# ARCHITECTURAL AWARDS OF EXCELLENCE 1962

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

## **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 with steel construction. This year a distinguished jury selected from nearly a hundred entries fourteen buildings representing the best architectural expression in structural steel.

In the opinion of the AISC Committee on Awards, each building represents design to the highest standards. All Awards are equal in stature. Therefore, the thirteen 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 a continuing program.

# JURY OF AWARDS

#### ROBERT W. CUTLER, FAIA

Skidmore, Owings & Merrill New York, New York

#### GEORGE EDSON DANFORTH, AIA

Department of Architecture and City Planning Illinois Institute of Technology Chicago, Illinois

#### JOHN T. GRISDALE, FAIA

Carroll, Grisdale & Van Alen Philadelphia, Pennsylvania

### WILLIAM J. LeMESSURIER

Wm. J. LeMessurier & Associates, Consulting Engineers Boston, Massachusetts

#### JULIAN WHITTLESEY, FAIA Whittlesey & Conklin New York, New York



#### Architect: Anshen & Al en, San Francisco, California

Internationa Eui ding, San Francisco, California Owner: Natomas Company Structural Eng meers: Gould & Degenkolb and Robert D. Dewell General Contractor: Dinwiddie Construction Company Steel Fabricator: Bethlehem Steel Company

The jury praised the sophisticated plan developed from the air rights as well as its structural soundness for an earthquake area. The spirit of the Chinese environment in which the building sits was enhanced through the use of modern steel cantilevers.

The building is adjacent to a public park and contains underground garage space for 1400 cars. Air rights were used to insure light and air on all sides and a connection with the park to the west. The 17-ft-length of the cantilevers was established as the maximum which could be attained without any premium in cost, and the cantilever construction established the basic outline of the structure.

#### Architect: Ballard, Todd and Snibbe, New York, New York

Tennis Pavilion, Princeton University. New Jersey Structural Engineer: Peter W. Bruder, P.E. General Contractor: Matthews Construct on Co. Steel Fabricator: The Standard Iron Works

 $\mathbf{D}$  esigned as a central point among the tennis courts, the pavilion was considered "delightfully decorative and fanciful, romantic and playful — in the spirit of the game" by the jury.

The architectural expression is achieved with light steel construction in order to create an atmosphere consistent with the feel of tennis courts, backstops, and other tennis paraphernalia. The main part of the pavilion is raised above the level of the tennis backstop for a better view of all the courts.



#### Architect: Cowell and Neuhaus, Houston, Texas David Haid, Associate

McAllen State Bank, McAllen, Texas Structural Engineer: Harold B. Horton General Contractor: W. D. Ferguson & Sons Steel Fabricator: Campbell Steel Company, Inc., subsidiary of Mosher Steel Company

HARPER LEIPER STUDIOS



T he jury called this "an excellent example of straightforward steel construction." They praised "the well-coordinated plan, with its high ceiling (18 ft) and simple, direct use of steel."

A raised platform covers the entire 250x130-ft site. The welded steel frame on a 24x36-ft kay system is exposed throughout — the mill shapes providing an aesthetic lightness to the structural frame which was chosen for its economy of cost and erection time and a minimum of wasted floor space.





#### Architect: Davis, Brody and Wisniewski, New York, New York

Philip Drill House, West Orange, New Jersey Structural Consultant: Wiesenfeld, Hayward & Leon General Contractor: Max Drill, Inc. Steel Fabricator: Interstate Iron Works

The jury praised the house "not truly as an expression of steel, but for detailing the steel for the excellent use of other materials."

The site is a deep, narrow plot with an elevation that permits a handsome view of the New York skyline. The house is divided into upper and lower levels with the living room facing east. For privacy, open glass areas are protected by redwood grilles.

The steel frame is composed of star columns consisting of four steel angles spaced two inches apart. The beams are built-up tubes of two steel plates with continuous bar separators. The tubes are placed between the angle columns forming a frame which permits complete freedom of planning within the structure at the upper level since there are no inside columns. The lower level acts as a carport and has also been framed with star columns. Since the steel angles of the columns do not come in contact with each other, light is allowed to pierce them, creating an appearance of lightness and yet of structural stability.



ALEXANDRE GEORGES





JOSEPE W. MOUTOR

#### Architect: Harrison & Abramovitz, New York, New York

Gateway Number Four, Pittsburgh, Pennsylvania Owner: Equitable Life Assurance Society of the U.S. Structural Engineer: Edwards & Hjorth General Contractor: George A. Fuller Company Steel Fabricator: American Bridge Division, United States Steel Corporation

T his is a multi-story office building which, in the words of the jury, "speaks steel — you can feel it." The jury praised the excellent plan and core system and called the structure a "proper solution of aesthetics and economize for high-rise steel construction."

Building construction is a steel frame with cellular steel floors. The office tower has a curtain wall of glass and stainless steel mullions; the service tower is clad with stainless steel panels.



SHEEDY & LONG



Arch tects: Charles Luckman Associates, Coordinating Architects. Los Angeles, California Welton Becket & Associates, Los Angeles, California Paul R. Williams & Associates, Los Angeles, California

> Service Station for Standard Oil Company of California, Los Angeles International Airport

Structural Engineers: Richard R. Bradshaw, Inc. and S. B. Barnes & Associates General Contractor: Miller & Miller Steel Fabricator: Madison Builders, Inc.

 ${f T}$  he jury praised the circular structure as "a logical solution for a steel roof . . . particularly attractive from the air."

The canopy is composed of a large circular box-beam supported by four columns. The system supports a radial pattern of tapered steel plate girders cantilevered and balanced at their approximate mid-point on the ring beam. Radial, inverted high-rib steel decking completes the roof surface and provides its own waterproofing. The circular irree-standing structures under the umbrella are framed with the same steel decking used for structural walls and exposed as the interior finish.

#### Architect: Mitchell and Ritchey, Pittsburgh, Pennsylvania

Pittsburgh Public Auditorium

Set and Vertially Owner and General Contractor: Public Auditorium Authority of Pittsburgh and Alegheny County

Structural Engineen: Ammann & Whitney

Steel Fabricator: American Bridge Division, United States Steel Corporation

The jury called the unique arena "as clean and logically designed as a piece of machinery." They felt that the great cantilever supporting the moving roof was well handled — a massive, yet delicately balanced arm supporting the moving roof leaves.

The unique feature of the Auditorium is its steel-framed and stainless steel-sheathed retractable roof—the largest retractable dome in the world. The structure is nearly circular in plan, about 415 ft in diameter and 150 ft high at the center. The dome is divided radially into eight, 45-degree sections, six mowable and two stationary.

The main structural members of the leaves are steel radial ribs fabricated from 30-in.-deep wide flange beams. Each rib is composed of a series of straight sections mitered and butt-welded together to follow the dead load string-polygon of the rocf. All eight leaves are supported at the crown by an exterior triangular steel space frame that cantilevers from outside the dome.





JULIUS SHULMAN

#### Architect: Murray-Jones-Murray, Tulsa, Oklahoma

Sts. Feter and Paul Church, Tulsa, Cklahoma Structural Engineer: Netherton, Dollmeyer and Scinok General Contractor: Wickersham Construction Company Steel Fabricator: Patterson Steel Company

A lmost complete separation of facilities for communal worship and private devotion is attempted in this church. The prominent altar of sacrifice is the very heart of the entire environment; elevated accessible from all sides, and emphasized by contrasting rear wall. The Blessed Sacrament altar and facilities for private devotion are grouped in a rather intimately scaled chapel to the right of the nave.

The church is framed with structural steel which is expressed in both the interior and exterior. Metal deck and insulating concrete-fill form the roof. Steel was selected as a reflection of our technical age, used according to its true nature. The jury called it "a simple, direct structural system designed for this industrial age."





BET NEWBY



#### Architect: Murray-Jones-Murray, Tu sa, Oklahoma

Tulsa Municipal Airport Terminal Building Owner: Tulsa Airport Authority Consulting Engineer: David R. Graham and Associates, Inc. General Contractor: W. R. Grimshaw Company Steel Fabricator: Patterson Steel Company

T he jury cited this as a "simple, direct and rather exciting plan for an airport building — an excellent use of steel for framing."

The clear separation of airline facilities from passenger conveniences is basic to the scheme. An attempt was made to tring automobile traffic as close as possible to the concourse and to provide for direct passenger movement between ticketing and aircraft without forcing passengers through the concession-waiting area. The fingers themselves are designed for future direct second-level passenger loading.

The terminal building is framed with structural steel and bar joists. Metal deck supports concrete fill on floors and zonalite fill on roofs. The exposed steel framing is expressed on both the exterior and interior of the building.



#### Architect: Neuhaus and Taylor, Houston, Texas

Office Building for the Holland Mortgage and Investment Corporation and the Fidelity-Southern Fire Insurance Company, Houston, Texas Structural Engineer: Nogt and Clouse General Contractor: W. R. Grimshaw Construction Co. Steel Fabricator: Fabricated Steel Products

 $T_{\rm he}$  jury cited the excellent plan for this small office building and its decorative, carefully detailed steel frame.

The square building has an eight-foot-wide covered walk around the perimeter. An arcade of columns composed of a cluster of four  $1\frac{1}{2}$ -in. galvanized and painted T-section arch and a six-incle channel section fascia. Because of the nature and size of the building, the steel frame structural system was utilized for economy.

F. WILBUR SEIDERS



#### Architect: Richard J. Neutra, FAIA, and Associates, Los Angeles, California The Garden Grove Community Drive-In-Church of the Reformed Church in America, Garden Grove, California Structural Engineer: Eugene Birnbaum General Contractor: John E. Snyder Steel Fabricator: Grano Steel Corporation



A unique feature of this motor-age church is that 600 cars can park within sight of the minister and tune in to the services through individual listening devices — an innovation that developed from the congregation's use of a drive-in theatre before the church was built.

The jury praised the structure which was so imaginatively engineered for the motor age. Jurors also liked the beautifully detailed steel and glass.

Sixteen steel bents are economically dimensioned to form a "visual fugue" while the graceful bell tower rises towards the clouds as a marker in the landscape.



AMIR H. FARR





CORTLANDT V. E. EUBBARD

#### Architect: Nolen and Swinburne, Philadelphia, Pennsylvania

Johnson Hall Dormitory for Men Temple University, Philadelphia Pennsylvania Structural Engineer: Seven d-Elstad-Krueger Associates General Contractor: 3. Born stein & Son Steel Fabricator: Bethlehem Steel Company

Part of a master plan for the development of the entire university, the eleven-story structure was praised by the jury for the organized, compact plan that coordinates sleeping, study and social areas. The jury also liked the excellent use of steel in the sunshade hung from the building's steel frame.

Large public use spaces are at ground level and below; service and maintenance traffic are physically separated from student traffic. Ten sleeping floors are serviced by single loaded corridors facing exre facilities.

#### Architect-Engineer: Reid Rockwell Banwell & Tarics, San Francisco, California

Aragon High School, San Mateo, California General Contractor: Rothschild, Raffin & Weirick, Inc. Steel Fabricator: Pittsburgh-Des Moines Steel Company

"Well planned, well sited on a hillside, excellent use and expression of steel," the jury said.

The building is characterized by rigorous use of module for structural, mechanical and finish. The owner requested complete flexibility of space. All partitions and exterior wall assemblies are capable of relocation or rearrangement of parts.

The construction is steel frame, steel roof deck and concrete floor on grade except over locker and shower areas. Steel Vierendeel trusses provide lateral resistance in gymnasia and little theatre frames, Cantilever steel columns provide lateral resistance in classroom areas.



ROGER STURTEVANT



#### Architect-Engineer: Skidmore, Owings & Merrill, Chicago, Illinois

General Offices for the Upjohn Company, Kalamazoo, Michigan General Contractor: O. W. Burke Company Steel Fabricator: Whitchead & Kales Company

 ${f T}_{
m his}$  excellent example of the influence of a structural space frame on architectural expression won the praise of the jury.

An extensive program study of functional requirements resulted in a two-story building, 432 ft square (or a 6x6-ft module), with interior upper and lower level courts to fulfill aesthetic and functional criteria.

The upper level roof structure consists of a fireproofed steel space frame of pyramidal configuration spanning a 43x48-ft bay. The frame is made up of large prefabricated sections composed of welded steel tees and angles. This frame and its form are the results of an effort to provide a light spanning structure for large bays and the integration into its form of a concealed fluorescent general lighting system. The upper level floor structure is a system of open web plate girders and wide flange beams spanning the bay.





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