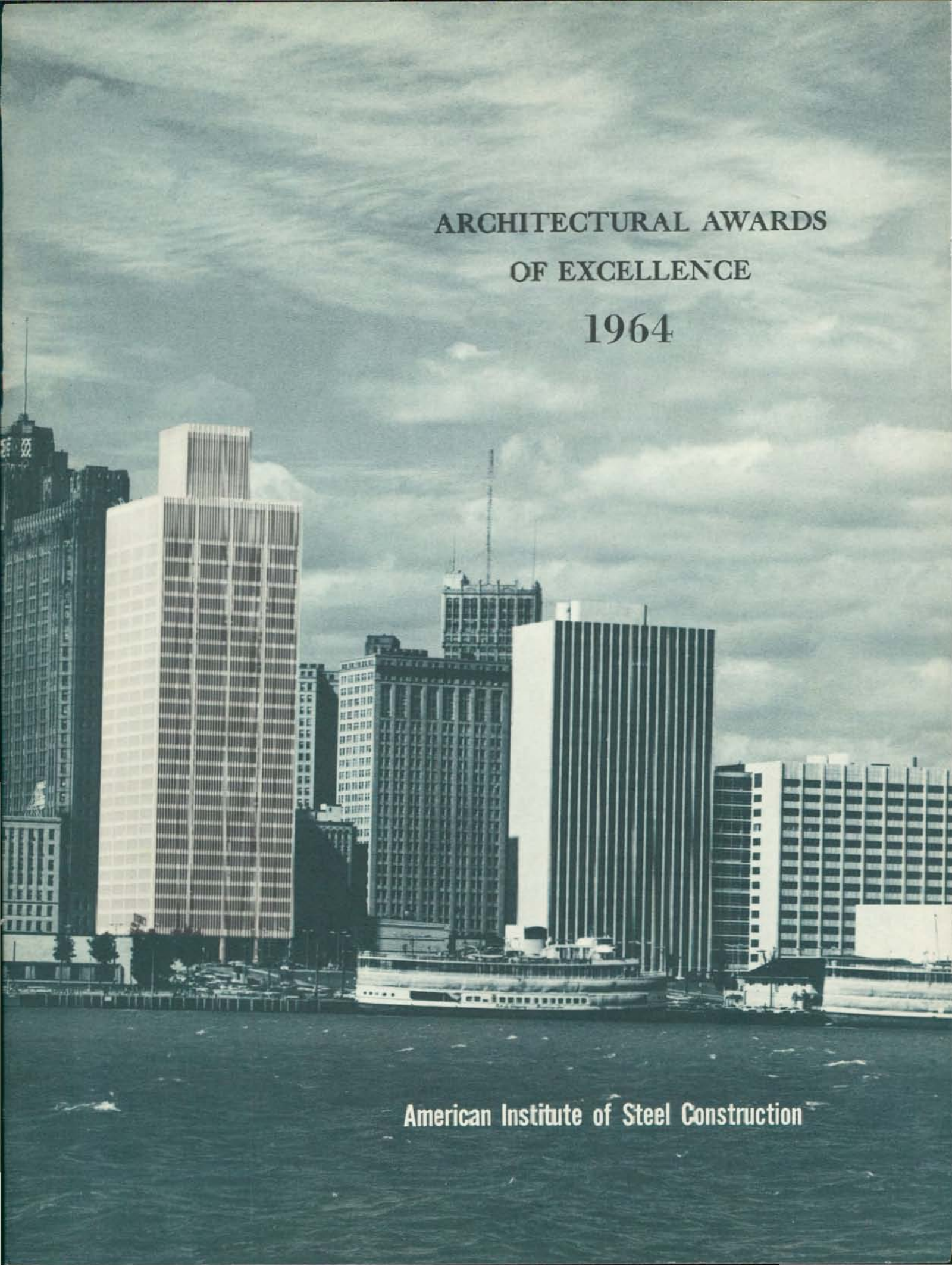


ARCHITECTURAL AWARDS OF EXCELLENCE

1964

American Institute of Steel Construction


AMERICAN INSTITUTE OF
STEEL CONSTRUCTION, INC.
PRESENTS
1964
Architectural
Award
of
Excellence
In recognition of
outstanding aesthetic design
in structural steel

Beauty in Steel Buildings

The Architectural Awards of Excellence were established by the American Institute of Steel Construction in 1960 to recognize and honor outstanding architectural design in structural steel and to encourage further exploration of the many aesthetic possibilities that are inherent in steel construction. This year a distinguished jury selected, from one hundred and forty entries, twelve buildings representing the best architectural expression in structural steel.

In the opinion of the AISC Committee on Awards, each building represents design of the highest standards. All Awards are equal in stature. Therefore, the Award-winning architects are listed alphabetically on the following pages with pictures of the buildings for which they received commendation.

The jury was particularly looking for the utilization of structural steel for its maximum architectural potential, and the jurors chose these buildings as outstanding examples of aesthetic leadership and direction. The architects used standard framing methods in many cases, but they used them superlatively. The successful use of steel requires a stringent attention to detail and orderliness in design. That this quality is not a restriction is demonstrated by the Award winners.

The Institute is most gratified by the enthusiastic response to the Architectural Awards of Excellence and plans to continue the program.

JURY OF AWARDS

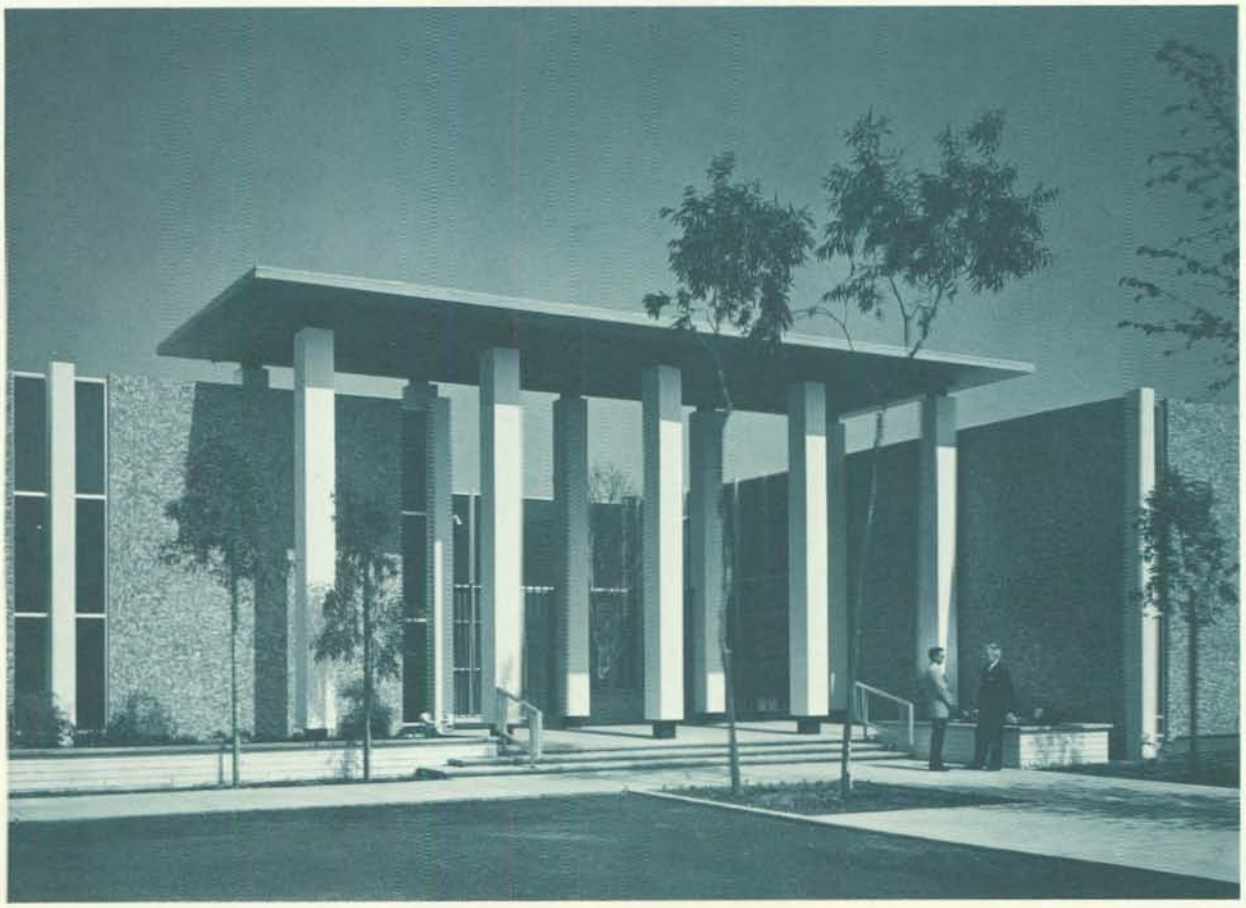
LEO A. DALY, AIA
Leo A. Daly Co.
Omaha, Nebraska

MORRIS KETCHUM, JR., FAIA
Morris Ketchum, Jr., and Associates
New York, New York

PAUL WEIDLINGER
Consulting Engineer
New York, New York

HENRY L. WRIGHT, FAIA
Kistner, Wright & Wright
Los Angeles, California

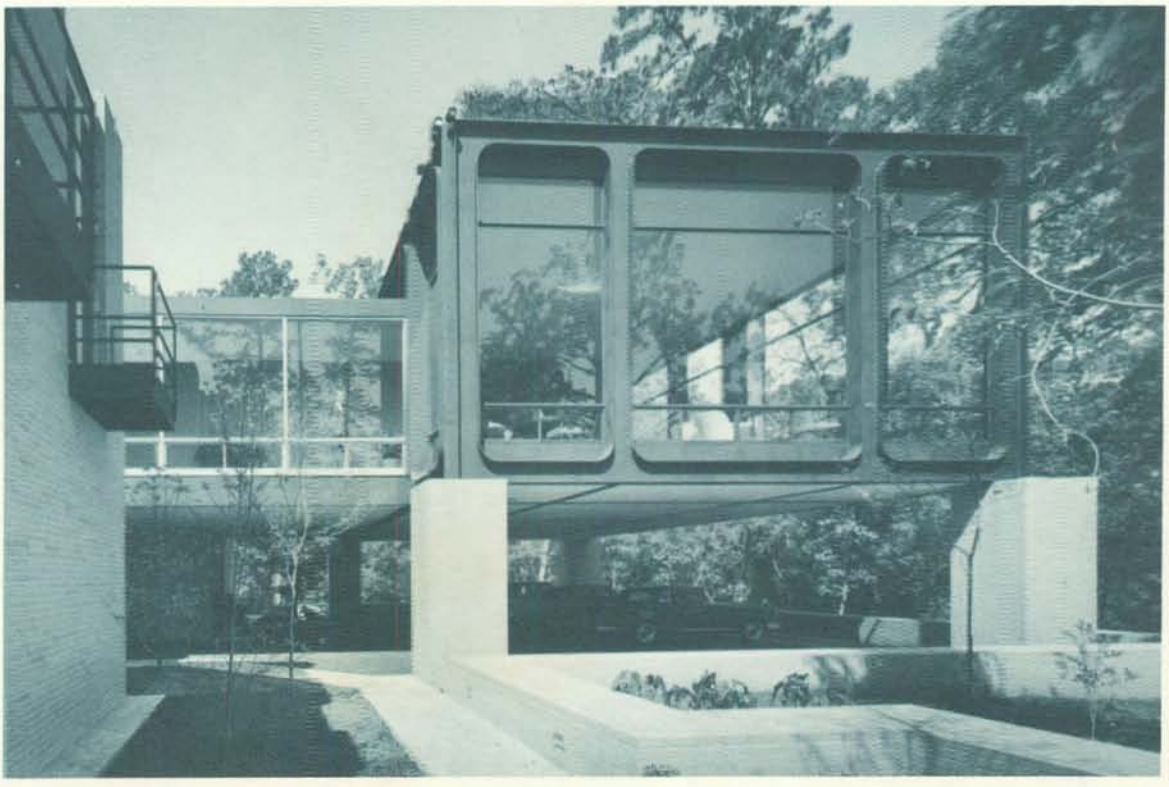
PHILIP N. YOUTZ, FAIA
Dean, College of Architecture & Design
University of Michigan
Ann Arbor, Michigan



Architect: Balch-Hutchason-Perkins, Los Angeles, California
California Credit Union League, Headquarters Building, Pomona, California
Owner: California Credit Union League, Pomona, California
Structural Engineer: Ropp & Ropp, Los Angeles, California
General Contractor: Gatman & Mitchell, Sherman Oaks, California

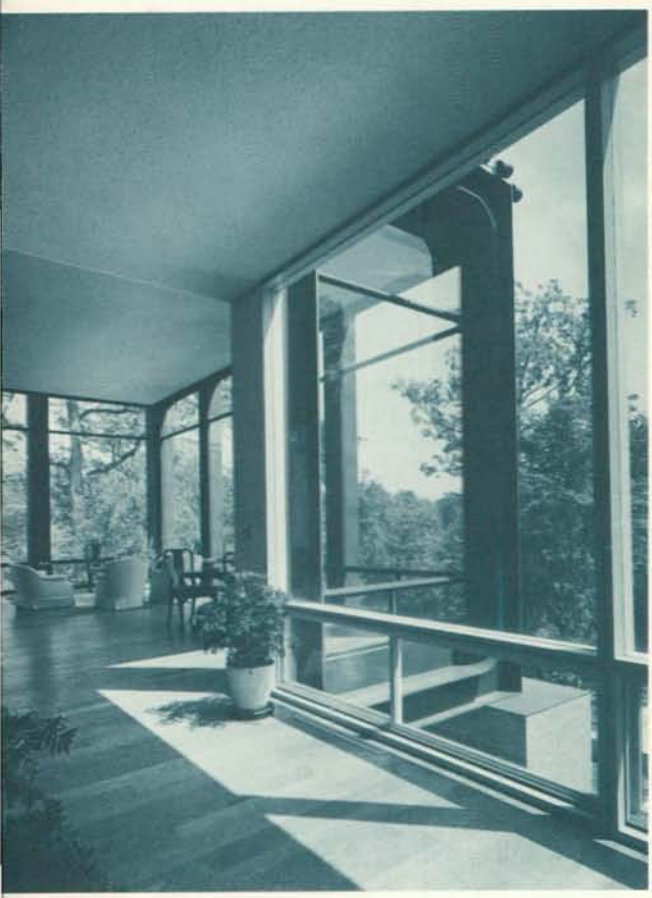
ARCHITECTURAL DESCRIPTION: Precast exposed aggregate concrete panels, reinforced concrete columns, long-span tapered steel roof girders used for economy in construction to obtain 100′ x 100′ clear floor area. Entrance canopy is of steel frame.

JURORS' COMMENTS: *"An office-type building with an inner court and all the offices open to the interior of this building. The architects have been able to screen the noise of the traffic by plank walls. Just enough light is permitted from the outside to give an interesting texture to the building. A very simple straightforward solution."*



Architect: Howard Barnstone and Partners, Houston, Texas
A Residence for Mr. and Mrs. John F. Maher, Houston, Texas
Owner: Mr. and Mrs. John F. Maher, Houston, Texas
Structural Engineer: R. George Cunningham, Houston, Texas
General Contractor: Ivanhoe Co., Houston, Texas
Steel Fabricator: Mosher Steel Co., Houston, Texas

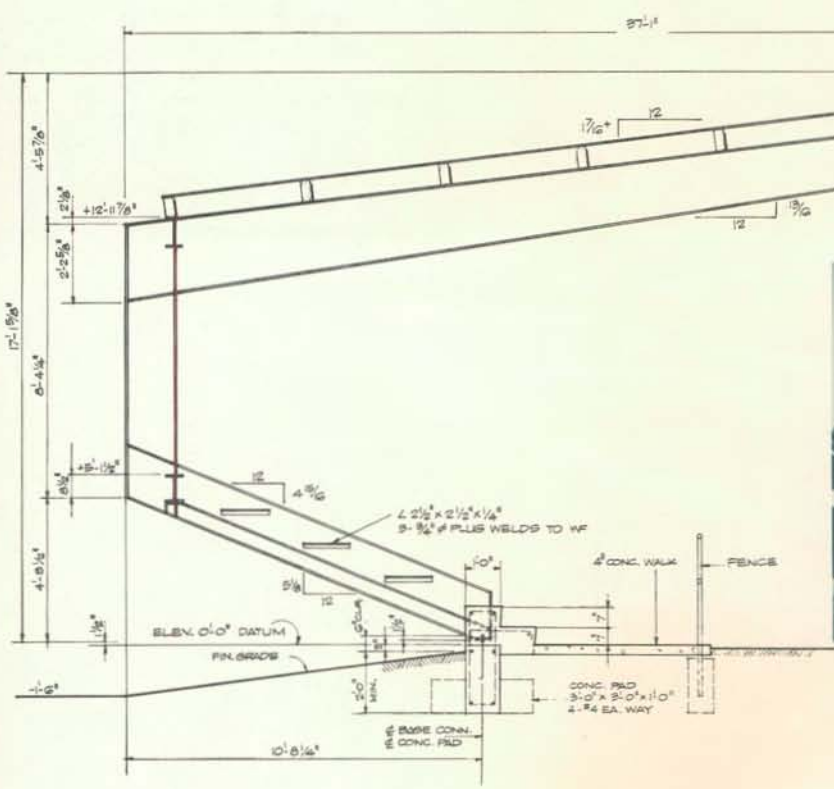
ARCHITECTURAL DESCRIPTION: The house was conceived of in two masses, the front mass being that of the entry, bedroom, and other areas, and the back section being that of an all-glass room resting on huge posts. The main entertaining and living areas are on the second, or entry, level. All of the bedrooms are on the ground level. The parking is below the living room and dining room. The house has a steel frame and the rear or living room section is a Vierendeel truss in steel spanning 55′ x 30′ clear and resting on four 4′ x 4′ columns.



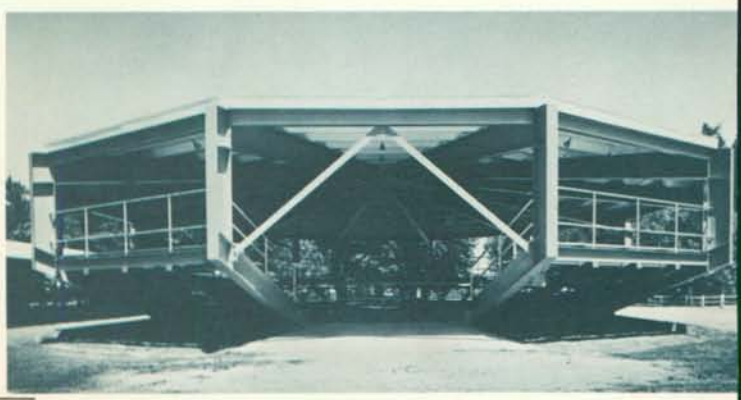
JURORS' COMMENTS: "*An unusual scheme for a residence beautifully carried out. You ascend a small flight of steps, penetrate a long courtyard and you emerge on a bridge. The bridge leads in turn to a sort of bird-cage living room-dining room set on four poles elevated one story in the air. That principal room of the house overlooks a bayou or small creek and a beautiful area — almost a wild area in the heart of the city. The steel detailing of the main room in the house and the bridge is beautifully handled. This space creates a private, quiet living area of great drama with a wonderful view. Steel is well expressed, well handled; the architects had a keen appreciation of its nature and its possibilites.*"

Architect: Raymond R. Franceschi, Sacramento, California
Judging Ring, Los Banos, California
Owner: City of Merced, Merced, California
Structural Engineer: Leroy F. Greene, Sacramento, California
General Contractor: T. Falasco, Inc., Los Banos, California
Steel Fabricator: Pittsburgh-Des Moines Steel Co., Santa Clara, California

JURORS' COMMENTS: *"A very neat, straightforward, excellent solution to the problem. We like the sophisticated crudeness of the structure connection. It is the very simplest way to put steel together and it is still beautiful."*



CROSS SECTION

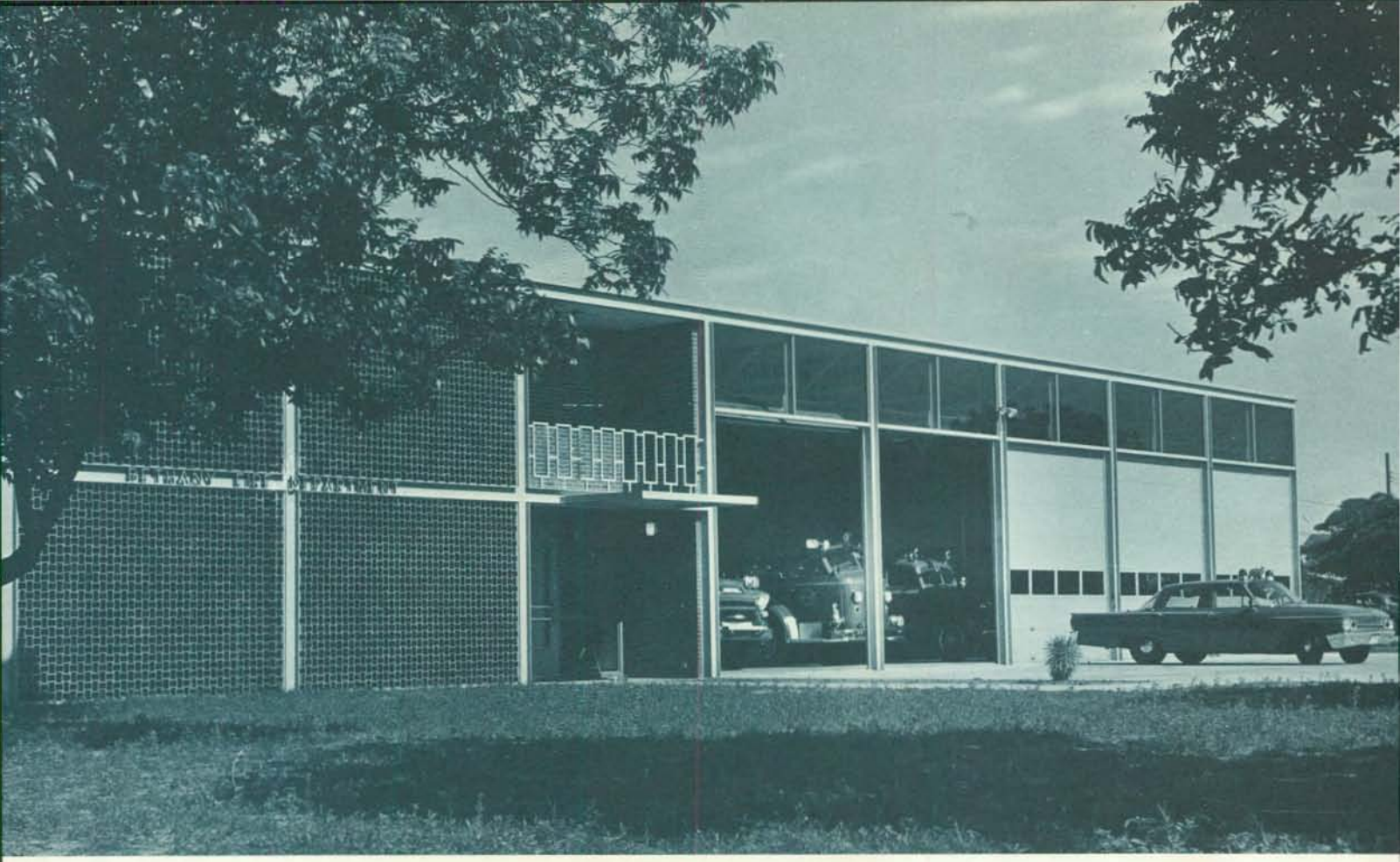


ARCHITECTURAL DESCRIPTION: A completely exposed steel structure, of welded construction, in the form of a carousel. Twelve identical frames in a broad C-shape, cantilevered from the foundation ring, constitute the vertical "ribs" of the circular structure. These support the room as well as the seating at the same time. The frames are entirely arc welded – thus permitting an "assembly line" technique of shop fabrication before transportation to the site for erection. The welded construction of the frames produces a clean and neat appearance, which is an essential quality particularly in the case of an entirely exposed steel structure of such honesty as this one. In addition to standard structural shapes, the roof portion of each frame is a tapered, built-up member that adds to the feeling of lightness and achieves economy of material.

Architect: Vincent G. Kling, FAIA, Philadelphia, Pennsylvania
Westinghouse Molecular Electronic Laboratory, Elkridge, Maryland
Owner: Westinghouse Electric Corp., Molecular Electronics Division, Elkridge, Maryland
Structural Engineer: Allabach & Rennis, Philadelphia, Pennsylvania
General Contractor: Kirby & McGuire, Inc., Baltimore, Maryland
Steel Fabricator: Derby Steel Co., Baltimore, Maryland

JURORS' COMMENTS: *"This is a complex of industrial units built for expansibility, and, when it is expanded, the total concept is not lost. It is orderly. As it expands, it expands in an orderly way and repeats the same elements. It is a clean, sharp, straightforward solution. If no further units are added to the building, it will remain a distinguished work of architecture."*

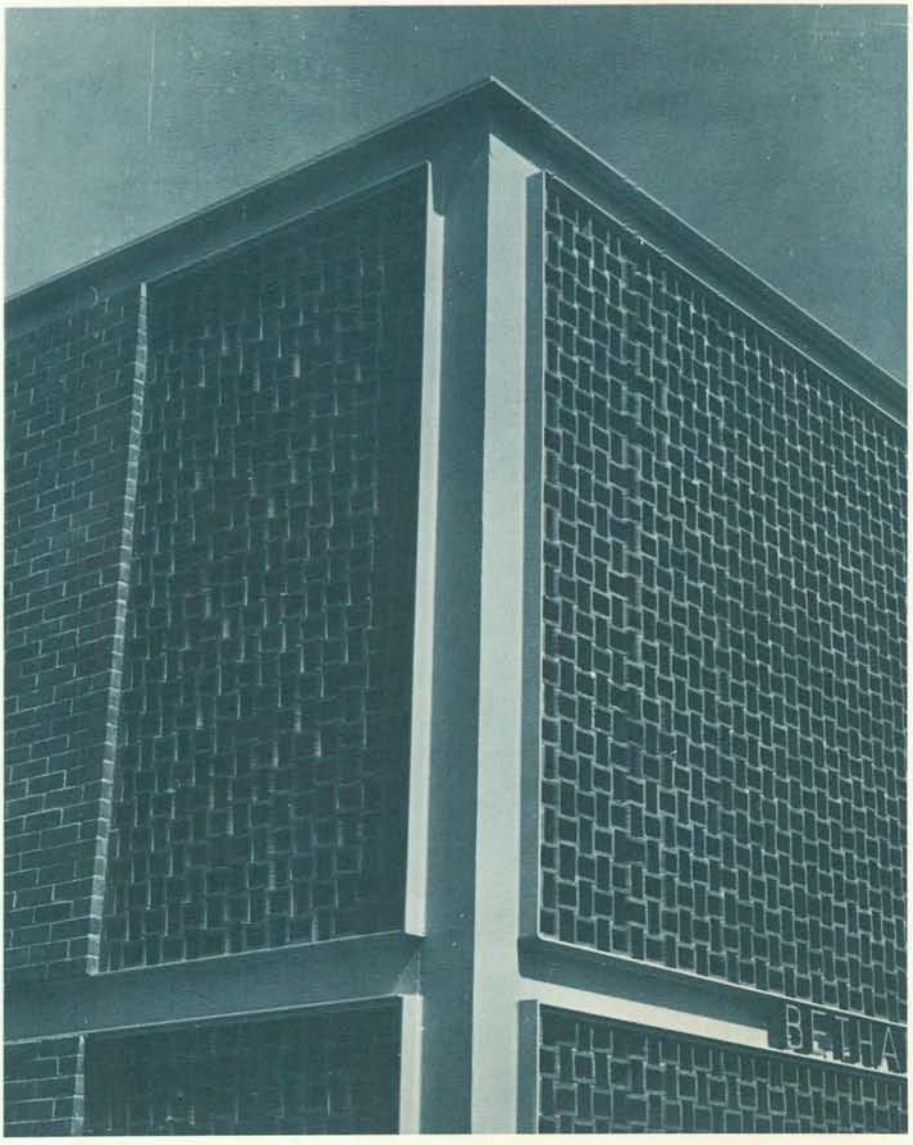
ARCHITECTURAL DESCRIPTION: The plant is designed as a sequence of structurally separate "space modules," each of which can stand as an independent unit or in combination with other modules. Each unit is a square composed of a 90′ x 90′ central space 14 feet high, for laboratory or production use, surrounded by a band of lower ceiling space for office and service areas. The structure of each module unit is a steel-truss space frame 90′ x 90′ resting on four 13½″ square steel columns at the corners. The lower chord of the trusses is cantilevered beyond the columns to roof the lower-ceiling perimeter area.

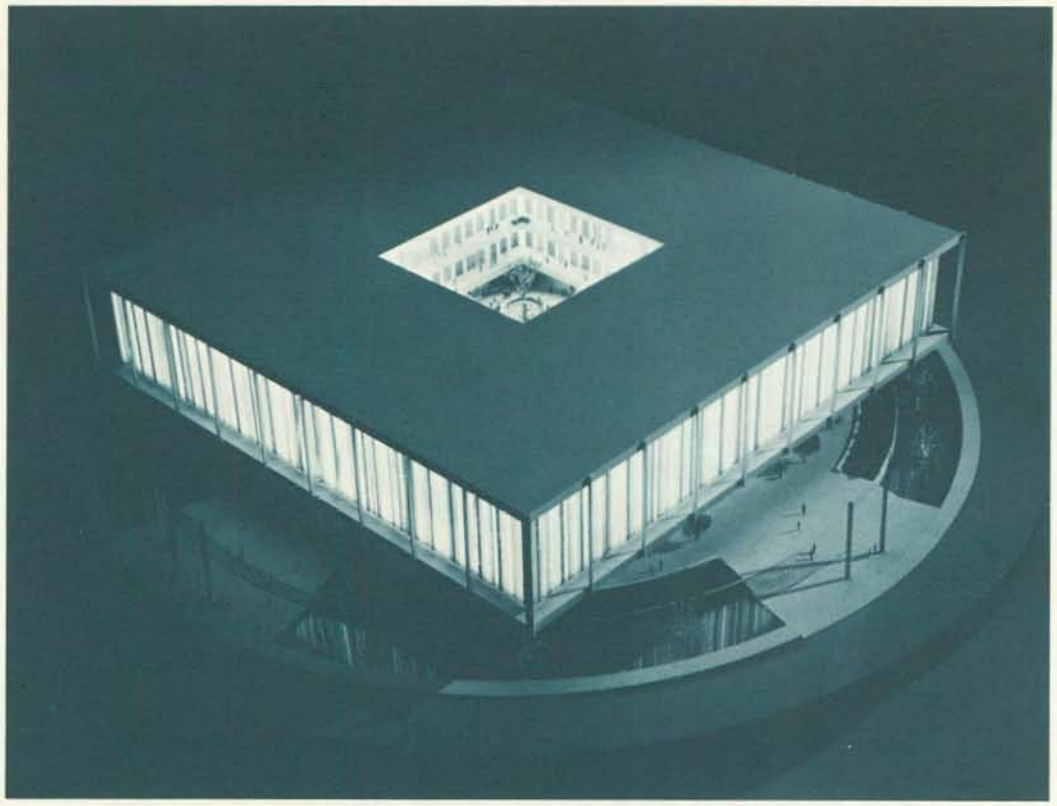


Architect: Locke, Miner & Smith, Inc., Oklahoma City, Oklahoma
Bethany Fire Station, Bethany, Oklahoma
Owner: City of Bethany, Bethany, Oklahoma
Structural Engineer: A. M. Eudaley, Oklahoma City, Oklahoma
General Contractor: LipoCo Construction, Inc., Oklahoma City, Oklahoma

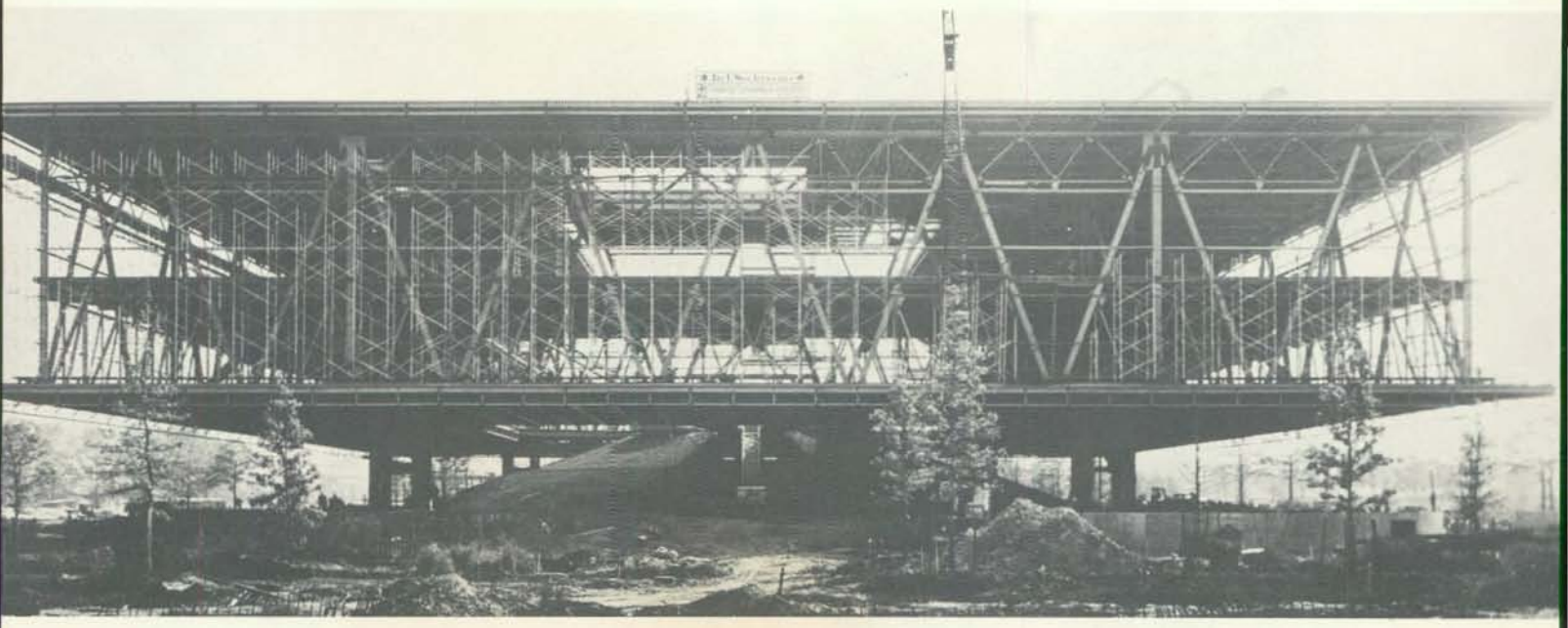
ARCHITECTURAL DESCRIPTION: The second floor kitchen-dining-living area is buffeted from the sleeping area by the mechanical core and and locker room. The sculptured steel stairway to the second floor is composed of exposed aggregate, concrete-filled stair and landing pans made from ⅛" bent plate cantilevered from wide-flanged sections tied into the laced network of exposed ceiling beams. The column-free apparatus room is framed with long-span steel joists allowing over 4000 square feet for equipment parking. Wide overhead doors at each end of the five equipment stalls allow trucks to pass through the building from the rear to the parking stalls rather than tediously backing in.

JURORS' COMMENTS: *'A simple community building executed in steel with very light members so straightforward, so simple in its approach that it is obviously an inexpensive building, appropriate in scale and size to its use and to a small community where it is located. Not a big city building in any sense of the word. The color schemes and detailing are unpretentious and honest and dignified. Excellent use of steel as a building material. It is a very good showroom for fire equipment in which a community very often takes great pride. The fire equipment is part of the design.'*





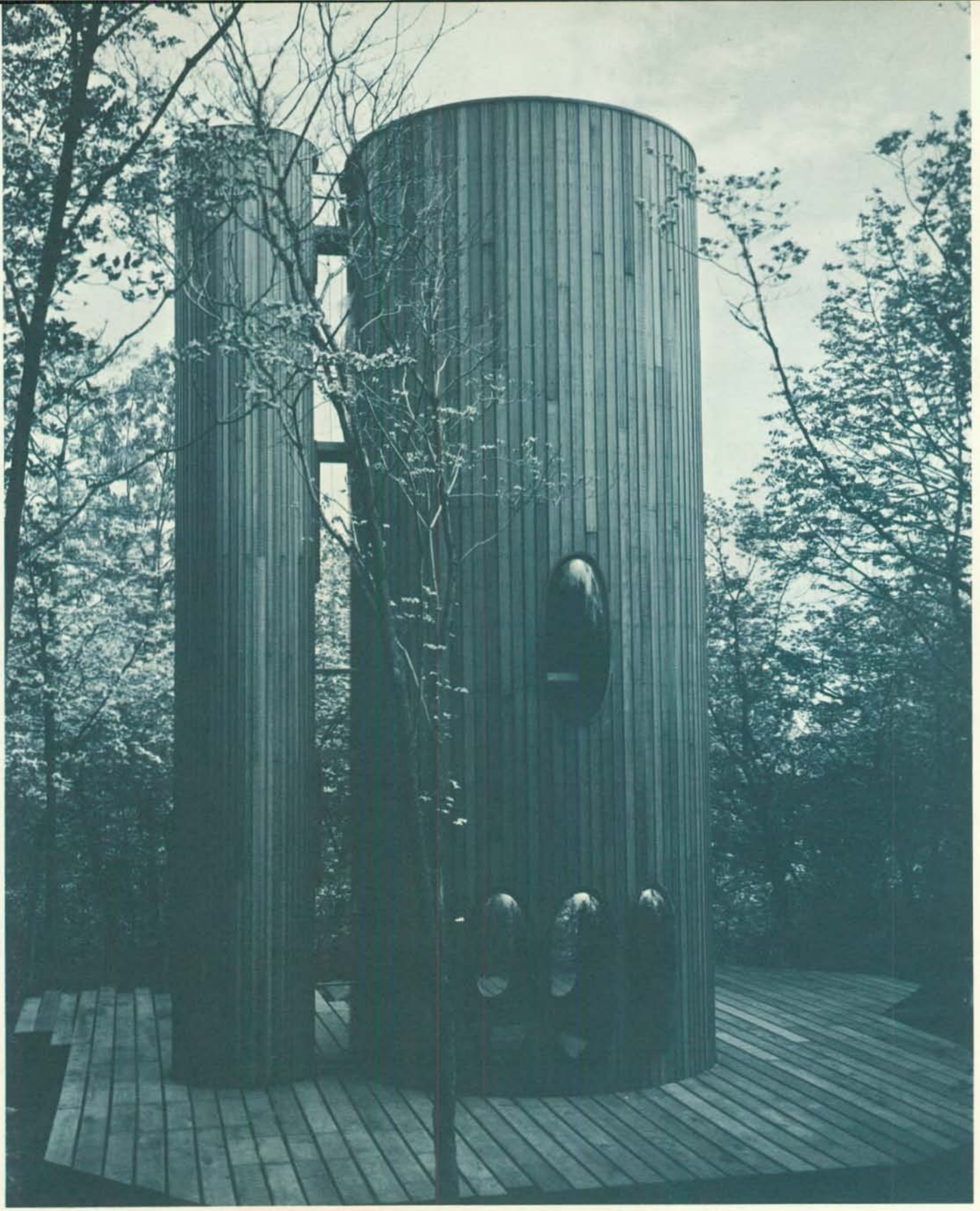
Architect: Charles Luckman Associates, Los Angeles, California
United States Pavilion, World's Fair, New York
Owner: United States Commission, Department of Commerce, Washington, D. C.
Structural Engineer: Severud-Elstad-Krueger Assocs., New York, New York
General Contractor: Del E. Webb Corp., Phoenix, Arizona
Steel Fabricator: Bethlehem Steel Co., Bethlehem, Pennsylvania

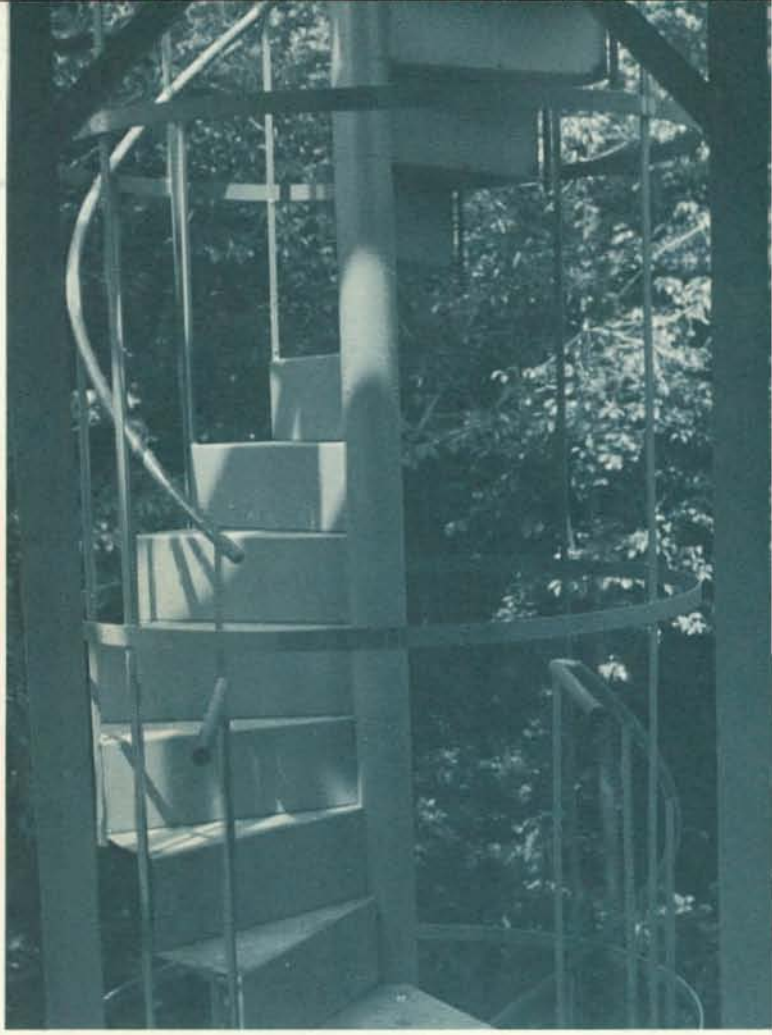


ARCHITECTURAL DESCRIPTION: The pavilion contains some 150,000 square feet of enclosed space and is situated on a circular 4½ acre, 500-foot-diameter site. The structural frame supporting the two exhibit levels consists of eight bridge trusses arranged to form a hollow square. The inner trusses are 310 feet long spanning some 174 feet center to center of the supports and extending out 68 feet to support the outer trusses. Both inner and outer trusses are 51 feet high, center to center of top and bottom chords.

Spanning between the inner and the outer trusses, at the first and second floor levels, a distance of some 66 feet, are wide flange beams varying in depth from 16 to 36 inches. Roof beams vary from 14 to 36 inches in depth. Galvanized 3-inch-deep formed steel decking laid over the beams serves to support concrete slabs. The lower level has an 18-foot floor-to-ceiling height, the second level a 30-foot height.

JURORS' COMMENTS: *"Probably one of the best buildings at the fair, it is simple and bold. It puts a relatively old material, plastic, to new use. Exciting structure, held on four piers, which have a tremendous span. This is a dramatic approach in itself, from the engineering point of view. Although the steel structure is hidden by the exterior panels of the walls, the photograph of it under construction show a very dependent use of steel; when you look at the building, you know it isn't concrete — it couldn't be because of its lightness. Here is a grand example of a steel building."*

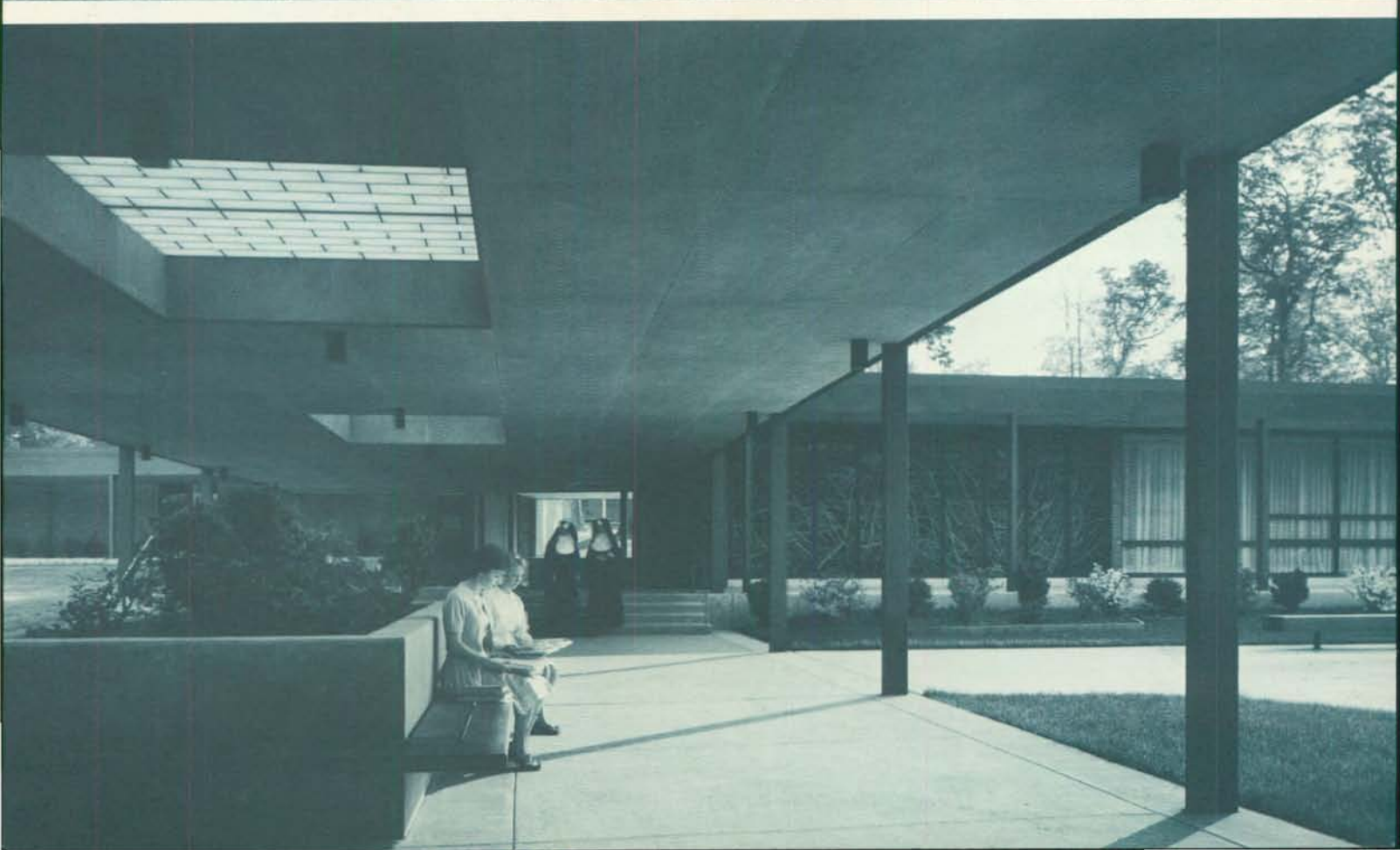




Architect: M. Medcalfe, New York, New York
A Residential Bath Tower, Stony Point, New York
Owner: M. Medcalfe, New York, New York
Structural Engineer: Arthur P. Hall, New York, New York
General Contractor: M. Medcalfe, New York, New York

ARCHITECTURAL DESCRIPTION: A residence devoted to bathing which is expressed in a five-level, steel-framed, wood-covered, two-cylinder concept. The design was proportionally a tall structure, with an estimated five-ton, dead-weight load at the high portion of the building. Therefore, a steel structure was decided upon for compressive and bending strength. The problem of twist or torque strength was solved by field-welded steel bracing that would not project into the room areas, and by a diaphragm skin wrapped about the building. The stairway, a circle, and the bath area consist of two circles. The other circles, the windows, are plastic domes utilized as window sash, teardrop in formation.

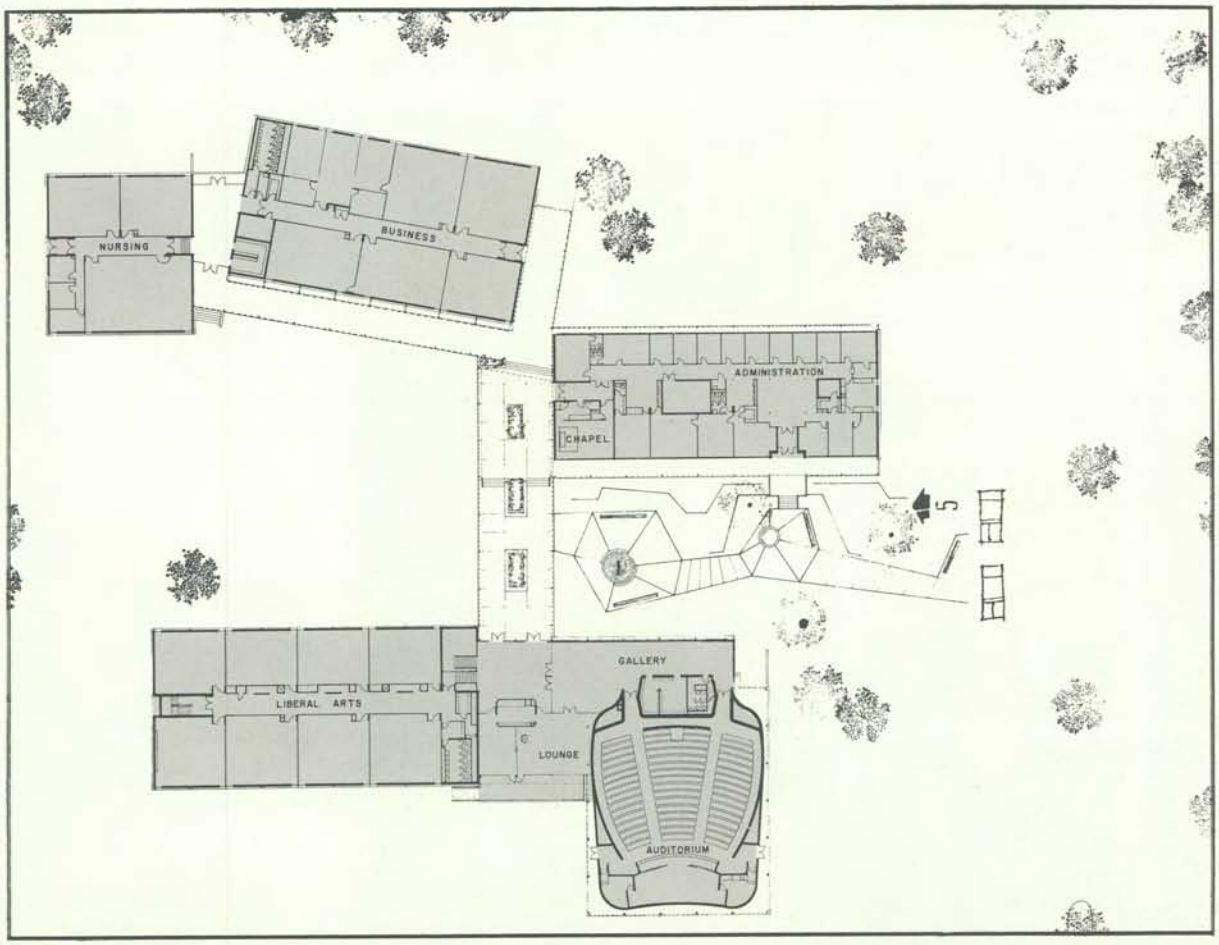
JURORS' COMMENTS: "*A unique building. It has two bathtubs, a Japanese bath and a Finnish Sauna, but is not a residence. The steel form is interesting and the exterior is sheathed with vertical redwood. A very unique, quite playful thing; a fun pavilion, showing creative imagination, using materials well and constructed well.*"



Architect: Nolen, Swinburne and Associates, Philadelphia, Pennsylvania
Academic Center, Gwynedd, Pennsylvania
Owner: Sisters of Mercy, Philadelphia, Pennsylvania
Structural Engineer: Severud-Elstad-Krueger Assocs., New York, New York
General Contractor: John P. Donovan, Philadelphia, Pennsylvania

ARCHITECTURAL DESCRIPTION: Exposed steel tube structural frame, steel fascia, brick infilling walls and glass.

JURORS' COMMENTS: *"A well-organized school plan, a very clean building all the way through. The way the architect has handled some of these forms within this roof is well done. Steel is exposed on the exterior in structural form and backed up with a much more familiar material, warm brick. The walls, of course, are not structural but enclose the auditorium and other units of the total complex very successfully. It has a residential character which would be welcome on a campus of this kind and a very harmonious expression of both structure and materials. It is also harmoniously sited, combining well with the whole plan. A good, workable school plan."*



Architect: The Perkins & Will Partnership, Chicago, Illinois

United States Gypsum Building, Chicago, Illinois

Owner: United States Gypsum Co., Chicago, Illinois

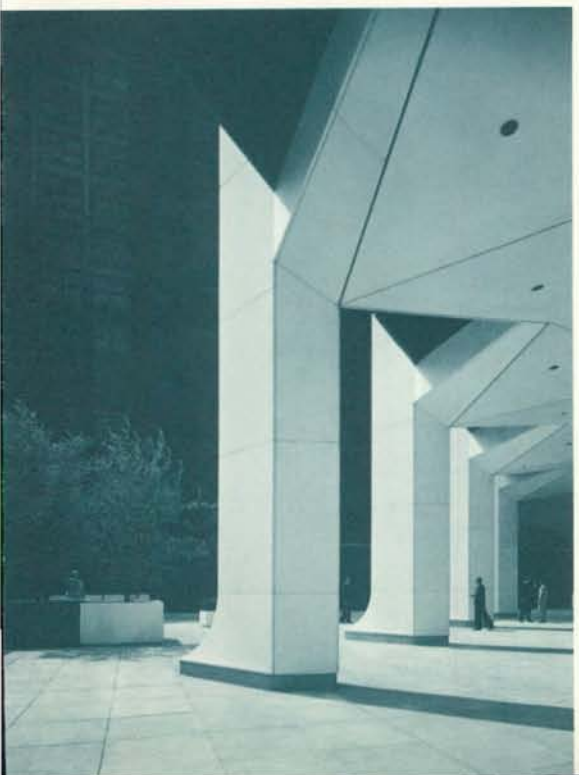
Structural Engineer: Edward Colin, The Perkins & Will Partnership, Chicago, Illinois

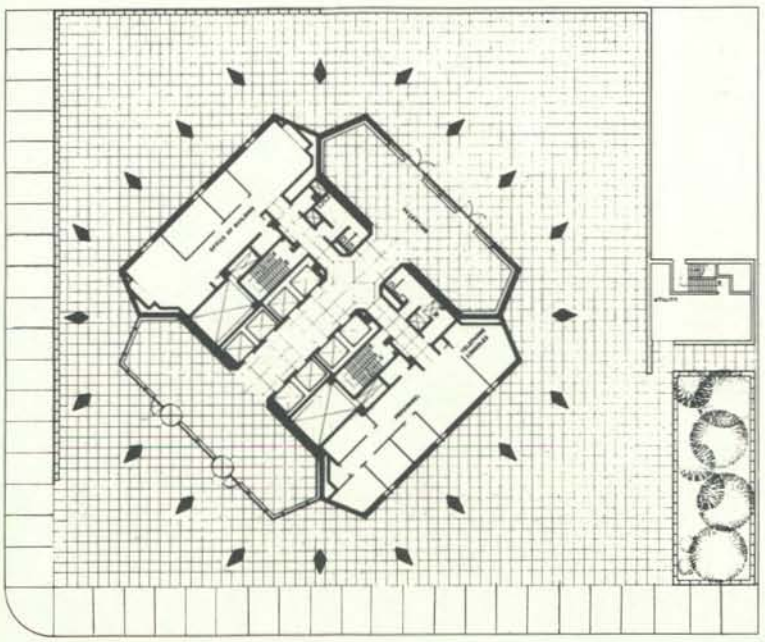
General Contractor: A. L. Jackson Co., Chicago, Illinois

Steel Fabricator: American Bridge Division, United States Steel Corp., Chicago, Illinois

ARCHITECTURAL DESCRIPTION: The office tower is framed in structural steel to make it possible to eliminate all interior columns in the office area, increase the flexibility of underfloor electrification, and diminish the deadload of the building structure and thereby reduce the cost of the foundation. Anchored at a 45-degree angle to the street, each floor of the building has eight corner offices. Its crystalline forms of columns, faceted soffits, and the crown of the building in the gypsum crystals, which the company mines, are enhanced by the slate and gray glass curtain wall.

JURORS' COMMENTS: "*One thing we like about this building is its unusual siting. The architect has been able to acquire much larger open spaces by putting it diagonally across the corner lot rather than have the same size building put in a square with narrow clearances around it. It is a very straightforward structure. Its daring exterior which is a little nervous and busy at times, has originality and fine use of materials. The columns are clothed in white marble, presenting a dark-green and white color scheme with an almost Gothic top — probably in the tradition of the* Chicago Tribune. *This building is very interesting and very unusual: the architect did not use steel spandrels and marble columns. The treatment tends to relieve some of the monotony you get with buildings of this type. A poetic solution.*"





Architect: Skidmore, Owings & Merrill, Chicago, Illinois
The Daily Journal, Franklin, Indiana
Owner: Home News Enterprises, Franklin, Indiana
Structural Engineer: Skidmore, Owings & Merrill, Chicago, Illinois
General Contractor: Dunlap & Company, Inc., Columbus, Indiana
Steel Fabricator: International Steel Co., Evansville, Indiana

ARCHITECTURAL DESCRIPTION: The building is located on a busy highway and entirely enclosed in glass, making printing and office functions visible from the road. The structure is of welded steel frame with a metal deck. Exposed steel was carefully aligned, sandblasted, and painted white. Welds were ground smooth. Steel is a logical choice for the structure because it is noncombustible, economical, and provides readily for future structural changes or expansion. It results in a light and elegant structure of great precision.

JURORS' COMMENTS: "*A very simple one-story building, with a beautiful steel structural system and wide spans so that the whole structural system is reduced to its very simplest elements. Beautifully proportioned. The structural system is expressed on the exterior by the roof and the columns. The glass-wall building, with its independent structural system, serves as a showcase for the newspapers and printing presses and other machinery, which, presumably, are done in interesting colors.*"

Architect: Skidmore, Owings and Merrill, Chicago, Illinois

BMA Tower, Kansas City, Missouri

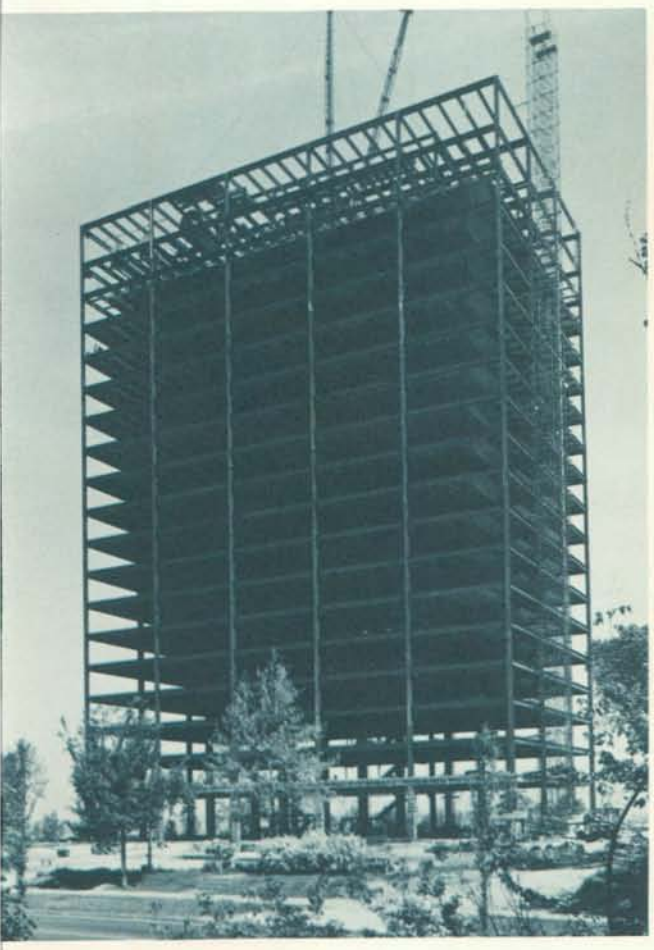
Owner: Business Men's Assurance Company of America, Kansas City, Missouri

Structural Engineer: Skidmore, Owings and Merrill, Chicago, Illinois

General Contractor: Winn-Senter Construction Co., Kansas City, Missouri

Steel Fabricator: Kansas City Structural Steel Co., Kansas City, Missouri

ARCHITECTURAL DESCRIPTION: A 19-story, high-rise building of contemporary design faced with white Georgian marble. Outside set-back wall panels, gray tinted glass. The 6600-ton, welded frame of new, high-strength steel reflected a considerable reduction in tonnage and lower costs in foundation construction, and allowed wider spacing of columns, resulting in more usable space.



JURORS' COMMENTS: *"Simple and clean, and the way the architects handle the windows by recessing adds a lot of character to the building. The windows are set right into the concrete but they are set back of the face. By pushing the windows back you produce a very emphatic statement of the structure. The siting and the plaza for the building is simple and well conceived. It is impeccably detailed."*

JURORS' COMMENTS: *"An excellent expression of structure, beautifully detailed The refinements of the building are unique even for Yamasaki's work. It is in a commanding position overlooking the river and is very simple in design so that you grasp it immediately. Proportions are beautiful, particularly as opposed to the average building surrounding it on the waterfront. It acts as a signpost for downtown Detroit, as a beautiful symbol of the new city, tying in with the convention center there as well as with the older buildings."*

Architects and Structural Engineers: Minoru Yamasaki — Smith, Hinchman & Grylls
Associated Architects & Engineers, Detroit, Michigan

M chigan Consolidated Gas Co. Office Building, Detroit, Michigan

Owner: Michigan Consolidated Gas Co., Detroit, Michigan

General Contractor: Bryant & Detwiler Co., Detroit, Michigan

Steel Fabricator: American Bridge Division, United States Steel Co., Detroit, Michigan

ARCHITECTURAL DESCRIPTION: The new 28-story building rises 436 feet above the Detroit Civic Center. Constructed on a square plan (four 30'-4" bays per side), the tower encloses 450,000 square feet of floor space within pierced white precast panels. The slender grace of its design impressed imposing requirements on the structural frame, which, within the limits assigned to its members, could be pragmatically met only with welded structural steel. (Some of the fabricated 2'-0" square columns at the structure's base carry a vertical load of over 6½ million pounds.) The column spl ces and beam connections are butt welded, providing a continuous frame to withstand wind forces in addition to the large vertical loads. The floor beams support a light-weight concrete "waffle" floor slab whose bottom ribs form a grid for the louvered ceiling and flexible partition system.

American Institute of Steel Construction

101 Park Avenue, New York 17, N. Y.