mills uses the third dimension to achieve fresh articulation in modern wall design. This flexibility in the Forecast Series gives designers complete freedom to create, with one Mills design group, unique interior wall systems for every client. Write us for details.*

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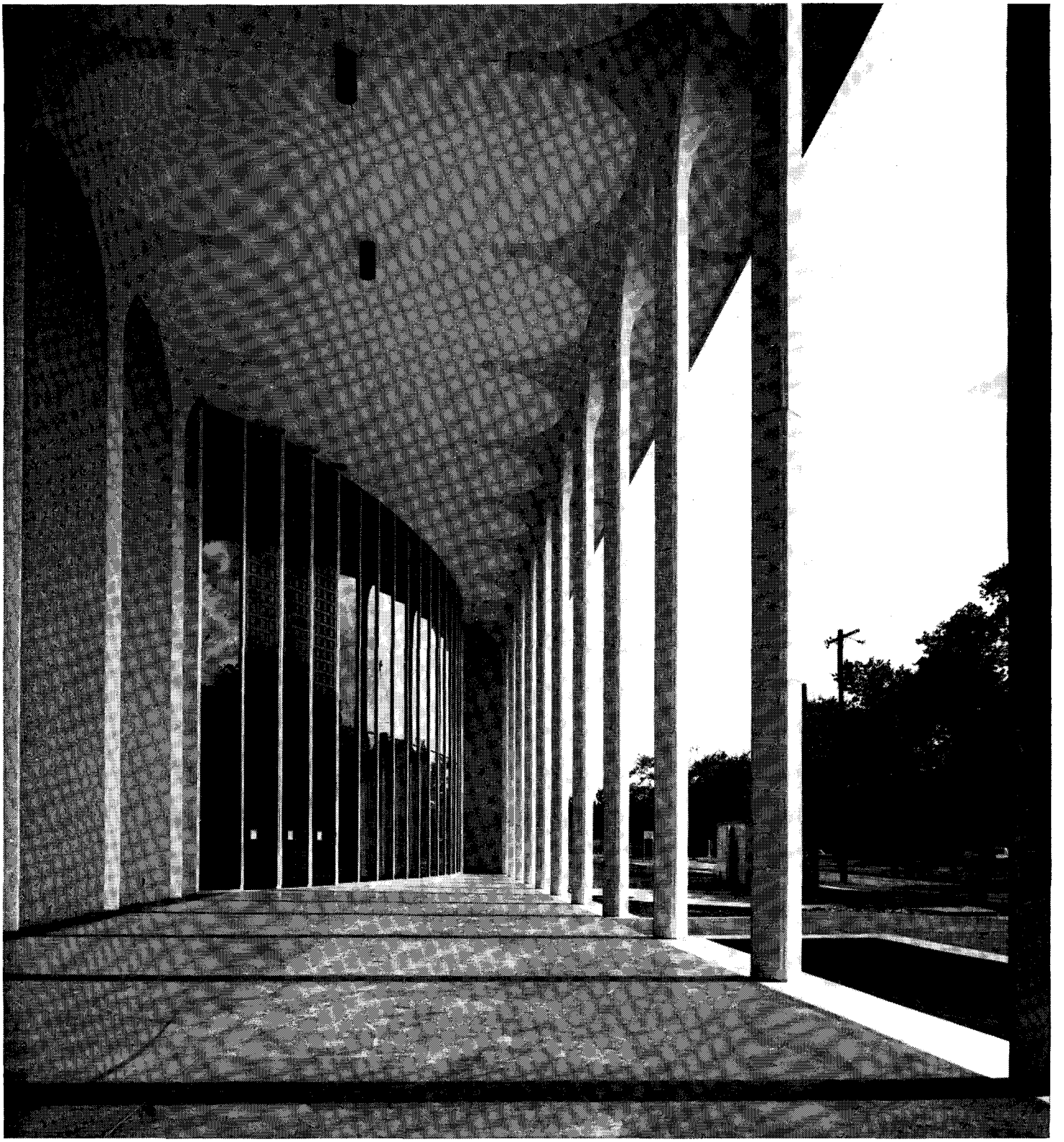
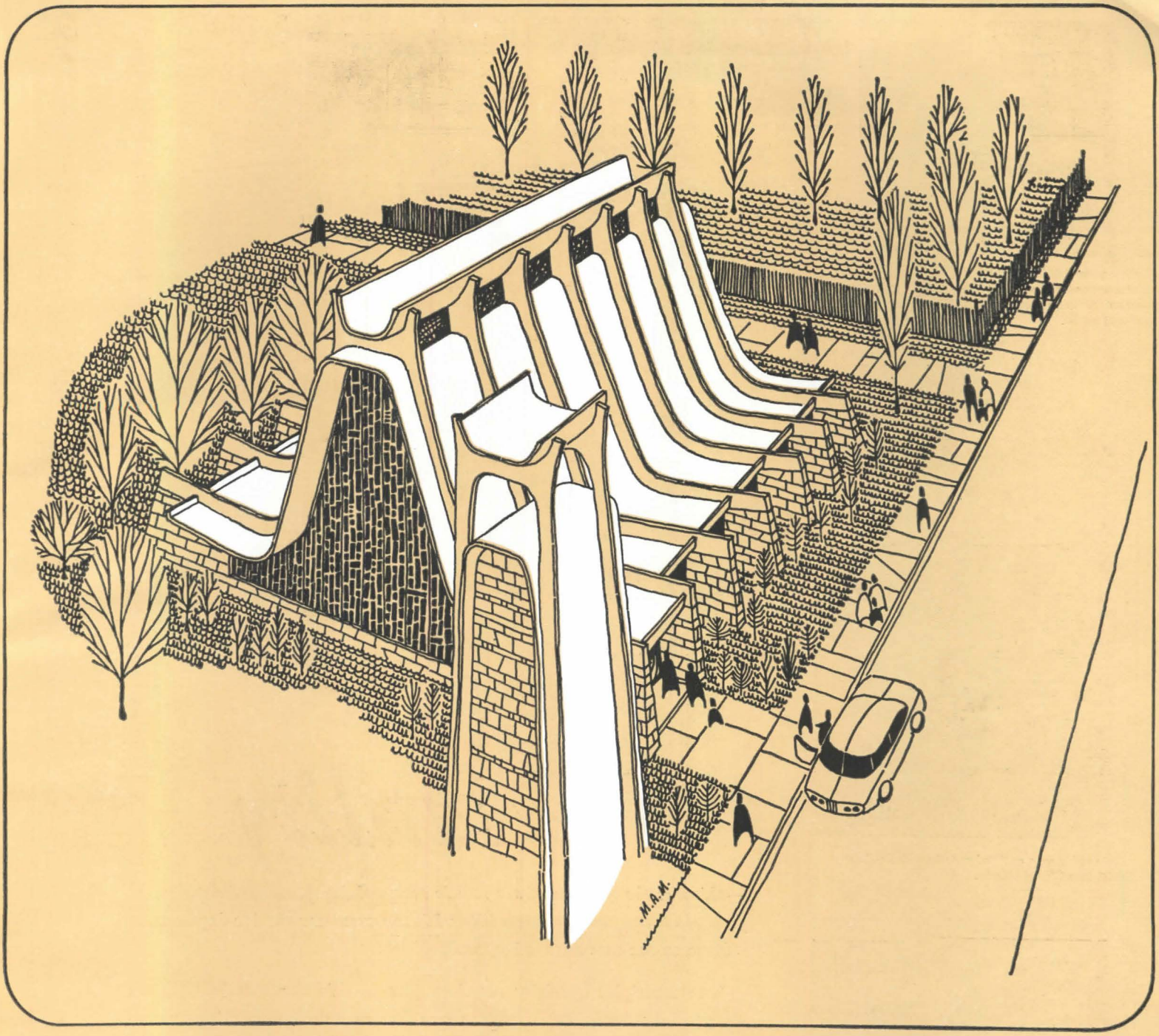
911 WAYSIDE ROAD • CLEVELAND 10, OHIO



DRAMA in architecture beautifully serves drama in the performing arts: for the new Fine Arts Center at the University of Oklahoma, Tulsa architect A. Blaine Imel selected a slender steel Fenmark grid system to carry the grayed glass of the foyer; and cellular steel longspan "D" panels for the floor and roof. A contemporary classic utilizing all the advantages of the latest structural systems by FENESTRA. A representative will call at your request. Fenestra Incorporated, Lima, Ohio 45802.

FENESTRA



OK, throw us a wild pitch. We'll cover for you.

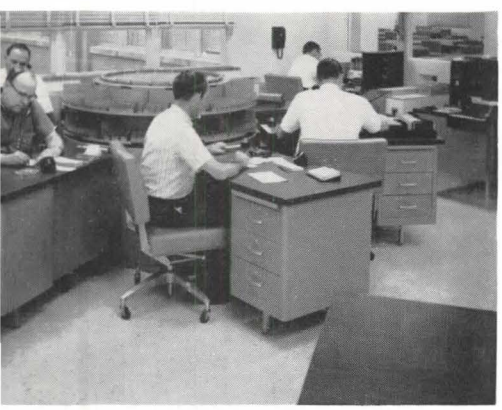
Go ahead. Design a roof that looks the way you want it to look. Make it steep. Make it wavy. Be exotic. B.F.Goodrich has a remarkable new roofing system that conforms to unusual contours, works on steep slopes. Its name is BFG One-Ply. One-Ply is a laminate of Du Pont Hypalon® synthetic rubber backed with neoprene-bound asbestos. It's light. Flexible. Easily installed. Fire resistant. Self-flashing. And so watertight, we guarantee it five years against leaks. Ideal for flat roofs, too. Find out more by writing BFG Building Products, Dept. AF-11 Akron, Ohio 44318.

B.F.Goodrich

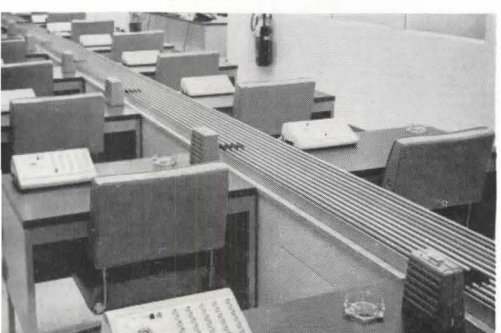
BFG® ONE-PLY ROOFING

Former general offices of the customer service department —prior to new facilities pictured below.

Main office area outfitted entirely with Peerless 9800 Line Olympic Desks.



(Above) Rotary files of order department features modified 1100 Line Peerless Commercial Desks. (Below) Conveyor system flanked by modified Peerless Olympic Desks.



Versatility

—this was the office furniture role in reorganizing specialized department from old to completely new facilities. It's the customer service department of one of the east coast's largest Utilities.

The multiple, specialty requirements of this contract installation dictated the choice of Peerless office furniture throughout. The versatility of the Peerless 9800 Olympic Line and the 1100 Commercial Line permitted the space designer, the Hoskins Company, Philadelphia, to readily design to the requirements of this unique installation.

Our full color literature, Form No. 176, will introduce you to the versatility of the Peerless Olympic Line. Write, Peerless Steel Equipment Company, Philadelphia, Pa. 19111.

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Chairs by Stendig.

Mosaic introduces Champagne Glaze scored tile. It's for people who want to be subtle without being dull about it.

There's never a dull moment with Champagne Glaze around.

Look how it brings that left wall to life. Yet it doesn't get pushy. It doesn't try to be the whole show.

It can't.

Champagne Glaze tile is like all other Mosaic tiles. It's absolutely color-compatible under any circumstances.

Notice how nicely it gets along with the outside wall of Velvetex 661 and our Egyptian quarry tile floor. And without stealing a thing from the recess wall of Velvetone 124 with highlights of Faientex 1291.

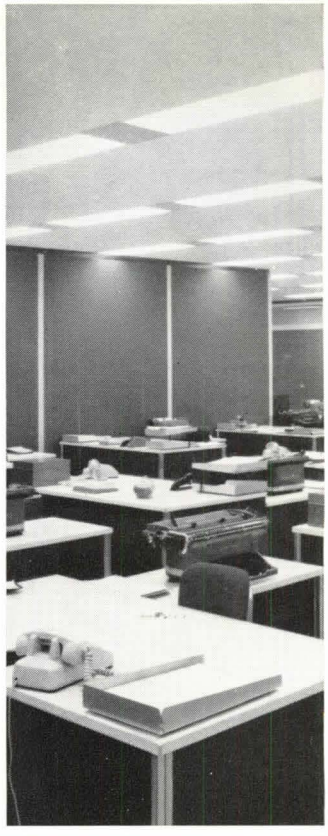
Champagne Glaze comes in five colors on a 4¼" x 4¼" scored wall tile body. Just to put your ideas in a little better light.

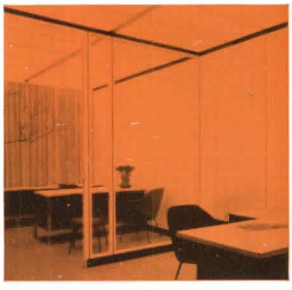
For prices, samples and availability, contact any Mosaic Representative, Service Center or Tile Contractor.

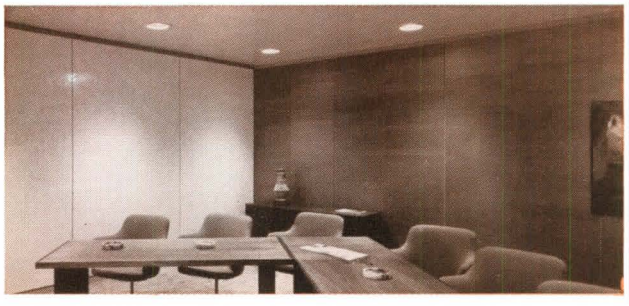
See Yellow Pages "Tile Contractors-Ceramic". Or write: The Mosaic Tile Company, 55 Public Sq., Cleveland, Ohio 44113. For comparable colors in the West: 909 Railroad St., Corona, Calif.

MOSAIC®

"Mosaic" is the trademark of The Mosaic Tile Company.







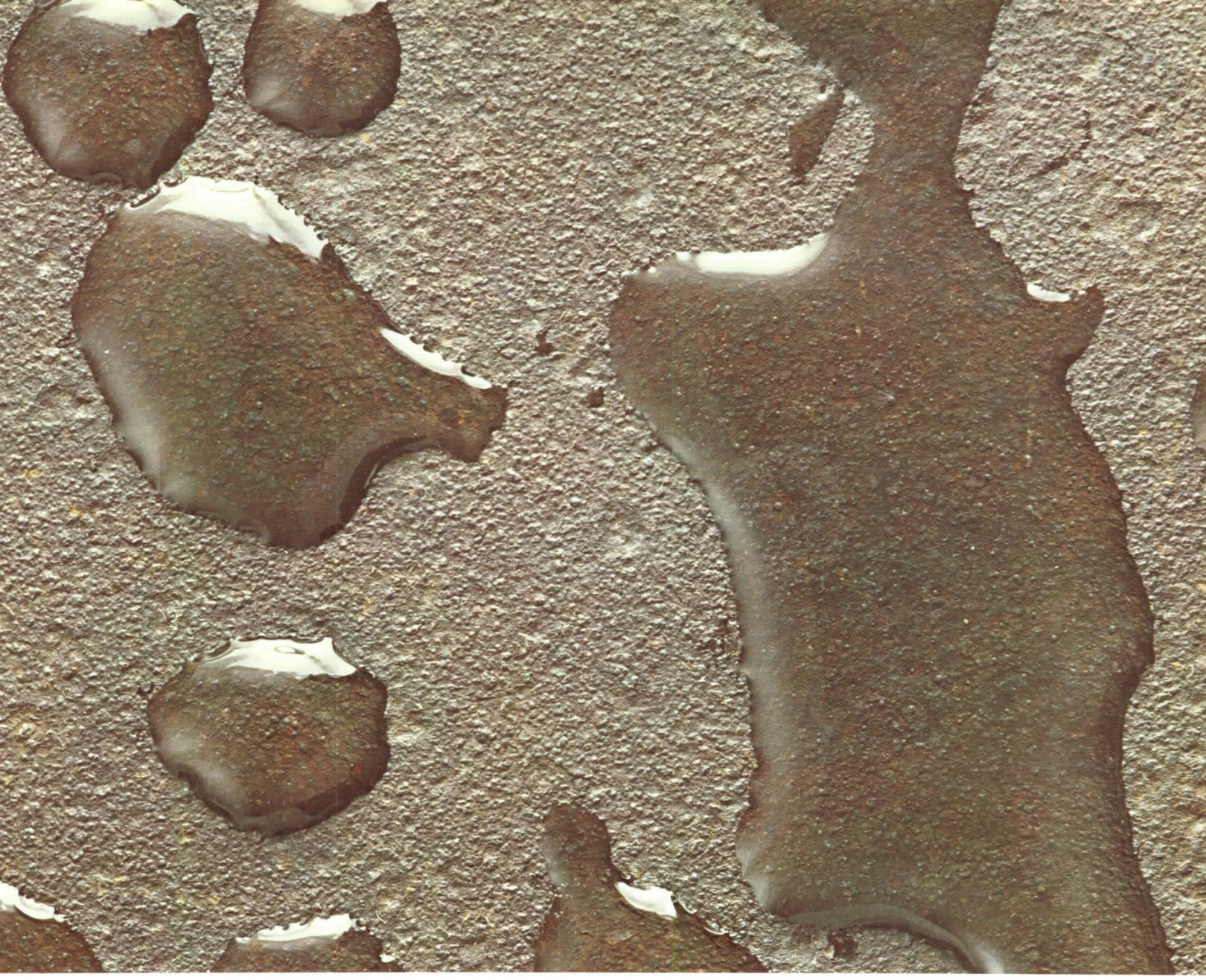
Movable Walls from Hauserman

Movable walls from Hauserman combine beauty and economy for contemporary offices—with the added bonus of total flexibility.

A complete system of Movable Walls is available to meet today's design needs. Low cost Double-Wall provides a handsome maintenance-free appearance with superior sound control for typical office space arrangements. For special emphasis areas, Hauserman offers Signature and Delineator to provide the beauty of baked-enamel finishes, the quiet elegance of woods, textured glass, and other fine wall coverings.

Hauserman Movable Walls with their distinctive beauty are the answer for office space division problems, and they can be easily relocated as space needs change. Write for the Hauserman Movable Wall Systems brochure. *The E. F. Hauserman Co., 5771 Grant Ave., Cleveland, Ohio 44105. In Canada: Hauserman Ltd., Mallard Rd., Don Mills, Ontario.*

HAUSERMAN



Everybody talks about the weather but USS COR-TEN does something about it!

USS COR-TEN Steel actually uses weather to protect itself by forming a dense, attractive, tightly-adherent oxide coating that inhibits further corrosion. As the patina develops, it weathers naturally—like stone or timber—to a rich, earthy color. If the fine-grained texture is scratched, it heals itself.

COR-TEN steel's ability to put weather to work is now being utilized in many outstanding structures.

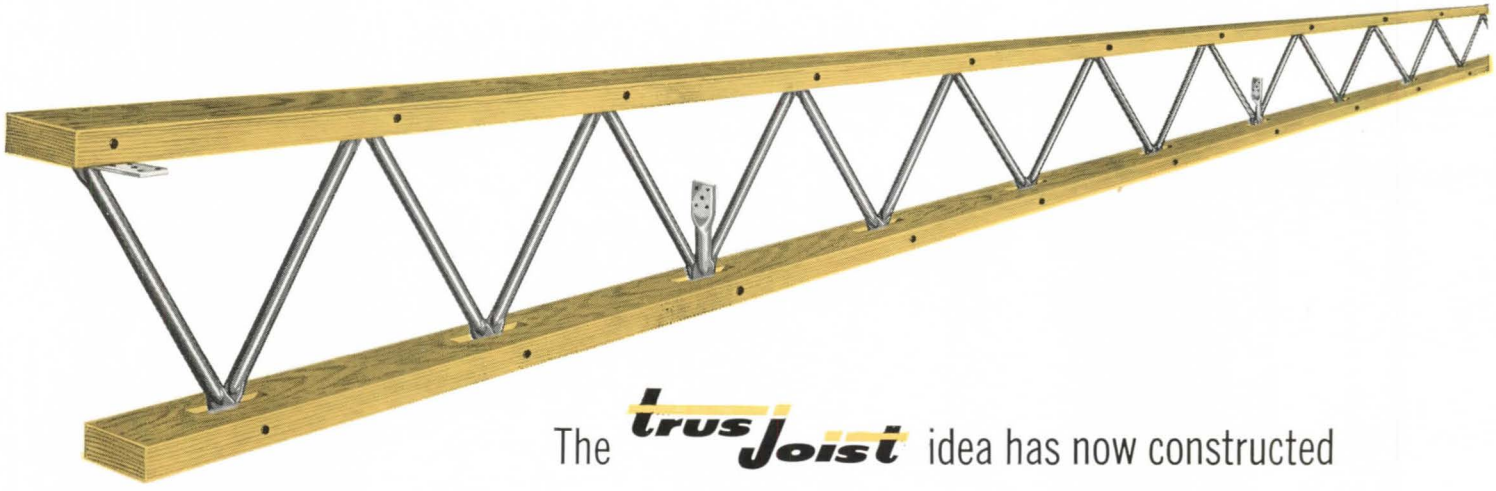
COR-TEN steel's self-protection and natural color are only part of the story. This high-strength low-alloy steel has a price/strength ratio that further stimulates the imagination. It has a 40% higher yield point than structural carbon steel, so it can be used in thinner sections to reduce weight. It is weldable in all thicknesses, available in all rolled steel products—plates, structurals (including wide flange), bars, sheets, strip, and tubular products. And, when a color scheme or other factor requires painting steel members, you can expect at least twice the paint life of structural carbon steel. For your next design, take a close look at USS COR-TEN Steel—and how it puts weather to work.

For more information, write for our booklet, "COR-TEN Steel for Architectural Applications." United States Steel, Room 6963, 525 William Penn Place, Pittsburgh, Pennsylvania 15230. USS and COR-TEN are registered trademarks.

USS United States Steel

No army
can withstand
the strength of
an idea
whose time has come

—Victor Hugo



The trus Joist idea has now constructed
more than 4,000 schools, shopping centers and commercial buildings of every type

Trus Joist is the perfect blend of wood and steel for roof and floor structural systems . . . light in weight and yet provides clear spans up to 100 feet.

All this plus custom design and three week delivery.

Profiles? Parallel, tapered, pitched, curved, or almost any shape . . . and economy is still the byword.

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Deflection is minimal even in long spans while temperature change poses no problems.

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Trus Joist is a money-saving, work-saving system that's balanced, precision engineered and custom made to the architect's specifications.

Good idea?

. . . an idea whose time has *come*.

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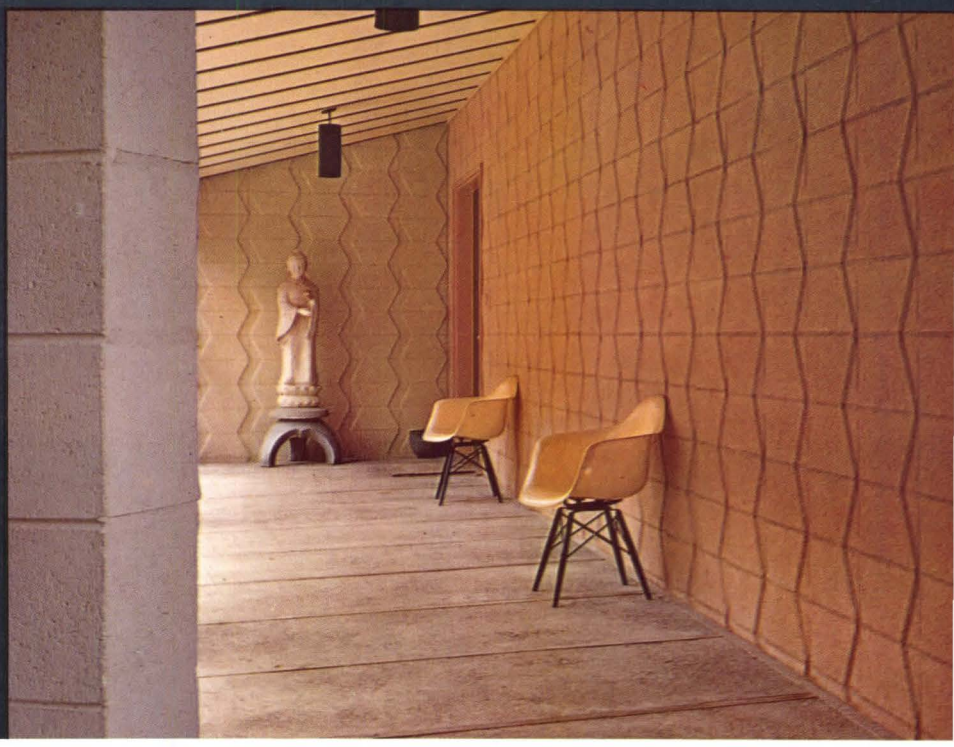
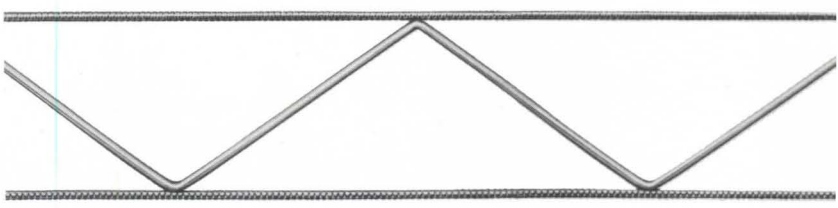


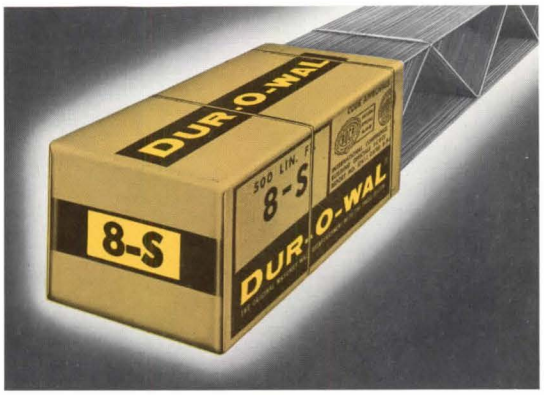
Build better masonry walls with Dur-O-waL



and Dur-O-waL Products...

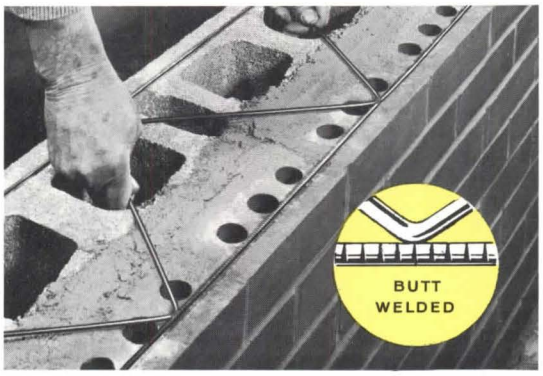
What is Dur-O-waL?

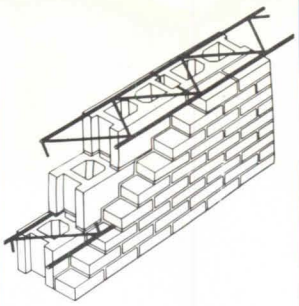
Dur-O-waL brand is the original masonry wall reinforcement with the truss design. Specially designed to give greater strength and bond to masonry walls, Dur-O-waL also minimizes shrinkage, temperature and settlement cracking in masonry. Dur-O-waL is manufactured from high-tensile steel, deformed and electrically butt-welded to give you the highest quality masonry wall reinforcement material known to construction today. Insist on Dur-O-waL.



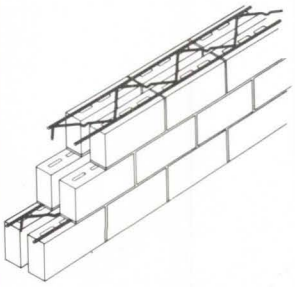
How does Dur-O-waL work?

Like nothing else on the market. This truss design reinforcement increases flexural strength of your masonry walls 79 to 261 per cent, depending on the weight of Dur-O-waL used, type of mortar and number of courses. And note how the side rods are scientifically deformed on four sides for the best possible gripping contact with mortar. Choose from a complete range of Dur-O-waL brand shapes and sizes.

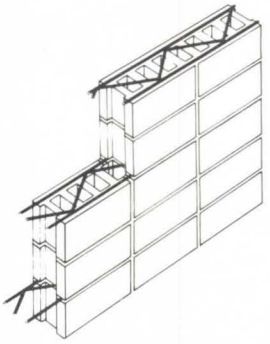




COMPOSITE WALLS



CAVITY WALLS



PLAIN WALLS

Use Dur-O-waL to reinforce plain, composite and cavity walls

Dur-O-waL gives your masonry walls increased compressive strength, increased transverse strength and marked improvement in resistance to moisture penetration in composite walls.

DUR-O-WAL®

THE ORIGINAL MASONRY WALL REINFORCEMENT WITH THE TRUSS DESIGN

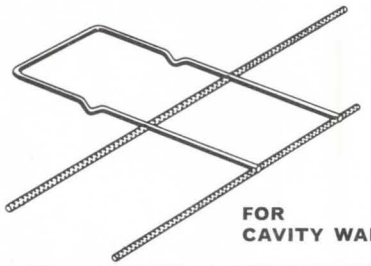
Are you familiar with these other versatile products made by Dur-O-waL?

Adjustable Wall Ties

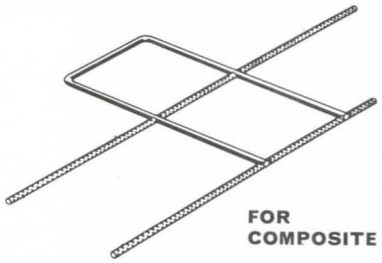
RECTANGULAR

Z-TYPE

Continuous Rectangular Ties (Tab-Tie)

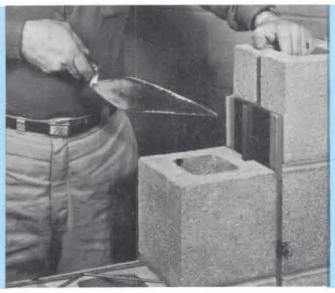


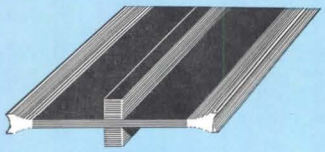
FOR CAVITY WALLS



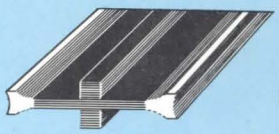
FOR COMPOSITE WALLS

Rapid Control Joint





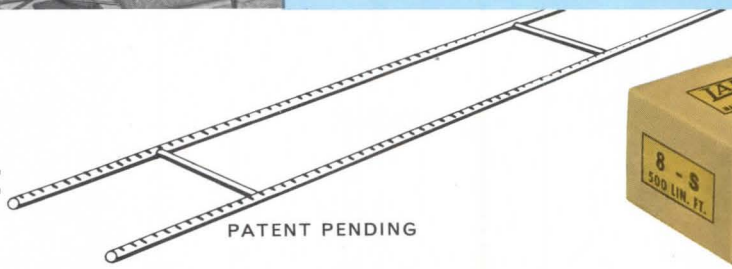
NO. 8 WIDE FLANGE



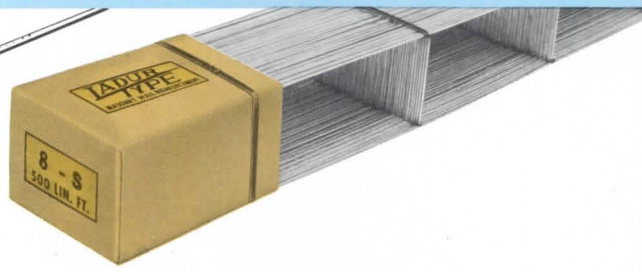
NO. 6 WIDE FLANGE

REGULAR

Ladur Type® Reinforcement



PATENT PENDING



Clip this coupon and mail to Dur-O-waL National Inc., Post Office Box 150, Cedar Rapids, Iowa, for complete information on Dur-O-waL brand masonry wall reinforcement and other Dur-O-waL products.

Please send me information on the following:

- ☐ Dur-O-waL Truss Design Masonry Wall Reinforcement
- ☐ Ladur Type Reinforcement
- ☐ Adjustable Wall Ties
- ☐ Continuous Rectangular Ties (Tab-Tie)
- ☐ Rapid Control Joint
- ☐ Please have a Dur-O-waL representative call.

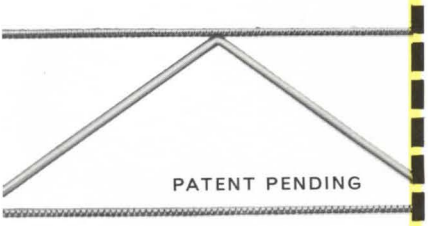
Name_____

Firm_____

Address_____

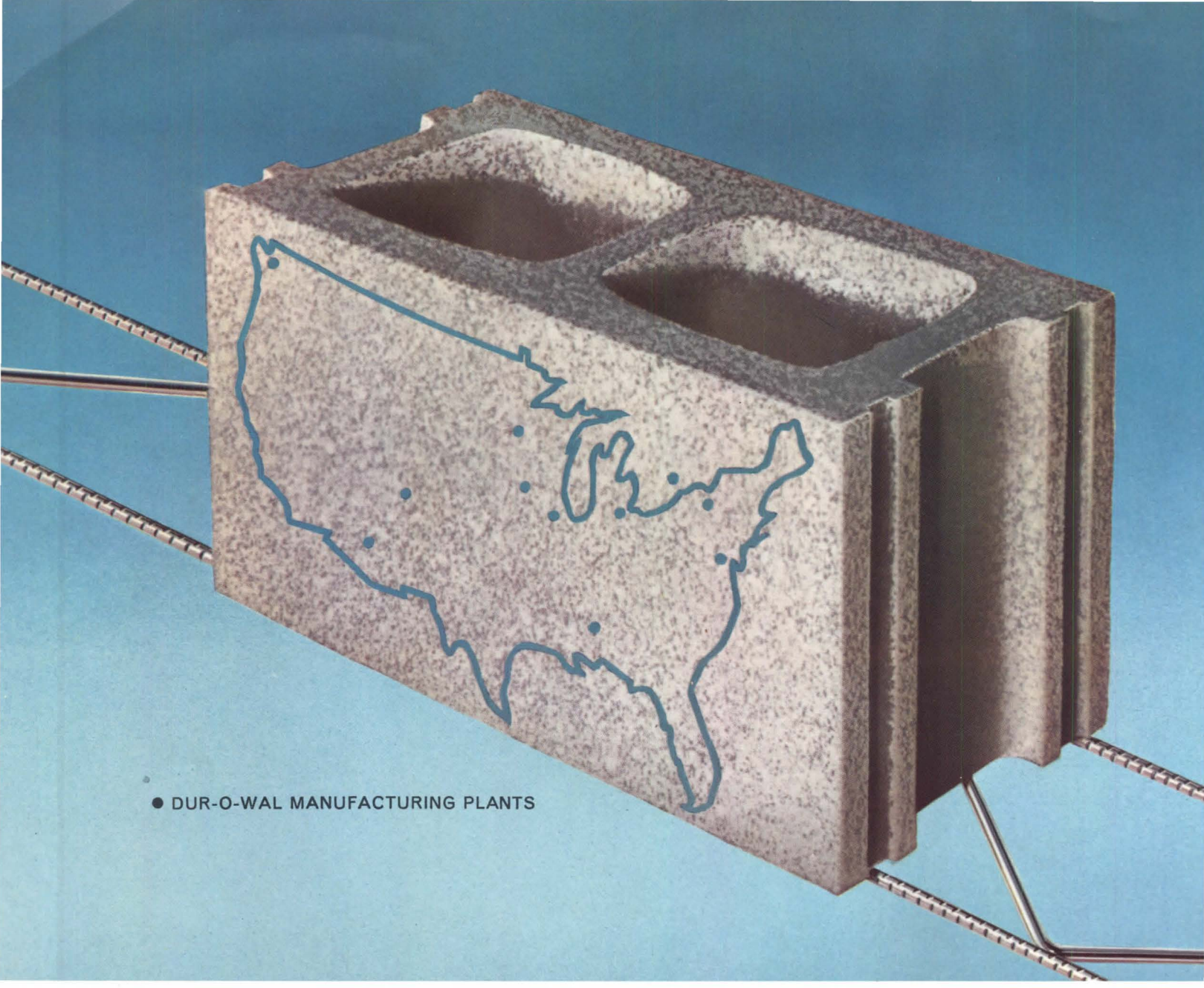
City_____ State_____ Zip Code_____

Clip and mail to Dur-O-waL



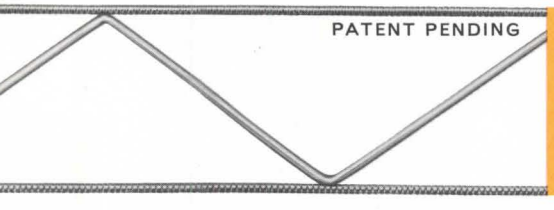
PATENT PENDING

MORE FROM DUR-O-WAL ON THE NEXT PAGE



You can get Dur-O-waL wherever you get masonry

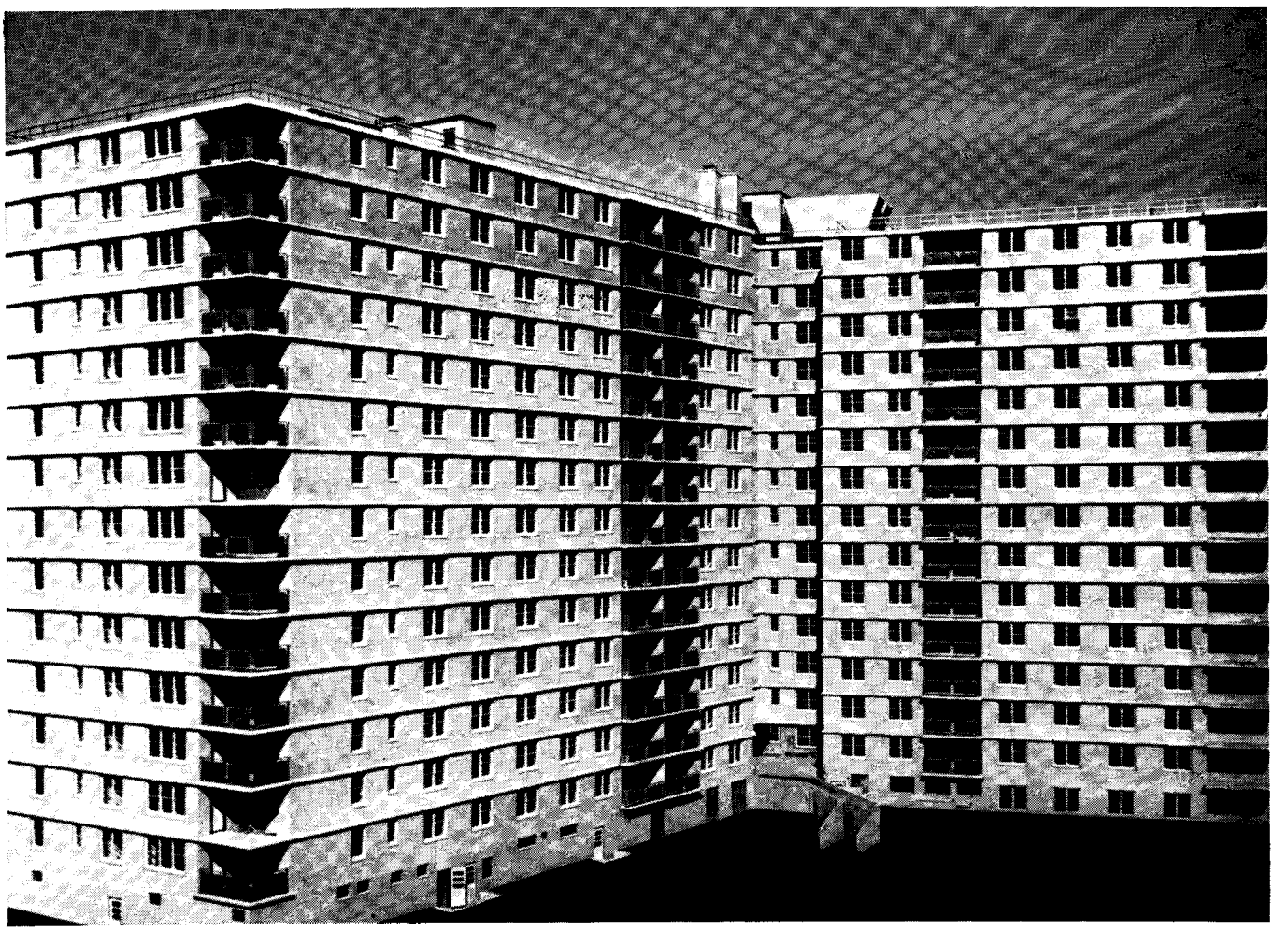
Not only is Dur-O-waL as versatile as masonry, but it's as accessible as masonry itself. Over 8,000 dealers now recommend and stock Dur-O-waL wherever and whenever you need it. Truss designed Dur-O-waL also carries material approvals for multiple use in masonry wall construction by the following code organizations: Building Officials Conference of America (BOCA), Southern Building Code Congress (SBCC), International Conference of Building Officials (ICBO). When you specify Dur-O-waL, make sure you *get* Dur-O-waL. Look for the original truss design. Look for the Dur-O-waL end wrap. They're your assurance you've found the way to make masonry walls live longer then ever before.



DUR-O-WAL®

THE ORIGINAL MASONRY WALL REINFORCEMENT WITH THE TRUSS DESIGN

DUR-O-WAL MANUFACTURING PLANTS • Cedar Rapids, Iowa, P. O. Box 150 • Syracuse, N. Y., P. O. Box 628 • Baltimore, Md., 4500 E. Lombard St. • Birmingham, Ala., P.O. Box 5446 • Aurora, Ill., 625 Crane St. • Pueblo, Colo., 29th and Court St. • Toledo, Ohio, 1678 Norwood Ave. • Mesa, Ariz., 213 So. Alma School Rd. • Seattle, Wash., 3310 Wallingford Ave. • Minneapolis, Minn., 2653 37th Ave. So. • Also manufactured in Canada.



Northbridge Park, Fort Lee, N. J.;
Lejo Construction Co., Leo Goodman,
John Guidera, Co-Owners; Englewood, N. J.;
Architects: Erwin Gerber & A. Pancani,
Newark, N. J.

M66-2

All Malta Windows display this 10-Year Warranty tag — Malta's written assurance of 100% performance through the critical years. They're built for a lifetime of satisfaction.

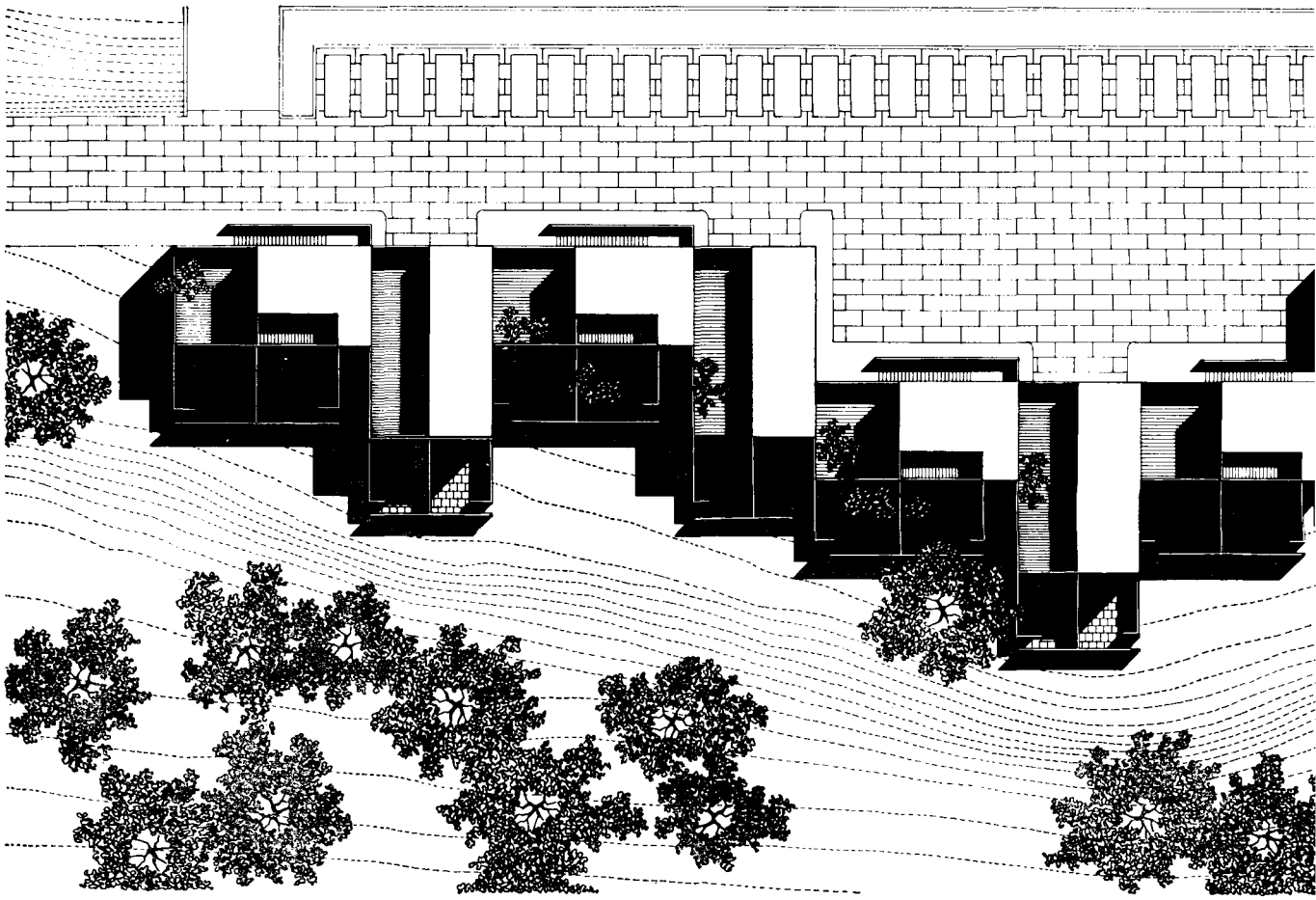
"We made 280 apartments more homelike with Malta Wood Windows.

Our next one, under construction, has Maltas, too."

What helps sell quality homes can also help fill apartments, condominiums and office buildings. When an apartment or office looks more homelike, tenants stay put. Malta Wood Windows dispel the institutional coldness of high-rise construction. The owner saves on heat loss, air conditioning and general maintenance. You can clean or brighten Malta Windows inside and out — from the inside. Malta Windows are easily removed without tools or trouble. Wood windows are best for high-rise where wind velocity makes ill-fitting metal windows noisy and costly. Add sales appeal and colorful charm with Malta Wood Windows. Find out how Malta gives your commercial building investment a new, fresh appeal for every particular tenant. Send for Catalog M66-1.

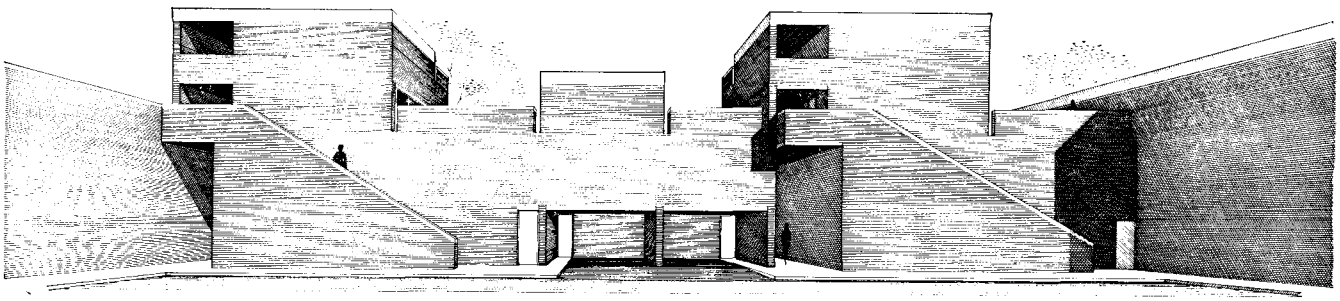
Malta

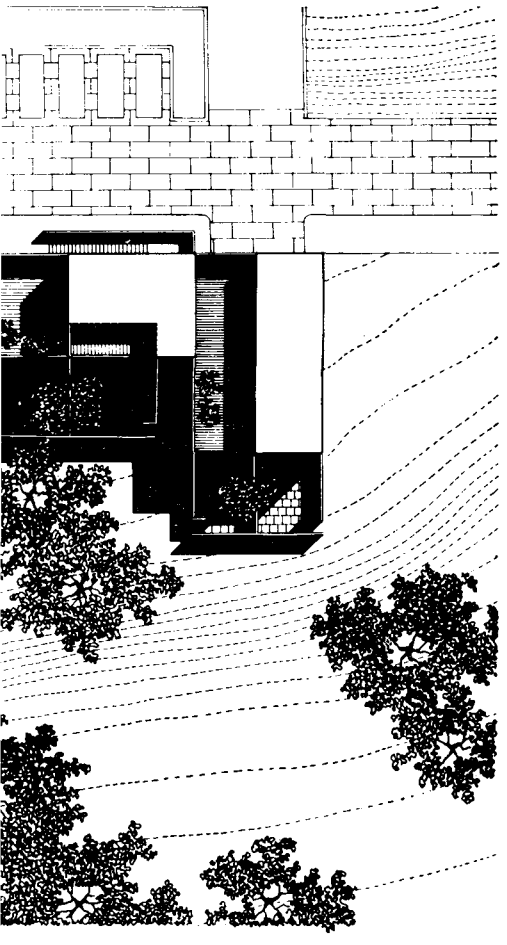
MALTA MANUFACTURING COMPANY
GAHANNA (COLUMBUS), OHIO 43020
Plants in Malta and Zanesville, Ohio



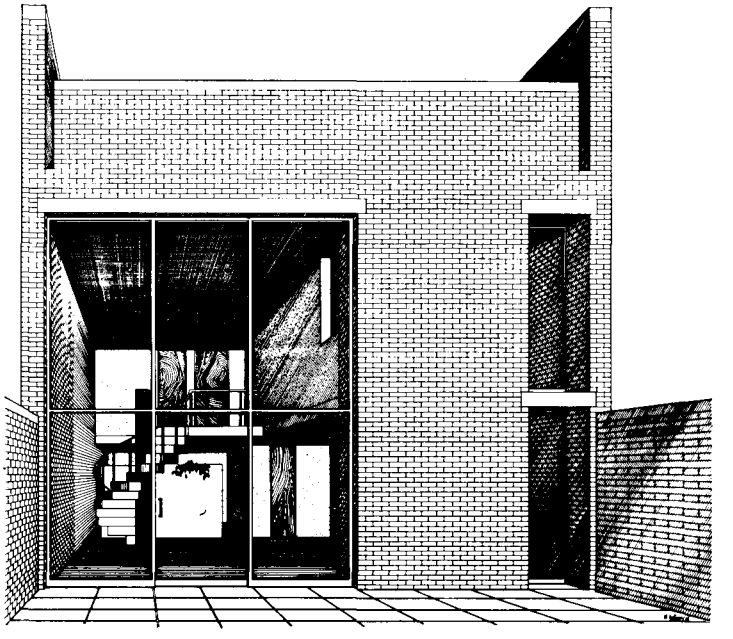
Marvin Hatami designs an apartment house

Utilizing Zonolite® Masonry Fill Insulation he cut operating costs $600 annually and handed his client a 206% return on his investment





Zonolite prototype building #11: a walk-up apartment complex.



Architect Marvin Hatami and consulting engineers Cator, Ruma & Associates, both of Denver, Colorado, were commissioned by Zonolite to design this spacious, 35 apartment complex.

One of the problems to be faced was engineering the structure to withstand Denver's severe winters, yet remain consistent with budget requirements.

To do this, Mr. Hatami specified Zonolite Masonry Fill Insulation. The addition of Masonry Fill increased net costs by $3400. However when this is figured against a 20 year mortgage life, at 6% interest, the annual cost becomes only $292.

Compared to the annual $600 reduction of operating costs, Zonolite provided a $308 a year saving for the client. That's a whopping 206% return on his investment.

The reason for this high return is the low cost, combined with the effectiveness of Zonolite Masonry Fill Insulation.

Masonry Fill also reduces initial building costs because smaller, more efficient heating units can be utilized. And because of the insulation's sound absorption qualities, each apartment is quieter.

Additional facts worth investigating are contained in our Bulletin MF-113. Write Zonolite, 135 South La Salle St., Chicago, Illinois 60603.

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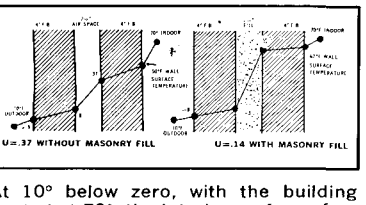


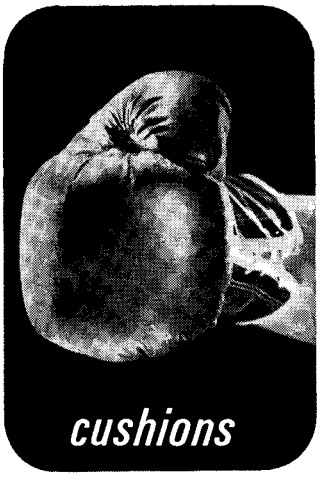
At 10° below zero, with the building heated at 70°, the interior surface of an outside wall without Zonolite would register an uncomfortable 50°.

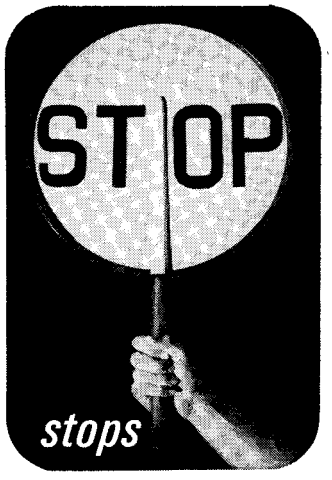
By installing Zonolite Masonry Fill insulation, the architect was able to increase inside wall temperature to a comfortable 62°.

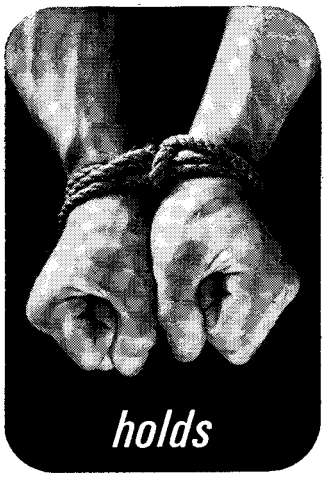
DESIGN CONDITIONS			Winter Heat Loss in BTU/HR. Assuming 70° F Indoor −10° F Outdoor	
	Without Masonry Fill	With Masonry Fill	Without Masonry Fill	With Masonry Fill
Walls	4" Face Brick 2½" Air Space 4" Face Brick	4" Face Brick 2½" Zonolite Fill 4" Face Brick	826,000	**313,000**
Roof	Roofing, 4" Concrete 2" Insulation		155,000	**155,000**
Floor	4" Concrete on Grade		41,000	**41,000**
Glass	¼" Plate Glass		780,000	**780,000**
Ventilation	4000 CFM		504,000	**504,000**
Totals			2,306,000	**1,793,000**
% Savings with Masonry Fill			$\frac{2,306,000 - 1,793,000}{2,306,000} \times 100 = 22\%$	

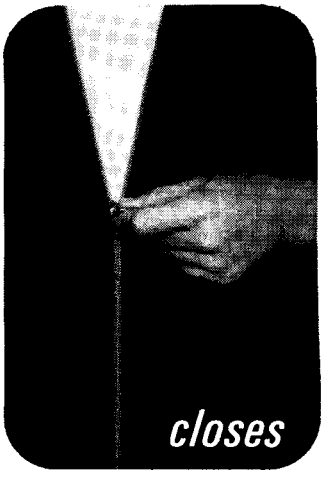
1. Operating costs are reduced by over $600 per year.
2. 34,000 sq. ft. of walls (includes 6,000 sq. ft. of Interior Walls) @ 10¢/ft. = $3,400 installed.
3. Raised indoor wall surface temperature from 50° F to 62° F provides added comfort.
4. Increased wall attenuation characteristics reduces sound transmission between apartments by a considerable amount.

Based on 5673 degree days $.053 per therm gas boiler.

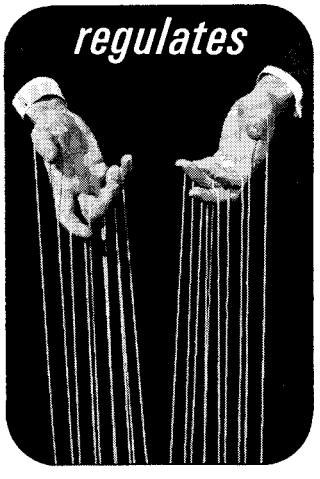


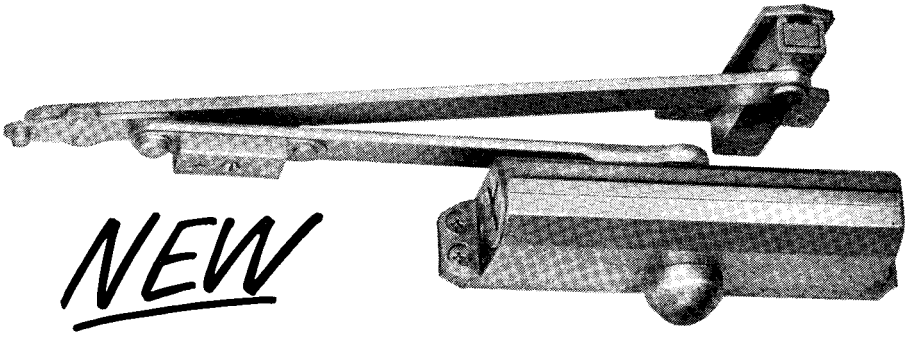






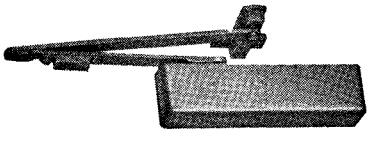
ALL FIVE DOOR CONTROL FUNCTIONS IN A SINGLE UNIT



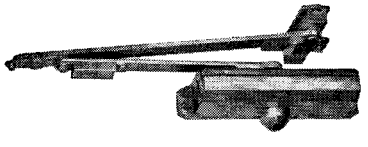


NEW

Norton Series 6100 Uni-Trol Door Control



Series 6110



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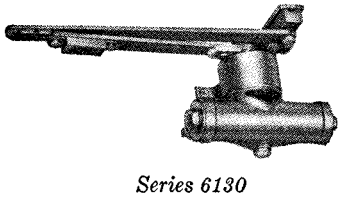

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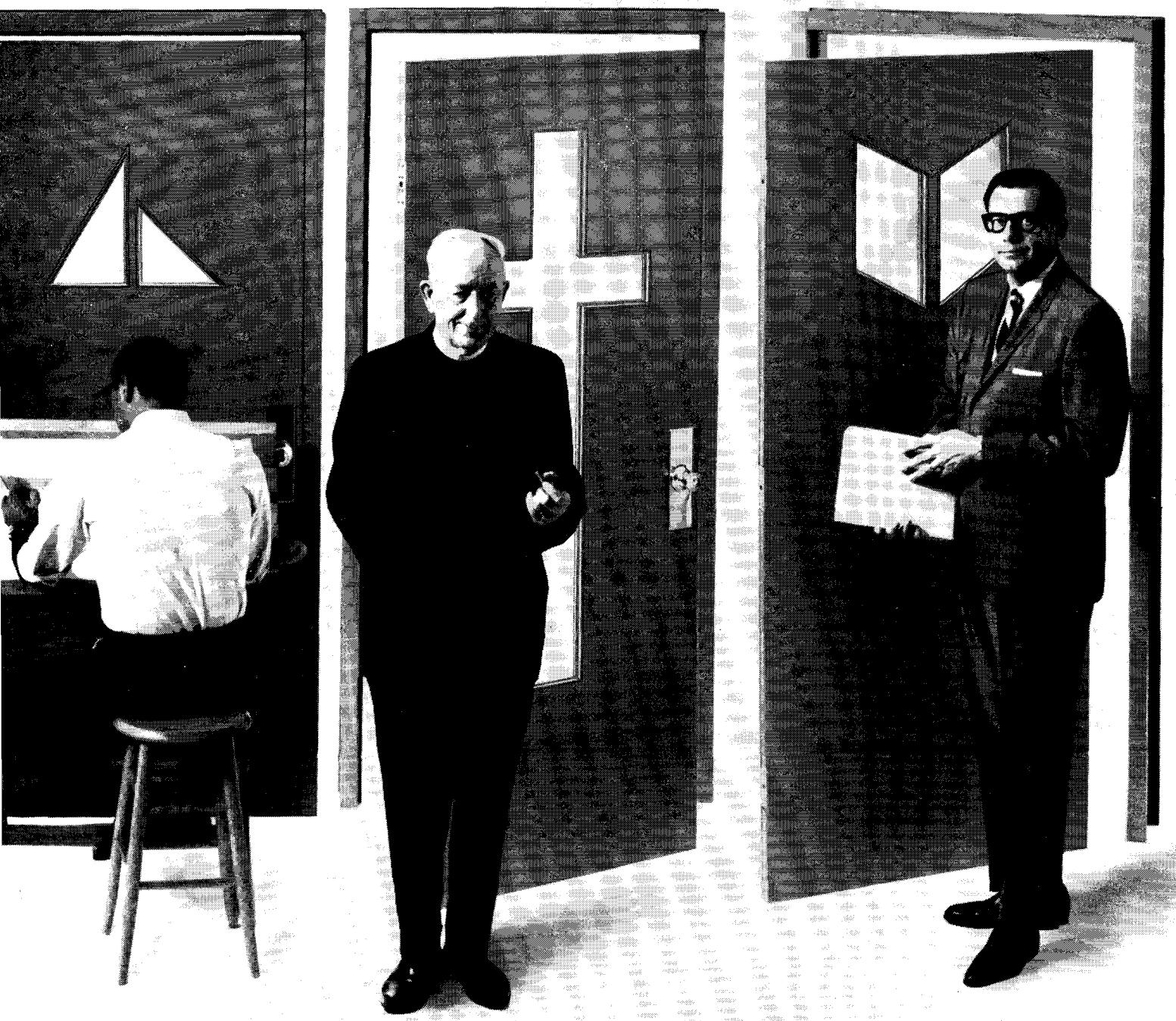

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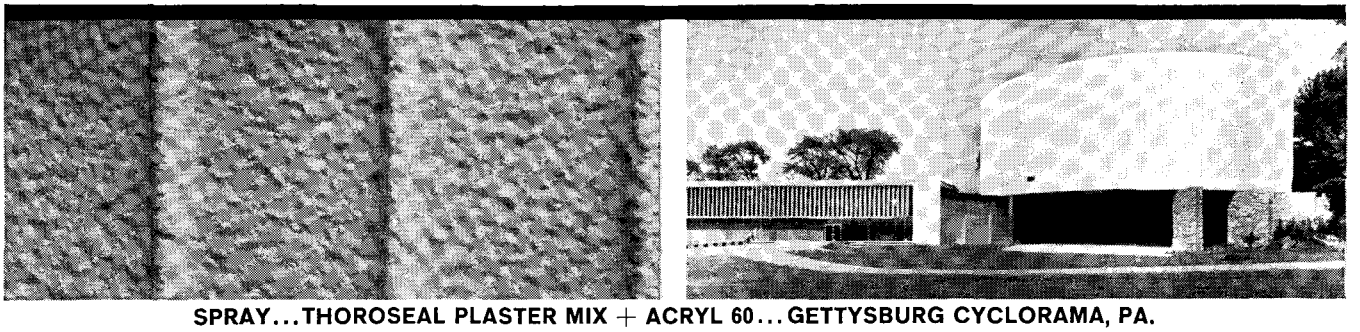
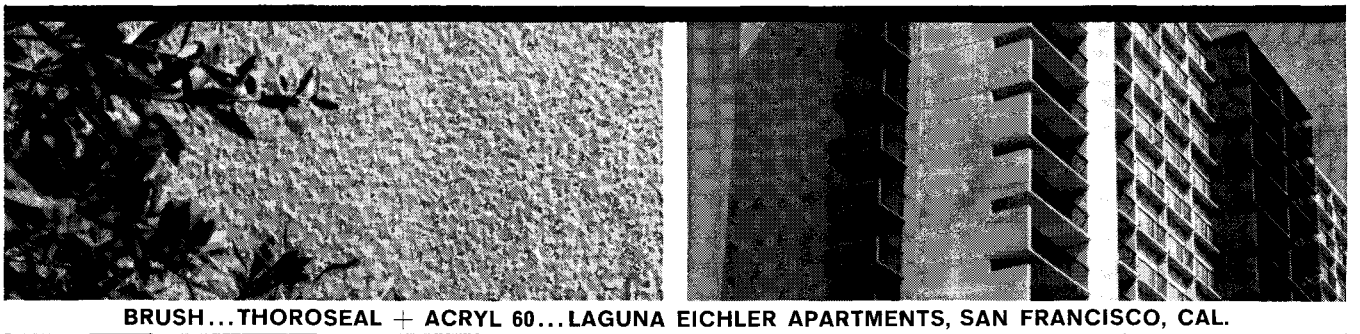


SPRAY...THOROSEAL PLASTER MIX + ACRYL 60...GETTYSBURG CYCLORAMA, PA.



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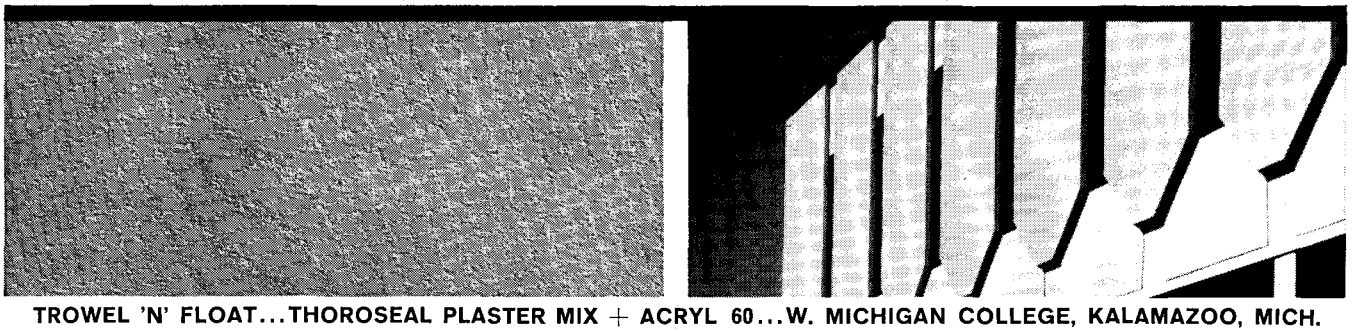

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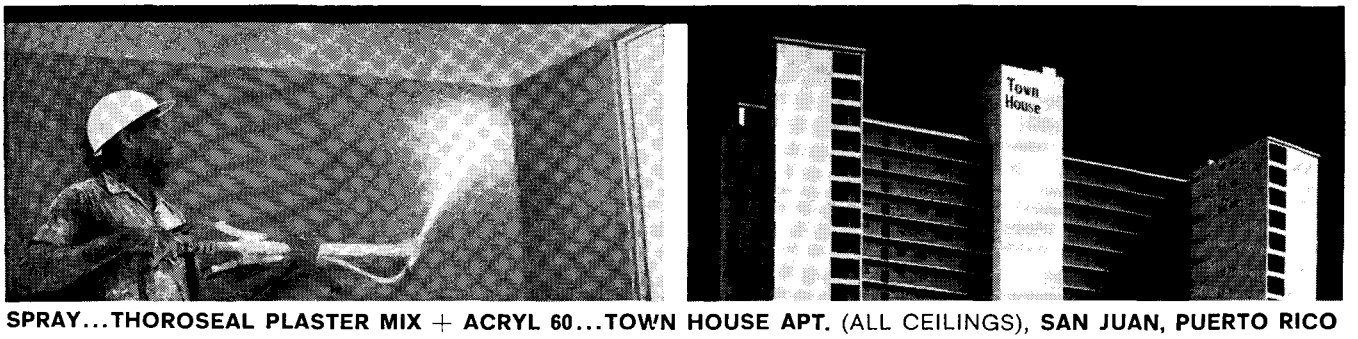

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For more information about Thoro System Products, write for Brochure #17.

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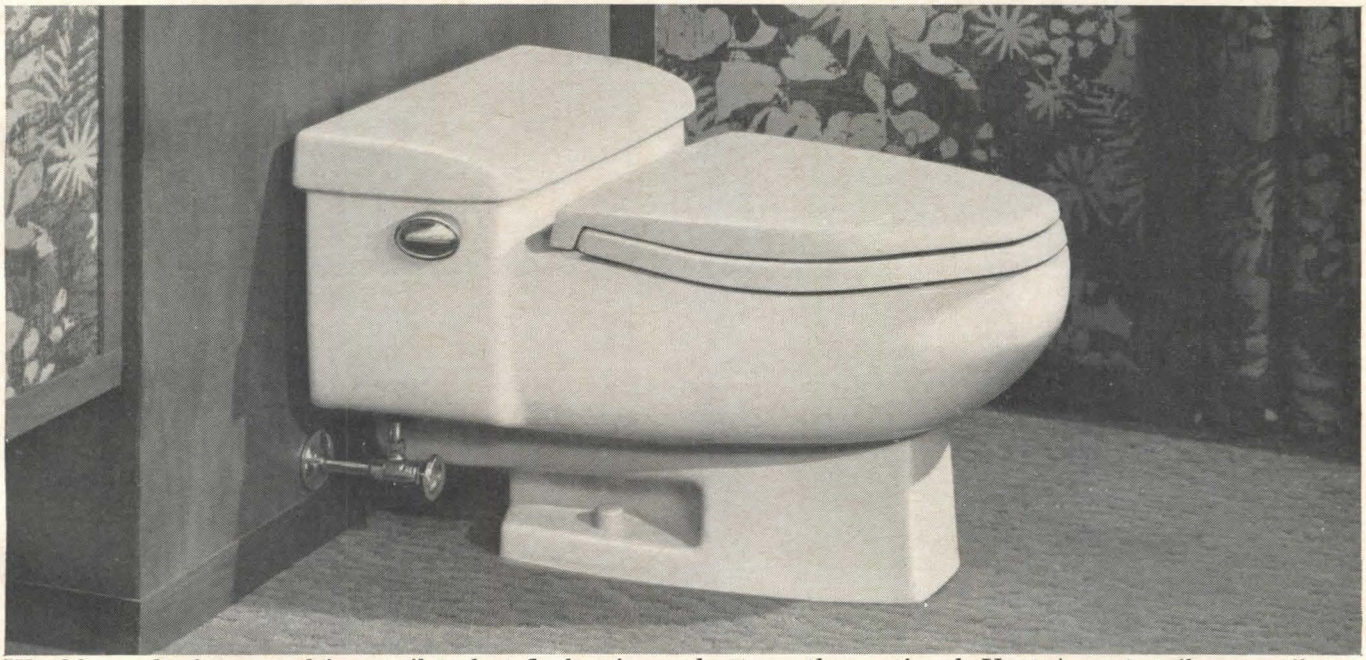

Would you be interested in a toilet that flushes in a whisper, never needs handle jiggling, won't overflow and ventilates itself every time it's used? Here it is! This American-Standard Luxor* is totally new. The tank is tucked down low, almost out of sight. Bowl and tank are one piece of fine vitreous china. But this unique toilet promises more. At a touch of the flushing button, the optional Vent-Away* toilet ventilator whisks toilet odors down the drain before they become bathroom odors. With no mechanical parts to install or service. The Luxor is worthy of your most sumptuous bathrooms. Ask your American-Standard representative or write American-Standard, Plumbing and Heating Division, 40 W. 40th St., New York, N.Y. 10018.

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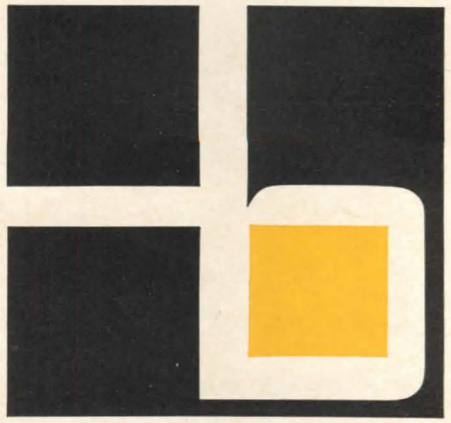

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MOVE #1. Sets new performance standards advancing existing industry specifications for sealants based on Thiokol polysulfide polymer.

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FORUM

"May the good Lord have mercy on you," said President Johnson to Dr. Robert Weaver as the latter left the White House as secretary-designate of the Department of Housing and Urban Development. The benediction was apt, if belated, for Dr. Weaver's appointment was announced amid a rash of discouraging reports

about the President's plans for HUD and for American cities.

The usually reliable *New York Times* quoted a usually reliable source to the effect that most recommendations of a Presidential advisory committee on HUD—headed by Robert C. Wood of MIT, who was appointed undersecretary—were being shelved. They included proposals that HUD take on additional responsibilities in the fields of poverty, pollution, and transportation.

These disappointing reports were given substance by the President's announcement in his State of the Union address that he would ask Congress to create a Department of Transportation to coordinate the work of the 35 scattered agencies dealing with the subject —one of which is HUD, which presently administers the mass transit program.

The proposal threatens to create a more serious division of responsibilities than the one it would heal. Earlier in the address, the President had advocated legislation "to stimulate and reward planning for the growth of entire metropolitan areas," which presumably would be added to HUD's other planning incentive programs. The placement of transportation—that most powerful influence on city and regional form—in a separate department would do little to increase the effectiveness of these programs.

THE BEST MAN

The appointment of Dr. Weaver surprised only those who had forgotten President Johnson's penchant for surprises. The President explained the protracted delay by saying that he had been searching for "the best man" among some 300 potential candidates, then found him right at home.

The visible reaction to the choice of Dr. Weaver and also Wood, former political science chairman at MIT and an outstanding administrator, was universally favorable. Both were quickly approved by the Senate Banking and Currency Committee, and the full Senate suspended its rules and confirmed the appointments by acclamation. The committee's chairman, Senator Willis A. Robertson of West Virginia, had opposed the prospect of Dr. Weaver heading an urban affairs department when it was raised by President Kennedy four years ago. He explained his change of heart by saying, with southern generosity, that Dr. Weaver had shown "no evidence of prejudice" while at HHFA.

There was some disagreement as to whether pressure by civil rights groups to appoint Dr. Weaver, a Negro, to the cabinet had helped or hurt his cause. In an era when the inhabitants of urban ghettoes are feeling increasingly restive and isolated, Dr. Weaver's race seems an important, if subtle, asset.

It is by no means his only asset, of course. The President may indeed have picked "the best man." Now he should give that man the tools to do the job.

". . . Don't Mention It—You Deserved It . . . Uh, Better Step Back a Little . . .

TRANSIT

were the pedestrians, who strolled blithely through streets once clogged with traffic (above). Unfortunately, however, they didn't do much shopping.

On the fourth day of the experiment, things were in such a turmoil that the city cut the pedestrian island in half. It didn't help, but the administration managed to keep the experiment going another four days before it threw in the sponge—36 hours before the scheduled end of the ban. After that, everything returned to normal (below).

Pala charged that nobody had been willing to give his experiment a fair chance. He was right, of course, but he was also silly to have expected that any Roman would. New York's Traffic Commissioner Henry A. Barnes predicted failure from the start, on historical grounds. "Remember what happened to Caesar," he said, recalling that the emperor had *once tried* unsuccessfully to ban chariots from the center of the city during daylight hours.

CREATIVE WORRYING

For years Mrs. James H. Rowe, Jr., chairman of the National Capital Planning Commission, has been worrying about the effect of the proposed "inner loop" freeway on the people who live and work in the nation's capital. She and the Commission have refused to approve it, and the result has been slow progress—sometimes no progress—on the city freeway system.

But now, acting on a suggestion from Mrs. Rowe, the District Highway Department has agreed to study the possibility of tunneling the freeway, which would in effect short-circuit the loop and touch practically no commercial or residential property.

If the proposal proves feasible, some of the city's most densely populated areas will benefit, and Mrs. Rowe's worrying in behalf of the city's people will have been eminently worthwhile.

LANDMARKS

ANTI-EXPANSIONISM

Connecticut Congressman Bernard Grabowski has joined the small, dauntless, and predominantly Republican band in the House opposing J. George Stewart's $31 million plan to bury the Capitol's West Front 70 feet behind a 4.5 acre extension.

Grabowski announced that he could not subscribe to the idea that the West Front was structurally unsafe. The Bureau of Standards proclaimed it basically sound in 1955, he said, and no independent, non-Stewart engineering study has been made since.

As to Stewart's claim that Congress needed the space which a West Front extension would provide, Grabowski termed it "absolute nonsense." He said he would press Congress to halt the plans, and would introduce a bill calling for a panel of architects to evaluate the West Front's structural condition.

Meanwhile grumbling has increased that Stewart is neglecting his other duties as architect of the Capitol (such as completing new parking garages) in his preoccupation with the West Front. In December, however, Stewart did find time to open a permanent crypt exhibit on the history of the Capitol, including such important objects as the electric mechanisms he installed for bird-proofing of the building.

TORONTO'S OTHER CITY HALL

Now that Toronto has a shiny new City Hall (Nov. '65 issue), is there any reason to keep the old one? The mayor doesn't think so, but a group of citizens that calls itself "Friends of the Old City Hall" is campaigning to prevent its planned destruction.

A large department store has offered to pay $108 million for the 66-year-old Richardsonian building and use the land as part of a $260 million superblock project of offices, apartments, shops and a hotel. Toronto's Mayor Phillip Given has called the proposal "the deal of the century," but the Friends call it "an act of historic vandalism." They point out that one of the reasons Finnish Architect Viljo Revell's design won the international competition for the new City Hall was because the jury liked its relationship to the old City Hall (below).

The Friends claim to have received more than 500 telephone calls and 100 letters from sympathizers who want to know how they can help. They are advised to telephone their aldermen, get signatures on petitions, and write the mayor. The result so far has been postponement of the deal's signing, but no other indication that the city fathers are giving serious thought to saving what is perhaps the continent's most successful confrontation of the architectural past and present.

AIA

THINKING BIGGER

The AIA convention next June will be asked to approve purchase of the Lemon Building next to Institute headquarters, providing a larger site for the projected new office building. The Board of Directors made it official at a December meeting.

The expanded site would allow the AIA to build 130,000 square feet of headquarters space, instead of the 70,000 provided in Architects Mitchell-Giurgola Associates' original competition-winning scheme. It also would take the squeeze off of the historic Octagon, which many feared would be overwhelmed by the new building.

The AIA released the above model photo showing how the Mitchell-Giurgola design might be adapted to the bigger site (the wing with the stepped back elevation, to the right of the Octagon and just past the entry ramp, would occupy the Lemon Building's site). It was careful to point out that this was only "one of several possibilities," however.

"Being architects, we're a tough group of clients," First Vice President Charles M. Nes Jr. said in a press conference after the meeting.

AWARDS PLAYOFFS

The AIA's committee on esthetics has recommended reform of the national honor awards program to assure that all contenders are actually seen (May issue). The committee's proposals were received by the Board of Directors in December, and some form of action is expected before or during the AIA's June convention.

The committee recommended a playoff system that would work as follows: Each local chapter would appoint an awards committee to compile a list of outstanding new buildings in its area, whether designed by chapter members or not. One or more members

(continued on page 93)

THE CORE OF THE CITY

Much of this issue is concerned, in one way or another, with the core of the modern U.S. city. And yet most of the stories scattered through the next 59 pages seem—at first glance—to have very little in common.

There is, for example, the story by John Morris Dixon on Dearborn Street, Chicago. Can a street be a "core?"

There is a reappraisal of Rockefeller Center by Douglas Haskell, who notes, quite rightly, that the Center is basically a Beaux-Arts composition—the sort of thing most of us think of when we try to picture the "core" of a city.

Then there is the story on those glass-roofed, 19th century arcades like the famous Galleria next to the Duomo in Milan. Another plausible version of a "core"—but does it have much to do with the 20th century *American* city?

Finally, there is the report by James Bailey on the little church in Harlem designed by Victor Lundy. It, too, is a kind of "core"—for one function of any city "core" (or neighborhood "core") is to give some sense of identity to its city (or neighborhood).

Still, the question remains: what exactly is a "core" in modern American terms—and do we need one, anyway?

Shadrach Woods, the American architect and urban designer practicing in Europe, recently put it this way:

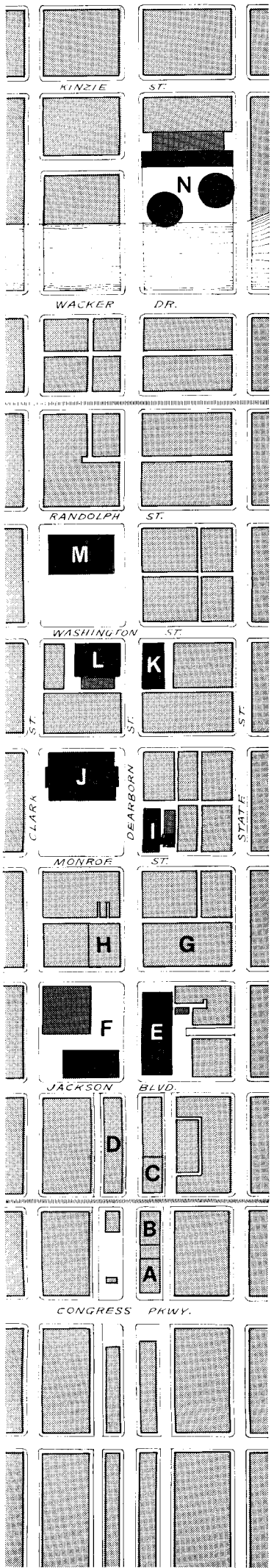
"All cities have cores—the core *is* the city. The core cannot be considered in isolation, localized, analyzed, or eventually synthesized.

"It exists throughout the city, in more or less concentration. As the cities have expanded, so have their cores. The core is the essence of the city: a web of activity and communication which varies in time as well as place. It is a shifting scene; it is everywhere—a continually changing, continuous web of human activities and relationships.

"The core of the city defies definition in the map-law terms of urban analysts and city planners. For each of us, the core of the city is somewhat different. For each of us the core changes with the time of day, week, or month.

"It's where the action is"

THE BETTMANN ARCHIVE



A Manhattan Building. **B** Old Colony Building. **C** Fisher Building. **D** Monadnock Building. **E** Federal Courthouse. **F** Federal Office Building and Post Office (site). **G** Montgomery Ward (formerly The Fair Store). **H** Marquette Building. **I** Inland Steel Building. **J** First National Bank Building (site). **K** Connecticut Mutual Building (under construction). **L** Brunswick Building. **M** Civic Center. **N** Marina City.

THE STREET AS A CORE

PASSING PARADE ALONG DEARBORN STREET

Chicago has a core that is remarkably stable, clearly defined —and almost totally unplanned.

That core is, of course, the Loop, a half-square-mile squeezed in between the angle of the Chicago River and the shore of Lake Michigan. The Loop has been the spontaneous center of commerce, government, and entertainment for all of the city's 130 feverish years. Despite the Burnham plan of 1907 (which proposed a new center to the west) and the Rubloff proposal of 1949 (which suggested one to the north), the Loop is still "where the action is."

In staying put while the centers of many American cities were dispersing, the Loop has undergone intensified internal change; many sites in the Loop have been rebuilt four times since the great fire of 1871.

Dearborn Street is only one of the main streets of the Loop, but it is the one where the most important changes are taking place today, changes that may turn it into a linear "core within a core." It is made up of buildings individually conceived, but governed by a rigid pattern of streets and a strong tradition of building form.

Dearborn Street was swept bare by the 1871 fire, but it was quickly rebuilt. By the beginning of the 1890's, the pressure for commercial space—and the use of metal framing, fireproofing, and elevators—set off a second wave of rebuilding. This phase, which lasted only about five years, left outstanding buildings by Jenney, Burnham & Root, and others along a half-mile stretch of Dearborn.

After 1896 there was little commercial construction along the street (a good thing considering the quality of what *was* built) until Inland Steel went up in 1957. At that time the economic future of the Loop looked bleak, but Inland proved to be the precursor of a new wave of rebuilding that is only now reaching its crest.

Now the street is being transformed again, this time by architects of the New Chicago School (among them Skidmore, Owings & Merrill and C. F. Murphy) and by their source of inspiration, Mies van der Rohe.

Traditionally, buildings in the Loop have risen straight up along the property lines. There have always been wide open spaces around the Loop, but no open spaces at all inside it. With Inland Steel, SOM introduced the office building plaza, a feature they had tried out earlier in New York; but here they made it small in scale and respected the old building lines. Similar plazas have since made other niches along Dearborn.

NOW, however, three major open spaces are being carved out along Dearborn, each one a whole city block in size and each serving as the base for a major tower. The first of these towers, now substantially completed, is for the city and county government; the second is for the Federal government; and the third will be a huge new private office building. The first two were meant to give the Loop a "shot in the arm"; the third proves the success of the treatment.

These three equally large plazas, strung out at regular intervals along Dearborn, seem to be ideal additions to the form of Chicago. They also suggest the possibility, already considered, that the street might be turned into a pedestrian mall. But if these plazas lead to a plague of lesser plazas, the orderly structure of the Loop will begin to crumble at the corners.

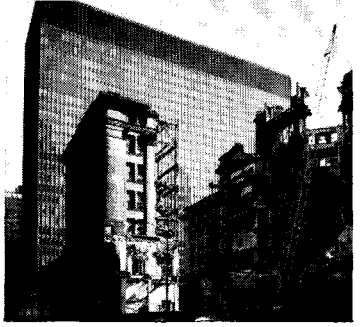
THE south end of the Loop was the last to be intensively developed for commerce. The first substantial commercial buildings on this part of Dearborn appeared in the early 1890's: an outstanding group of speculative office buildings by the best architects of the period.

Since this area will probably be the last reached by the present wave of rebuilding, these old buildings are not threatened so much by replacement as by competition from new buildings elsewhere in the Loop. There is already some unrented office space in the old buildings at only about $3.00 per square foot. Token modernization of entrances (A, B, C) and lobbies, intended to attract tenants, has only served to deface most of these landmarks.

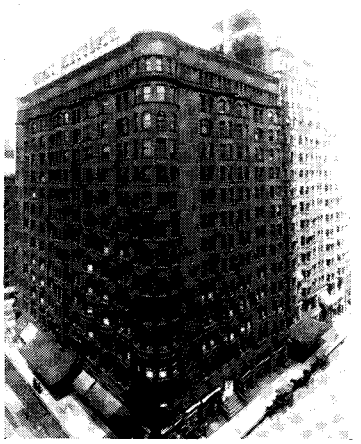
Only Burnham & Root's Monadnock Block (D), long the most famous of the group, remains in (almost) first-class condition. It is still managed by the same company that arranged for its construction 75 years ago (whose offices are in the building). The original lettering remains over the doorway; most other signs have been kept within the powerful frames of the first-floor window openings.

When Monadnock was built, Burnham & Root were also constructing a companion piece diagonally across Dearborn Street —the Great Northern Hotel (E). Like most of the fine Chicago School hotels (with the notable exception of the Congress on Michigan Avenue), it was demolished years ago.

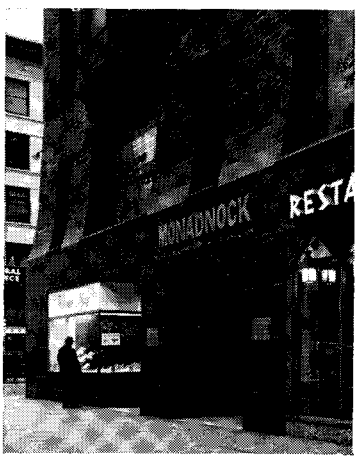
The property where it stood now forms half of the site of Mies's Federal Courthouse and Office Building (facing page), first unit of a three-building Federal Center. The other two buildings will soon begin to rise on the opposite side of Dearborn, where workmen are now *carting* away the remains of the 1905 Federal Building (F)— the second Federal Building on that site, as a matter of fact. When the entire project is completed, Chicago will have a Federal Plaza enclosed on three sides by authentically Miesian curtain walls.



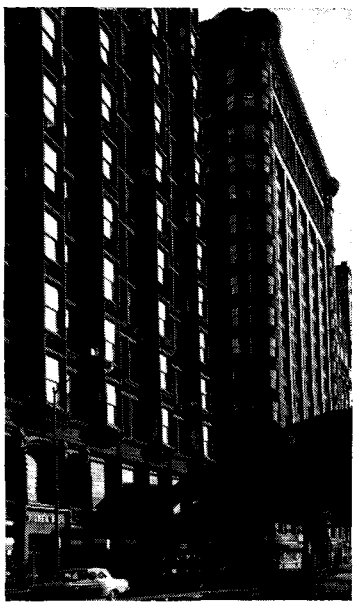
F The old Federal Building (1905) by Henry Cobb has now been demolished to make way for a 43-story Federal Office Building and a one-story Post Office, both by the architects of the Federal Courthouse (see below).



E The Great Northern Hotel (1892-1940) by Burnham & Root stood on the south half of the site now occupied by the Federal Courthouse (1964), opposite page, by Mies van der Rohe, A. Epstein & Sons, C. F. Murphy Associates, Schmidt, Garden & Erickson.

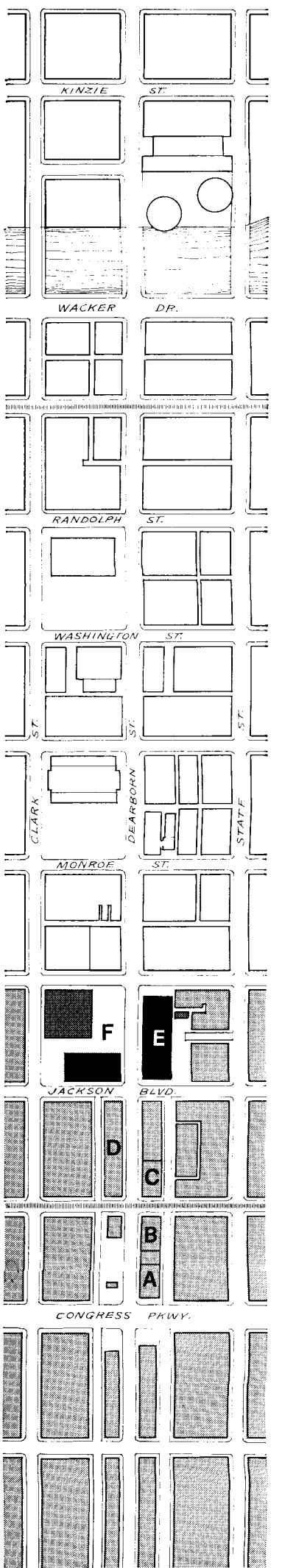


D The Monadnock Building (1891) by Burnham & Root is unaltered at the main entrance, except for plaques citing it as a landmark. A few tenant signs spill over onto the first-floor brick walls, which have been painted to hide cracks and patches.



B, C The Old Colony Building (1894) by Holabird & Roche, right in photo, and the Fisher Building (1896) by D. H. Burnham & Company, left in photo, have been well preserved except for alterations at entrances.

A The Manhattan Building (1891) by William LeBaron Jenney has been "modernized" with corrugated metal.



FOR three blocks north of the Federal Center, Dearborn Street is devoted exclusively to commerce.

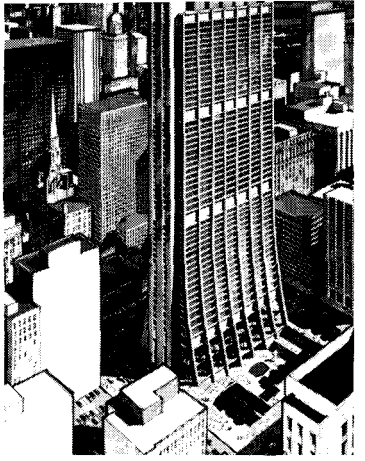
Just north of the Federal Courthouse is Jenney's Fair Store (G), a functional landmark and esthetic curiosity that has recently been disguised behind a bland stone face. Its finicky details are little better than the original disorder, but the recessed arcade is a humane touch that ought to be widely imitated.

The Marquette Building (H), across the street, was the first Chicago office building in which the skeleton frame was indicated on the facade by a single broad window in each bay. The expressive effect is marred by the classically inspired emphasis on base, attic, and corners; but the terra cotta panels used to carry out this arbitrary scheme provide a handsome texture at pedestrian level (facing page).

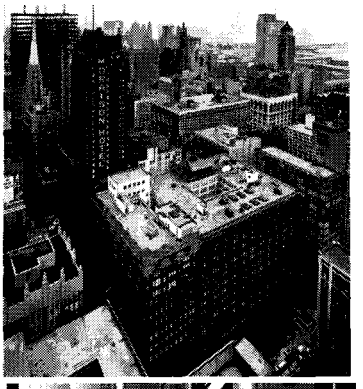
One block farther north, the columns of Inland Steel (I) rise straight up along the property line, lighting up the street for blocks with reflected sunlight. The entire block across from Inland Steel (J) is now being transformed into a site for the 800-foot-high First National Bank tower, which will be the tallest building in Chicago except for the 1,100-foot John Hancock Center, now rising on the city's North Side. The First National project already holds an altitude record for demolition: 46 stories.

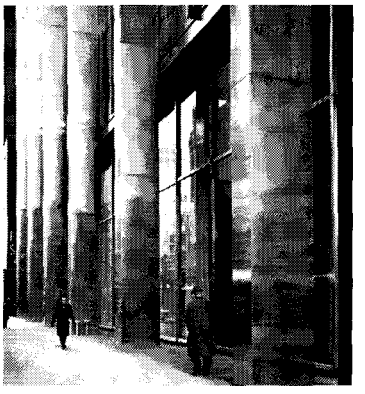
The south half of the block, which will eventually become a plaza, is still occupied by the bank's present headquarters, the work of Burnham & Company. Damned by some as the firm's first classical office building, it nevertheless displays Chicago School sturdiness.

The new tower, for all of its audacity, also seems to be a deviation from the Chicago tradition. Its slack curves seem more akin to the "packaging" of some industrial designers than to the structural discipline of Root. Unfortunately, it will overshadow the more significant—and handsomer—Civic Center tower only 800 feet to the north.



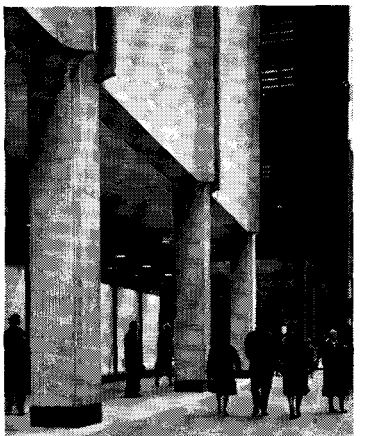
J The First National Bank Building by Perkins & Will and C. F. Murphy Associates will replace an entire city block (below left). The north half of the block, including the 46-story Morrison Hotel, has already been demolished; the south half, including the present First National Bank (1903) by D. H. Burnham and Company (the bank's second building on this site) will be removed after the new tower is completed.



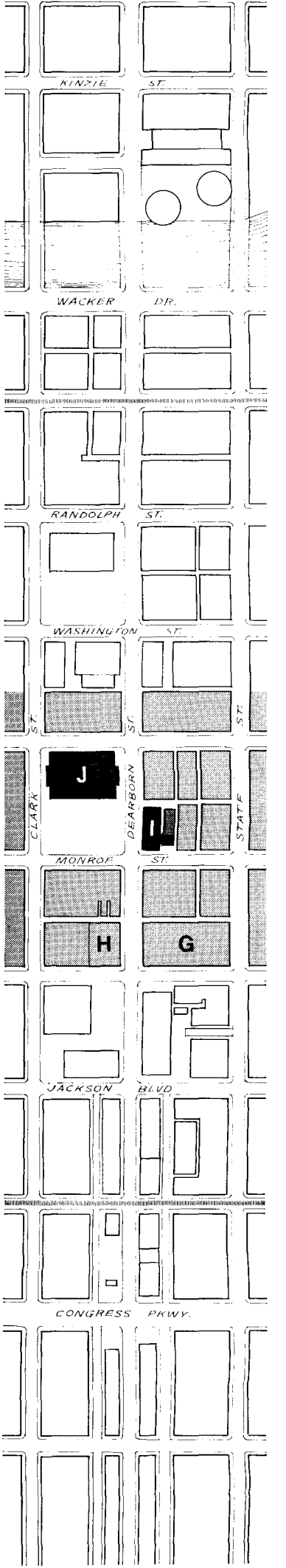


I The Inland Steel Building (1957) by Skidmore, Owings & Merrill maintains the traditional building line along Dearborn Street. SOM's Chicago office is in the building.

H The Marquette Building (1894) by Holabird & Roche introduced the broad horizontal windows that became known as "Chicago windows." The building is in excellent condition, except for removal of the cornice shown here (see page 34).



G The Fair Store (1891) by William LeBaron Jenney has been remodeled (1964) by Perkins & Will for Montgomery Ward.




W ADAMS ST
NO PARKING ANY TIME
FIRST FEDERAL SAVINGS

THE first of Dearborn Street's plaza's to be completed is the full city block of granite paving around the 631-foot Civic Center tower (facing page). The uncluttered spaciousness of the plaza belies the fact that there are two full floors of subterranean offices beneath it.

The new plaza is surrounded by a haphazard collection of buildings. The southeast corner will be firmly defined when the Connecticut Mutual Building (K) by SOM is completed. On the south side of the plaza, SOM's new Brunswick Building (L) rubs shoulders with the Gothic parody of Chicago Temple.

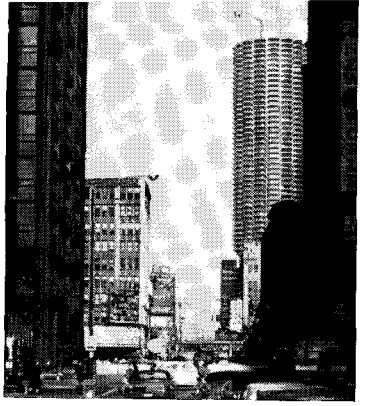
The Civic Center tower itself (M) is a double-scale replica—in oxidizing steel—of the Miesian office block, a bigger-than-life monument to all that Chicago has stood for in building. Its 18-foot story-heights and 87-foot-wide bays were not arrived at solely for effect (nothing ever is, in Chicago), but to allow placement of large courtrooms anywhere in the building.

By a happy coincidence, the 55-year-old city-county building across the street to the west has that same bigger-than-life scale —a fact that could not be appreciated until the plaza was opened up. The giant facade of the old building returns the favor by giving the plaza an appropriate west wall.

North of the Civic Center there is little of architectural interest except the distant view of Marina City (N). One of the few faults of the Civic Center is that it turns its back on these faltering blocks to the north. When these blocks are rebuilt, it will be important to make them a fitting conclusion to the spatial sequence of the street.

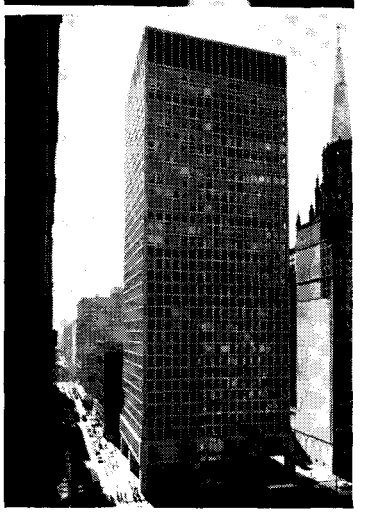
THE future of Dearborn Street depends on a common commitment to the unity of the street. Open space has now become the threat: if narrow self-interest sprinkles a garnish of open space all along the street, this unity is doomed. It all depends on whether the traditional self-discipline of Chicago architects prevails.

—JOHN MORRIS DIXON

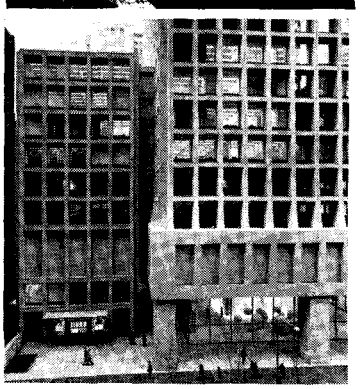


N The Marina City Apartments (1964) by Bertrand Goldberg can be seen looking north on Dearborn from the Civic Center. Although they are on the east side of the street, they appear to jut out into it, providing a visual reference point.

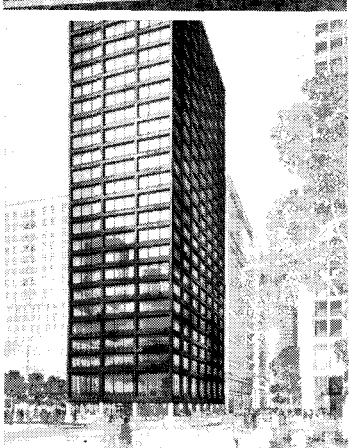
M The Civic Center (now being completed) by C. F. Murphy Associates, with Skidmore, Owings & Merrill and Loebl, Schlossman & Bennett, Associated Architects, has 12 exterior columns rising 631 feet straight up from six-foot-wide cruciform bases.

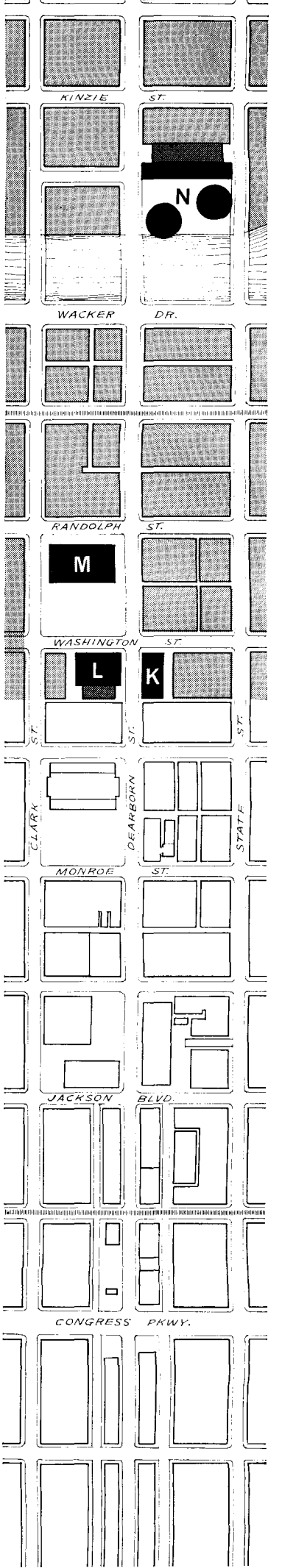


L The Brunswick Building (1965) by Skidmore, Owings & Merrill is supported mainly on the concrete mullions of its exterior walls. A massive girder at second-floor level transfers structural loads to piers 56 feet apart. The low wing to the rear along Dearborn Street relates uneasily to the muscular main tower.



K The Connecticut Mutual Building (now under construction) by Skidmore, Owings & Merrill revives the Chicago window and preserves the traditional building line.



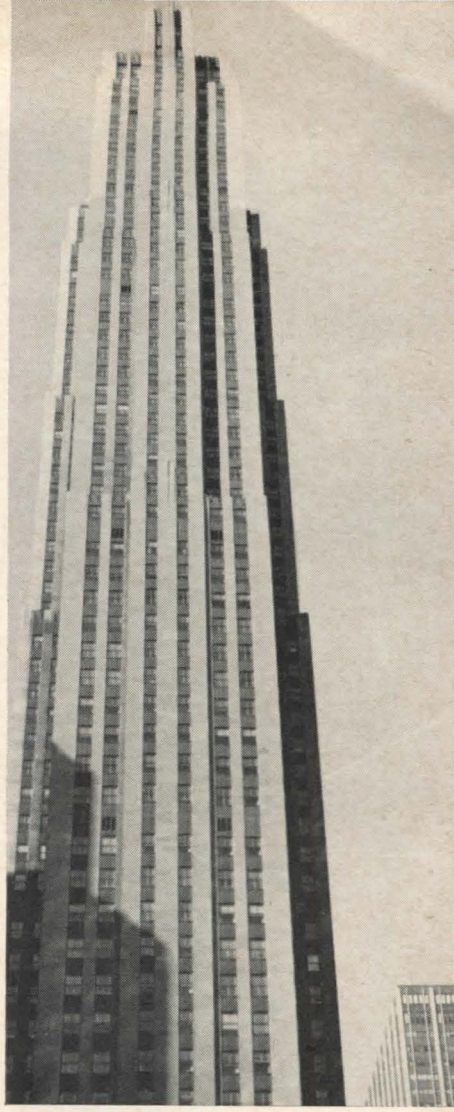


PHOTOGRAPHS: All by Richard Nickel except Page 34: Airpix. Page 36: (F) Hedrich-Blessing, (E) courtesy C. W. Condit. Page 39: John Morris Dixon.

THE SUPER BLOCK AS A CORE

UNITY AND HARMONY AT ROCKEFELLER CENTER

BY DOUGLAS HASKELL

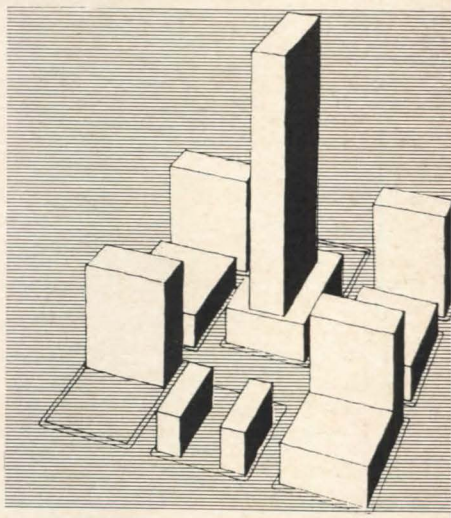


It has a fairy-tale kind of history. Conceived back in 1926 as a new opera house, it grew into one of the core elements of America's greatest metropolis and now accommodates close to 50,000 occupants besides 160,000 daily visitors. Built by the most prominent of wealthy American families, single-handedly and with what is now called a sense of "stewardship," in ten years it became a combined business center, international center, and entertainment center with 11 important buildings (including a primary skyscraper) erected on a site of 12 acres, comprising three centrally located New York superblocks.

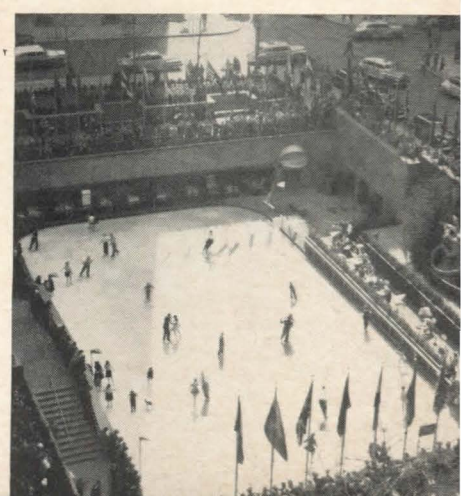
It was created in the teeth of our deepest depression, but it gave back to the city more space and gave the people more art, and more joy, than any other "city redevelopment" of near comparable size anywhere in the U.S. has done since—even with major help from agencies of government. Rockefeller Center is the only large piece of urban renewal done in business terms that the people of the United States really love. They visit it by the millions and they come again.

To some it is distressing that the Center achieved this standing without a single building that is an architectural masterpiece, and with some that are downright ugly. In his fat and "definitive" history of two centuries, a leading U.S. architectural historian, passing great buildings one by one through his fine post-Victorian mind, managed to bypass Rockefeller Center without a whisper. And indeed only the large-toothed slab of the RCA Building (right) remains individually in vivid memory, knifing like a great prow through the channel towards Fifth Avenue in a combination of shape and void that is downright sexy. It is a set piece that evokes snapshots by the jillion.

Esthetic examination, even when applied to the Center as a whole, seems to have difficulty capturing it, although Sigfried Giedion's brilliant analysis of the Center as a modern dynamic "space-time" composition is evocative. Yet this explanation is perhaps a bit overdone, for as the air view shows, and history confirms, this is also a centralized, pyramidal, Beaux-Arts composition redone in dominoes. Some are laid on their long edges and others are stood on their short ones, while their faces are turned at right angles variously. How did this come about?



WE never know the secret history of artistic intuition, but Picasso has left occasional records of his progressive distortions of a picture from "realistic" beginnings. Similarly, Winston Weisman's history of the Center shows the key transition drawing which the architects produced in 1930 (right), the minute the opera house was dropped from the program and slab-plan buildings were decided on for the sake of better view and sunlight in the offices. Comparison of this with the condition in 1940 shows how minor a rearrangement from the former central steeple - corner tower



Mr. Haskell, a member of our Board of Contributors, is, of course, the former Editor of the Architectural Forum. This article is another in a series of reappraisals we have published in recent issues.


ENGLISH GRILL
ENGLISH GRILL

schemes sufficed to land Rockefeller Center squarely in space-time.

The pithiest characterization of Rockefeller Center has come from the visiting Polish Architect Jerzey W. Soltan, and deals less in esthetics than in poetic symbolism. He told last year's Harvard Urban Design Conference that the Center's "emotional shock" waits at the very middle of it, in the "minute white square of the skating rink" dug in at the feet of the gray skyscrapers.

Here we find "Hansel and Gretel skaters [opposite, below] dancing in the skyscraper forest!" And after this fantastic juxtaposition in the programming—"a great decision, a surrealistic decision, a fairy-tale decision"—he maintained that the architecture, "so very gray," and the sculpture, "so very gold," became "unimportant." Indeed, in a case like that, he went on, an architect might be excused from design, saying to himself, "The drabber the better. Let my main decision work for me."

Still, we do care about the architecture and the sculpture even though we know what Soltan means. For just as Hans Christian Andersen had a habit of viewing the whole world with the same childlike wonder that he brought to his fairy tales, which were set against drabness magic-touched, so in Rockefeller Center the rink with its whole-family dance does not stand alone but climaxes an extraordinary amount of agreeable walking, all planned as such. In general, it seems as if the things that people like and dream about were what the Center's creators also liked: all the way through, the owners and architects seem to have regarded urban life as an enhanceable romance.

AT the Center, the attention to walking starts subsurface and reaches as high as 69 stories on the landscaped rooftops (page 42). As the climax of the walking system, where walking breaks into "dance," the skating rink is sunken. One can exit from it by one of the two classy, below-sidewalk restaurants; these in turn open to the elaborate subsurface "concourse" network diagramed at right. This concourse ramifies for a length of a full mile and a half, and surfaces inside 19 different buildings. Among the scrambled wonders the explorer passes along the way is the only humanly maintained mezzanine for a New York subway station: the Rockefellers take care of it.

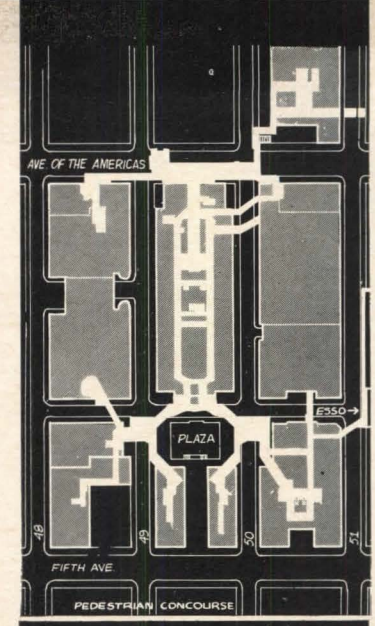
For the exploration of such urban caves there should be an urban spelunking club. The railroads invented the caves, and the story is this: Early in the game, the Center's skating rink and plaza were to be not for skaters but for passengers arriving by the Baltimore & Ohio railroad through a new tunnel under the Hudson River.

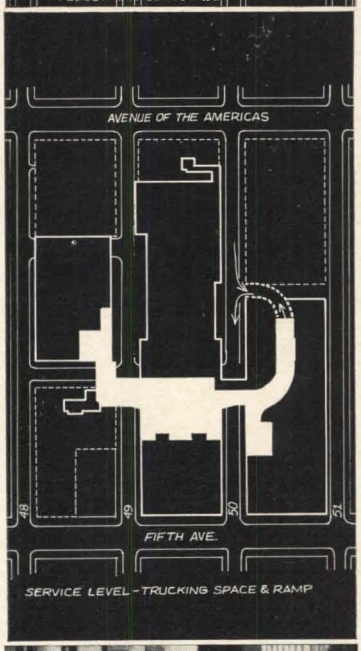
But at the turn of the century the then magnificent railroads entering New York had made a magnificent discovery about people (see "The Lost New York," Nov. 1963 issue): By supplying people with protected all-weather passages underground between the station and the nearby hotels, department stores, and major office buildings, the railroads could offer a then unprecedented luxury and create a new metropolitan magic.

With time these human rabbit warrens grew in number to four, with only small gaps between them, wandering all through midtown, with a spread of five long blocks east-west, and of 20 short blocks north-south. Altogether they offer perhaps five miles of walking distance. Some day this semi-secret urban facility, known to millions, will be adequately described by a bright city reporter.

To the question, why not a corresponding walkway system raised up above street height? The answer is that one of the 1930 Rockefeller Center schemes did indeed offer a raised pedestrian platform, with bridges over the cross-streets, but the idea could not have seemed urgent, since the city surface was not yet flooded as today by cars and carbon monoxide.

Now besides celebrating pleasant adventure on foot from base-





ment to attic, the Center's plaza celebrates something often missed because it consists of an invisibility—of excess wheeled traffic. In the view of the rink there is seen a city bus, but behind all the space given to rows of flags, to terraces, plant boxes, trees, park benches and such, no heavy parking is in sight and especially no truck unloading, despite the tremendous building concentration.

The answer lies not only in a 12-story garage, partly underground, but in the Center's possession of no fewer than nine truck ramps (see plan, left center) leading down to unloading platforms at least 30 feet below the surface, some of them equipped with monster truck turntables. The daily volume of trucks handled in the chief one can reach 1,000. And this is done on the deeply human principle which will never be learned by the likes of Robert Moses: that greater than the mechanical triumph of handling unnecessarily large volumes of traffic (blocking the city sights) is the human triumph of handling large volumes of necessary traffic, entirely *out* of sight.

AGAIN focusing on the rink in the plaza, a view such as the one opposite conveys some of the smalltown warmth that Rockefeller Center achieves in the great metropolis. If it be a skyscraper forest, it has nice clearings.

This is a matter of shapes, spaces, and sizes. For if the Center proves anything, it is that the deadliness of metropolis lies not in having great heights but in accidental and uncontrolled uniformities of height in random spacing.

Thus, around the plaza it is the low bumpy set of building forms in the foreground of this view that brings down the scale to human comfort, and behind that it is a graded series of heights carefully arranged that keeps the game going with human interest.

The people at the left in this same view are standing approximately in front of the 70-story building; but if we were to take

their vantage point we would see a six-story building (one of four such) which lets us look at a comforting pair of cathedral steeples over the top (opposite).

Not only does this older core of Rockefeller Center have building heights in each range of ten stories from one to seventy, but the long low structures are generally laid in front of the slabby high ones, giving the eye a more gentle gradation than sudden heights would. Then, where a tall building does suddenly rise in the view straight up, like a prow of RCA, it is dramatic.

Up until 1952 when the Sinclair Building was erected by others, on an unacquired corner, and was sold to the Center later, the spacing and turning of building slabs stayed pretty well in hand as a piece of space music. (The turning had to do, too, with "not shading one another".) Thereafter a decline set in, for when the Center jumped in 1959 across Sixth Avenue and started the subsequent extensions, its composed character began to go to pieces. As for this scraggly aggregation (June '65 issue), it should not even be discussed as a part of "Rockefeller Center."

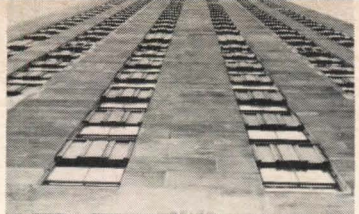
THERE remain to be noticed some aspects of Rockefeller Center which are pretty tame, corny, or conservative. Thus few architects today would be satisfied with so limited a palette of material and vocabulary—all individual windows between flat limestone-covered piers of slightly varying profile and arrangement (right), and with the occasional application of slate-grey, cast aluminum spandrels. When Rockefeller Center was begun, the only Continental-modern tall building in North America was Howe & Lescaze's PSFS building in Philadelphia (see May '64 issue); and Raymond Hood, whom Wallace K. Harrison generously credits as the leader and the most creative member of the Rockefeller Center architectural team, had graduated from the Beaux-Arts in 1911 and had given not much evidence, until after his Gothic confection won the *Chicago Tribune* competition in 1923, that he had ever heard of Le Corbusier, Mies or Gropius.

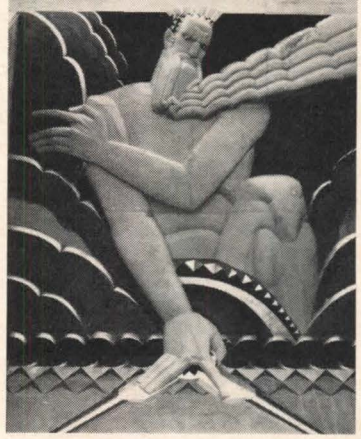
Hood was a maverick first to last, and specialized in an act of giving businessmen undiluted admiration, under cover of which he would lead them into striking departures, such as the American-flag striped *Daily News* Building, still handsome on 42nd Street, and the duotone green McGraw-Hill Building with its continuous horizontal rows of windows.

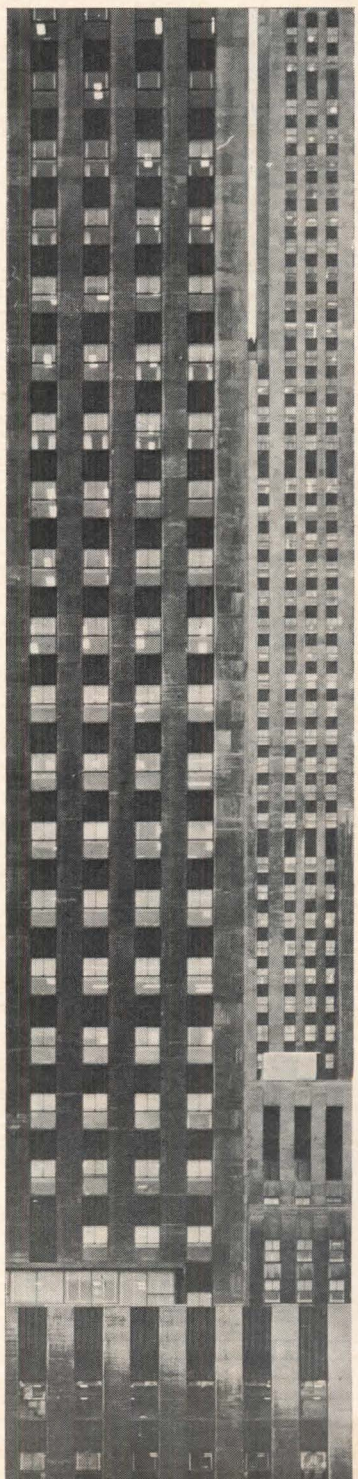
By and large we can be very thankful indeed for what remained in the Center as conservatism. Both the fact of the uniform material, its history written on it by the smoggy weather, and the fact of the lingering symmetry of Beaux-Arts composition, turned out to be highly useful in giving the Center a distinct sense of *place* and letting you feel, in terms since made familiar by Kevin Lynch, that you know where you are within the scheme, where you have been and where you are going.

The unity of material also gives the coherent impression of such a precinct as virtually one structure. In comparison, schemes like Hartford's Constitution Plaza are distressingly immature, a set of unrelated toys, some pretty, thrown together with the undiscipline but not much of the freshness of children. Hood in his lifetime was never "in" with the advance guard but he seems to have been extraordinarily effective with the big things.

THEN again it is pretty difficult for any trained eye to regard with other than dry humor the treatment at the Center of that "other population" made up, I was going to say, of hearts and flowers—art and planting. It spreads thick like corn, and the best one can say for clients and architects alike is that they started seriously and were generous with art and have made giant strides since then. Also that there is at least something innocent and endearing about the muscular heroics of figures like Wisdom (left).







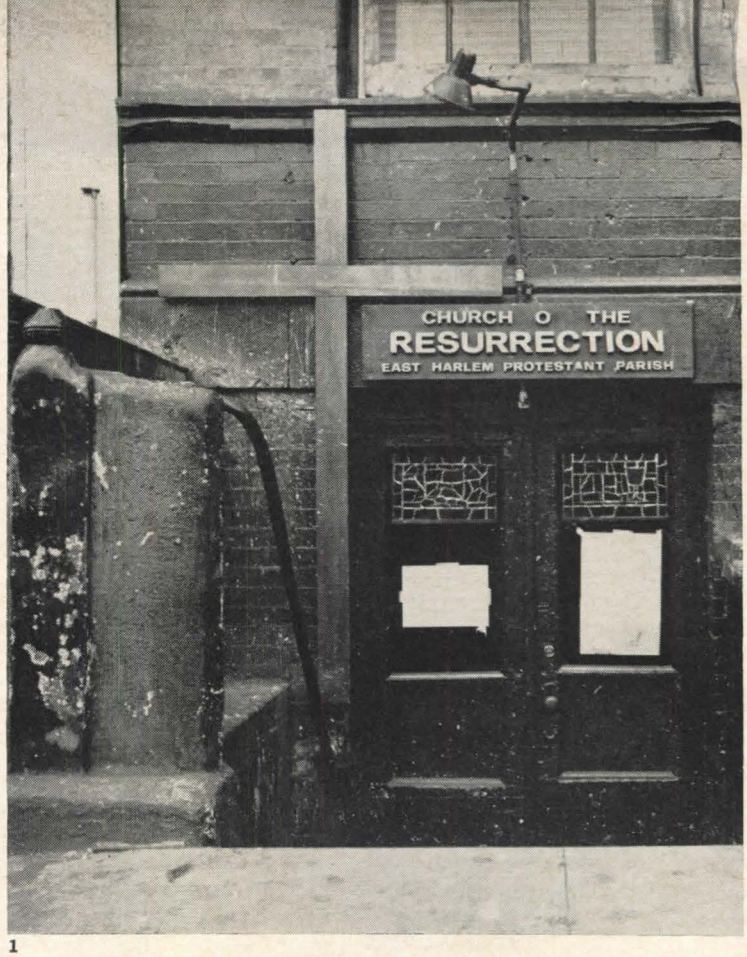
There is, come to think of it, some consolation. George Nelson was the one, I believe, who suggested that here you know at least where to go if somebody proposes to meet "under the Atlas" or "behind Prometheus" whereas—it is not George saying this—some of the lumps and broken hammocks at Lincoln Center, though perhaps very high as art, would strain even the ingenuity of a Berliner seeking descriptive nicknames.

IT is very sad to see the "new" Rockefeller Center being frittered away on the other side of Sixth Avenue, and one cannot escape the thought that the basic trouble is in the programming, or rather the lack of it. Perhaps not even the Rockefellers, with their sense of responsibility, can get together large enough financing for an effective, large-scale repetition, privately and comprehensively directed. In the terms of our times, says Philip Johnson with some show of truth, the Athenian Acropolis cost billions; today such money goes only into the search for sterile planets.

Meanwhile dedicated Federal officials, such as William Slayton, do their best with the slow grinding processes of urban renewal federally aided; but never yet at any comparable scale has this come out like Rockefeller Center by the time it has passed through the gauntlet of speculative builders and of nether officials seriously devoted to obstruction. It should nevertheless haunt the Rockefellers that John D. Jr. once did set such a pacewith a fairy tale in stone, at once so romantic and so solid.

FACTS AND FIGURES

Architectural firms for the thirteen Rockefeller Center buildings designed prior to 1940: Reinhard & Hofmeister; Corbett, Harrison & MacMurray; Hood & Fouilhoux (collectively, or singly)
PHOTOGRAPHS: Page 42: Thomas Airviews. Pages 43, 44 and 45: Douglas Haskell. Page 43: bottom, Edward Ratcliffe. Page 46: bottom, Peter R. Petersen. Page 47: George Cserna.



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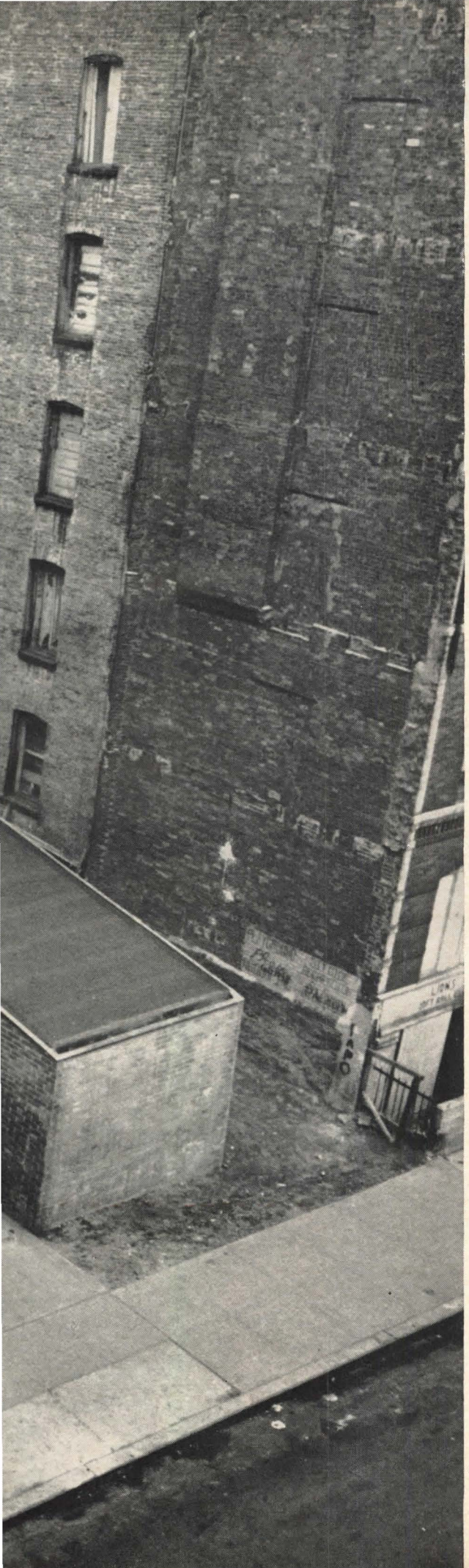


2

THE SYMBOL AS A CORE

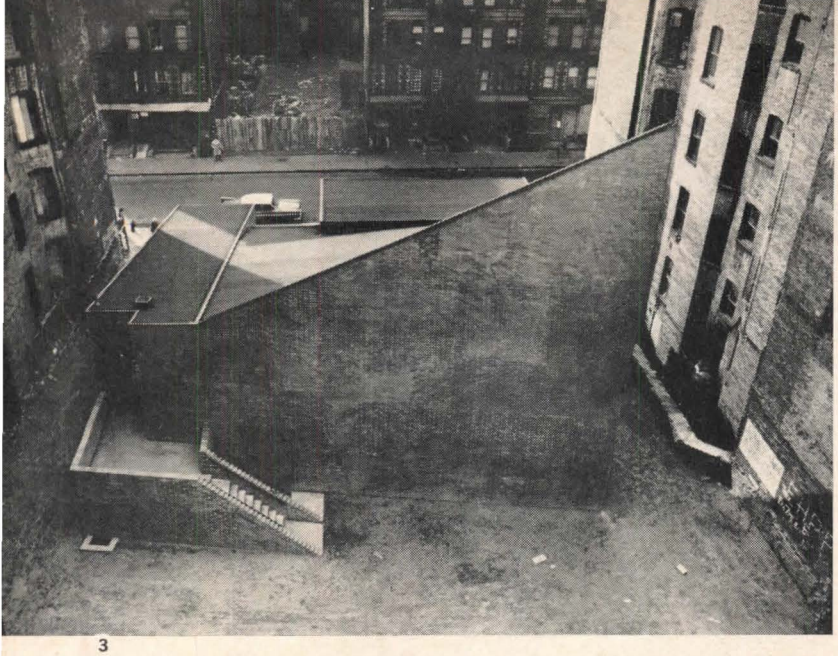
NEIGHBORHOOD CHURCH AS FOCUS FOR RENEWAL

New York's Harlem is studded with storefront churches like the one on East 102nd Street (1). They aren't much to look at, but for years they have served the religious needs of neighborhoods that could not afford temples.

Now Harlem is changing, slowly, under the impact of urban renewal and public housing, and the storefront churches are being forced to change with it. Victor Lundy's new Church of the Resurrection (2), with its giant prow soaring above the surrounding decay, is a striking example of how dramatic the change can be.

Four of Harlem's storefront congregations (including the one pictured above) joined together six years ago to build this new church. They did it more out of an instinct for survival than from a desire to have a grand edifice: new developments in Harlem were sweeping away the old tenements in which storefront churches had found cheap space. The congregations had to look for alternatives.

"We weren't particularly unhappy with our storefronts," says the Rev. Charles Farrell, pastor of the new church. "We considered them appropriate to the community and close to its problems. But already two of the storefronts were uprooted by renewal, and we knew the other two would get it soon. We were running out of cheap



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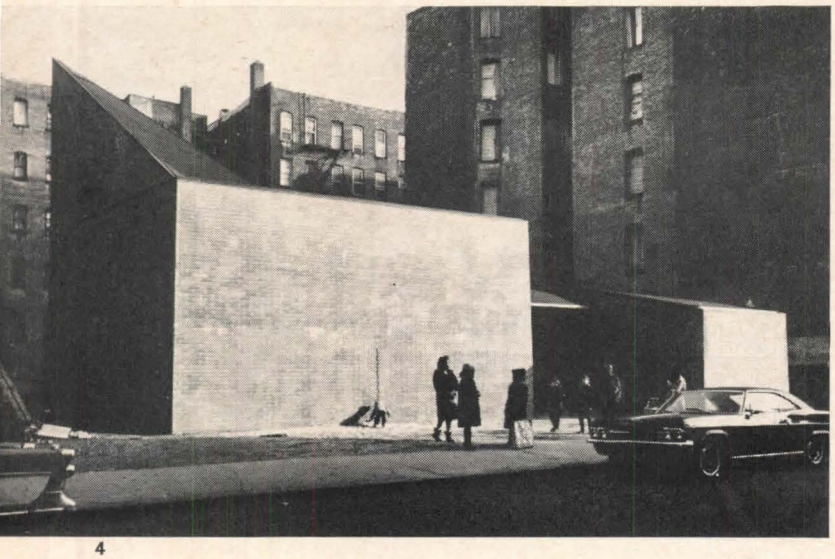

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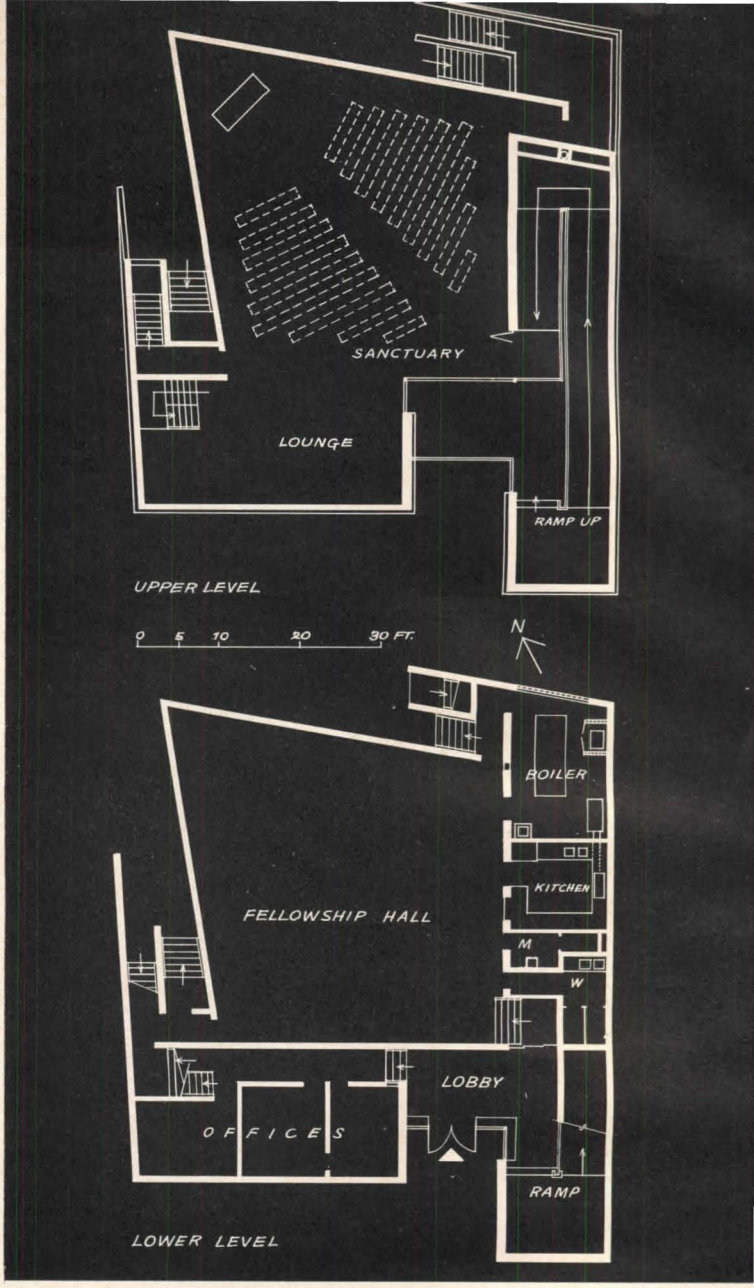

space to rent; so we finally decided that it would be wise to have equity in the community."

The four congregations were of different denominations, but all were members of the East Harlem Protestant Parish. With its help, they bought a lot on East 101st Street, started a fund-raising campaign, and selected Lundy as their architect.

The site and its surroundings were not exactly the stuff that inspiration is supposed to be made of. The lot was strewn with garbage and junk, and bounded on three sides by crumbling tenement blocks. Everyone assumed that demolition of the neighboring buildings was inevitable, but no one could predict how soon. Lundy further assumed that they would be replaced by medium-rise or high-rise low income housing.

"I realized that the one dimension that was free was upward, toward the sky," Lundy says, "and that the building would have to be designed as a piece of sculpture to be looked down upon from above. I tried to imagine how it would be to move in a certain way through the building, and how I would like the spaces to be. From this beginning came a first fix on the exterior volume—sculpture. After that it became a tug of war between the inside and the outside to make a unity that would be successful both on the ground and from above."

Lundy decided upon brick as the most indigenous "New York" material. He intended to cover the entire building, roof included, with bricks, and to use them as paving on the rest of the site. But the tiny budget of $200,000 would not permit it, so Lundy settled on brick-colored concrete blocks that closely resemble the real thing and have a pleasant, warm quality quite unlike that usually associated with the cheaper material. He also had to exclude masonry from the roof (substituting inexpensive mineral surfacing) and eliminate the paving altogether, for now.

An all-brick composition would have been impressive, but abandoning it has not destroyed the sculptural quality that Lundy sought. The church's form is still powerful, asserting its strength whether viewed from the upper floors of the surrounding tenements (3) or viewed from ground level (4). The one really disconcerting feature is what seems to be a crack in the wall (4, being inspected by a child). At first sight it would seem to be the result of sloppy workmanship, but it is actually a window slit for the pastor's office, glazed on the inside.

On the interior, Lundy has created a progression of spaces that are remarkably dramatic for a building of such small size. The sanctuary, beneath the

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prow of the building, can be glimpsed from outside through the glassed-in entrance. Once one is inside, it reveals itself (but not all of itself) as the dominant space. It is raised just above eye level behind glass on an exposed concrete slab (6) which also forms the ceiling of a Fellowship Hall below. This hall (7) is depressed slightly below the entrance level and is visible only through a horizontal eye-level window slit.

The sanctuary—the ultimate objective of most congregants—is easy to see, but it takes some doing to reach it. The route is indirect, to say the least. From inside the entrance, one must turn to the right and completely around; then up a short incline to a blank wall; then completely around again, this time to the left, and up a long, sloping ramp (8, next page). At the head of the ramp is another blank wall, and again one must turn sharply to the left, continuing along an elevated level ramp from which can be seen the journey's course. This final ramp ends abruptly at the glass-enclosed sanctuary entrance.

Why all this walking? "Because of the compelling environment outside," Lundy explained, "I felt that the church needed a preparatory space that involved actual physical movement and commitment to a new experience. So I purposefully made a ramp as an artificial hill to reach the sanctuary above."

The sense of forward motion does not stop even at the sanctuary entrance. The space is diamond-shaped in plan, with the entrance at one tip of the diamond. The roof is low at this point, and the ceiling consists of laminated wooden strips nailed to the roof beams. The ceiling rises gently from the entrance to a point where it traverses the diamond; then it appears to end abruptly. Beyond, at the opposite point of the diamond, the walls meet to form the prow behind the altar. Natural light falls on the prow, but its source is concealed (5).

One is instinctively drawn toward the prow. At midpoint the space opens up, revealing that the ceiling does not end, but swoops sharply up to meet the apex of the prow—and the source of the light—almost 40 feet above (9, page 53).

The entire drama is achieved through Lundy's manipulation of spaces; there is no decoration. The walls are plain masonry, the wooden strips of the ceiling are unstained, the floor is raw exposed concrete, the altar is a simple, cloth-covered table. The only "decorative" element is the cross behind the altar—and it is a happy accident. It belonged to one of the storefront congregations, which used it for picketing and religious processions. One of the ministers leaned the cross

8

against the prow, and it has stayed there ever since.

Budget problems prevented Lundy from including a number of niceties, such as stained glass windows, a skylight over the overflow space at the rear of the sanctuary, and a finish for the interior walls of uncolored concrete block. Perhaps this was all for the better. The building is stark, austere—even brutal; but by being shorn of all refinements, its basic form is revealed more effectively than it might have been had the budget permitted more. It also reflects the circumstances of those who worship in it: materially poor but, in Lundy's words, "rich in the wealth of their emotions and involvement with life."

The congregation, composed mostly of Negroes and Spanish-speaking Puerto Ricans, combines strong social consciousness with its religious fervor. The church operates a narcotics rehabilitation center, a mental health program, and remedial reading classes. It is also one of five neighborhood organizations that have joined together to develop an ambitious master plan for redevelopment of the entire seven blocks from 99th to 103rd Streets between First and Second Avenues.

The master plan, prepared by Whittlesey & Conklin was completed last fall, and work already is underway. Five tenements on 100th Street (one of several so-called "worst blocks in Manhattan") are being rehabilitated by the Chicago-based Kate Maremont Foundation; and on 102nd Street, United States Gypsum Co. is doing the first rehabilitation project ever attempted by a private company.

The tenements surrounding the new church are already empty. Soon they will be demolished to make way for a six-story public housing project. In drawing up their master plan, Whittlesey & Conklin have treated the church as one of the neighborhood's major focal points. They have placed a landscaped plaza across the street and provided generous open space at the back, which will also serve as a court yard for the new public housing, which will almost encircle the block.

By deciding to build their new Church of the Resurrection, the four storefront congregations did more than insure their own continuation: they helped shape the quality of the neighborhood's physical revival—and they gave it a powerful new symbol of hope.

—James Bailey

FACTS AND FIGURES

Church of the Resurrection, East Harlem Protestant Parish, 325 E. 101st St., New York City. Architect: Victor A. Lundy. Engineers: Severud Associates (structural); Fred S. Dubin Associates (mechanical). General Contractor: Thompson-Brinkworth, Inc. Building area: 6,044, sq. ft; 77,164 cu. ft. Construction cost: $200,000.
PHOTOGRAPHS: George Cserna

BOOKS

FREI OTTO—SPANNWEITEN. By Conrad Roland. Published by Ullstein, Berlin, Frankfurt/Main, Vienna. Distributed in the U.S. by Wittenborn & Co., 1018 Madison Ave., New York 21, N.Y. 168 pp., illustrated. 8½ in. by 11 in. German text. $15.00.

REVIEWED BY PAUL WEIDLINGER

The name and the works of Frei Otto are well known to most American architects. He is considered an influential exponent of tensile, suspended and inflated structures. His ideas and works have been published in two books of his, one on suspended roofs and a second one on inflated structures. While these books are not available in English translation, many of the illustrations used in these volumes, as well as some of his executed projects, have been published in English language publications.

The book by Conrad Roland, which was made possible by a grant from the Graham Foundation for Advanced Studies in the Fine Arts is, essentially, a comprehensive report on the works of Frei Otto. After a thoughtful introduction by Felix Candela, the book begins with a brief note by the author in which he states that his purpose is to disseminate some of the new and important ideas of Frei Otto in order to influence architecture and building technology. The book does not pretend to be a text book on construction details or techniques—it is to serve as a vehicle for the demonstration and illustration of these ideas. The key to the book is not to be found so much in specific examples, but in the sum total of the many studies and projects which are presented.

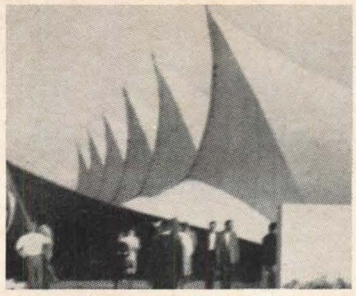
There is no doubt that the author is successful in accomplishing his objectives. In fact, because Roland's aims are much less pretentious than those found in the books written by Frei Otto himself on the same topic, his book presents a more favorable and much clearer impression of Otto's ideas.

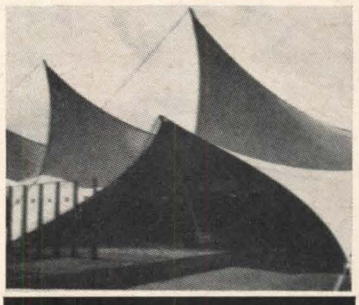
Mr. Roland discusses four types of structures: tensile structures; compressive structures; mobile roofs (i.e. retractable roofs, or structures which permit a change in form or dimensions); and, finally, large span envelopes (i.e. roofs designed to cover entire cities, etc.). In each section of the book individual examples are given, together with some construction details and a general, technical discussion of the subject. This technical and "theoretical" part of the book is perhaps its greatest weakness, because of its vagueness and occasional errors. However, it more than makes up for this weakness with its excellent illustrations.

Anyone with visual sensitivity and with an interest in construction technology cannot help but be fascinated by the wealth of forms displayed in the numerous photographs and sketches contained in the book. In fact, the most important attribute of Frei Otto's work on tensile structures, as explained by the author, is this (freely translated):

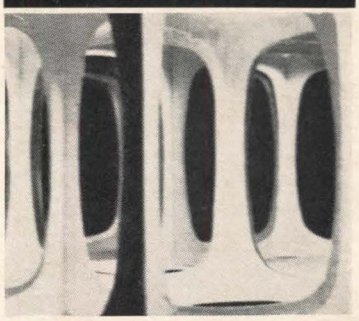
"It is an essential property of tensile structures consisting of membranes and cable networks that they cannot be designed in the ordinary sense; since these elements do not possess bending stiffness, they must take on a distinct shape for each and every loading condition. Consequently, each possible loading configuration is limited as soon as the overall system is defined. Therefore, the whole process of design is reduced to an effort to obtain the optimal solution through model experiments. The form and space becomes a consequence of the structure."

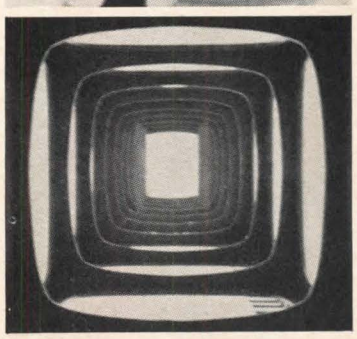
This point of view is, I think, quite valid and the implications of this process are far reaching. It probably allows the architect to "design" buildings as dictated by structural requirements without the intervention or approval of the structural engineer. He depends solely on limitations, which become immediately and visually perceptible in the models which replace paper and pencil as design tools: form follows structure. To those who are in sympathy with this approach to architecture, tensile structures indeed promise a newly found freedom. To others, it offers at least a wide range of exciting forms and spaces.

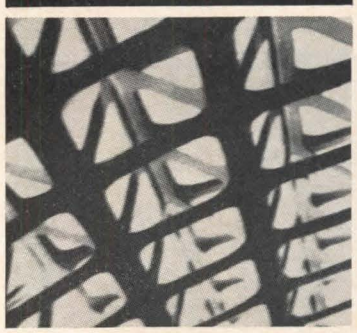




Top: tent structures (cables and canvas) for 1963 Landscape Exposition in Hamburg. Bottom: projected space-frame structures, developed in the early 1960's.







Mr. Weidlinger is, of course, one of the world's best known structural engineers. His completed work, as well as some of his visionary projects, have been published frequently in the Architectural Forum in the past.

Mr. Roland also offers a fascinating insight into Frei Otto's single minded thought processes. He evidently begins his work by concentrating on tensile structures partly because they lend themselves to the previously mentioned "direct" approach to design. His design aim is the minimal—or, rather, the optimal—structure, which is intuitively defined as one of "minimum energy," i.e. the least amount of material combined with the least amount of labor.

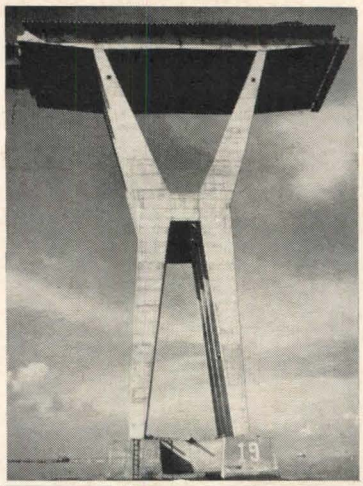
The search for this rather elusive aim led him into many other variations of this theme: to inflated structures, to suspended structures and surprisingly, even into structures composed principally of compression members. All, or almost all of his attempts are plausible though unconventional, original if not always successful and practical. Mr. Roland, no doubt, is an admirer of Frei Otto, and he presents Otto's experiments ably. He may be forgiven if this admiration leads, at times, to uncritical acceptance of some naive, dubious or exaggerated concepts regarding the merits of tensile structures. One suspects that the author *really* believes in the oversimplified and mystical notion that tension is inherently desirable or even "good"; and that compression and buckling are "bad." This seems to imply that tensile failure is more forgivable than failure in buckling or compression. Still, in the single minded pursuit of original ideas, it is not uncommon for one to arrive at brilliant conclusions from erroneous premises. This aspect is a psychological one and probably a part of the heuristic process in the search for ideas and solutions. While *it is forgivable* in Frei Otto's own works, it is subject to criticism in a book written about the work. It is true that neither Frei Otto, nor Mr. Roland, make exaggerated claims regarding the merits of any one of the proposed or existing tensile or inflated structures. The claims are, however, exaggerated regarding the concept itself, and this leads to confusion.

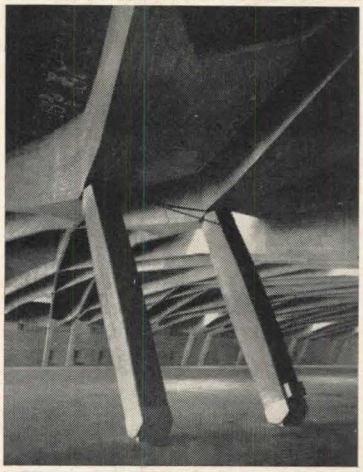
Many materials are indeed stronger in uniaxial tension than in compression, but some other facts are equally pertinent in this context: For example, strength is not the only, and often not even the governing structural consideration; static, dynamic, aerodynamic stability, rigidity, durability, dimensional stability, elastic stability (to name only a few), can be of overriding importance. It is also worth remembering that, while some materials are stronger in uniaxial tension, *all* materials are *strongest* in triaxial (hydro-static) *compression*. Some interesting, and valid concepts could also be deduced from these premises.

Finally, lest we forget: structures of the sort discussed here must be in static equilibrium; consequently the tensile forces must always be balanced by equal and opposite forces, which most often imply compression. For example, the tension in the cables and in the surface of a tent is (alas!) balanced by compression in the mast. In fact, in many such tensile structures, to achieve aerodynamic and dimensional stability, the cables are tensioned—and this results in compressive forces in the masts which add up to more than the total weight of the structure!

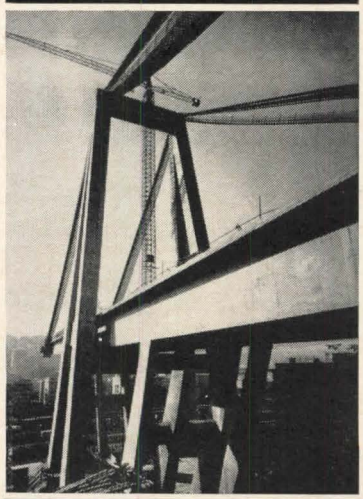
In some instances, ingenious design can overcome these shortcomings. In inflated structures, compression is provided by compressed air and the final balance of forces may be obtained by further compression in the ground itself transmitted through an anchorage. It would be unfair to imply that either Frei Otto or the author is unaware of these facts; but there is no doubt that their presentation is one-sided. This may be inevitable in a work which is, to some extent, propagandistic (in the best sense) for a worthwhile cause and idea.

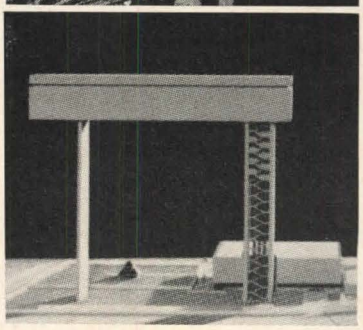
Still, the reader should beware and be aware of the other side of the coin: This review is an attempt to restore the balance, by reminding the reader of Newton's first law—to every action there is an equal and opposite reaction. Tensile structures are promising and exciting but they do not in themselves guarantee excellence. Excellent architecture and engineering is achieved only by excellent architects and engineers. Frei Otto is one of them.





Top: support for 5½ miles long bridge, Maracaibo (1957-62); and detail of underground hall, Turin (1958-59). Bottom: Polcevera viaduct (1960-65); and water tower project.





THE WORK OF FRANK LLOYD WRIGHT. The Great Wendingen Edition. With a special introduction written for this re-issue of the book by Mrs. Wright. Published by Horizon Press, New York. 164 pp. Illustrated. 13½ in. by 13¼ in. $42.50.

In 1925, the Dutch architect T. Th. Wijdeveld put together a magnificent edition on the work of Frank Lloyd Wright. The introduction and the "typographical arrangement" were by Wijdeveld; but much of the graphic design was powerfully influenced by Wright's graphic vocabulary.

Horizon Press, to its great credit, has now reprinted this fine edition, with its lovely drawings and many little-known photographs. Much of the reprinting was done directly from the Wendingen Edition since the original illustrations were often no longer available. Despite this, the present Horizon reprint is actually better in quality than the original, and well worth its steep price.

THE CONCRETE ARCHITECTURE OF RICCARDO MORANDI. By Giorgio Boaga & Benito Boni. Published by Frederick A. Praeger, Inc., New York, N.Y. 234 pp. Illustrated. 9 in. by 11½ in. $20.00.

REVIEWED BY PAUL GUGLIOTTA

The Roman engineer, Riccardo Morandi, was virtually unknown outside Italy until quite recently (Kidder Smith's 1955 edition of *Italy Builds* does not mention him). Yet he has made significant contributions to prestressed concrete technology, and, through his structural imagination and poetry, to reinforced concrete and prestressed concrete architecture. He is the direct spiritual descendant of Eiffel, Hennebique, Freyssinet and Maillart, his structures developing from, and adding to, their earlier contributions. (Left, examples of Morandi's work).

This book on his work is well organized, with the reasoning behind the forms made self-evi-

(continued on page 103)

Mr. Gugliotta holds degrees in engineering and in architecture from both U.S. and Italian universities. He studied with Pier Luigi Nervi in Rome, where he later practiced both as an architect and as an engineer. He currentiy practices in New York City, and teaches at Pratt and at Dartmouth.

BIG HAPPENING IN BERKELEY

BY DONLYN LYNDON

To the surprise of many and the despair of some, a serious building has risen at Berkeley. Wurster Hall, built to house the University of California's College of Environmental Design, is strikingly congruent with the turbulent Berkeley scene—and a telling, if unsettling, emblem of the changing role of architects and planners in California.

One of the few post-war buildings to escape the Regents' compulsive passion for red tile roofs, Wurster Hall has also forsaken the lotus-land charm of the much-maligned and very pleasant Student Center. It has done so in favor of a persistent questioning that has as little use for dignified appearance (1 & 3) as did the leaders of the Free Speech Movement (FSM).

FSM upstaged the building's appearance on the campus last year, and temporarily distracted the College's dean, Martin Meyerson, into acting chancellorship; but today Wurster Hall's hulking presence at Berkeley is powerful evidence of the state's need for qualified thought about the shape of the future.

Situated near the southeast corner of the campus, the College overlooks one of the principal student entries to the university grounds on Bancroft Way. Its tower, visible from most of the campus, is the terminating landmark for College Avenue (2). Though many siting decisions seem to have been made with reference to adjoining masses and spaces, there is no relationship in detailing to that of the neighboring, rather insignificant buildings. The context of Wurster Hall is ideas, not shapes.

Its architects, Joseph Esherick, Donald Olsen and Vernon DeMars, are influential members of the architecture faculty, with separate practices. They worked on this building jointly. The final form does not represent the independent thought of any one of them; it is the result of interactions with their colleague committees and with each other (in varying degrees at successive stages of design). As they worked on this building, they were immersed in the ferment of change within the College, where stylistic dogma was anathema, where bags of conventional tricks were being junked, and where dissatisfaction with existing design procedures was incipient.

Considerable initiative and much behind-the-scenes support came from William Wilson Wurster, the founding dean of the College. As dean, and as a member of the Campus Planning Committee, he played an important role in developing the building and in persuading the Regents to build it.

Last fall, the building was dedicated jointly to him and to his wife, the late Catherine Bauer Wurster. The Wursters' foresight was in large part responsible for the establishment of an institution confident enough to build this building.

Mr. Lyndon is the Forum's West Coast correspondent and chairman of the University of Oregon's department of architecture.

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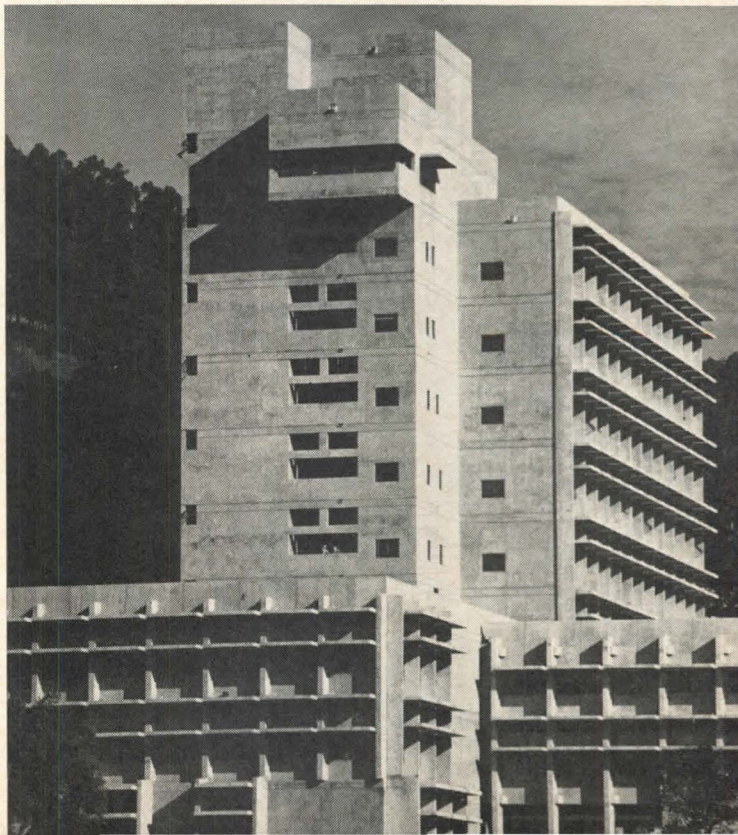

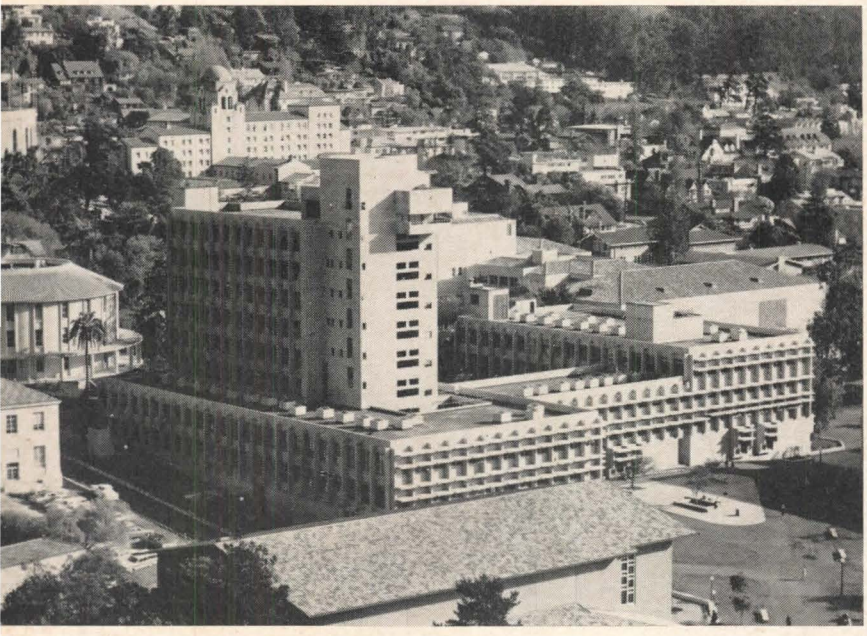

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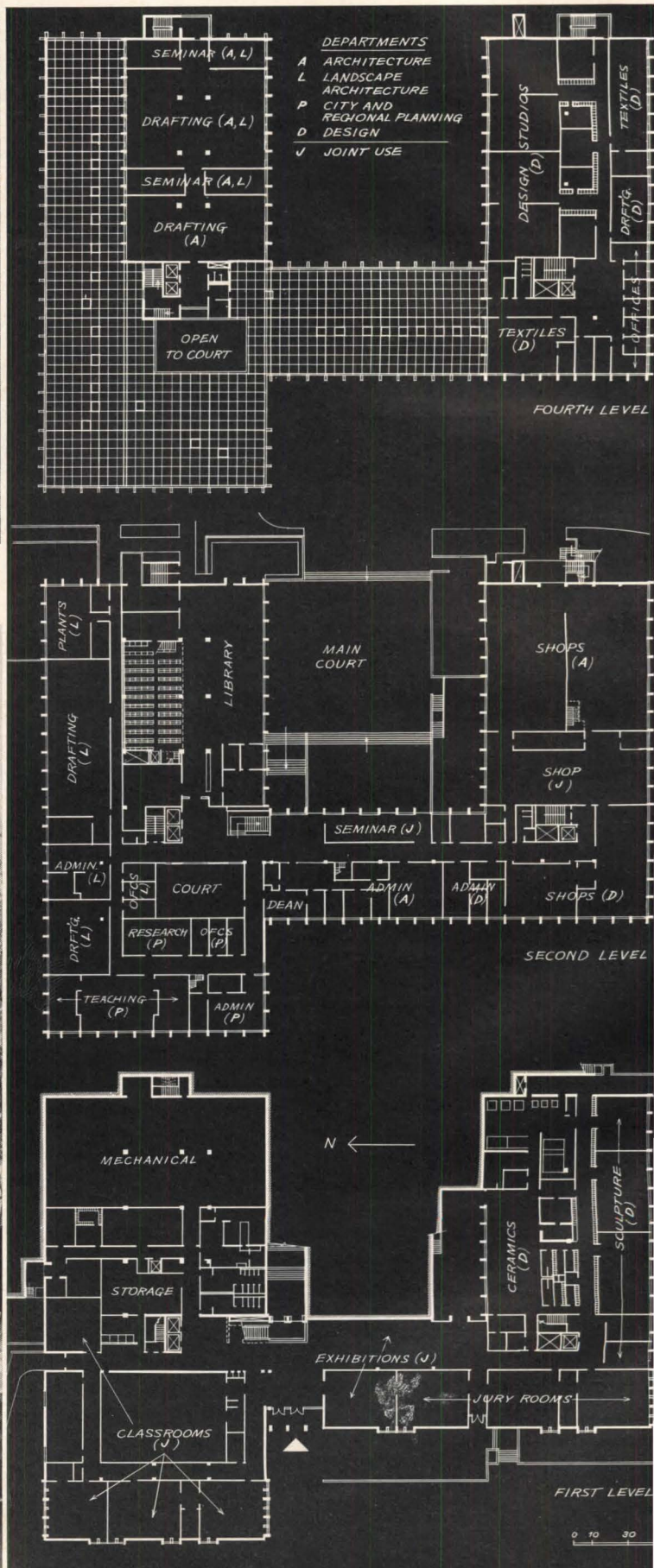
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A ARCHITECTURE
L LANDSCAPE ARCHITECTURE
P CITY AND REGIONAL PLANNING
D DESIGN
J JOINT USE
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DESIGN STUDIOS (D)
TEXTILES (D)
DRFTG. (D)
TEXTILES (D)
FOURTH LEVEL
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LIBRARY
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CLASSROOMS (J)
FIRST LEVEL
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Wurster Hall: an attempt to plan a catalyst despite constraints and changing programs

At Wurster Hall the lag between preliminary planning and final occupancy has meant that the organization of the building in many ways reflects the College as it was six years ago, rather than its state today.

One of the initial intentions was to bring together in one building the various disciplines that had been merged into the College of Environmental Design—principally the College of Architecture and the departments of landscape architecture and city planning. For several years, the College did not exist as a physical entity. Its nerve center was the old and beloved "Ark" — an exposed frame wood structure of great charm. Into this frail building were packed the administration of the College and of the department of architecture, the lecture hall, and the architecture library. The rest of the College was scattered about the campus.

The new building houses all the expanded functions of the College with the addition of several institutes, a department of design, and sculpture workshops. It does not house a usable lecture hall; though such a hall was built, it has never been furnished because the state, after some lunatic bit of area calculation, decided that a large lecture hall in that area of the campus was superfluous.

The architects mention three arbitrary constraints on the design: first, that departments should be identifiable; second, that there should be a tower; and third, that there should be a courtyard open to the east and the hills.

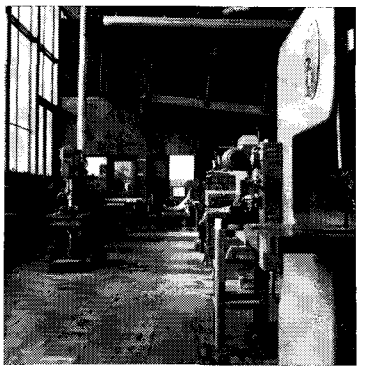
The tower came from decisions that had been made by the Campus Planning Committee. The courtyard (4 & 5) was intended to recall the most important place in the old Ark. Its openness to the east was demanded by the building committee.

Curiously, the combination of these two notions, plus certain similarities between the old and new sites, produced a scheme which in organizational terms is not unlike the Ark. In each case, the principal entry is from the south on the downslope, and therefore at a level lower than the courtyard. In each case, drafting rooms face north for time-honored reasons.

Opposite were placed the bulky shop and demonstration laboratory spaces (6) with simple servicing wittily advertised (7) at the east end of the south wing. Adjacent to these are research office spaces, and below them are sculpture workshops with direct ground level access to the adjoining art building.

The west end of the south block houses the department of design. Linking the north and south blocks on the ground level are a series of exhibition spaces and judgment rooms, above which extend two floors of administration and faculty offices along the major circulation link.

The college offices are immediately above the entry facing the courtyard. The low block on the north houses the library (under the tower) and the departments of city planning and landscape architecture.



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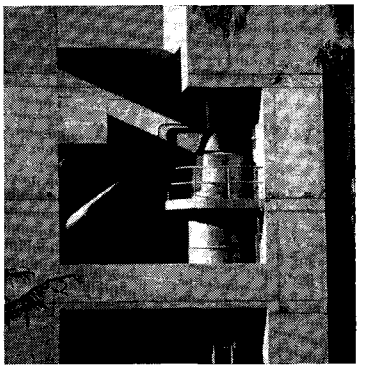
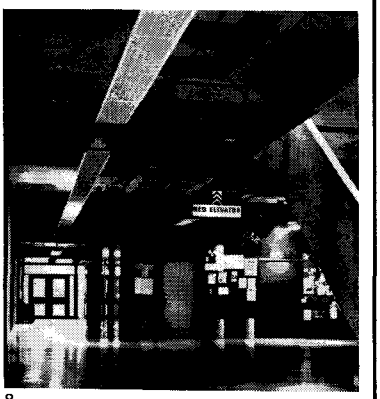


Organization around a courtyard of the scale of Wurster Hall's resulted in distances between the activities that contribute to the sense of remoteness experienced by some. Actually, the circulation area is comparatively small.



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Of more serious social consequence are the problems introduced by the need for elevators to the drafting rooms. With large numbers of students and teachers on tight schedules attempting to use the elevators, the demand at peak hours often exceeds their capacity. And many students and teachers regularly follow paths that bypass the rest of the college.

Students, for instance, may enter at the ground floor entrance (8) and take an elevator directly to their drafting rooms without ever setting foot on any of the floors occupied by faculty. Faculty offices for each of the departments have an internal, subsidiary stair that links them vertically so that they operate independently of the other sections of the building. This has fulfilled the requirement for departmental identification—a condition with which the architects were out of sympathy, since it seems to have resulted in more isolation than before, not less.

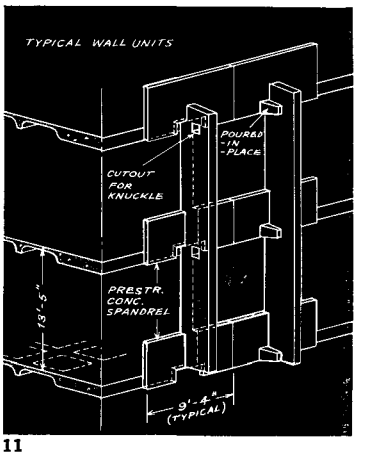
Wurster Hall: a loft without dogma, and a mixture of the general and the specific

"How can we ever get anywhere when what I call 'brutal,' he calls 'frank'?" Alan Temko, a resident critic at Berkeley, asked a while ago. He was exasperated by the architects' insistent one-downsmanship, and denounced the whole as incompetence cloaked in a private language of rationalized "Emperor's Clothes." Such a counterattack is certainly in order, for the whole building is predicated on the assertion that, as in the story of the Emperor's Clothes, architects generally have been evading issues, prematurely resolving functional conflicts, and inventing imaginary stylistic problems.

In the words of one of the architects, they worked to have the building be "utterly utilitarian." Nothing was to be done solely for architectural effect (nothing, that is, but the tower, the east-opening courtyard, and possibly, the projecting balcony at the top of the tower). This is not to say that one is not mightily affected. The investigative eye may be pained, insulted, but certainly not bored in this wonderland of perhaps premeditated but evidently uncensored mechanical happenings. All bits of mechanism have been left exposed, as in the jury room (9); wall surfaces are either dense, smooth concrete or resawn redwood plywood panels (10), meant to be stapled, tacked or otherwise mutilated. Connections are everywhere evident.

Knowing that a university building and its contents are subject to frequent and radical change during the life of the building, the architects had aimed at one point for what one describes as a "big chunk of real estate." The loft-like construction that has resulted is based on a system of two-story precast pre-stressed columns with integral wall spandrels. These are linked to the poured floor slab by a chubby knuckle that penetrates the spandrel (11).

10

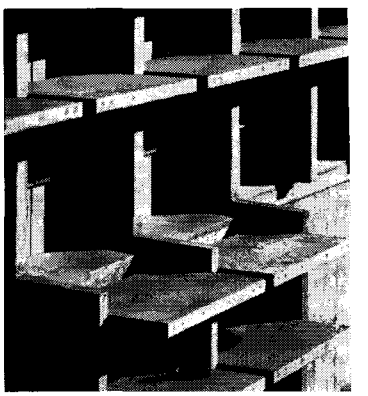


11

With the exception of lateral bracing walls, the base walls and the elevator tower, all walls were built using this basic unit or one of several minor variations generated from the same basic form. Hoisted into place on a 9 ft. 4 in. module, sealed by the insertion of a standard aluminum sash between spandrels, and laden with a dense hatching of horizontal concrete slabs to moderate the sun (12), the units merge together into a thick textured wall. All modeling is on the exterior, leaving interior surfaces flush for maximum flexibility.

Joseph Esherick believes "that the solution lay not in adherence to any single ideology or dogma, but rather in finding a reasonable path among a great array of conflicting and competing requirements; not arbitrarily eliminating or modifying requirements to make our own problems easier or the end product more palatable to those with a limited taste, but giving the greatest importance to the preservation of conflicting requirements. . . . Thus we were intellectually opposed to the idea that architecture is somehow a grand compromise and we sought not to resolve conflict but preserve it."

In the bizarre textural shifts in the wall patterns, one can most easily read the conflicting claims—where the sill height of windows varies with reference to the needs of the rooms behind but without reference to the massing or to alignment with adjoining windows. In many cases the variations are matters of inches, unsettling the visual redundancy of a uniform bay space. In others, strong changes of pattern encourage an episodic reading of the functions accommodated. In either case, there is a curious conflict between the plan system generalized to account for change and the wall variations made specific to a temporal use.



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The whole is indeed a curious mixture of the general and the specific, with little effort to make coherent the shapes and forms that meet the eye. Exasperating as that sometimes is, the great strength of the building is the architects' capacity to hold all of its parts at a consistent level of irresolution—their refusal to substitute a simple set of pseudoproblems for the complexities of their task.

9

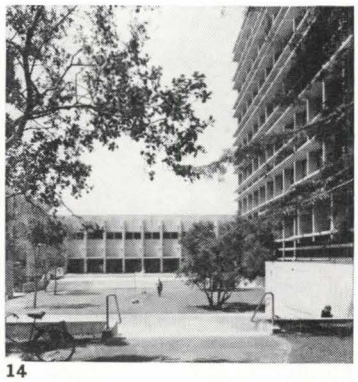
While many critics are still puzzling over its form, the College has more surprises in store for them. "The great thing about the building is that you can literally gut it to rearrange the spaces—and we'll have to literally gut it if the new curriculum goes through," comments one unabashed professor. Dean Martin Meyerson points out that the importance given to drafting rooms (13) in the programming and design of Wurster Hall is somewhat anachronistic now that most indications suggest a decrease in their importance as the library shifts to prominence in the education of able and responsible professionals.

13

Wurster Hall is not a how-to-do-it model—while aiming to be general it makes no pretense to be universal. It doesn't tell its users what they should consider to be important, it's just there—for them to use and to think about if they will, or to avoid thinking about it if they can.

Reactions are wildly varied, and it remains to be seen (if we only knew how to see it) what, if any, effect the building will have on those who hope to design California's environment. The results of a recent photography contest (14) indicate by their "professional" glamor that the romantic vision once fostered by our magazines has tenacity even in the face of great diversity. On the other hand, an impromptu letter addressed to the architects by one sympathetic observer evidenced Wurster Hall's close fit with Berkeley's own romantic tradition. It went like this, in part:

"I walked into your building from the back, through the courtyard, and I began to feel a life which was there . . . I walked down the corridor, and blau! I thought, that roar! How disturbing. And then that roar drew me into the heart of a place for creation, not just a space where creation takes place, and certainly not just a space . . . There was work there on the wall, and the building helped to set a standard of life and of excellence for the judging of that work—judging if it was of the spirit, not of the times, as the plaster angel in the library (15) or a picture of a beautiful house framed by a used car sign, but the spirit of creativity and life. . . . I talked to a person who didn't like it. He said that it had no soul. I felt it was he who lacked the soul, for this building very nearly attains to being just soul. There is a feeling of people, and the building is merely something around them; an extension of people, of an idea . . . It's a nice world, when you let it be. This building helps people let it be."



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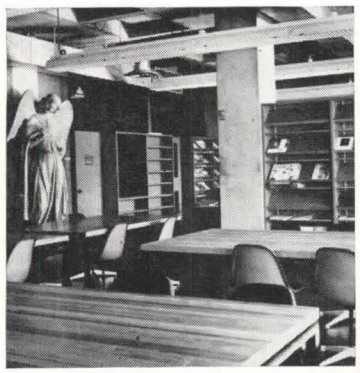
It was meant to be this, a place to work in and on; for students to learn as they best can without adopting any particular cultural pose. Faculty may and do point around them to the "ingredients" of a building, to establish in their students an inventory of the kinds of problems to be solved, but the students point them out better with actions. Soon after moving in, one drafting room corridor developed a mock fireplace and hearth, fronted by a seating arrangement of gross, overstuffed furniture. A column elsewhere acquired lurid wallpaper. Light wells of cardboard distributed light from the overhead fluorescent tubes to individual desks. Later, during the Free Speech Movement, the tower somehow developed teeth (16), since extracted.



15

The aedicular impulse is just, for Wurster Hall doesn't reach down to its occupants, it leaves them to build; it does not prescribe for them an experience, it lets them choose. Less single-minded than most buildings, it has more the sense of a community—not a magic domain but a place for some people to work hard on problems that affect us all.

Wurster Hall: body and soul, shifts and surprises, and a tower with teeth

FACTS AND FIGURES

Wurster Hall, College of Environmental Design, University of California, Berkeley, California. Architects: DeMars, Esherick & Olsen. Engineers: Isadore Thompson (Structural); G.L. Gendler & Associates (Mechanical). General contractor: Rothschild, Raffin & Weirick, Inc.

Building area: 215,788 sq. ft. (excluding courts, decks, etc.) Cost: $4,523,000.

PHOTOGRAPHS: Ueli Roth; except photo 14, this page, Louis Rajki.

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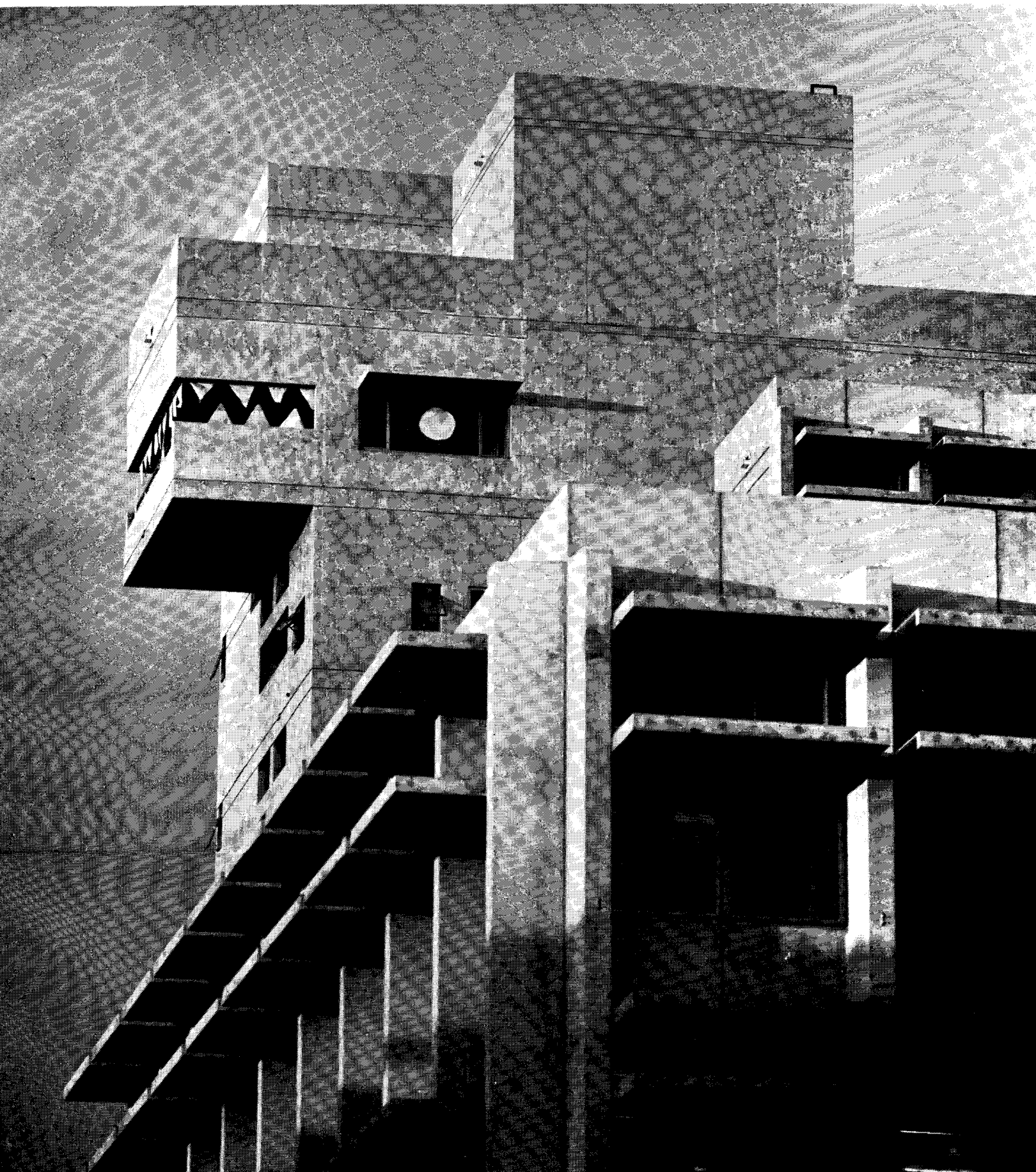


JOHN M. JOHANSEN DECLARES HIMSELF

His latest project, a $4 million library for Clark University in Worcester, Massachusetts, looks like a giant machine and is, in effect, a manifesto. In it Johansen places himself firmly on the side of letting the unpredictable happen, without preconceptions of order. The core of the Clark library is an elevated box in which books are stacked. The perimeter, however, is a seemingly random collection of shapes and angles that makes the irregular elevations of Wurster Hall (page 57) look positively Miesian. In the text that follows, Johansen tells how the design of the library (which is scheduled for construction in the spring) got that way.

"This is my first modern building. By that I mean it is the first that is attuned to contemporary thinking in science, in philosophy, in the arts. I regard my earlier works as Renaissance buildings by comparison.

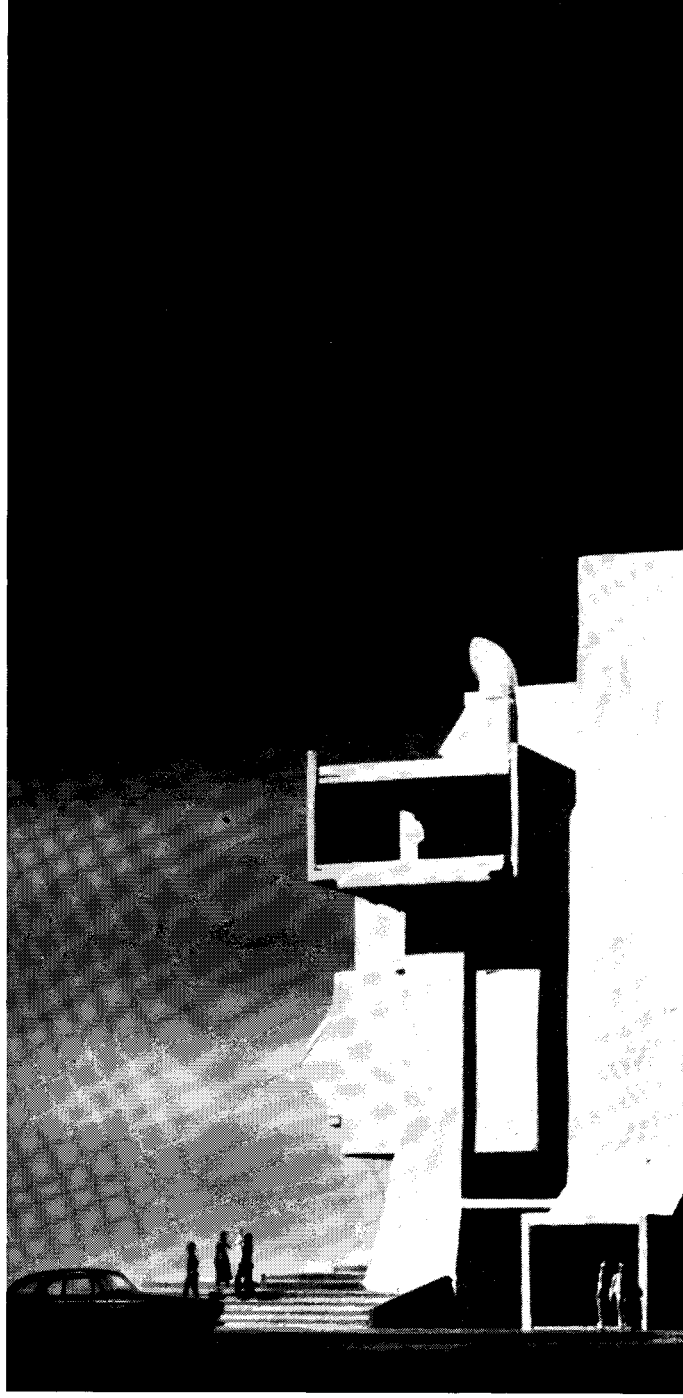
"I did not willfully 'design' this library. Rather, I presided and guided the building as it developed, letting it exercise its growing confidence and will and assert its purpose. The building does not attempt outright to be architecture, a work of fine art, a thing of good taste or of beauty. It represents an attempt to find the essential nature of 'library'. It is simply doing a job; it is performing.

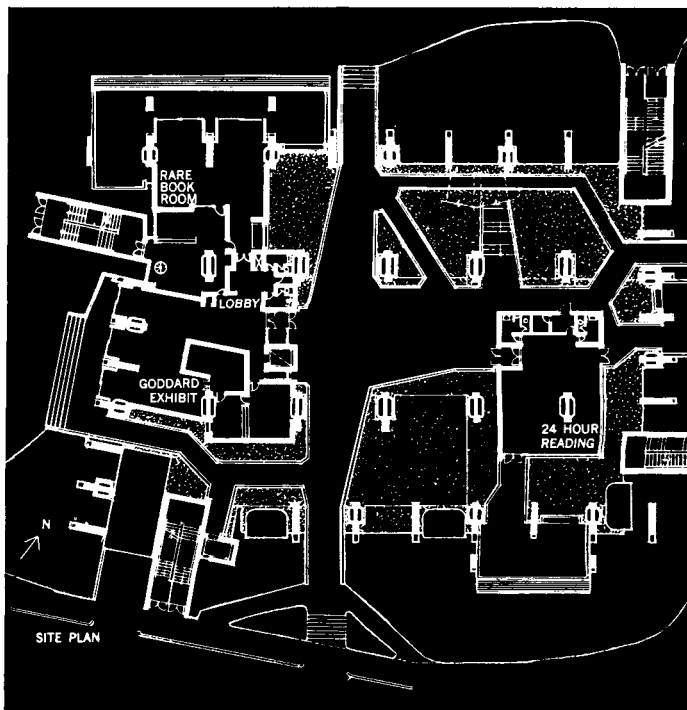
"I believe that no architect can produce buildings which are valid unless he is sensitive to the prevailing conditions and experiences of his time, and that all but a few today, regardless of their talent, are out of touch. Our time is one of uncertainty; our lives are mobile and improvised. Einsteins' theory of relativity has shattered the myth of a static universe. Heisenberg has introduced the idea of 'indeterminacy'. Sir James Jeans, finding a margin of error even in astronomy, has told us that 'nature abhors precision'. 'New Mathematics' and 'New *English*' are outgrowths of electronic data processing.

"In philosophy and religion, our thinking is anthropocentric, concerned primarily with the human condition, rather than with absolutes. For most *avant garde* authors and playwrights, existentialism is the unifying ideology; man is alone in a world where events can neither be predicted nor fully understood, but in which the only salvation is commitment. We wish to declare ourselves and our lives totally, to participate.

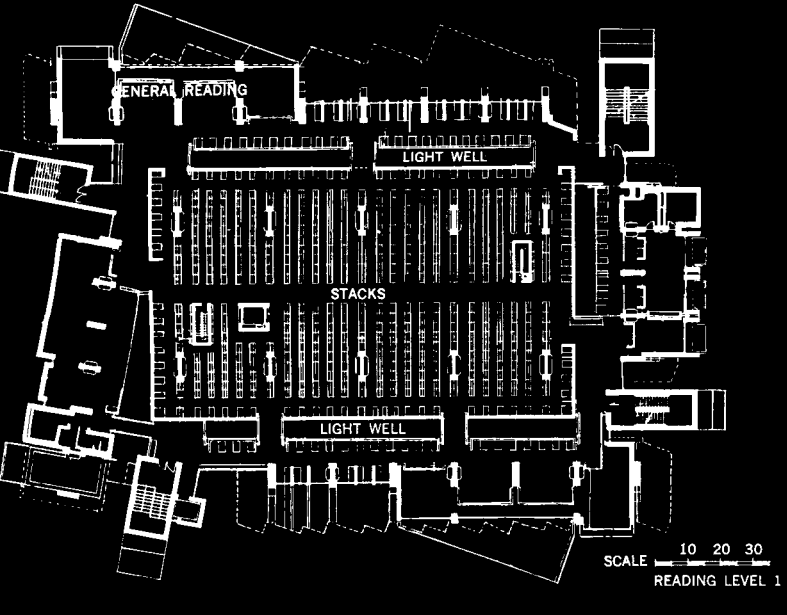
"In music, Gunther Shuller composes 'chance music' and develops new notation methods to depict 'musical events' in which the only directives are speed, dynamics, and route. Shuller, Lucas Foss, and others disdain anyone attempting a 'masterwork'. John Cage explains that his scores, and the choreography of Merce Cunningham, exist together and are not integrated, but merely take place in common space and time: 'To affirm life, I expose the audience not to a world of "art" but to open unpredictables. . . .'

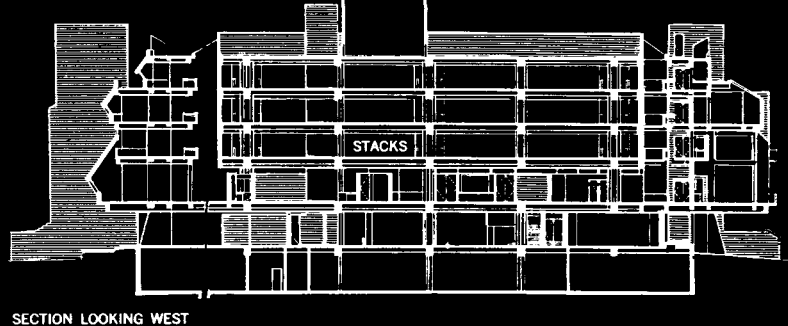
"In drama, as in fiction, events are neither rational nor resolved. Plot gives over to an 'unpredictably developing situation'; even the outcome often is ambiguous. The dramatic 'happening', like the action painting, is a search for immediacy. Simi-





Johansen's library is raised above a pedestrian plaza which opens onto a lounge, rare books library and 24-hour reading room (site plan). Around the three level "box of books," which can be expanded in the future simply by adding more floors, are four randomly attached outer structures with separate foundation systems, containing a variety of reading and study spaces and other library services (reading level plan and section). For orientation, the irregular window openings are different on all four sides (photo above, south elevation). The snorkel tubes flanking the entrance and peering over the roof are intake and exhaust ducts.





SECTION LOOKING WEST

larly, in the *Cinema Verité* and the American Cinema, movie makers like Mekas, camera in hand, improvise vivid bursts of imagery with the purposeful neglect of technical perfection.

"Marshall McLuhan, in his book *Understanding Media,* says of electronic communication that 'we have extended the central nervous system itself in a global embrace abolishing time and space. . . . Today action and reaction occur almost at the same time.' This simultaneity of experience requires new perceptive habits, in which we grasp visually not isolated elements but patterns and configurations.

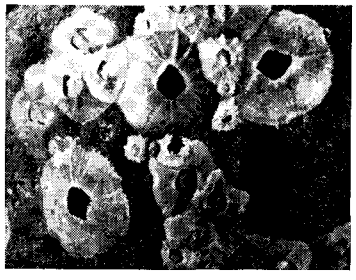
"The Clark University library is a natural and inevitable expression of concepts and experiences as I feel them. Held up one story off the ground, the building stands astride the major pathways of the campus. Its central position is appropriate: it serves all departments of the university; it is the symbol of academic wealth.

"Accordingly, the central portion of the library is an enclosed and protected treasury, a three-story 'box of books.' Around the box is a continuous outer structure of reading spaces, held up range upon range by separate systems of concrete piers. This outer structure is a free assemblage, a loosely attached cluster of enclosures to accommodate an intricate program of specialized studies.

"During the course of design, the program was modified and enlarged so that there was, quite literally, a process of growth, improvisation, and change. The building itself expresses this. On encountering the final form, there is a feeling that one has come upon the various parts of the building in the process of assembly or attachment. The form is evolving and alive, not fully at rest. It is, in the terms of Gestalt psychology, a configuration: 'an integrated whole with independent properties and functions over and above the sum of the properties and functions of its parts'.

"The central box of books is the lodestone which sets the polarization of the peripheral elements. Yet the south side takes an independent angle; there is the 'element of the unresolved.' The faculty lounge, propped up on one lofty pier, is figuratively out of the polar field (and literally a shameless afterthought on my part).

"In biological terms, one might describe the assemblage as an accretion of shells (enclosures) or

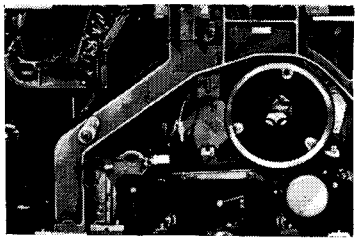


as barnacles attaching themselves to a rock of their own free will. The will at work here is the will of the program, rather than the will of a fine-arts-minded architect. The elevations are uncomposed. Except as they respond to the program, arrangements are accidental, haphazard, unresolved, to be added to or subtracted from. There is certainly tolerance for error.

"The shuttering of glass areas for sun control, resulting in four different elevations, evolved as naturally as does the adjustment of a fixed organism to its environment. Specialized treatment is given spaces for specialized use: the microfilm reading room is nearly without light; the music room has no light control for reading; the art room has a full skylight to provide studio conditions; lounges have a view; all reading rooms have full protection from direct sun.

"The interior reading areas are illuminated by nearly continuous vertical light slots, crossed by bridges at each level. The slots make vivid the separate identity of the inner box and outer assemblage, their structures usually unaligned, functioning independently but in the same space and time as do modern choreography and musical scores. At times the inner building will be lit and the outer silhouetted, at other times the reverse.

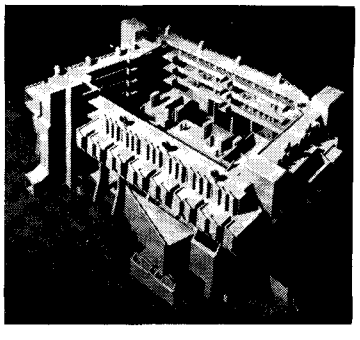
"I have, on occasion, spoken of this not as a building, but rather as an assemblage of components or subassemblies, plugged into an armature as in electronic devices. This is a building not of the passing mechanical age, but of the electronic age. Elements of this building, like the circuit pattern, transistors, and tubes of electronics are inward directed, selected to perform in combination a particular task. This library is not a device of automation (as libraries of the near future may be). Still, its elevations are like the rear, not the tidy front, of a Xerox copier with the components and their



connections rigged on a structural chassis and exposed.

"In general aspect, the building certainly is anti-perfection, anti-master work, anti-academic, and I hope successful in being sensitive to its purpose and its time, without pretensions to architecture. (It should be noted, however, that chance in art and science only happen to the 'prepared mind.').

"I believe that our buildings, and all of our arts, should serve not as consumer commodities but as the means of training man's perception. They should be not a diet for the privileged, but a factor in explaining and helping all to understand and adjust to our often bewildering environment of rapid technical change. For the arts, Ezra Pound said, are 'the antennae of the race.' "



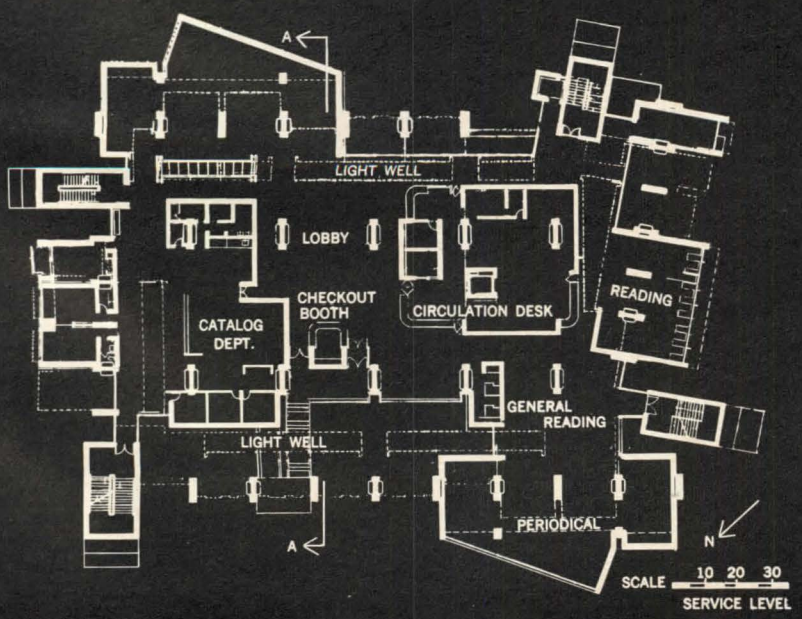
Center of the library's operations and control activities is the service floor situated one level above grade, beneath the first tier of open stacks (floor plan and section). Here reference, circulation and reserve desks are combined in one central control area. Window openings on the north and west (model photo) are larger to allow more light. The structure is reinforced concrete with brick infill.

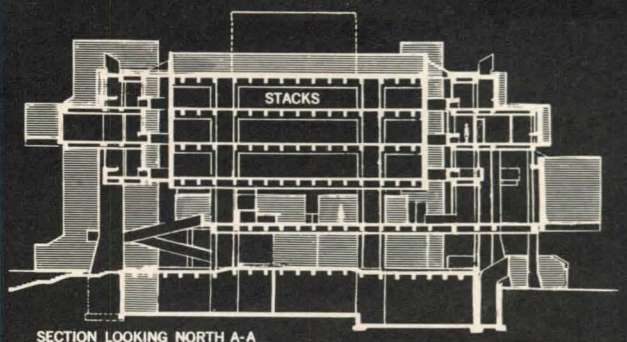
FACTS AND FIGURES

The Robert Hutchings Goddard Library, Clark University, Worcester, Mass. Owner: Clark University. Architects: John M. Johansen & Associates. Engineers: Rudolph Besier (structural); John L. Altieri (mechanical). Landscape architects: Currier, Anderson & Geda. Library consultant: Keyes D. Metcalf.

Building area: 134,000 sq. ft. Book capacity: 600,000 volumes. Estimated construction cost: $4,000,000. Estimated completion: May, 1968.

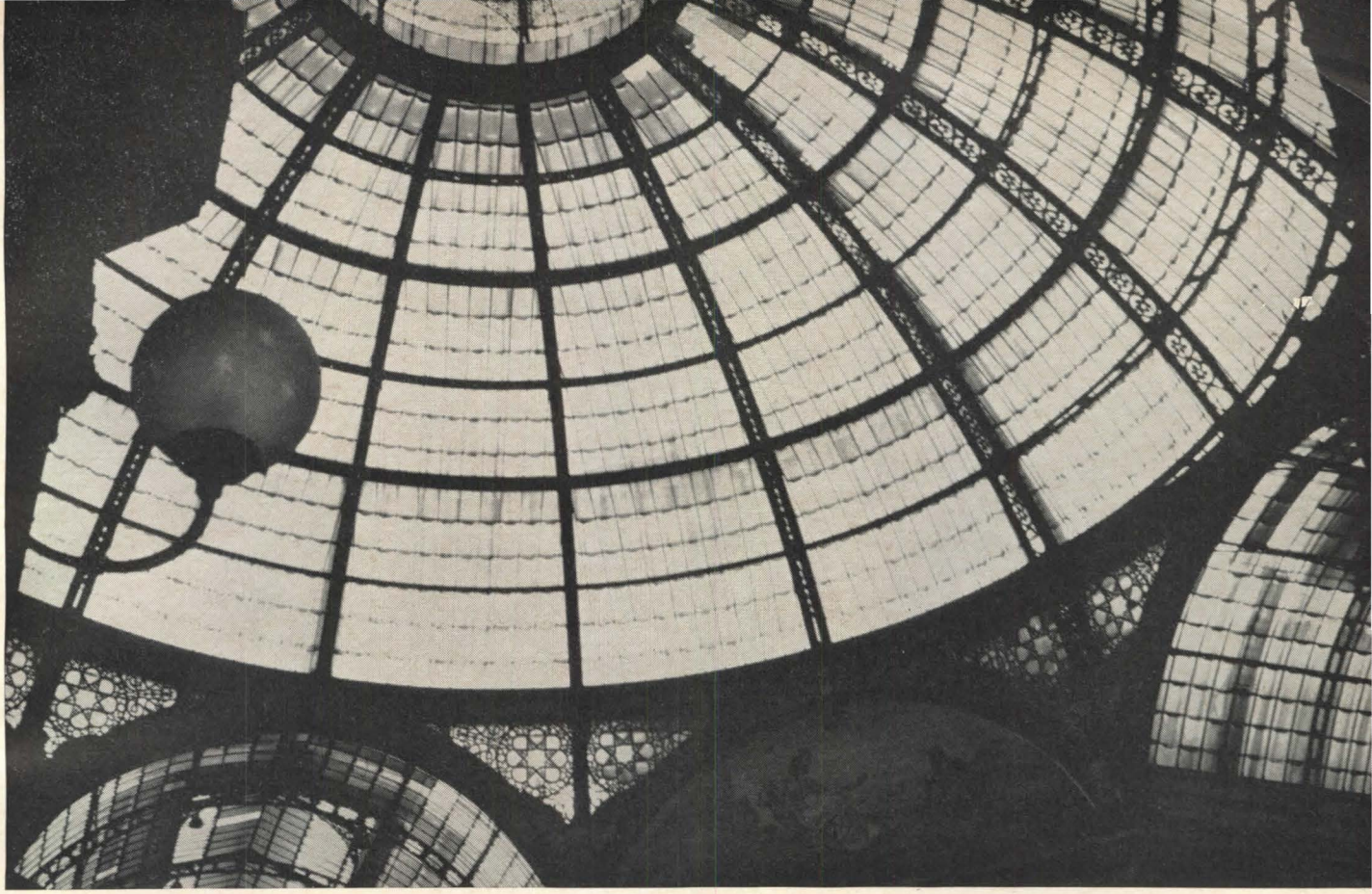
PHOTOGRAPHS: Louis Checkman, except page 66, center, American Museum of Natural History, and upper right, Xerox Corporation.





SECTION LOOKING NORTH A-A


BIFFI

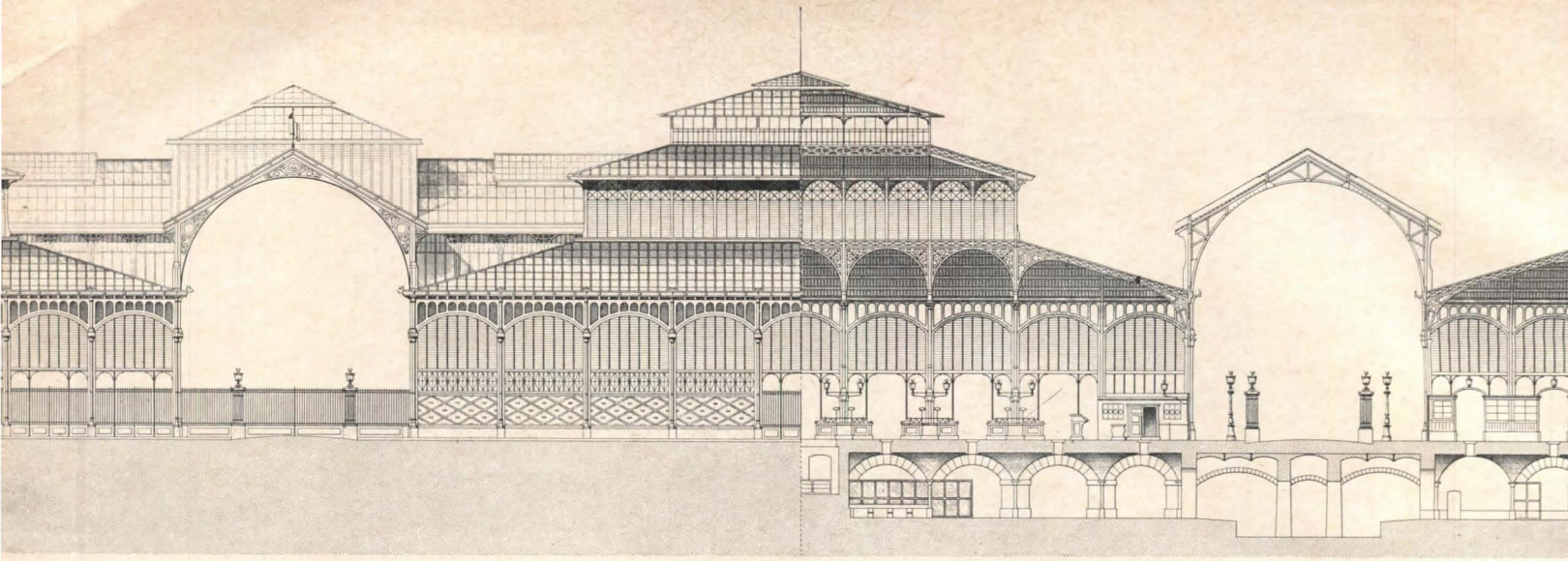


SHOPPING STREETS UNDER ROOFS OF GLASS

The Galleria Vittorio Emanuele II, in Milan, shown on these two pages, is probably the most famous shopping arcade in the world. Designed by Giuseppe Mengoni, and completed in 1877, it turned out to be its architect's final, as well as finest achievement: just as the great Galleria was being completed Mengoni fell to his death from the scaffolding under the great glass-and-iron dome.

Not many arcades can match the Galleria's melodramatic unveiling; but quite a few, in different parts of the world, come close to the spectacular Milan arcade in structural boldness as well as commercial and social success. Indeed, the glass-roofed arcades built, generally, during the 19th century, have proved to be so successful, in human and economic terms, that 20th century architects have started to resurrect the arcade wherever and whenever this seems appropriate: in shopping centers, in urban university complexes, in places intended to form the social "cores" of new cities or neighborhoods—and intended, also, to function for just about 24 hours each day, rain or shine.

So the display of fabulous arcades on these and the following pages is not meant to be a nostalgic backward look, but a series of suggestions, directed to today's urban designers struggling to develop a kind of space that might serve as a lively, predominantly pedestrian urban core. Mengoni's Galleria was and continues to be such a space: it is quite obviously, *the* place in Milan where the action is—the pedestrian action, anyway. For further examples, please turn the page. —PETER BLAKE



FACE COTE SUD.

Echelle de 0 1 2 3 4 5 10 20 metres.

COUPE SUIVANT L'AXE

PARIS

The most fantastic, and possibly the biggest existing "arcade" is LES HALLES *(opposite page), the greatest wholesale and retail food market in Paris. Its graceful iron-and-glass structure was designed in 1853 by Victor Baltard, and its many wings, cross streets and complexes cover something like eight acres of valuable, central Paris real estate. For this reason, and because Les Halles are not as accessible today as they were in the days before the automobile, the authorities are busy building a new giant market outside Paris, near Orly airport. When the new market is completed, Les Halles will, undoubtedly, be torn down. Too bad for Baltard, too bad for Paris!*

DUBLIN

The most unlikely "arcade" to be found anywhere today is, probably, the old KILMAINHAM JAIL *(top right), the first section of which was built in the 18th century. Kilmainham Jail was Parnell's address in 1881, but it has not been used as a penal institution since 1922. Now, with the help of voluntary contributions of cash and labor, a group of Dubliners is busy restoring the Jail and turning it into a historical museum and a major tourist attraction.*

LONDON

THE BURLINGTON ARCADE *(bottom right) off Piccadilly, built in 1818, remains one of the busiest shopping streets in the world. Unlike some of those shown earlier, the Burlington and Royal Arcades (the latter is on page 75) are spanned by masonry arches, with fairly traditional skylights in between. This detracts a little from their structural daring, and tends to make them a good deal narrower than the Galleria in Milan, for example. However, this very narrowness contributes to the bustle and excitement of the London arcades as shopping streets—though it does rule out such amenities as sidewalk cafes.*

BRUSSELS

LE PASSAGE DE ST. HUBERT *shown at left on a subdued Sunday morning, when the Belgian capital tends to close down like Philadelphia, was built in 1847 and designed by Jean Pierre Cluysenaar. It is located a block away from the spectacular, gold-encrusted central square of the city, and continues to flourish to this day as a successful downtown shopping center.*

LONDON

COVENT GARDEN *(top right) has operated as a market ever since the 17th century, and the arcades that formed the original piazza were designed by Inigo Jones. The present market, shown here, was constructed in the 19th century from plans by Charles Fowler. Although primarily a wholesale flower and fruit market, Covent Garden is lined with individual "stores". Its center aisles, most of the time, are jammed with the crates and vehicles that go with any big wholesale operation—and with hundreds of men and women whose livelihood depends on its success, regardless of London's unpredictable weather.*

ATLANTA

THE PEACHTREE ARCADE *(bottom right), one of several multilevel spaces of this type, was designed in 1916 by Ten Eyck Brown, to fit within the walls of the old National Hotel which once occupied the site. The Arcade was a charming, popular downtown shopping center, complete with fountains and permanent good weather. Despite widespread protests from Atlantans, the structure was torn down in 1964 to make way for a high-rise office building.*

MOSCOW

The famous GUM *department store (left), on Red Square directly opposite Lenin's Tomb and the walls of the Kremlin, is, in effect, a series of multilevel arcades with connecting bridges —all under great glass vaults. The arcade of shops was originally known as* Torgovye Ryadi, *and it was built between 1888 and 1893, according to designs of Alexander Nikanorovitch Pomerantsez. After minor alterations, GUM moved into the premises in 1953. The top picture shows GUM's glass vaults at night, with St. Basil's Cathedral, Red Square, and the Kremlin to their right. The modern, post-Stalin building going up in the background is the huge (and controversial) Hotel Rossia.*

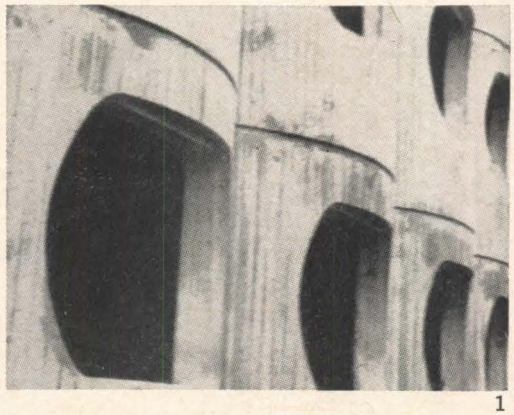
LONDON

The ROYAL ARCADE *(right) which links Old Bond and Albemarle streets, near Piccadilly, is one of the smallest shown in this collection, and one of the most pleasant. Its vintage is roughly comparable to that of the Burlington Arcade nearby (which claims to be the world's longest and oldest), but its detailing is more polished and more ornate.*

This short arcade, forming a direct pedestrian link between two parallel streets (and thus cutting straight through the middle of a city block), brings us back to our original point: that the pedestrian arcade may well be one solution to the increasingly urgent problem of separating the pedestrian from the car—without tearing down the existing city altogether and beginning from scratch. For these examples from our past show that, with a minimum of urban surgery, a new pedestrian grid might be superimposed upon our present automobile grid; and that this new grid might easily bridge today's automobile-dominated streets instead of merely linking them.

PHOTOGRAPHS: Pages 68, 69, 70, 71 and 72: P.B. Page 69: Paul Gonn—Black Star. Page 70: Carter Winter Archive. Page 71: Norman R. C. McGrath. Page 73: Norman R. C. McGrath. John Morris Dixon. Page 74: Sovfoto, Page 75: Evelyn Hofer.

FOCUS



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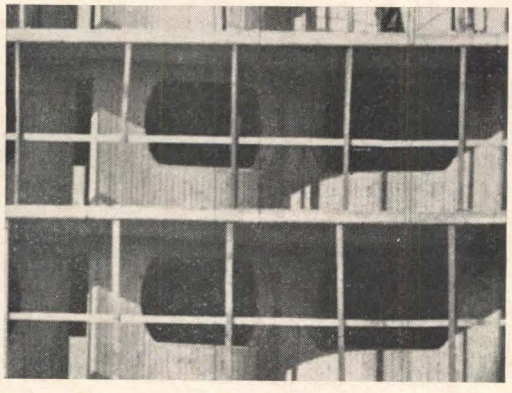
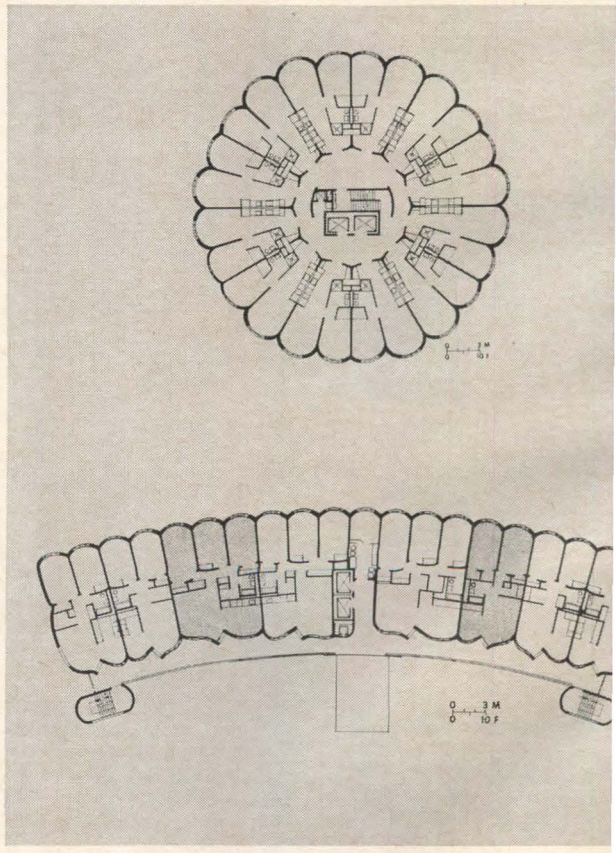
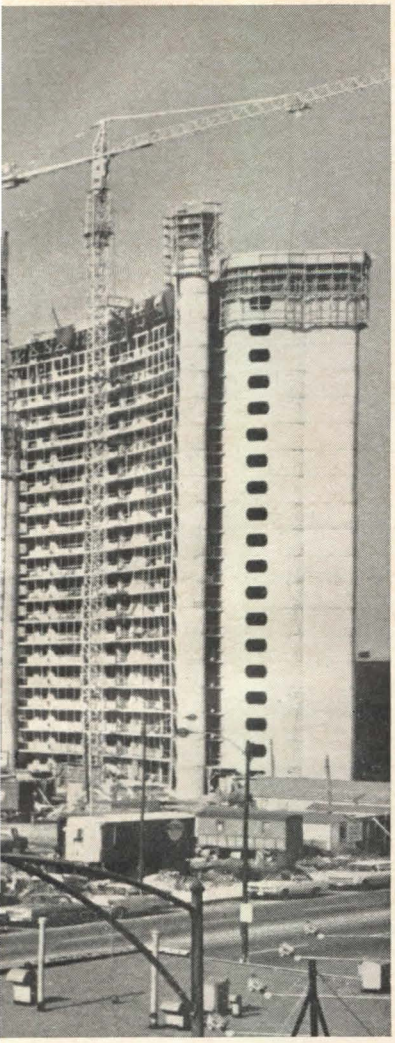






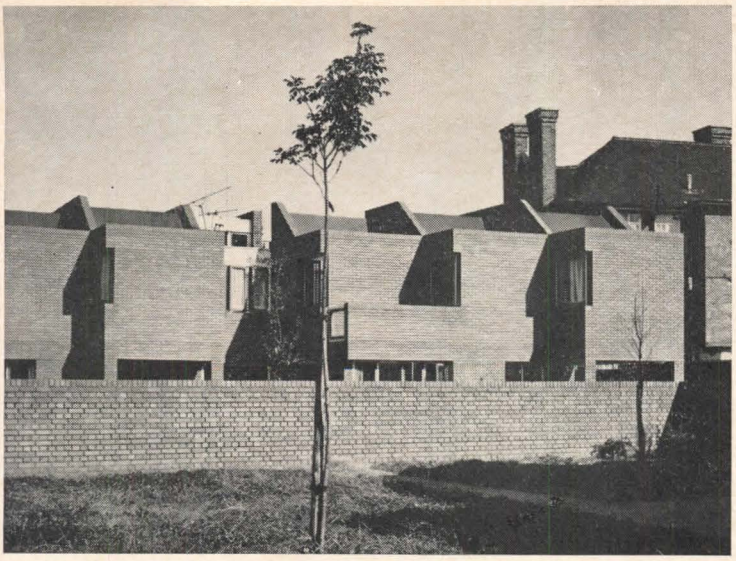
SCALLOPS IN CHICAGO

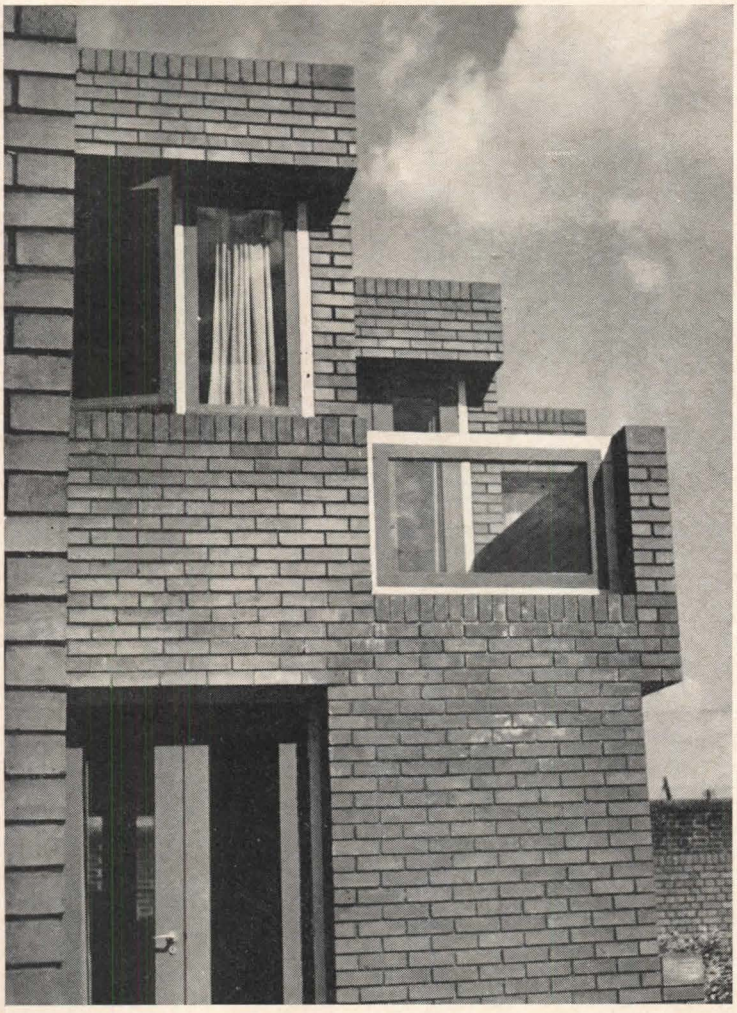
Architect Bertrand Goldberg, continuing his exploration of scalloped forms which began with Marina City (April '65 issue), has designed a four-building group for the Chicago Housing Authority that defies convention yet stays within the strict confines of PHA's spatial and budgetary regulations. Nearing completion on the South Side, the project contains two circular apartment towers for the elderly, shaped like daisies in plan (1), and two structures for families, in which the daisy petals are strung out to form an arc-shaped plan (2). In all four buildings, major rooms are enclosed in load-bearing concrete walls, their irregular spacing controlled by the needs of plan rather than structure. All windows are shaped like TV screens; they are tucked behind outside corridors on the family buildings, where writhing walls give each unit an oblique entry.

PHOTOGRAPHS: Page 76: Orlando R. Cabanban. Page 78: left, Stirling; right, Hickey & Robertson.

ART IN PUERTO RICO

The $2 million Ponce Museum of Art in Puerto Rico was dedicated with much fanfare December 28 in a ceremony attended by art and architecture buffs from around the globe. Designed by Edward Durell Stone, the rectangular concrete structure is covered with white "troweled marble" applied like stucco. A wall around three sides conceals a small open-air theater and two gardens. Inside, on the first level, are offices, a library, and two swooping staircases leading to the seven hexagonal shaped galleries on the second level. A space-frame structure of recessed triangles, topped by skylights, forms the ceiling of the galleries. The art was assembled by Luis A. Ferre, a Puerto Rico industrialist, who built the museum.



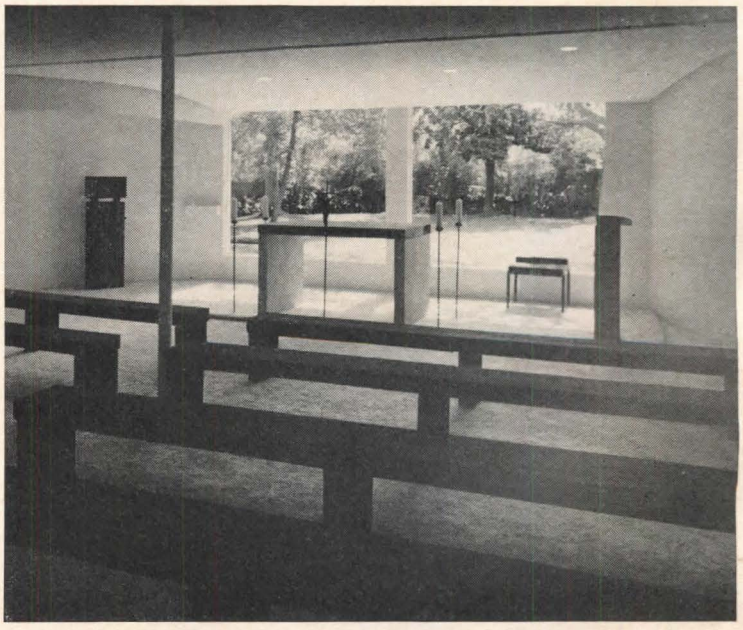


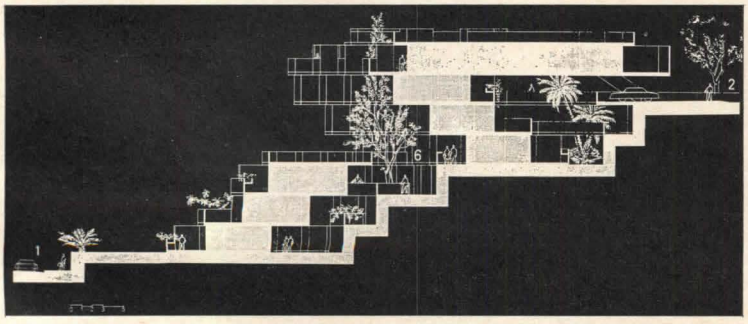
DOMESTIC SCALE IN LONDON

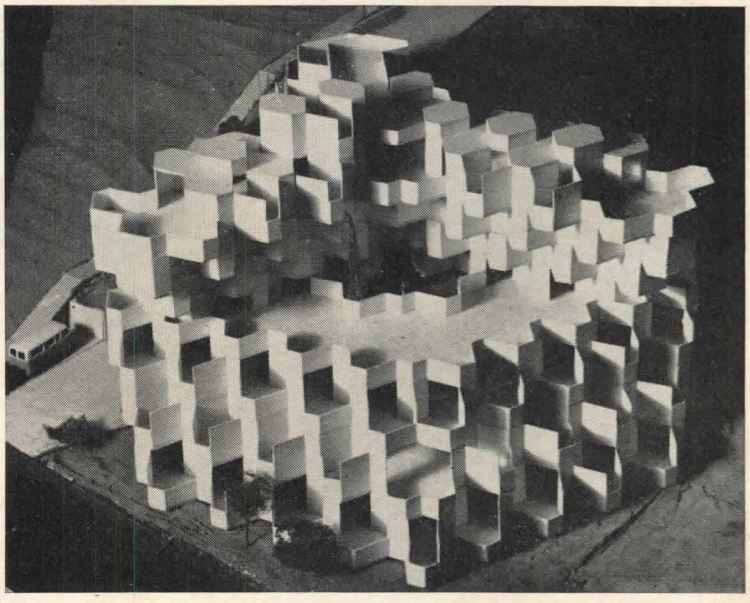
The brick structures above could be a pair of elegantly scaled town houses, but in fact are an orphanage in Putney, South London, designed for the London County Council by Architects Stirling & Gowan. Each of the two buildings, sited at right angles to one another in a walled garden, is designed for about 17 children and a married couple. The "parents," with the help of day staff, attempt to rear the children in a family atmosphere, which suggested a domestic scale in the buildings. Living areas are on the ground floor, bedrooms on the second. Some bedrooms have balconies, others overhang to create covered outside play terraces below.

PRODIGY IN HOUSTON

This simple little chapel for St. Thomas University, Houston, is the work of Glen Heim, a 25-year-old graduate of the school, who shaped curved walls within an existing rectilinear structure attached to one of the campus' older buildings. Heim also designed the black-stained fir benches, the rectangular metal tabernacle with fir pedestal, and the altar of poured concrete and wood, placed in front of the large windows. Campus architects are Philip Johnson and Howard Barnstone.

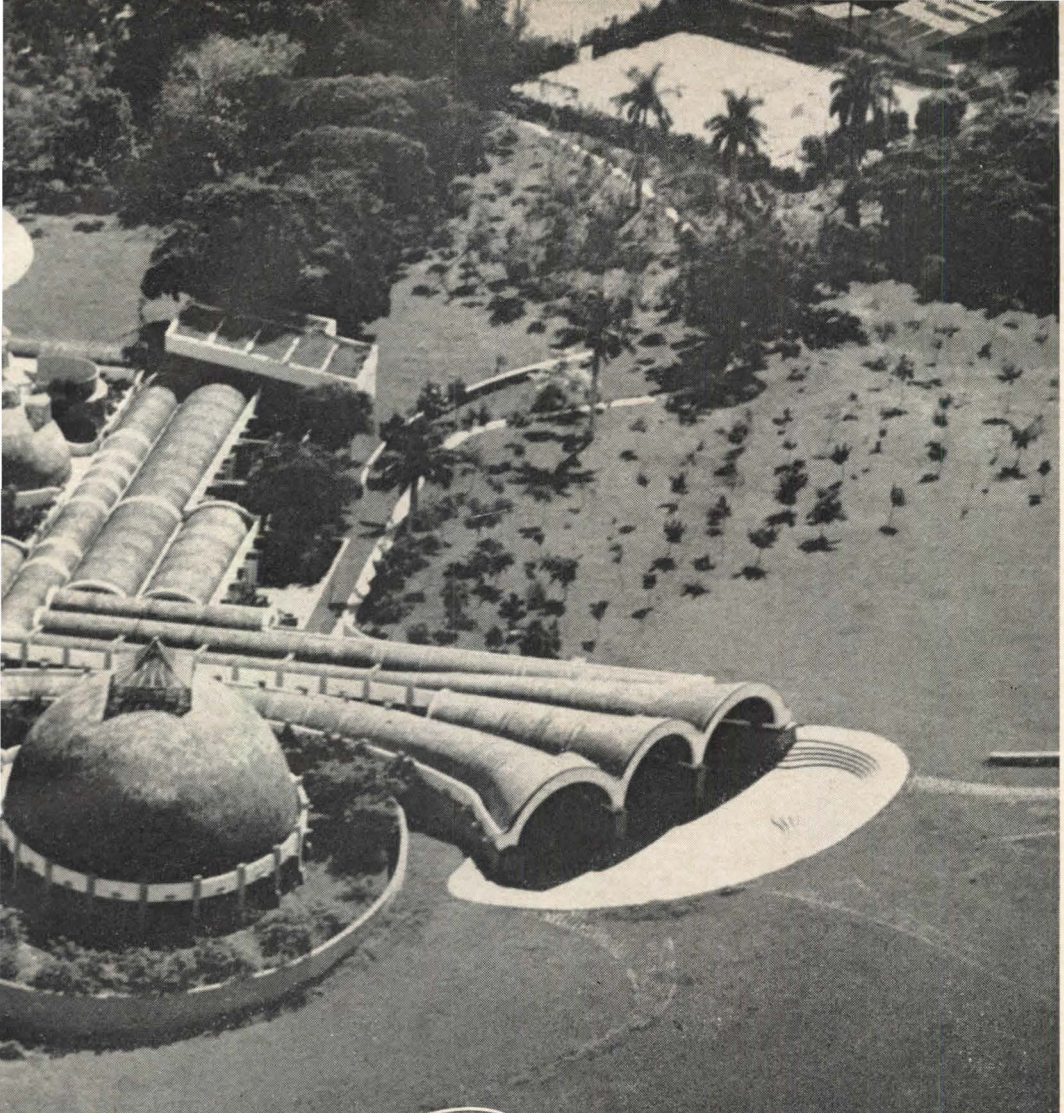


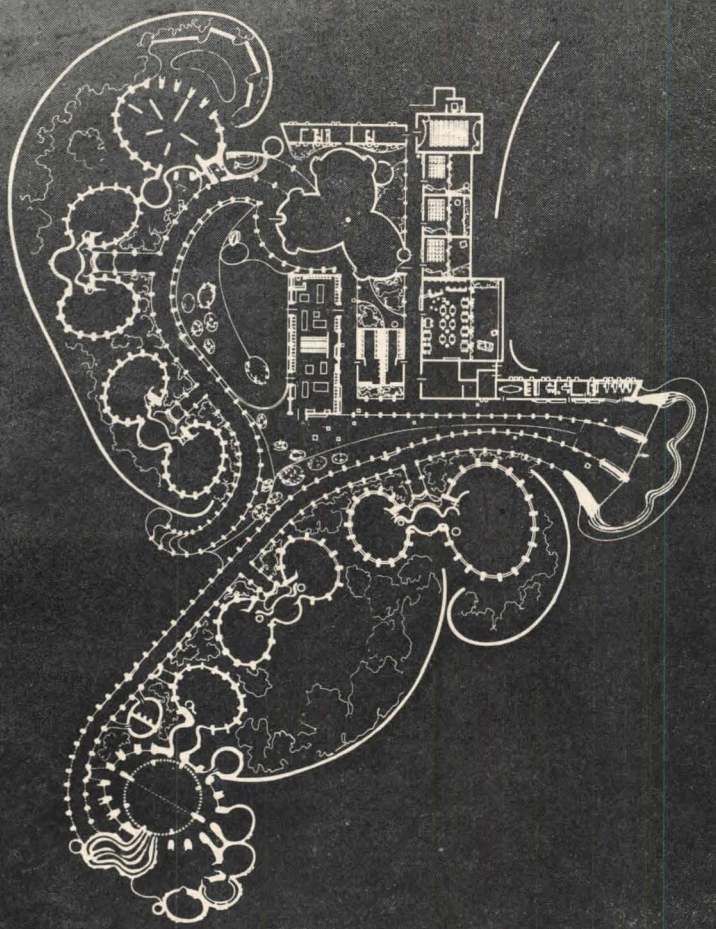




HEXAGONS IN RAMAT GAN

Hexagon piled upon hexagon gives this apartment building in Ramat Gan, a suburb of Tel-Aviv, its powerful form. It is the creation of Alfred Neumann and Zvi Hecker, two Israeli architects who are intrigued with the possibilities of "space-packing patterns." On the lower three stories, the 100-sq.-ft. hexagons follow the profile of the hill, forming a pyramid. From then on, they project out in overhanging layers. The top floor forms a bridge connecting the hilltop to the building. Each unit has its own half-covered terrace.





CUBAN ART SCHOOL:

A CLUSTER OF BUBBLES

The School of Plastic Arts in suburban Havana (left) is further evidence that architecture in Castro's Cuba* has not been frozen into any official stereotype. This school is one of two designed by Ricardo Porro for the five-part National Schools of Art complex now occupying the site of the Havana Country Club. Neither an omnipotent regime nor a drastic shortage of materials seems to have limited the extravagance of his building forms. (For more examples of his work, see page 85.)

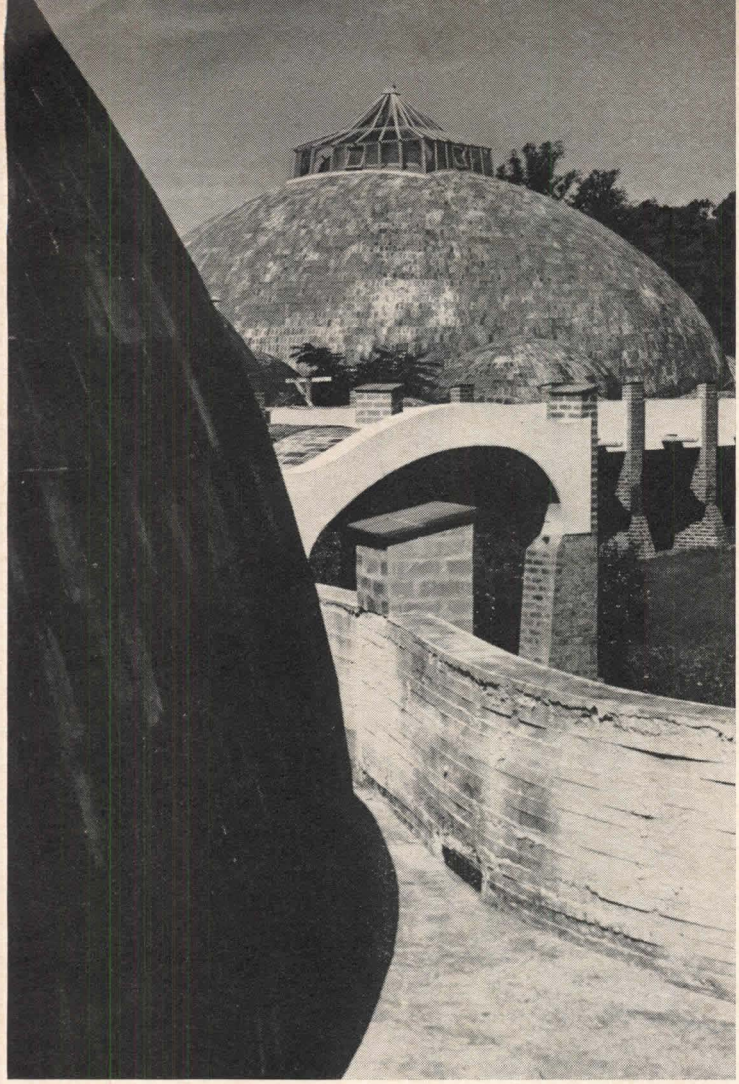
The Plastic Arts School was designed in 1961, when steel and cement were critically scarce; so Porro decided on a system of "Catalan" tile vaulting supported on brick walls, with concrete used only where absolutely necessary.

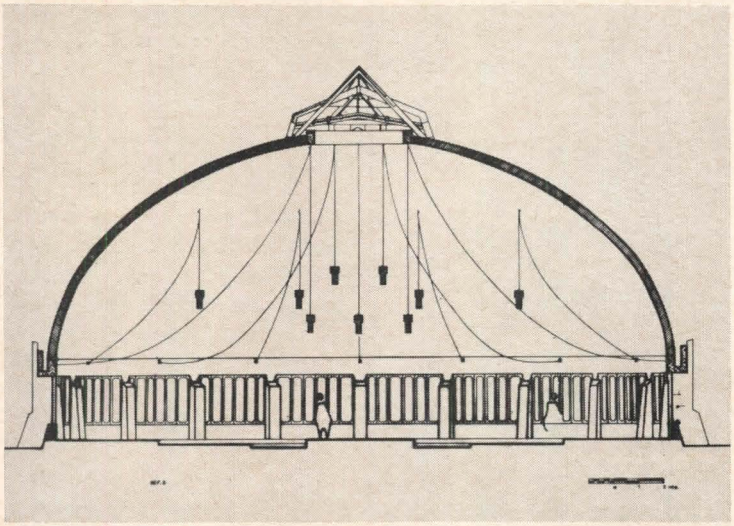
This limited palette of materials and forms was no handicap to his sculptural drama, however. Elliptical domed studios, twisted at various angles, are linked by funnel-like covered walks that flow freely across the lush landscape, converging and receding to form a series of outdoor spaces.

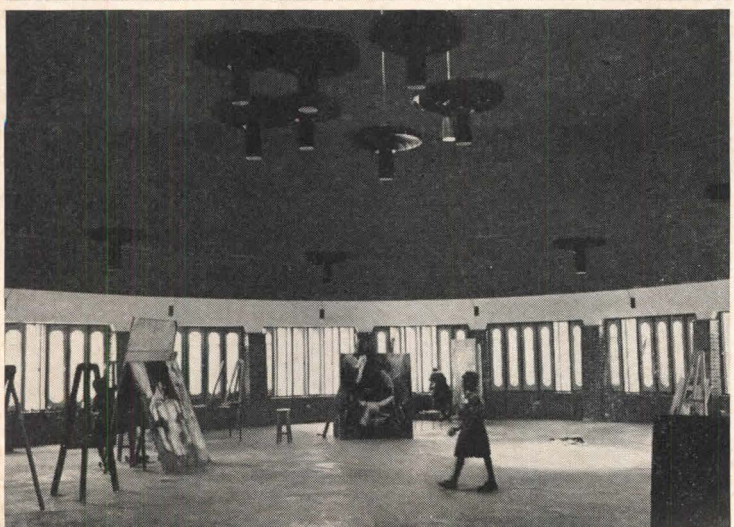
At the very heart of this squirming organism, Porro has stopped the movement by inserting a cluster of rectangular spaces. But even among these spaces he has introduced an exhibit gallery of trefoil plan that threatens to burst the square court in which it sits.

Such an uninhibited approach in government-sponsored architecture is rare, either inside or

** For an earlier report, see "The New Architecture of Castro's Cuba," by Diana Rowntree, April '64 issue.*







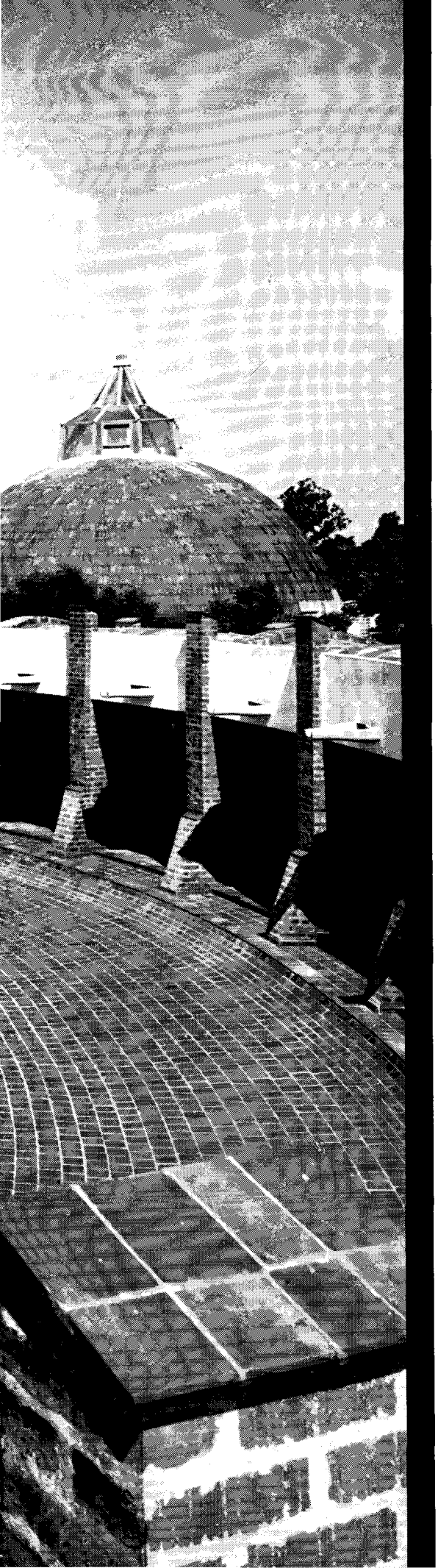
outside the Communist sphere. Considering the importance Castro is known to place on this educational effort, the design is no accidental flash in the pan.

The architectural audacity of the regime seems to be the happy result of several negative factors: the inexperience of the Castro bureaucracy, which has not yet developed a foolproof snare of regulations; the desire in high places to promote a national style, unlike that of any past or present Big Brother; and the shortage of construction materials, which a creative architect can exploit to justify his nonconformity.

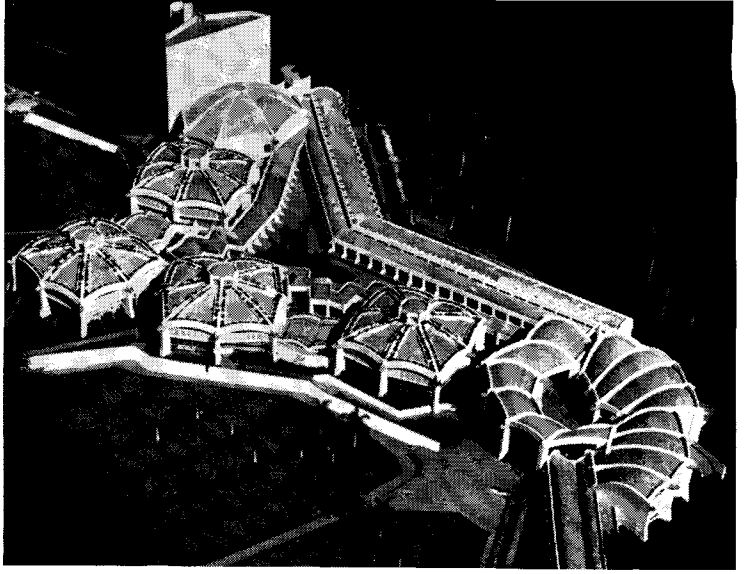
Porro, a 39-year-old architect who returned to Cuba from abroad after the revolution, was especially anxious to express something of the national character. Cuban art, both popular and cultural, he finds, is full of "vital force" and "sensualism" derived from Spanish and African sources. He readily admits that these buildings are both Baroque and sensual, the sensuality here acquiring "erotic hues." He even points out that "the vaulted passages are full of vaginal suggestion and the domes resemble breasts or eggs." (The sharp-eyed reader may discover other images on his own.) He assures us, however, that this eroticism does not express mere "primary instincts," but is "a conscious symbol of life and fertility, of the creative impulse as opposed to the forces of destruction."

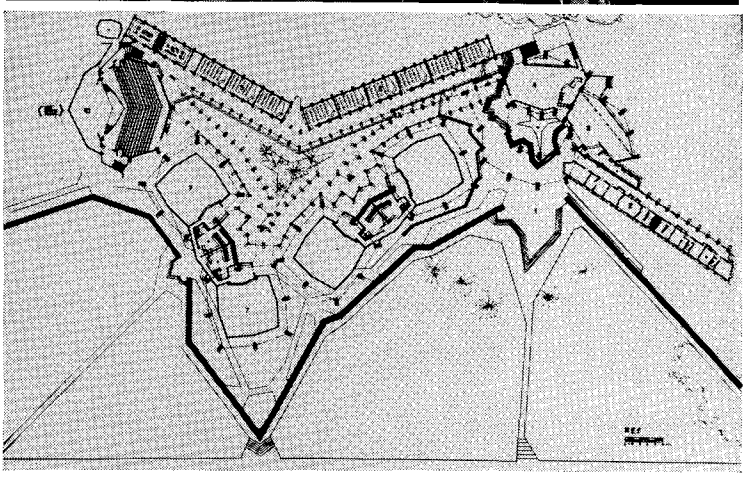
The domed studios (left) that give the school its exotic silhouette were conceived as "theaters in the round", with central skylights over models' platforms. Their hollow tile vaulting is restrained at the perimeter by a concrete edge beam supported on buttressed brick piers. Covered walks (right) tie the school together, the "winding streets" and "plazas" between them forming a miniature townscape.

FACTS AND FIGURES
School of Plastic Arts, National Schools of Art, Havana, Cuba. Architect: Ricardo Porro.
PHOTOGRAPHS: Paolo Gasparini



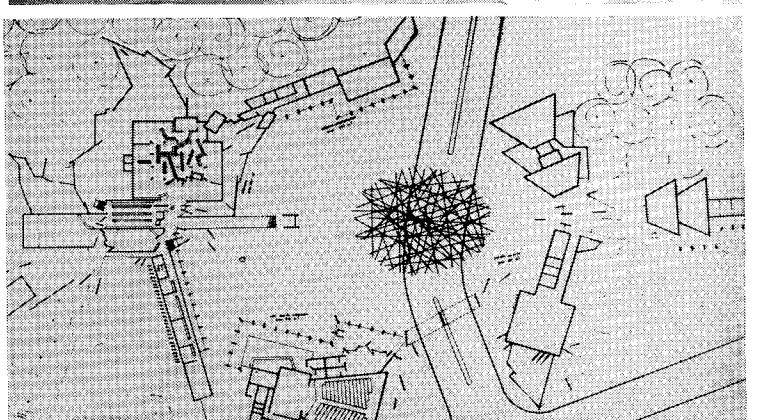
In the central plaza of the school, the confrontation of rectangular workshop and curvilinear studios is reflected in the paving pattern. The sculptural fountain, says Porro, "emphasizes the erotic tone of the design."

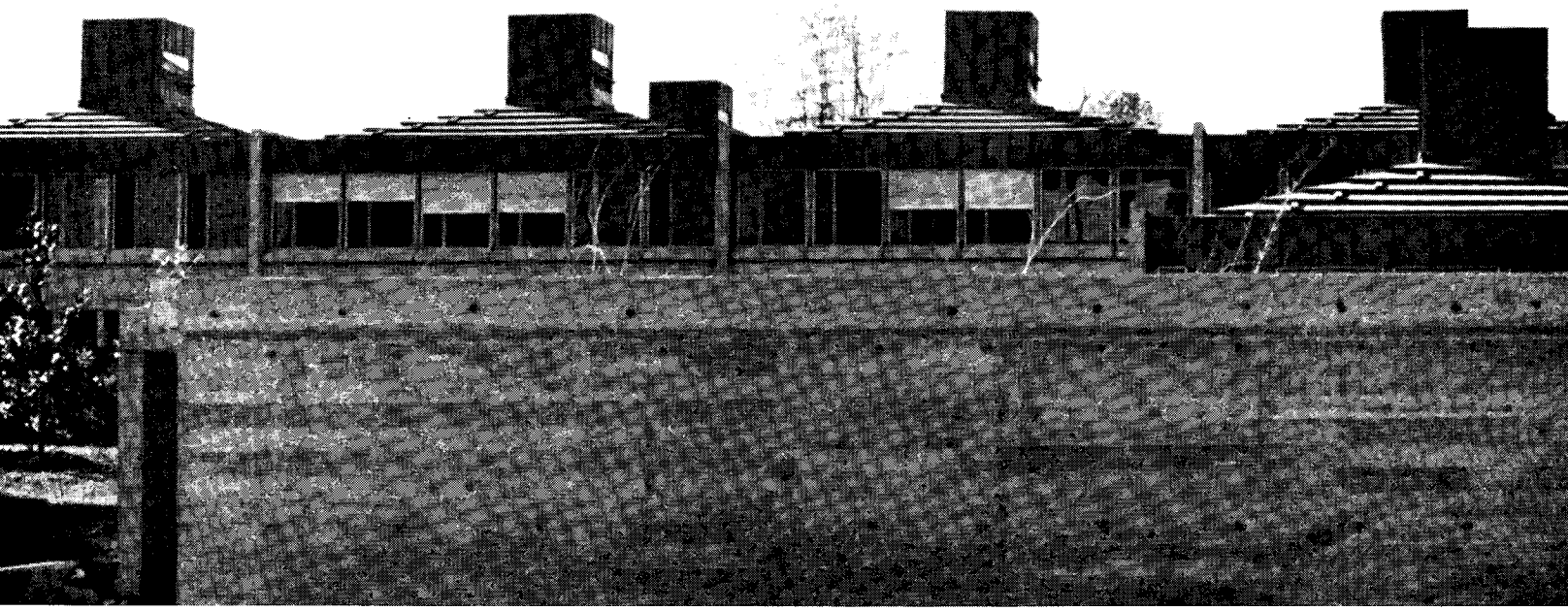


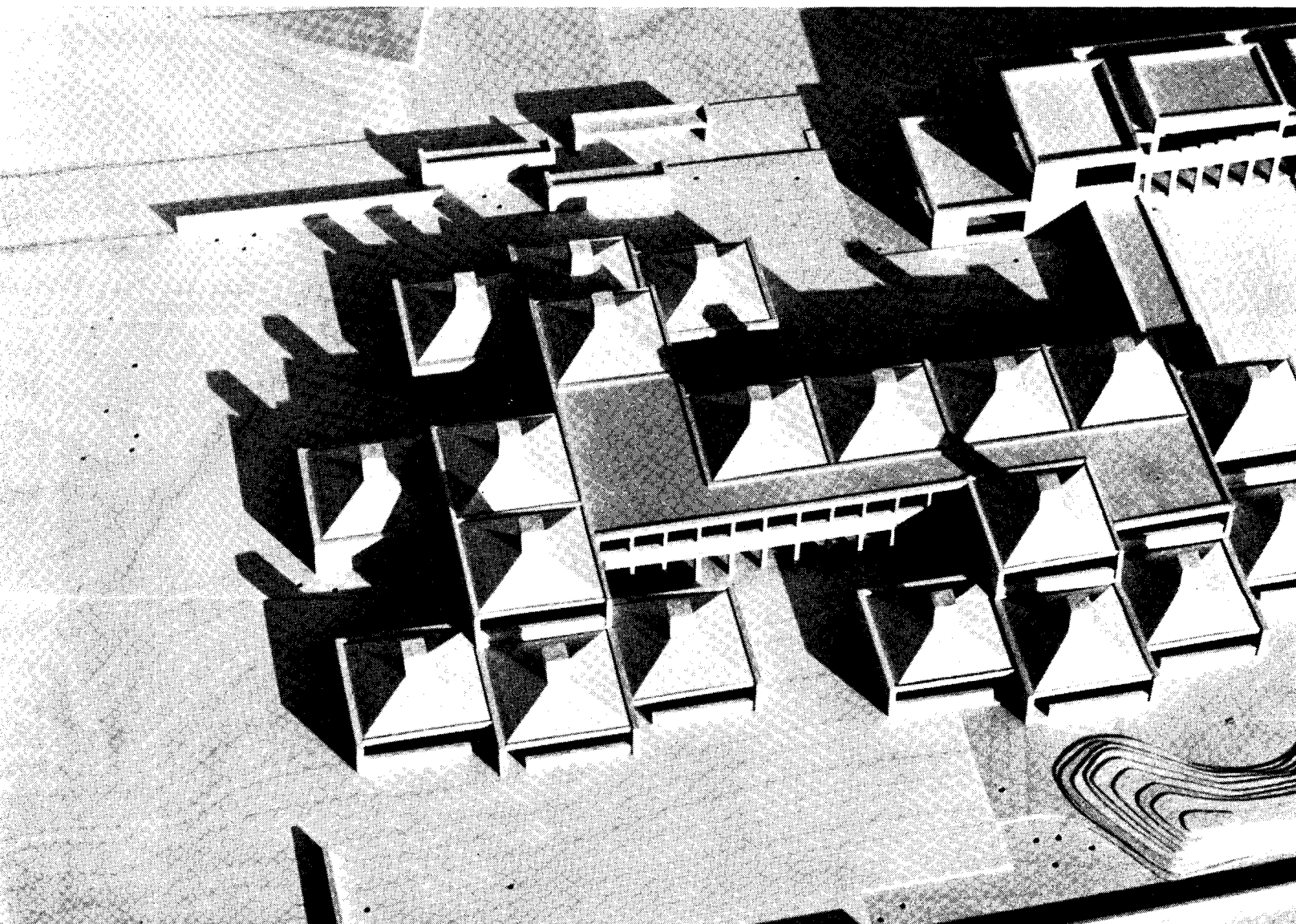


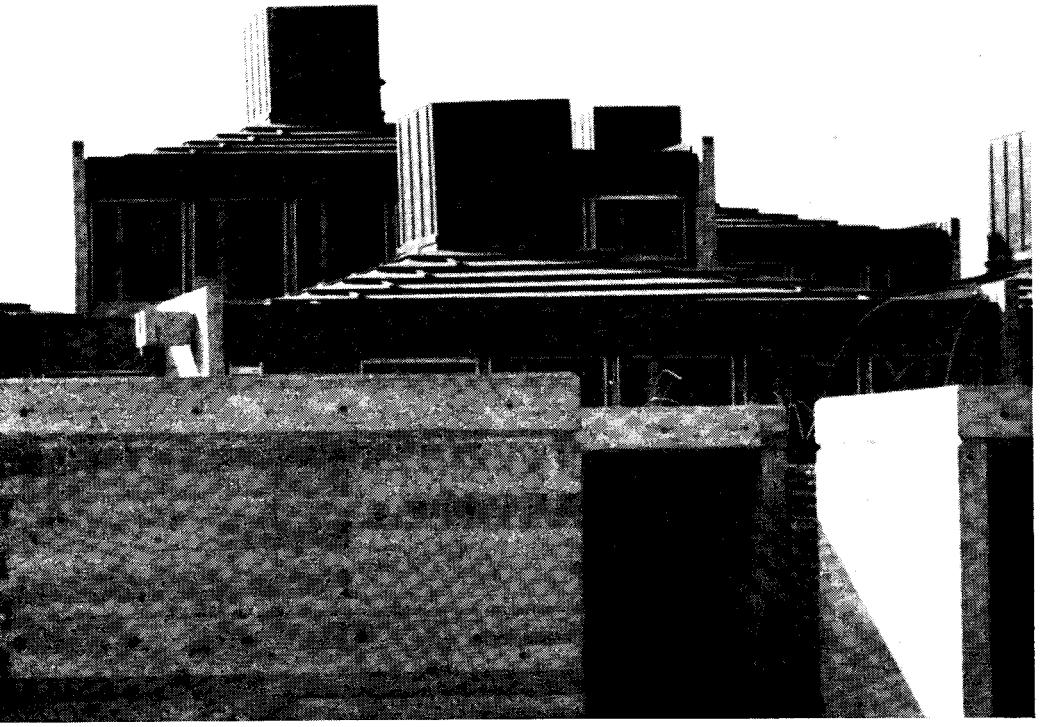
OTHER RECENT PROJECTS BY PORRO ARE EQUALLY AUDACIOUS

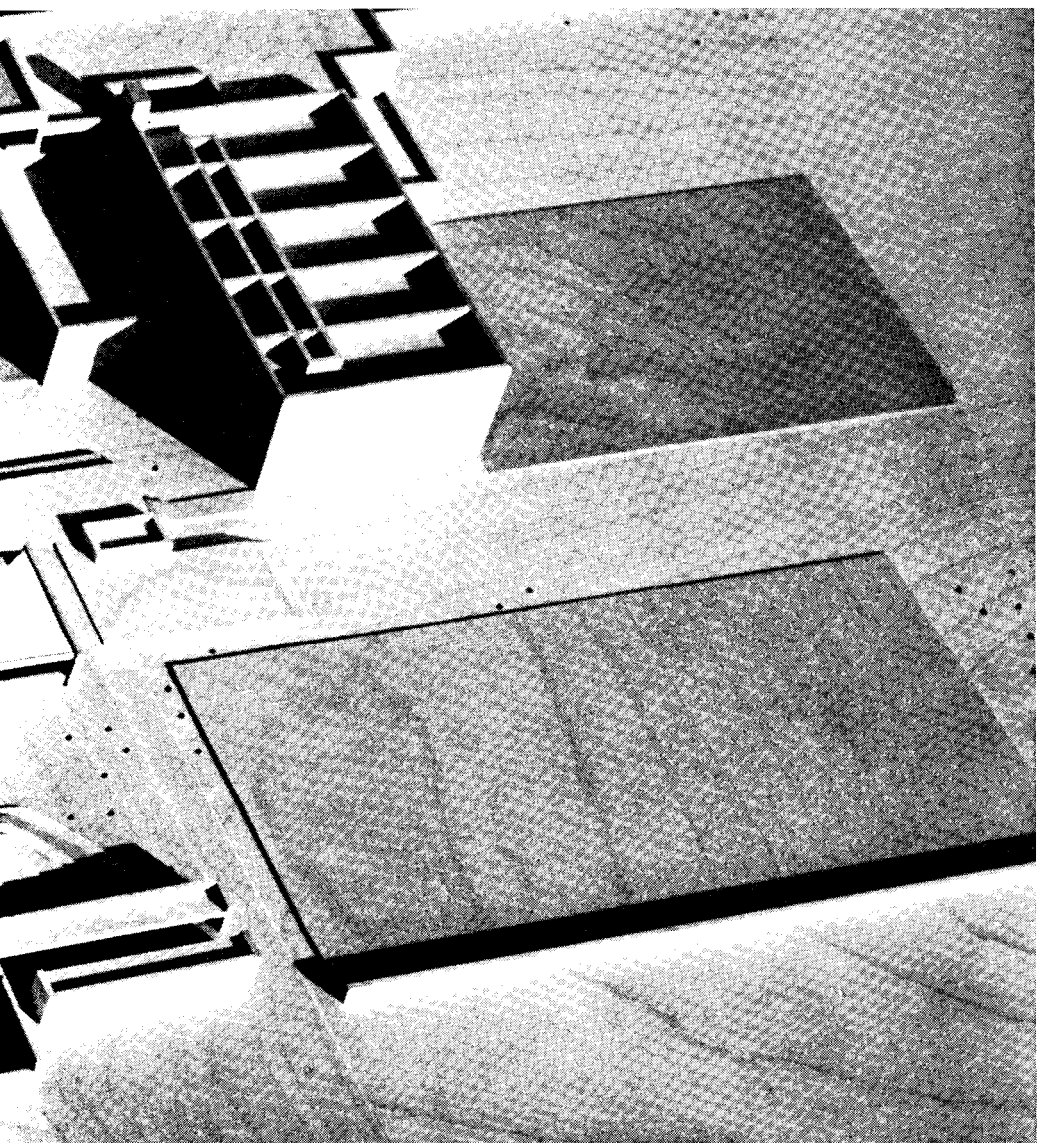
The School of Plastic Arts is no isolated phenomenon in Porro's work. He has shown equal bravado in his School of Modern and Folkloric Dance (above), another component of the National Schools of Art complex in Havana. In the Dance School he has spanned the major pavilions with shallow vaults in a radial pattern (emphasized by planters over the groins), allowing the massive stagehouse to dominate the skyline. The school's swelling forms and sharp juxtapositions, he feels, express both the "exultation" and the "anguish" of the revolution. In the proposed Cultural Plaza for the town of Levisa (below), Porro has attempted an urban scale. Here, the long broken axes and massive fragmented wall planes suggest ruined cities, the aftermath of epic struggle.











SWISS HIGH SCHOOL:

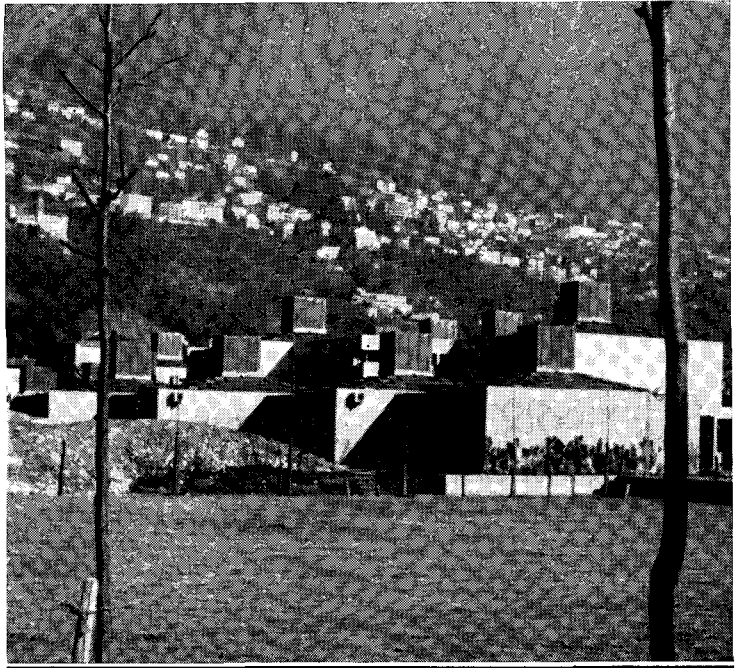
A CLUSTER OF HUTS

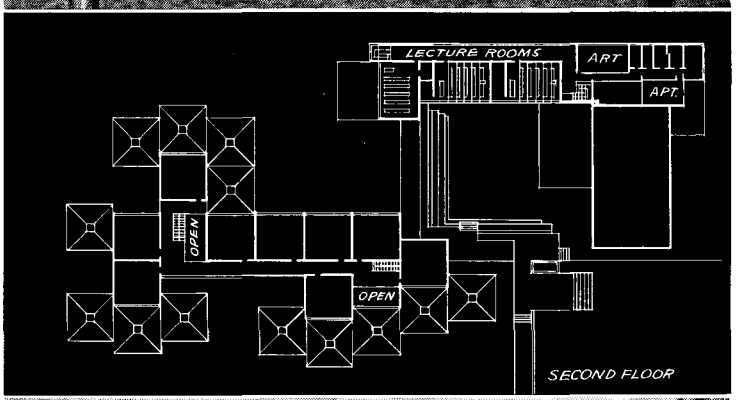
The Ginnasio (junior high school) of Locarno, like the preceding buildings, is basically a cellular scheme. There the resemblance ends. For all of its irregularities of plan and silhouette, and its casual roughness of surface, the Locarno school is as precisely controlled and organized as the Cuban schools are explosive.

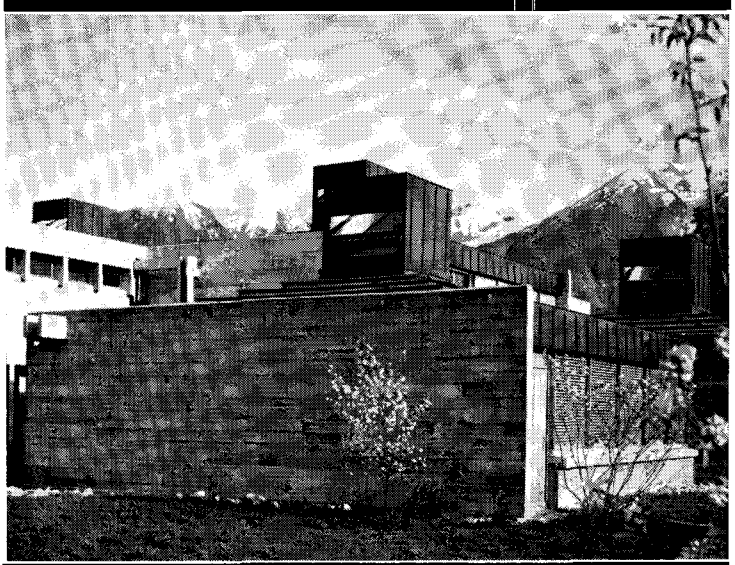
The organization is that of a village. The school was built to a competition-winning scheme by Dolf Schnebli, a young Swiss architect who has studied and taught urban design at Harvard and Washington universities. It contains ideas about movement and space and form that could well have application on a civic scale.

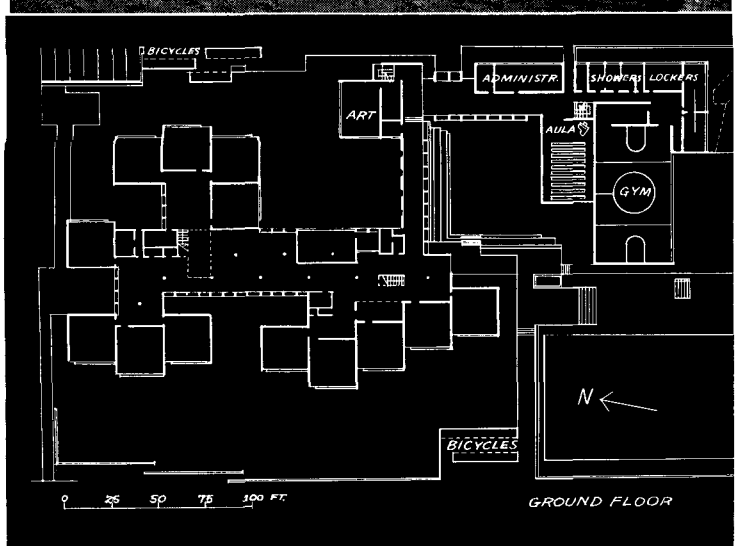
The major outdoor space, the school's equivalent of a village square, is an amphitheater flanked by the gymnasium and assembly room on one side (far right in model photo), and by a spine combining administrative offices, lecture rooms, art and drafting rooms on the other. The major indoor spaces, and the amphitheater too, are for use of the community as well as the school. This idea of the school as an "open house," as Schnebli puts it, was his; community use was not in the competition program.

The classrooms are strung along a two-level corridor extending from the "square" like dwellings along a village street. Each classroom is a small, square pyramid, with copper-clad roofs rising on all four sides to a central "chimney" containing a generous skylight. Placed on varying levels, they have the look of highly sophisticated huts rising and falling on a gently undulating terrain.





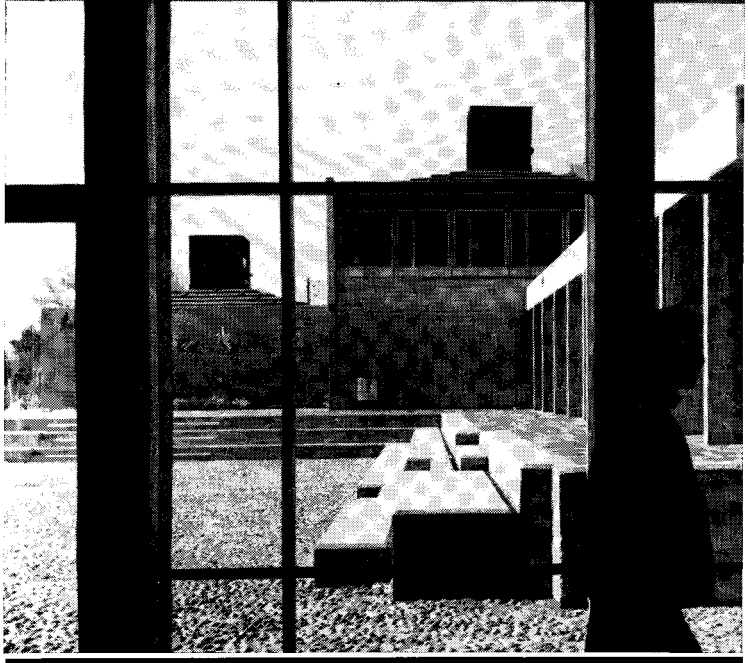




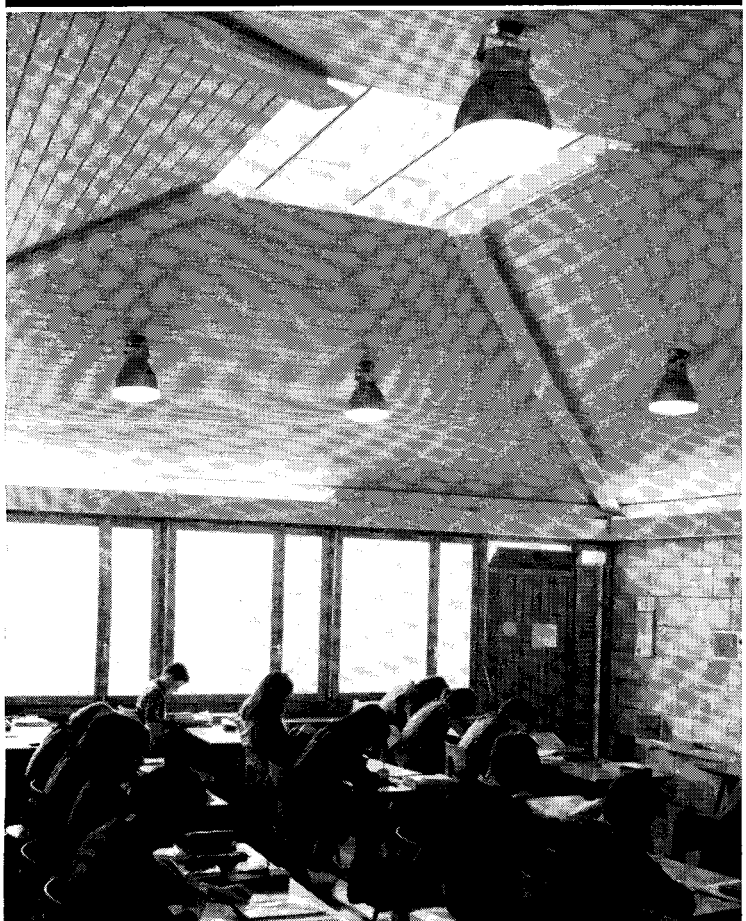
Left, a clear distinction is made in plan between the classrooms—the quiet, "private" realm of the school —and the more active, more public facilities around the amphitheater. The classrooms are never stacked one on another; those opening from the corridor's second level (upper plan) are over the wide "street" of the main floor gallery (lower plan).

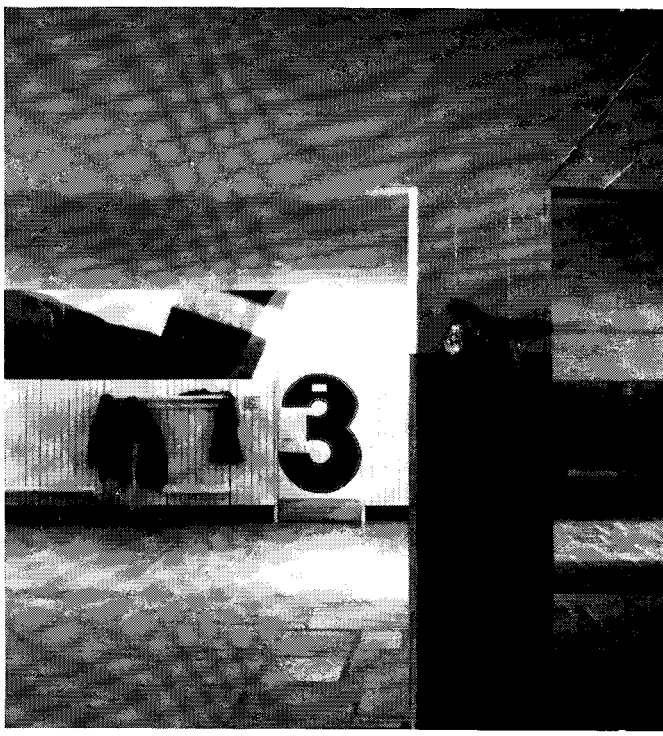
Near right, the classrooms have windows on one wall and blackboards on the other three, allowing considerable flexibility in arrangement. The square plan assures equal distribution of light from the "chimney" overhead; the windows are mainly for the sake of views. Schnebli was seeking an "atmosphere of concentration" in the classrooms, making them "feel more like study cells than lecture rooms."

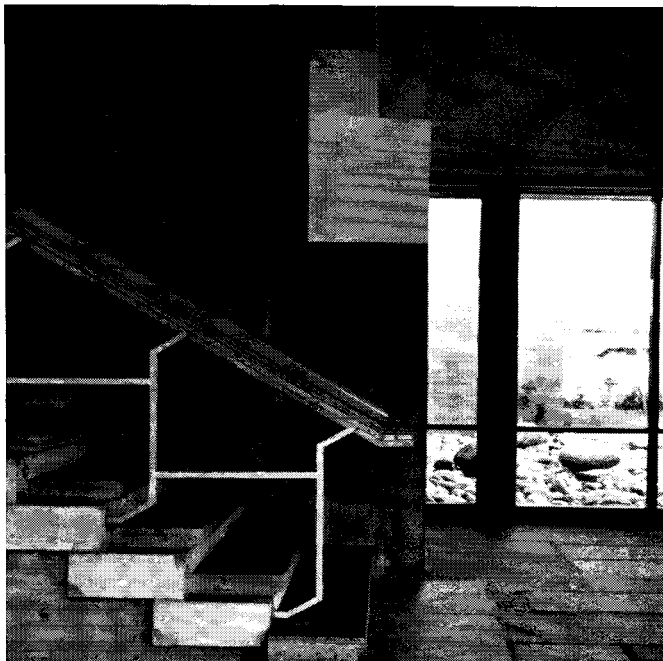
Far right, Schnebli placed great stress on the experience of moving from room to room. Views open intermittently from the wide, main-floor corridor; the space itself changes as the classrooms pop in and out and change in level. Surfaces in the corridors and stairwell are painted vividly and almost randomly (artists: Bernasconi, Travaglini, and Paulucci). Note the huge numeral on the classroom door in the center photo.



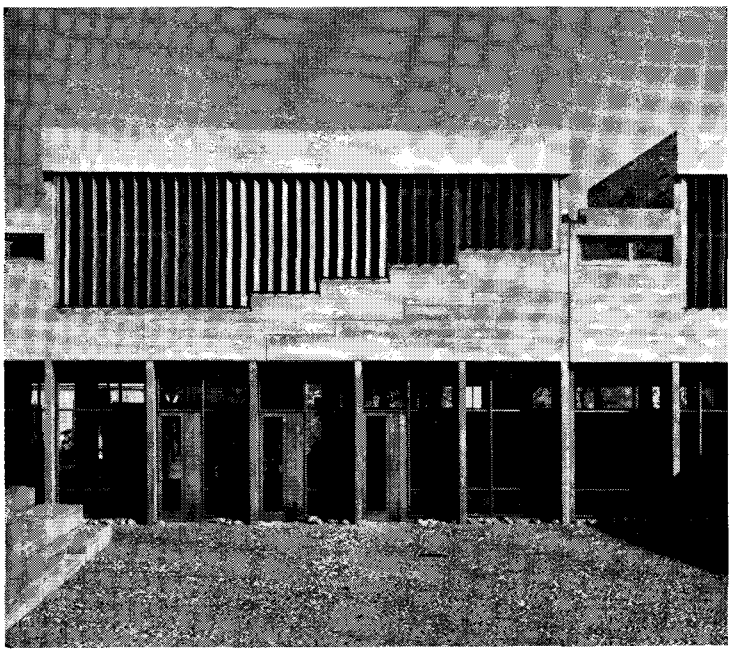
SECTION OF CLASSROOM







Left, special facilities such as lecture and drafting rooms are above the school offices in a sturdy two-story structure that forms the east wall of the amphitheater. The terraced seating of the lecture rooms is expressed on the elevations. Flanking the gym is an assembly room, **the Aula,** serving a variety of school-wide events (bottom photo).

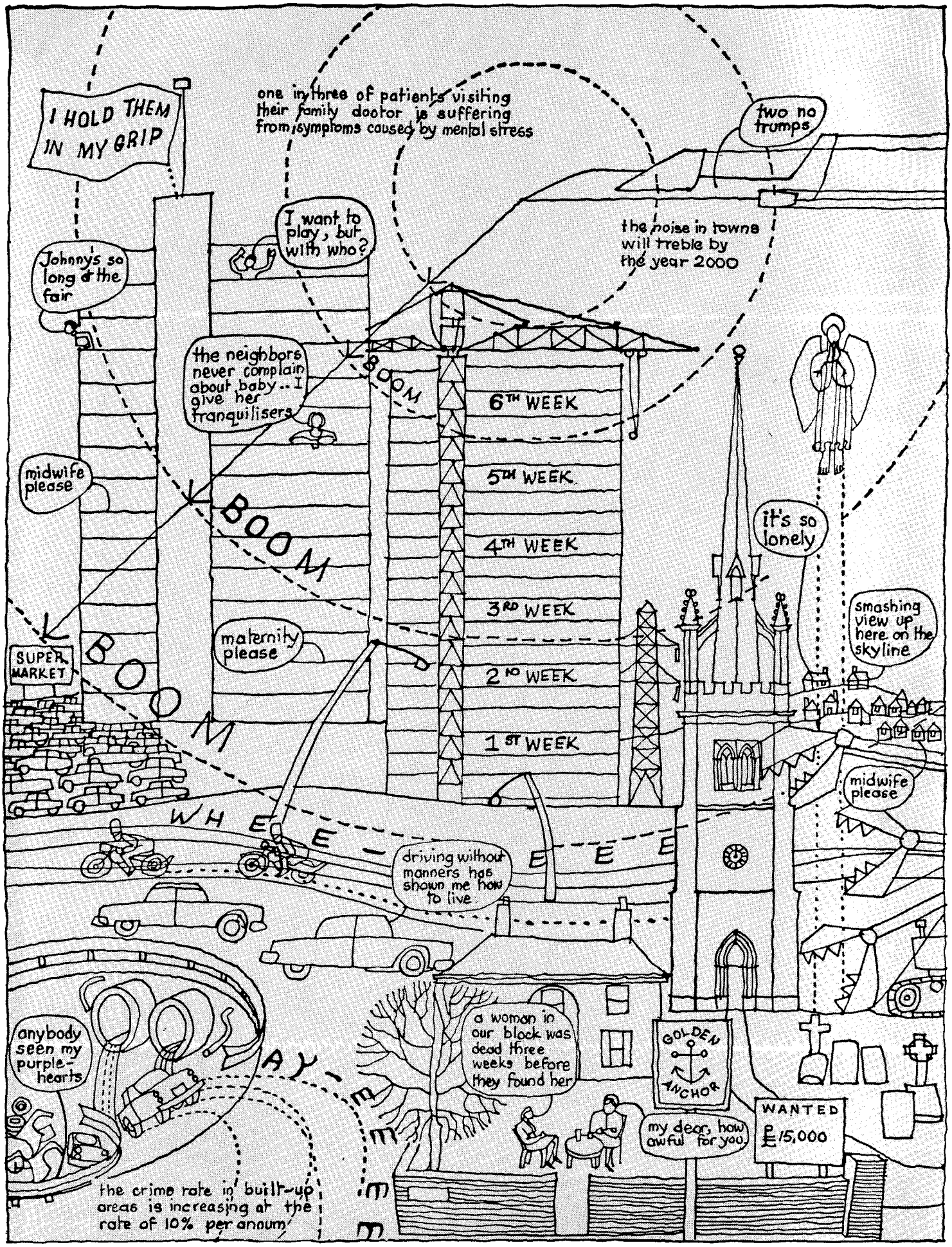


Right, the structure is entirely concrete, cast in place for the walls and floor slabs, precast for most structural columns, window sills, and water spouts. Exterior walls are insulated with 1 inch of cork, covered with wire mesh and stucco. The concrete is left exposed wherever it might be frequently touched. The play of materials, Schnebli says, was determined by "the kind of world we wanted the school to be, and the plain fact that healthy children 11 to 15 years of age are full of life."

FACTS AND FIGURES

Ginnasio Locarno, Locarno, Switzerland. Owner: Department of Public Construction of the Canton of Ticino. Architect: Dolf Schnebli. Collaborator: Isidor Byser. Structural engineers: Alessandro and Augusto Rima.

PHOTOGRAPHS: Fritz Maurer


I HOLD THEM IN MY GRIP
one in three of patients visiting their family doctor is suffering from symptoms caused by mental stress
two no trumps
I want to play, but with who?
the noise in towns will treble by the year 2000
Johnny's so long at the fair
the neighbors never complain about baby.. I give her tranquilisers
BOOM
6TH WEEK
5TH WEEK
4TH WEEK
3RD WEEK
2ND WEEK
1ST WEEK
midwife please
BOOM
it's so lonely
smashing view up here on the skyline
SUPER MARKET
BOOM
maternity please
midwife please
WHEEEEEEE
driving without manners has shown me how to live
anybody seen my purple-hearts
a woman in our block was dead three weeks before they found her
GOLDEN ANCHOR
WANTED £15,000
my dear, how awful for you
the crime rate in built-up areas is increasing at the rate of 10% per annum

of the committee would then visit each building personally.

The committee would narrow the list down on the basis of these visits, and nominate the survivors to a regional jury. The regional jury, on the basis of photographic submissions and reports from the chapter committees, would choose the best of the local nominees and send them to the national awards jury for the final winnowing.

The essential point, says the committee, is that "the evaluation of every building nominated for or premiated in an honor awards program include a four-dimensional survey of the building that is possible only through an in-person visit . . ." Amen.

TOO MUCH OF A GOOD THING

We applauded the AIA when it instituted its awards program for "excellence in community architecture" last April, and we continued to applaud as it announced recipients of the award; but now our hands are getting raw.

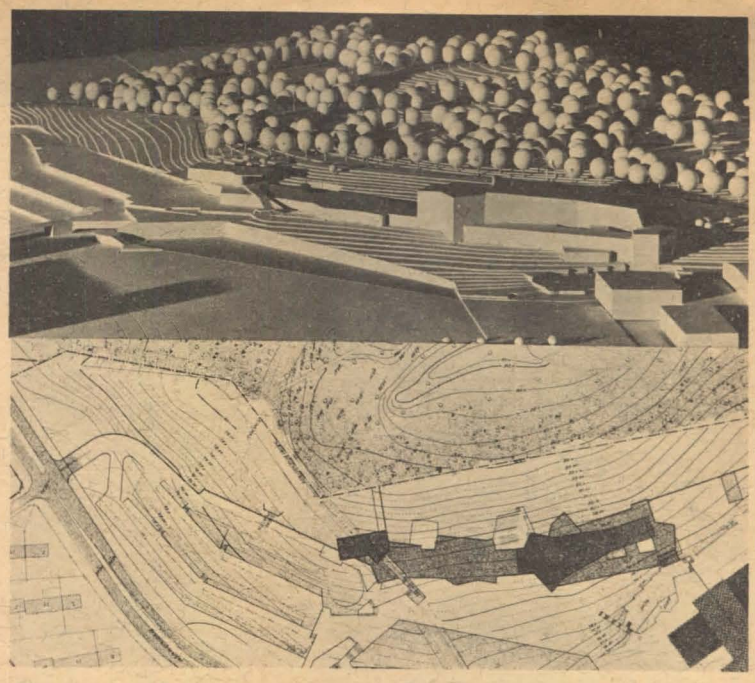
When we lost count, the list of recipients had grown to 14, and more are said to be on the way. We wonder if the Institute hasn't made too much of a good thing—and in the process watered down the stated purpose of its program, which is to reward "excellence," not mere competence.

COMPETITIONS

VOLKSWAGEN THEATER

The town of Wolfsburg, in West Germany, is the place where they make all those VW's; it is also the town that commissioned Finnish architect Alvar Aalto to design its Cultural Center (see our March '63 issue), and contains a considerable amount of much-better-than-average housing and commercial architecture.

Last year, the city fathers of Wolfsburg (in effect, a company town) decided they needed a theater to complement Aalto's Cultural Center. To get the best possible building, they agreed to hold a limited competition, and invited architects Jörn Utzon (Denmark), Aalto himself, Hans Scharoun, and four other German architectural firms (including the Berlin theater-specialist, Fritz Bornemann) to participate.



The jury met late last year and chose the most romantic of the proposals submitted: a terraced, multi-faceted building complex by Scharoun (above). Designed to enhance and grow out of its hilly site, the building will, in some respects, resemble Scharoun's famous Berlin Philharmonic (see our May '64 issue), both inside and out.

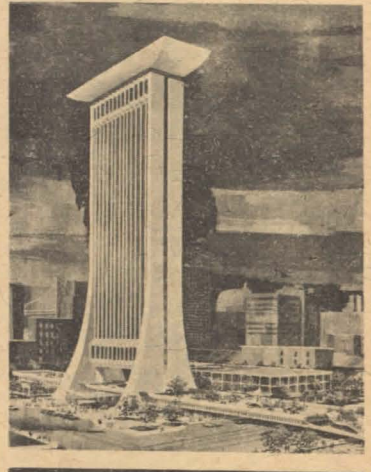
The latter building, incidentally, was immortalized (if that is the precise term) by the Berlin postal service a few weeks ago on a 20 *Pfennig* stamp (below). Twenty

Pfennig comes to about 5¢, and the graphic design of the stamp isn't quite up to Scharoun's snuff—but, still, we're glad to see our friend bombarded with honors. He spent some weeks in the U.S. recently to inspect library equipment in these parts, and the honors didn't seem to weight him down too severely.

CHINESE MODERN

One of the two designs at right is about to be selected for the new Chinese Cultural and Trade Center to be built in San Francisco. The designs finished neck-to-neck in a five-way competition conducted by the San Francisco Redevelopment Agency.

The one that resembles a bridge tower with a celery dish on top was designed by Clement Chen & Associates and Dartmond Cherk for Tishman Realty and Construction Co., Inc. The one with a crow's nest on top is the work of Campbell & Wong & Associates and Chan-Rader & Associates, and was designed for Sun Yat Sen Plaza Associates.



FOOTNOTE

The drawing, opposite, entitled "A City called Despair," appeared in an advertisement in the London *Observer* a few weeks ago. The despair is that of Gordon Cullen, and the ad was sponsored by Alcan Industries. The text stated, in part: "'A City called Despair' . . . is built to accommodate man's physical activities alone. It inhibits his social and emotional drives—largely because it doesn't know what they are. . . ." We won't try and explain how the text finally managed to relate the "City" to Alcan's product (aluminum); but we thought Cullen's nightmare looked a bit familiar to us—and might look familiar to some of our readers, also. Like home, in fact.

ARCHAEOLOGY

INSTANT HISTORY

For the new $970,000 Governor's Mansion to be built in Harrisburg, the Commonwealth of Pennsylvania's General State Authority has decided to look to hoop skirts and powdered wigs for inspiration, rather than to the state's hard-won image of progressiveness.

According to A. J. Caruso, executive director of the Authority, the board "considered many styles of architecture, including the contemporary, prior to a final design selection." It finally chose a style which it called "Early Pennsylvania Georgian" (above, by George M. Ewing Co., architects).

Why not contemporary? "Because of the distinct possibility," Caruso explained, "that, as such, the residence would be out of style in a relatively short period of time." In other words, rather than run the risk of *going* out of style, choose a design that *has been* out of style for several generations. Governor Scranton, who will live here, is known for his anti-Goldwater views. Unlike Barry, Scranton evidently prefers "an echo."

DISCOURSE

PUBLIC NEED, PRIVATE PROFIT

Conferences on industry's role in building better cities usually consist either of cliches about partnership, or equally trite invective about the relative merits of public and private enterprise. Two conferences on the subject were sponsored in recent weeks by ACTION, one before and one after announcement of its merger with Urban America Inc. (see page 1). A few lapses aside, the discussion at both began where the cliches end.

The first was held in Washington in mid-December on the theme of "The Troubled Environment." The conference was itself troubled: despite a sprinkling of inspirational speeches by such congenital optimists as Vice President Humphrey, the atmosphere was charged with frustration. The businessmen obviously recognized the problem of the urban poor, but were just as obviously uncertain what they could do about it.

Sociologist Herbert J. Gans of Columbia suggested that their biggest contribution would be the creation of more jobs. "Giving a poor person good housing does not eliminate his poverty," Gans said, "whereas removing his poverty enables him to obtain good housing and the other attributes of the American standard of living."

He was seconded by Hedley Donovan, editor in chief of Time Inc., who named jobs as the first of "six areas where the American businessman is especially well equipped to make a contribution to the creation of a better American city." In other areas, he advised the businessmen to:

- Launch a "really serious assault on the fantastic and preposterous complexity of our structure of local government";
- "Apply some of the same creative radicalism to the creation of good cities, even great cities, that they devote to creating good, sometimes great, products";
- Stop their communities from pirating new industry away from other cities and "devote the same talent and energy to improving the quality of urban life for the people already in their city";
- "Move in, in a really big, imaginative, entrepreneurial way, on decent, ugly neighborhoods, where a third or more of America now lives, and figure out some way of building *on*, not tearing down, existing structural values."

SOCIETY AS CLIENT

The second conference was held in early January in Riverside, Calif., home town of its cosponsor, the American Cement Corp. Its theme was "America's Private Construction Industry and the Future American City." Its preoccupation was reorganization of the industry and of the very processes of city building.

Lyle C. Fitch, president of the Institute of Public Administration, predicted the development of public-private "consortiums" to meet urban social and physical needs. Government, he suggested, might contract with industry for entire systems of urban services.

Eugene P. Foley, director of the Commerce Department's economic development program and the final speaker, made a bona fide offer to enter into the kind of consortium that Fitch was advocating. Foley said he had concluded that the ghetto would be "here for some time," and that the thing to do was make it livable. He offered to put "a disproportionate amount" of his program's federal funds into a demonstration of how this might be done, picking up the tab for a massive attack on the economic problems of a selected ghetto if others would do the same for its physical and social ills.

PROGRESS

ADVICE TO HIGHWAYMEN

The appointment of professional committees to advise the Federal government on environmental matters is becoming so common that it's a rare architect or planner who doesn't belong to one. The latest Federal agency to join the club is the Bureau of Public Roads, which in December announced that a new eight-man Advisory Board of Urban Consultants will help it prepare guidelines for "integration of highway facilities in the urban environments."

The new board, appointed by Federal Highway Administrator Rex M. Whitton, consists of Chairman Michael Rapuano, Lawrence Halprin, Dr. Thomas C. Kavanagh, Kevin Roche (the announcement spelled it "Roach," which is about par for highway sign language), Matthew L. Rockwell, John O. Simonds, Marvin R. Springer, and Harry B. Powell.

"We want to make sure," Whitton said, "that Federal-aid highway programs in urban areas will serve the over-all community needs as well as those of highway users. We are aware that in building highways, particularly in urban areas, we have the social responsibility to consider the full range of human values." That's a fine start.

PREVIEW

SOUTH AFRICAN SUPERBLOCK

Johannesburg, South Africa, is getting its first superblock (above), courtesy of Skidmore, Owings & Merrill and local architects W. Rhodes-Harrison, Hoffe & Partners. Called Carlton Centre, its landmarks will be a 51-story office tower with a concrete structure, and a bell-bottomed 37-story hotel also of concrete (for a similar flare in Chicago, see page 38).

Two streets were closed to create the superblock out of four normal blocks. In addition to the two big buildings, the development will include two department stores, 150 shops, and parking for some 3,000 cars.

Even so, *buildings will* occupy only 35 per cent of the site. Most of the shops will be in sunken concourses, and all parking, plus a truck delivery area, also will be underground. The 3¼ acres of plaza at ground level will increase the amount of public open space in the city by more than half.

Developers are the Anglo-American Corporation of South Africa, Ltd., and the South African Breweries, Ltd. Site work will start in April, and completion is scheduled for 1971.

UNITED NATIONS SCHOOL

Architects Harrison & Abramovitz have released the arresting photo above, showing the present, state of their design for the United Nations International School on New York's East River. The site actually overhangs the water—it is now a pier—and the preliminary scheme envisions a six-story concrete structure.

It is to be a private school, for children of U. N. personnel and some from the city, going from first through secondary grades. The curriculum will stress international cooperation.

The site will be leased from the city for 99 years at a dollar a year. Construction funds have come from the Ford Foundation ($7,500,000) and the Rockefeller Brothers Fund ($1,000,000).

SIMPLICITY IN DALLAS

Architect Philip Johnson's design for the John F. Kennedy Memorial in Dallas (below), revealed in December, is a simple "room", 50 feet square and 30 feet high, with entrances in two facing walls, and with the sky as a ceiling. The two U-shaped walls are raised slightly off the ground. There is no statuary, no inscription, no direct reminder. In Dallas, there will never be any need of one.

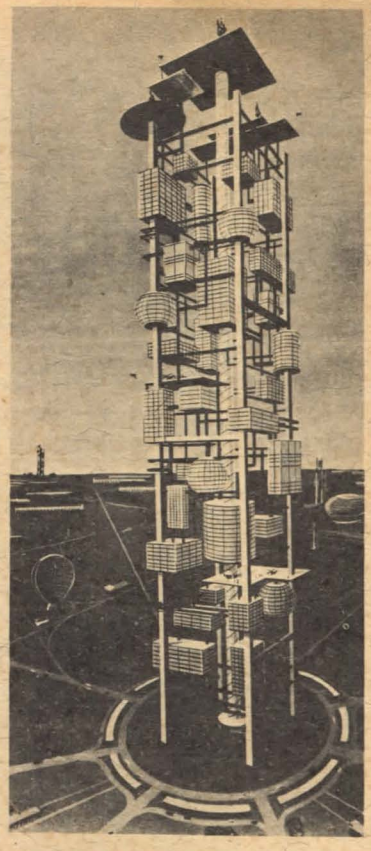
The white memorial will be built of 72 vertical precast concrete slabs, eight of which will be longer than the others to serve as legs near the four corners. The memorial will be built three blocks from the point where the President was assassinated, in a park next to the old County Courthouse.

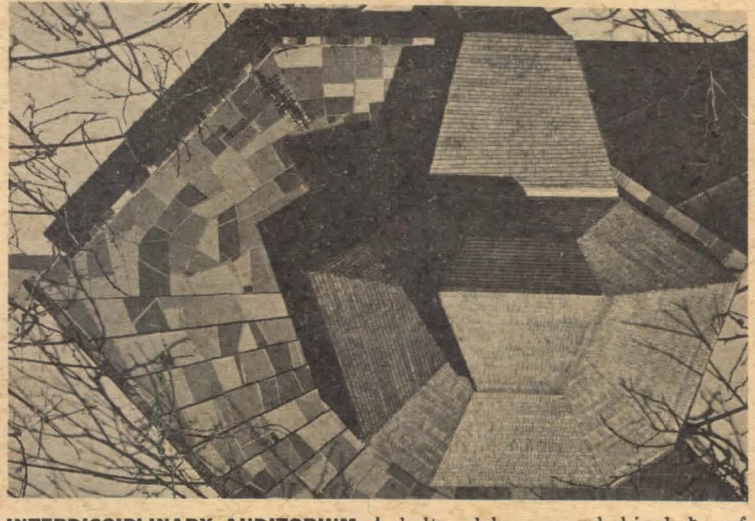
"From inside the memorial Architect Johnson said, "You can't see Dallas; you can't see anything but the sky. You are forced into an attitude of reverie." For him, he said, the design represents Kennedy's simplicity; the two halves, "like a pair of magnets about to clamp together but held apart by some powerful force," represent his magnetism as a leader; and the obliteration of all surroundings, except the sky, represents his aspirations.

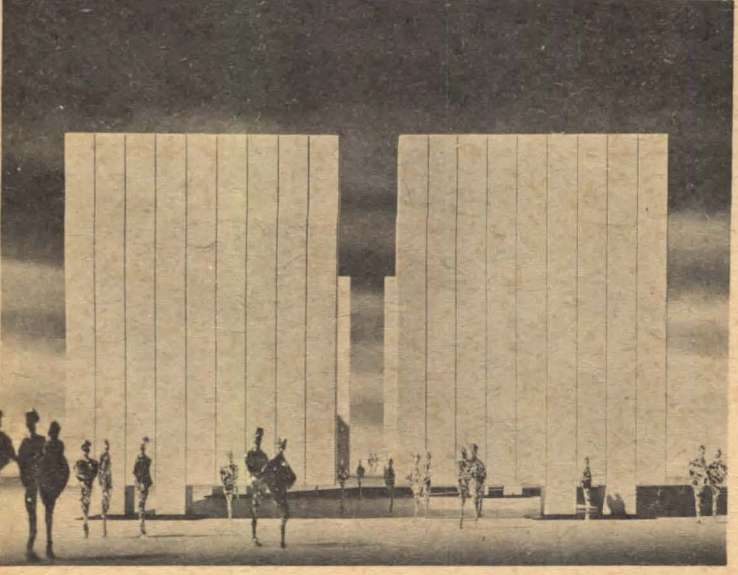
In a curious way, the memorial resembles the scheme of a Gothic Cathedral, with a powerful and unmistakable axis, and all attention drawn to the heavens. If Johnson succeeds in recreating this effect, it will be a remarkable feat. Meanwhile, the critics had better wait: this sort of space cannot be "experienced" in drawings or in scale-models.

CYBERNETIC CITY

As a matter of fact, the 36,000-foot-high structure at right is only a *part* of Hungarian-born Painter-Sculptor Nicolas Schöffer's "Cybernetic City"—the part that he calls the "University Center," designed to house 30,000 students. Schöffer's work, together with that of the Swiss maker of motorized and otherwise animated sculpture, Jean Tinguely, is shown in an exhibition that opened in November at the Jewish Museum in New York, and is scheduled to be on view in Washington, Minneapolis, Pittsburgh and Seattle. No construction schedule for Mr. Schöffer's "Cybernetic City" has been announced.







INTERDISCIPLINARY AUDITORIUM

The Institute of Man and Science, now being developed at Rensselaerville, N.Y., as an adjunct to the State University System, is described as "an interdisciplinary experiment in communications between the arts and sciences." To bring the two groups together for seminars, lectures, concerts and other events, architects MacFadyen & Knowles have designed a 414-seat auditorium sheltered by a wood-shingled roof and encircled by a stone court and wall (above).

The tentlike roof is formed by upside-down trusses which converge around a compression ring in the center. A shingled unit perched atop the roof serves as a vent and brings indirect light into the auditorium. The seats fan around three sides of the thrust-type stage. Entrances are to be left completely open to the outdoors.

Walter McQuade

AND IT CAME UNTO NEW YORK CITY

It started when that airplane crashed into the Empire State Building, in 1945. It then first became apparent there might be a series of Biblical events, perhaps even an apocalyptical fate, in store for the city—something on the scale of the Great Flood.

The Empire State, our shining tower, was appropriate for the first target. After all, King Kong made his final stand there, too.

There followed the sudden Great Snowfall in 1961 that caused automobiles to be barred from Manhattan for several days. Washington Square looked like something printed in Kansas City by Hallmark. The soft snow also made it very quiet, of course—the best acoustical absorbent of all, damping reverberation. (Our corner of Washington Square usually has all too much miscellaneous reverberation, what with both the tourists and the beats abounding. Our five-year old complained one morning just before last Christmas, "I couldn't hardly get to sleep. There was a bunch of bums downstairs on the street shouting *Holy Night*.")

Then, last summer, came the Great Drought, but it didn't reach people quite so much as it might have seemed to newspaper-readers. After all, there was always still a little water in those reservoirs. I suspect that most New Yorkers went on wasting it, taking a selfish gamble, enjoying a cheap extravagance, waiting, somewhat fascinated, for the faucets really to run dry. One evening during that period I was alone at a table in a good restaurant and heard the people next to me talking, over their wine and roast duckling, about the various official injunctions to take it easy on the water. These were people in their sixties, with that very clean, rich look, shining with health. "Not bathe daily?" one of the gentlemen clucked, "Surely the mayor doesn't mean people like *us*." The water shortage wasn't a physical event.

The night of the Great Darkness last fall was, but an ebullience set in almost immediately. The moon was like a floodlight. For once, apartment houses became neighborly places. Doors were left open to the hallways and the well-known New York guard was dropped. The usual restrained nod in the elevator gave way to shared laughter and wonder. But Nora Sayre, reporting to London's *New Statesman*, suspected that the jovial spirits with which New York took the Great Darkness might have been distilled.

Miss Sayre wrote: "The most unlikely people got drunk with calculated speed, some on the 32nd and 50th floors of Wall Street offices. (Several men explained to their wives that walking downstairs is more perilous to the heart than ascending.) Five colleagues—one male editor and four secretaries—were approached on Lexington Avenue by a courtly stranger wearing a private detective's badge, who asked if he could share the women. Leading them to a reserved table with six bottles of superb champagne, he alleged that he owned one-fourth of Paramount, had married at 17, divorced his wife after she had murdered their child, but that he had managed to kill her lover first. Crawling up 12 flights on hands and knees at 4 a.m., the most dignified and reserved of the ladies couldn't locate her own apartment, and slept slumped across the stairs. She later described her host as a nondescript liar, but she loved her evening."

The Great Stoppage this January—the transit strike—was not a blow by nature, but that does not alter the Biblical cast. (Mike Quill is an Old Testament character.) Nor does it diminish the ebullience which once again possessed those New Yorkers who live on Manhattan, and were not deprived of their pay. The terribly disheartening thing about large cities, when they are depressing, is their cold torpor, and the strike did break that. Seeing how many people can get into one taxi was sport. It was also a relief not to climb down into that most miserable example of public architecture, the subway itself. The walking was pleasant, and has outlasted the strike. The only time many of us really walk is when we go to foreign cities, when we do it omnivorously, devouring the neighborhoods. The truth is that it's equally pleasant in New York and, after the first week, the shin-splints do begin to subside. On my 50-block stroll to the office I passed through the wholesale flower market, for example, and, best of all, among people in motion, not standing on subways or sitting behind desks.

The ebullience could not continue forever, although I'm told that bombed cities—lightly bombed cities, that is—have a lot of it too. The people who commute to the suburbs, or to other boroughs, were hurting, it is certain, and genuine exhaustion overtook many of them. One morning before putting on my shoes I watched the avid TV coverage given the traffic on main roads leading into Manhattan. The method was to examine these first from a helicopter. It was a most inhuman sight. You looked down upon thousands of cars lined up like beetles on the roads, unmoving, then creeping, then waiting, waiting, waiting, to be admitted to the magic island. It made our allegedly complex life seem very crude. Ants have more choices of route.

Then the TV camera switched to ground level for a close-up, and inevitably a cheerful, wind-blown TV type explained that bad as the traffic seemed, it was really no worse than every morning at that hour. Traffic is always like this weekday mornings on these roads strike or no strike, it turns out! Perhaps the eventual Biblical end of the city may ignite in the smothered violence of thousands of people sitting on an ordinary morning, in motionless cars, deteriorating, resigned to the inevitability of their fate.

PHOTOGRAPHS Page 29: Wide World Photos, Engelhardt—St. Louis Post Dispatch. Page 30: Wide World Photos, Bill Sears. Page 31: Hans Namuth Weber—© 1966, The New Yorker Magazine, Inc., Ruth Rankin—Boston Redevelopment Authority. Page 32: UPI, George Cserna. Page 93: Heidersberger, Gerald Ratto. Page 95: Harrison & Abramovitz, Louis Checkman. Page 96: WOR-TV.

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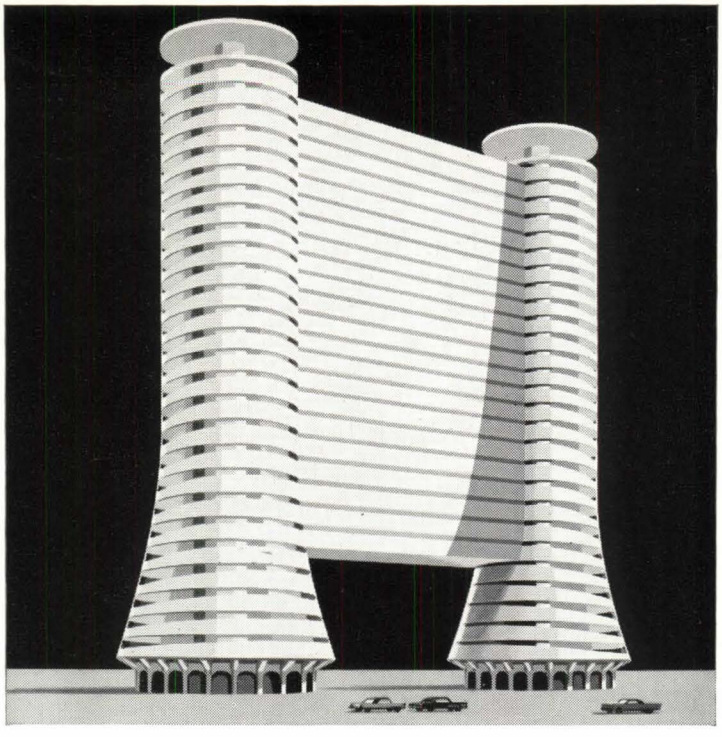

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In the student lounge at Boston College, architects M. A. Dyer Company specified Makori Flexwood® on one virtually unbroken long wall. Flexwood is real wood, 1/85″ thick with a fabric backing. This permits you to utilize the continuity of a single flitch on extremely large walls, curved or straight. No joints show, no furring needed. And when it's bonded to an incombustible surface, no fire problems. Installation by Carlson-Powell, Inc. of Boston.

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Weldwood architectural doors with 2 kinds of faces.

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Architect: Smith Smith Haines Lundberg & Waehler, N. Y.
Installer: Tieco Products Inc., Southfield, Michigan.

An uncommon commons.

The main resident dining hall in McElroy Commons at Boston College is a large room: 170 feet long and 88 feet wide. Yet the walls of Portuguese marble topped with Weldwood architectural figured quartered walnut paneling give the room an atmosphere of warmth and intimacy. The 4′ x 12′ panels are separated by 1½" gold-leafed wood splines, and sequence-matched to echo the simple continuity of the over-all design. All veneers were cut from just two giant flitches placed at the architects' disposal from United States Plywood's vast inventory of fine wood veneers. Sample veneers in infinite variety and price range are available for your inspection at any of our 161 branch offices.

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3. Weldwood prefinished paneling: Specification information, grade description, recommended installation and design usage for the full line of prefinished woods.

4. Weldwood guaranteed sidings: Specifications, features and variety of designs, finishes, installation details, guarantees for a full line of wood sidings.

5. Weldwood Novoply®: Engineering details, suggested usage and machining, installation details, edge and joint treatment for a quality 3-ply particle laminate board.

6. Weldwood Movable Walls and partitions: Design and structural specifications, maintenance and cost studies for a variety of both standard and custom designed wall systems.

7. Micarta®: Technical and application information, color selection, for hig pressure decorative laminates made by Westinghouse, distributed by Unit States Plywood.

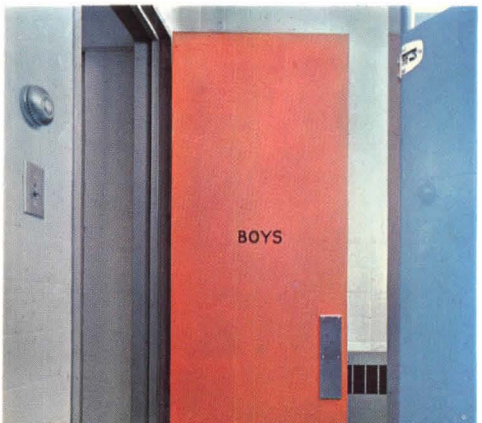
8. Glasweld®: Description of properties, color and pattern choice, installati suggestions and examples, guarantee, and specifications for an exterior gra panel with a permanent finish.

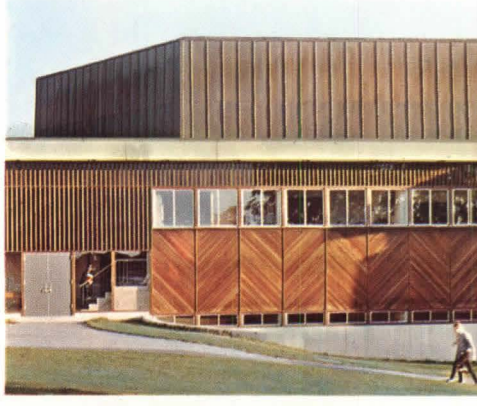
9. Weldwood Flexwood®: Wood selections, dimensions, fire rating specificatio and installation details for a completely flexible wood veneer and backi applicable to almost all surfaces, curved and flat.

10. Weldwood preservatives and finishes: Product and specialized use descripti for Weldwood preservatives (Woodlife®, Penta®, Stormy Weather®, Rainchel and Woodhealth®) and Weldwood Finishes (Color Tones®, Deep Fini Firzite®, P.A.R.®, Patiolife®, Satinlac® and White Firzite®).

Where lumber won't behave, Flexwood® will. One element in the unique screen at left posed a problem the floor-to-ceiling posts. Originally the design called for 2′ x 2′ posts of solid walnut. But warping made many of them unusable. Solution: walnut Flexwood wrapped around aluminum posts. Result: the posts retained their shapes, and a more uniform grain matching was achieved. Library of the W. E. Upjohn Institute for Employment Research.
Installer: Tieco Products Inc.

Doors that were made to be painted. Architects LaPierre & Litchfield & Partners used 60 Type 3A Weldwood Duraply®-faced doors for classrooms, laboratories, and lavatories in the new Science Building at Peddie School, Hightstown, N. J. The 5-ply lumber core doors were supplied factory-primed to permit fast, economical, on-site paint finishing with excellent lasting results.





Permanently colored Glasweld®—it outweathers the weather. Behind a grille of Chilean cypress, Glasweld's crisp blackness contrasts with copper roof, and walls of wood, glass, and stone. Inaccessible areas such as this are where Glasweld's 28 maintenance-free colors most convincingly prove their value to creative new designs. College Center, Goucher College.

BOOKS

(continued from page 55)

dent in the drawings and photographs. The many reinforcing drawings are quite lovely in themselves, and allow one easily to understand the flow of stresses in the structures. It is a much better presentation of his work than his own book, published in Italy in 1954.

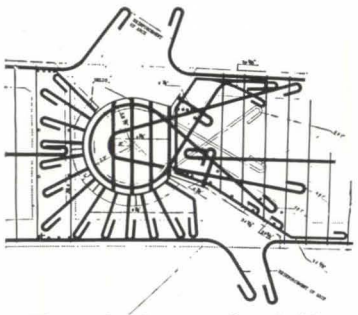
Morandi received his engineering degree from the University of Rome in 1927. His early experience was primarily that of a consultant, collaborating with architects and contractors. Not being able to accept the architectural formalism then prevalent, he devoted himself to research in the design and construction of reinforced and prestressed concrete. The forms of his structures—industrial buildings, theatres and bridges—developed from a desire to express, always more simply and purely, the functional and engineering requirements of each project.

Unlike his friend and competitor, Nervi, Morandi was not his own contractor, and his work reflects this fact. Each of his designs had to be finalized in his studio, after which Morandi had to explain and rationalize the design concept to convince the contractors involved. The need for making such rational presentations forced him to analyze each project objectively, always refining and extending earlier ideas and methods. This need to convince others of the soundness of his proposals may have given Morandi's structures a somewhat two-dimensional character, since prefabricated elements of prestressed concrete, for example, were much easier to explain in two dimensions.

The necessity to simplify and a desire for perfection may have led Morandi to develop pure determinate structural systems, within which the number of elements is reduced to the absolute minimum; with each element refined to perform at maximum efficiency; and with an often ingenious counterbalancing of live loads with deadweight, of reactions with prestressing, etc. The result is often a pure, cohesive structure relying mainly "on intuition, the feeling for structure and the possibility of finding the confirmation of its own inventions in calculations."

Morandi's earliest bridges had counterweighted ends to produce negative moments over the supports, thus reducing the positive moments (and thus the thickness of the bridge) at the center where maximum clearance was required.

By 1951 Morandi's bridges had become elegant expressions of their purpose. One of these newer ones was the Vespucci bridge in Florence, a fitting companion to the Santa Trinita. The use of prestressing to provide the same effect as counterweighting the ends, led to the prototype Corsa Francia bridge in Rome, done in 1958, which became the absolute solution for prestressed concrete bridges of up to about a 300-foot span—just as Maillart's had been, and still are absolute solutions in poured-in-place reinforced concrete. The Corsa Francia is extremely shallow—dynamic, self contained and stable.



The slender arch bridges, which first brought Morandi international recognition, came as the result of special site requirements for a 230-foot span footbridge over a man-made lake near Lucca. Foundation conditions necessitated a minimum number of supports, and this led Morandi to an arch solution. However, no scaffolding could be employed because of flooding during construction. This problem led Morandi to invent a method for casting two sections of the arch vertically, and then rotating them about their springings until they met at center span (see detail of rotation-hinge, above). The various

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BOOKS

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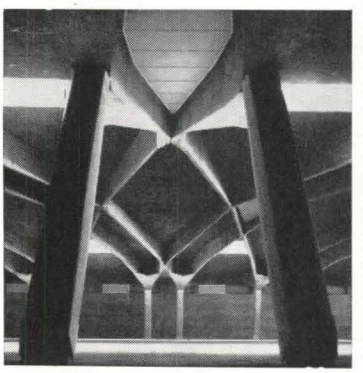
elements had to be kept slender to minimize cost and rotation stresses. This was done by placing only a single load on each arch element.

Among the other prestressed concrete bridges illustrated in this book—of interest because of the range of inventive forms developed by Morandi—are the inverted trestle types that led to the Lake Maracaibo viaduct (page 55). Here Morandi used diagonal cables as supports for a continuous, prestressed bridge about 5½ miles long. The diagonal cables not only provide support points at some distance from the bridge piers, but also provide much of the prestressing force for the road-deck girders. This bridge type was the concrete equivalent of the steel bridge across the Rhine at Cologne. The Maracaibo design which won an international competition was the only entry submitted in concrete, primarily to solve corrosion and maintainance problems. Other Morandi bridges of this type, with spans up to 1,368 feet, are also illustrated here.



Morandi's translation of his bridge vocabulary into buildings further emphasizes the two-dimensional character of his structures. The only recent exception is the lovely Valentino Park Underground Exhibition Hall (above & page 55), next to Nervi's famous hall in Turin. This is an exciting space, the best achieved by Morandi to date.

It is revealing to compare the works of Nervi and Morandi: Nervi is more concerned with defining space; Morandi is more concerned with defining structure. Nervi prefers his ferrocemento molded into three-dimensional forms; Morandi prefers prestressed concrete in two-dimensional structures. The quality of finishes and details in their buildings are different, too: Nervi is a contractor, Morandi not. Nervi, the contractor, allows his intuition wider range than Morandi is able to. It is intriguing that the work of these two has remained so independent, though their design premises were so similar. This range of imagination in the development of forms and spaces makes both men outstanding architects.

Although the translation from the Italian text is awkward, this awkwardness is more than compensated for by the clarity of the drawings and the photographs contained in this book, which offer convincing proof of Morandi's poetry and genius.

ARCHITECTURE: CITY SENSE. By Theo Crosby. Studio Vista Limited, London. Reinhold Publishing Corp., New York. 96 pp., illustrated. 6½ in. by 7¾ in. Hard cover $4.95, Soft cover, $2.25.

REVIEWED BY ROGER MONTGOMERY

For some time, Theo Crosby has written advanced and polemic statements about architecture. Now he has collected these ideas, expanded and organized them into a neat little paperback (also available in hard cover). Every architect and environmentalist should get one.

Taken as a whole, *Architecture: City Sense* demonstrates quite clearly why American architecture and architectural thought compare so feebly with the British equivalent. Crosby's style, wit, enthusiasm and seriousness go a long way toward explaining the violence of Colin St. John Wilson's reaction (*Architectural Design*, March, 1965) to the pointlessness of architecture and architectural education in the United States.

Crosby begins and ends with a conventional plea for planning:

(continued on page 106)

Mr. Montgomery is the Forum's Correspondent in the Midwest. He is also Director of the Urban Renewal Design Study, School of Architecture, Washington University, St. Louis.

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Dr. Strangelove

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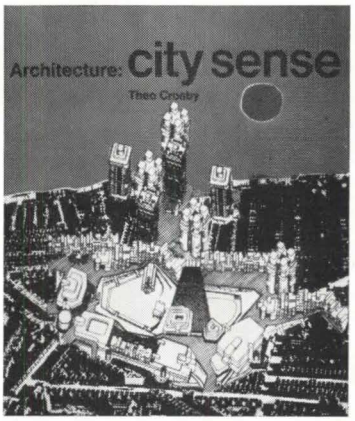
BOOKS

(continued from page 104)

"Our way of life will largely depend on planning and architectural inventions, which must be formulated now." Nothing new or advanced here. In the first chapter, the book discloses its geneology by moving back to 1949 and recalling the electrifying and still unexplained moment when Wittkower published his study of Renaissance proportion. Why is the rebirth of interest in proportion, and participation in a search for new geometric rules of composition, the unmistakable hallmark of membership in the coterie of advanced architects, Team X, etc.?

Crosby next turns to cities and the thesis that architecture's main values derive from its urban context. Here he summarizes another identifying theme of the new architects: their overwhelming concern for collective against individual values. (This alone may explain the failure of communication between Americans and Wilson.) In writing about architectects and cities, Crosby puts down some amazingly modest good sense in contrast, at least, to the AIA's official prose. "The architect is not a prime mover," says Crosby, "in the city or any other situation. He is a technician who does what is asked of him by his clients. He will try to create something of value within an existing situation, but he is seldom allowed to create the situation."



Another theme, and again one which mystifies Americans, appears later in the book. Crosby thinks that the architecture of the Twenties sets a still durable standard for building design. He asserts: "Few arcihtects find it possible to be continuously original," that instead, "all that is required is to be literate."

The book puts forth sound ideas on density and traffic in response to the problems of sprawl and congestion. Many of these were evolved in the course of a housing study by Crosby and others for the British Minister of Housing. Its most important contribution appears in the concept of *action planning* credited to Otto Koenigsberger and advocated by Crosby. This notion, damned by comprehensive planners as "projectitis," corresponds to ideas advanced some years ago in this country by David Wallace, planner of Baltimore's Charles Center. Action planning proposes taking "a small, defined area" and rebuilding it in a short time "in such a way as to solve a host of social, economic and environmental problems.... They must be rebuilt as islands, coherent quarters . . . that . . . carry an image," like Edinburgh New Town, Bath and Bloomsbury. This concept is coupled with one called action architecture—Crosby is for sophisticated prefabrication—in a prescription for the emerging metropolis.

The bibliography contains no surprises. It contains the favorites of generalist-architects: Mumford, McLuhan, etc. Despite such banalities, and its attention to being "in," *Architecture: City Sense* is the most useful paperback of the season; it moves beyond connoisseurship and speaks about what there is for us to do here and now.

COMMUNITY AND PRIVACY. Toward a New Architecture of Humanism. By Serge Chermayeff and Christopher Alexander. A Doubleday Anchor Book. 255 pp. Illustrated. 4⅛ in. by 7 in. $1.45.

This carefully reasoned and important plea for a new urban pattern, originally published in 1963 (and prominently reviewed in our December 1963 issue) has now come out as a paperback. So there is no longer any excuse for passing it up.

Downward Trend in Electric Rates and $80,000 Saving in Construction Costs Make Electric Resistance Heat Logical Choice in Home for the Aged

TELFORD, PENNSYLVANIA—By installing electric resistance heat, rather than a central flame fuel system, the Lutheran Home at Telford here saved an estimated $80,000 on construction costs and was able, within budget, to build 40 rooms instead of 30 as originally planned. The $80,000 figure included the lower cost of the electric heating equipment, and lower installation costs resulting from the elimination of boiler rooms, chimneys, pipe tunnels or ductwork. Reductions in electric rates, in May 1964 and July 1965, will reduce total electric operating costs by more than 50% of the original estimate.

The Lutheran Home was designed to accommodate approximately 60 elderly guests, some of whom would require nursing care. The low total owning and operating costs offered by electric heat, coupled with its superior safety, comfort and convenience features, made it the logical choice. Baseboard heaters are used in the guest rooms, lounges and offices. Cabinet convectors are used in other areas. Temperatures in the guest rooms can be individually controlled day and night for maximum comfort and convenience. Temperatures in other parts of the building are automatically set back at night for operating economies.

The Home's Administrator, Dr. Charles F. Brobst, says: "We like everything about our electric heating system. In fact, we like it so much, we're using it in a series of small homes we're building on our property for elderly married couples. The system is clean, comfortable and economical. After living with electric heat for several years now, I can say quite sincerely that our choice was a good one from every point of view."

Details of the Home are listed on the following page. The categories of information were developed by the Electric Heating Association with the assistance of editors of leading trade and technical journals and have been reviewed by the Consulting Engineers Council USA, Washington, D.C. The Council agrees that they provide a thorough evaluation of the project.

SEE REVERSE SIDE FOR DETAIL INFORMATION

1 CATEGORY OF STRUCTURE:
Shelter Building—Home for the Aged

2 GENERAL DESCRIPTION:
Area: 44,321 sq ft
Volume: 471,143 cu ft
Number of floors: one (and partial basement)
Number of occupants: 62
Types of rooms: 34 guest rooms, 8 infirmary rooms, 2 lounges, large and small dining rooms, library, beauty parlor, barber shop, kitchens, offices, recreational and vocational rooms, storage areas, multi-purpose room

3 CONSTRUCTION DETAILS:
Glass: double
Exterior walls: 4″ brick, 8″ block, 2″ Styrofoam (R/11). U-factor: .07; exposed basement wall, 14″ concrete, 2″ Styrofoam. U-factor: .11
Roof or ceilings: ¾″ tile, 6″ batt (R/19). U-factor: .05
Floors: perimeter 2″ insulation, concrete slabs on grade, basement floor 4″ concrete
Exposed wall area: 9,685 sq ft
Glass area: 4,207 sq ft

4 ENVIRONMENTAL DESIGN CONDITIONS:
Heating:
Heat loss Btuh: 894,000
Normal degree days: 5,800
Ventilation requirements: one air change/hour
Design conditions: 0°F outdoors; 75F in infirmary, 72F other areas
Cooling:
Two ¾-ton units in offices only

5 LIGHTING:
Levels in footcandles: 20-80
Levels in watts sq ft: 1-4
Type: fluorescent and incandescent

6 HEATING SYSTEM:
Electric baseboard units in guest rooms, lounges, offices; electric cabinet convectors in other areas.

7 ELECTRICAL SERVICE:
Type: underground
Voltage: 120/208v, single phase
Metering: secondary

8 CONNECTED LOADS:

Heating	295 kw
Lighting	90 kw
Cooking	83 kw
Water Heating	104 kw
Other	70 kw
TOTAL	642 kw

9 INSTALLED COSTS:

General Work	$334,695	$ 7.53/sq ft
Plumbing & Ventilating	75,465	1.72/sq ft
Insulation	12,800	.29/sq ft
Electrical (Total)*	99,700	2.25/sq ft
TOTAL	$522,660	$11.79/sq ft

*Includes heating

10 HOURS AND METHODS OF OPERATION:
24 hours a day, seven days a week

11 OPERATING COSTS:
Period: 7/8/64 to 7/8/65
Actual degree days: 5,895
Actual kwh: 557,900*
Actual cost: $10,428.59*
Average cost per kwh: 1.85 cents**
*Total electrical usage
**New electric rate, effective July 1, 1965, will cut annual operating costs to 1.2 cents per kwh

Billing Date	Demand	Kwh	Amount
8/6/64	136	18,000	$ 542.60
9/4/64	126	20,200	550.50
10/7/64	118	29,900	649.90
11/5/64	199	41,600	942.35
12/7/64	192	58,100	1,071.85
1/7/65	218	71,700	1,236.90
2/4/65	215	79,000	1,275.88
3/8/65	203	77,600	1,232.88
4/6/65	187	64,400	1,096.68
5/7/65	164	45,800	901.60
6/8/65	125	28,400	647.05
7/8/65	104	23,200	280.40
TOTAL		557,900	$10,428.59

12 ANY UNUSUAL FEATURES:
The electric heating system permits individual temperature control in guest rooms, offices and most areas of the building. Automatic night time setback of temperatures is provided for all areas except guest rooms.

13 REASONS FOR INSTALLING ELECTRIC HEAT:
Lower installation costs, downward trend in electric rates and overall economy of total owning and operating costs plus the extra safety, comfort and convenience of electric heat were reasons for its selection.

14 PERSONNEL:
Owner: Lutheran Home at Telford
Architect: Charles M. Talley
Consulting Engineers:
Structural: Maurice Lutz
Mechanical: Herman G. Metzgar
General Contractor: Lawrence A. Buck
Utility: Pennsylvania Power & Light Company

15 PREPARED BY:
J. Bruce Wallace, Commercial Sales Representative, Pennsylvania Power & Light Company

16 VERIFIED BY:
Charles M. Talley

Charles M. Talley, Registered Architect

NOTICE: This is the twenty-seventh in a series of case histories which will cover all categories of buildings. Some of these histories will be published in leading trade and technical journals and some will not. If you wish to receive all histories as they become available, please fill out the strip-coupon at the left and mail it to Electric Heating Association, 750 Third Avenue, New York, N. Y. 10017.

Gentlemen:
Please send the complete series of Electric Heating Case Histories as they become available to me at the following address:

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LETTERS

LE CORBUSIER

Forum: The issue on Le Corbusier is a befitting tribute to the greatest architect of the 20th century.

JEET MALHOTRA
Chandigarh, India — *Architect*

ELEPHANT HOUSE

Forum: With regard to the matter of the striated concrete used at Yale and at the London Zoo, it is nice to learn from your issue of November that Reyner Banham, who caused the confusion, has "cleared it up". Nevertheless, the one fact that would interest a real historian should get a mention: this finish was used in 1933 on Twickenham Bridge in England designed by Maxwell Ayrton. We have always acknowledged this as the source of the Elephant House version. We fully accept that Paul Rudolph's version was arrived at independently.

CASSON, CONDER AND PARTNERS
London — *Architects*

ASSORTED GREETINGS

Forum: I would like to congratulate you on Architectural Forum. I think it is a most effective and important publication for anyone interested in or working on urban problems.

DENNIS O'HARROW
Executive Director
American Society of Planning Officials
Chicago

Forum: My compliments on the Forum; it is factual, informative and sparkling. The December 1965 issue was an interesting cross section of subjects from large scale planning to sculpture, all thoughtfully set off by your excellent cover, typography and graphic layout.

Good work. Hope it stays good.

RAYMOND J. WISNIEWSKI
Windsor, Connecticut — *Architect*

ASSORTED CORRECTIONS

Forum: While I was very pleased to see the article on New York's West Side project in your July/Aug. 1965 issue, I was distressed at the fact that no mention was made of the project planners who, in this instance, were Candeub, Fleissig and Associates and Brown and Guenther.

It may be of further interest to you to know that the project plan incorporates a great many important innovations not mentioned in Miss Dennehy's article. In the treatment of density patterns, design controls, open space, street characteristics, commercial uses and provisions for rehabilitation, the project establishes a format for high density urban areas which is far ahead of its time. It is a great pity that the specific techniques and elements of the project plan have not been widely described or recognized so that they could be properly applied in similar areas.

ISADORE CANDEUB
Planning and Community Development Consultant
Newark, N.J.

Forum: We are very pleased to see the photographs and small writeup of the Field House for the University of California at Santa Cruz in the November issue. However, the architects should have been listed as Callister, Payne and Rosse, not just Callister and Payne. The undersigned was executive architect for this project.

J. MARTIN ROSSE
Architect
San Francisco

TAXES AND THE DEATH OF CITIES

Forum: I read Mr. Prentice's article on the subject, "Taxes and the Death of Cities," in the November issue of the Forum with lively interest.

One of his key points is, "The value of unimproved suburban land and underimproved urban land derives 100 per cent from money the community has had to invest in roads, streets, sewers, schools, water supplies, fire protection, police protection, and other community facilities without which that land would be neither accessible nor livable." On this premise he argues that the land should be more heavily taxed, while the buildings (improvements) on it should be untaxed.

If the value of land derives from public investments, this is equally true of the buildings on it, and it is by means of the buildings that the owners of land are able to realize its value. A house, an office building, a factory—all depend on access and services without which they could not function and would be of as little value as the land by itself on which they are built. The value of land derives from the use to

(continued on page 112)

LETTERS

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which it is or can be put. . . .

The value of the buildings in turn depends on the demand for them. Rising urban values are due to growing urban population and wealth. If population were moving away from rather than into the city, values would quickly fall... The purpose of spending $11,200 for public services per additional family, or lot, in New York is to *increase* the supply of urban land on which to build, in response to the increase in demand, and to keep land values at least within sight. . . .

The argument for site taxation rests on the quite different ground that urban development and redevelopment would be stimulated if land were taxed more heavily and buildings less so. Perhaps it would, but I am not persuaded that the advantages would outweigh the disadvantages. . . .

If slums are a highly profitable housing investment, the main reason is not that the taxes on them are too low but that the demand for them is too high. This is because the supply of decent housing, public housing in particular, which the poor can afford is too small. . . . Site taxation would do nothing directly to improve matters, and would do little if any good indirectly, whereas an obvious result would be that the slum landlords would pass on as much as possible of the higher taxes they would have to pay to the tenants; their rents would go up.

Mr. Prentice asks rhetorically, "Do land owners have some special right (in Millais' words) 'to get rich in their sleep'?" Granted that they should not, that there is nothing sacred about land speculation profits, the same may be said of stock market profits. . . . The remedy is not site taxation, singling out land, but a stiff capital gains tax of general application.

H. L. ROBINSON
Urban and Regional Consultant

Toronto

A reply: *I am flattered that Mr. Robinson took time to write a lengthy statement in supposed rebuttal to my short piece. I would be a lot more flattered if he had paid attention to what I wrote instead of challenging me on what I did* not *say.*

What excuse is there for his implying that my case for taxing land more and buildings less rests "on the premise . . . that the value of unimproved suburban land and underimproved urban land derives 100 per cent from money the community has had to invest in . . . facilities without which the land would be neither accessible nor usable"? This is indeed a truth, but it most certainly is not my premise.

So let me restate my premise so simply that Mr. Robinson cannot possibly misunderstand or distort it—as simply as A, B, C.

A. Within the next generation billions of dollars must be invested to build and rebuild our cities much bigger and much better.

B. The investment required will be so enormous that maximum participation by private enterprise is essential.

C. If we want maximum participation by private enterprise and private investment, it is unbelievably foolish to discourage private investment in building and rebuilding by penalizing that investment with a property tax on improvements that is apt to be the installment-plan equivalent of a 30 per cent sales tax.

D. It is almost as foolish to abet land price inflation by undertaxation as it is foolish to inhibit building by overtaxation. Today's skyrocketing land prices would be impossible if the location value of land were taxed anywhere near enough to pay for the enormous investment of other people's money required to make the location reachable and livable; and these skyrocketing land prices are the biggest single reason private enterprise cannot meet without subsidy the need for good middle and lower income housing in big cities.

I did indeed say that the location value of urban and suburban land derives 100 per cent from an enormous investment of other people's money and not at all from any act or investment by the past or present owner. But that was no part of my thesis. I mentioned it only because I was afraid some readers might otherwise be unduly disturbed by my suggestion that the landowners' unearned increment should be deflated by more adequate taxation of the community-created location value on which, under today's realty tax incidence, they now get a free ride to riches.

—PERRY PRENTICE

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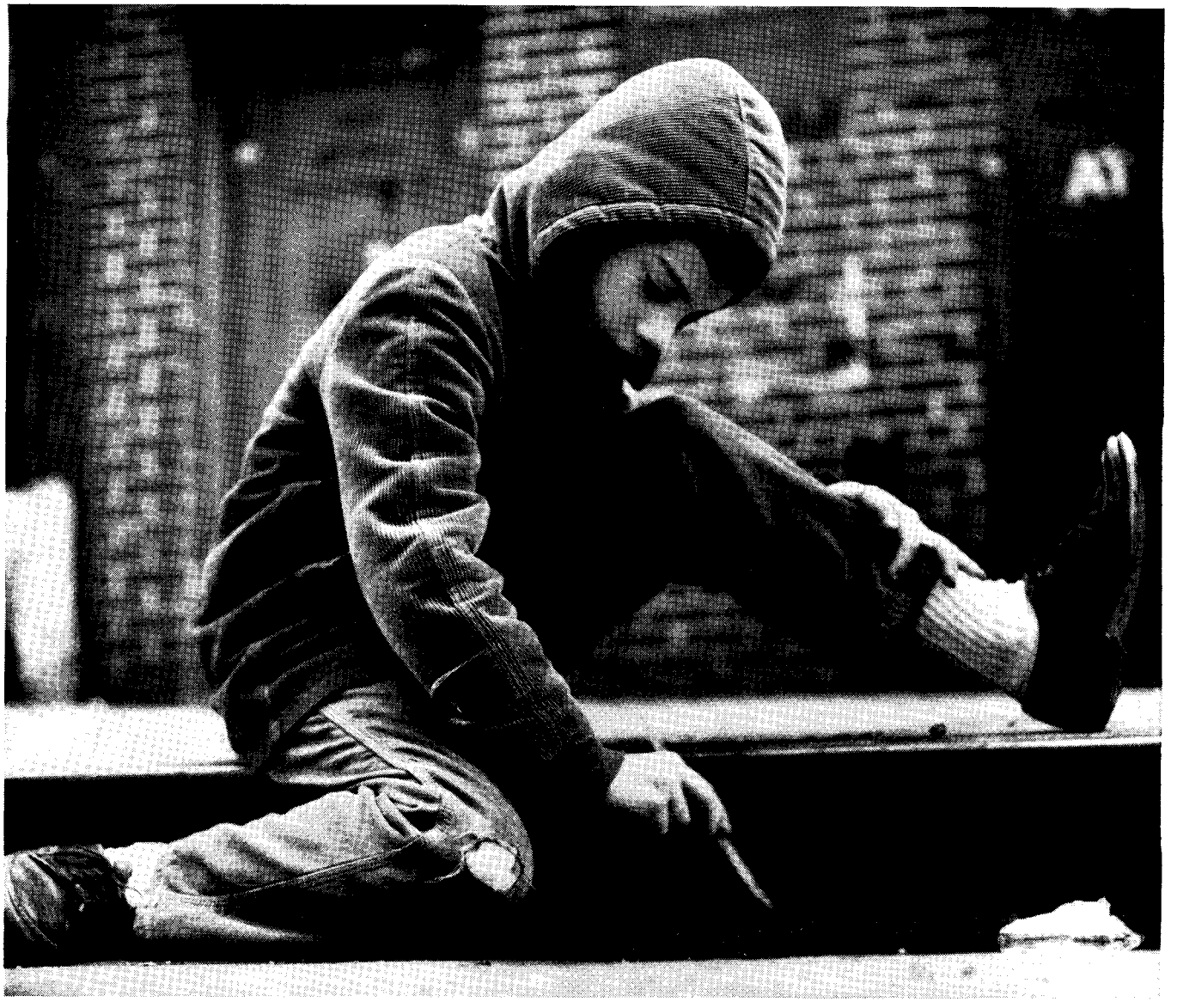


Michael couldn't care less that **Action** has merged with **Urban America.** But he's why they merged.

In mid-December, while Mike was in school, some men got together and agreed to combine their two teams into one bigger and better team . . . to help people like Mike.

He doesn't know it, but he now has the largest private urban improvement group in the world working for him. It's Urban America, Inc., now joined by ACTION, simply to do a more effective job of making America's urban centers better places in which to work and live.

Mike may never know the names of Urban America and ACTION but his life–and the lives of all those with whom he comes in contact – will be touched by their foresight and planning.

The combination of ACTION with Urban America, means that urban blight and deterioration are now being attacked by experienced and privately-financed forces from many different sides.

Urban America—through its predecessor, American Planning & Civic Association—has a background of more than sixty years in working for better urban environment. To this organization has now been added the established national program of ACTION and its successful experience during more than a decade in urban improvement . . . working with more than 70 affiliated local grass-roots organizations throughout the country.

At current rates of construction the U.S. will rebuild itself completely by the end of the century. Architects must design not just buildings but a better total environment.

Simultaneous programs are needed to build well-designed new cities and to rehabilitate the cities in which we live today. A million dollar programmed attack on ugliness and blight in urban centers has been launched by the newly-expanded Urban America . . . tangible evidence of the determined assault being made now on one of the most serious problems facing the people of our nation.

Urban America, Inc.

The ACTION Council for Better Cities
2 West 46th Street, New York, N.Y. 10036

Instead of a lot of unsightly hardware in the ceiling to circulate conditioned air, why not integrate air distribution and lighting systems. The idea is not new, but in the new CBS office building in New York it is done with the highest degree of precision and elegance. Besides high quality illumination, the fluorescent luminaire provides for air distribution through barely noticeable slots in the supporting frames. As in all such installations, manufacturing precision is essential from the very outset; otherwise all the components of the system might not fit. In this case the welded aluminum fixture chassis (19,992 of them) had to be accurate to a couple of thousandths of an inch overall. Altogether the system looks well and works well. We're happy about the whole thing because we made the fixtures and, just as we expected, everything fits.

Gotham Lighting Corporation

37-01 thirty-first street, long island city, NY 11101

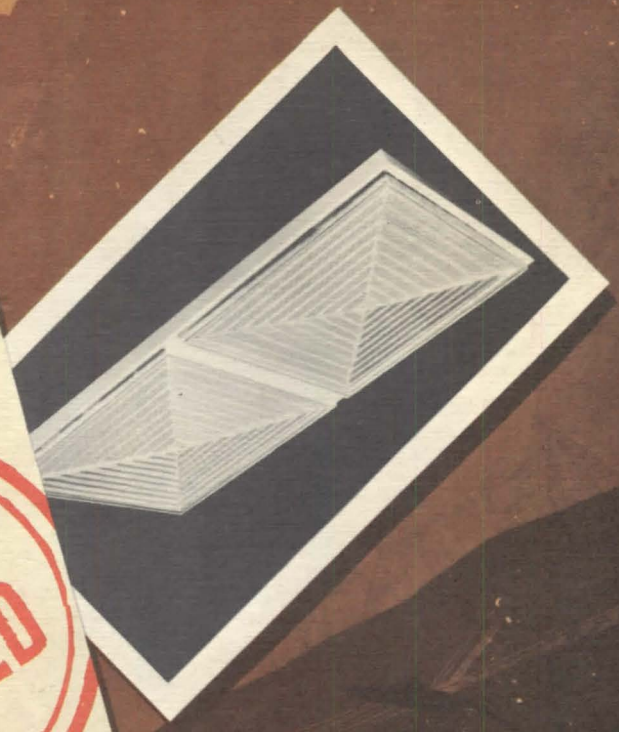
in Canada: Gotham Lighting of Canada, Ltd., Toronto, Ont.

Judgment at Lauderdale:

SINGLE-SOURCE, COORDINATED LIGHTING WINS APPEAL IN ALABAMA COURT HOUSE CASE!

"Melding a variety of fixtures into a functional yet smooth-looking lighting system can get pretty complicated" says Malcolm E. Smith, A.I.A., of Northington, Smith, Kranert & Associates, architects. "Particularly in the Lauderdale County Court House where we had some definite ideas requiring fixtures not available in standard designs. That's where Day-Brite entered the picture. Besides standard styles which met our requirements, they also had the facilities to come up with everything we needed, on a custom basis. I can't say how much time and trouble was saved by having all our needs filled by one manufacturer. But it was considerable. And we achieved exactly what we wanted, with no design compromises. The results add up to mighty convincing testimony in favor of a one-stop source for lighting."

CUSTOM DESIGNING is just one of several ways in which Day-Brite can make a valuable contribution to your lighting needs. To learn more about these services, contact your Day-Brite representative. He's eager to help. For the best solution to any lighting problem, look to Day-Brite . . . where the creative answers are coming from.



CASE CLOSED

DAY-BRITE®

DAY-BRITE LIGHTING • A DIVISION OF EMERSON ELECTRIC • 5411 BULWER • ST. LOUIS, MO. 63147

LAUDERDALE COUNTY COURT HOUSE
Florence, Alabama

Architect: Northington, Smith, Kranert & Assoc.
Consulting Electrical Engineer: Hazzard & Nall

HEATH