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 named thirteen buildings for Architectural Awards of Excellence. In the opinion of the AISC Committee on Awards, each building represents design of the highest standards, and all awards are equal in stature. The award-winning architects are listed on the following pages with pictures of the buildings for which they received commendation.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

Photo Credits
Federal Reserve Bank of Minneapolis
Balthazar Korab
Frank B. Hall & Co., Inc. Office Building
Joseph W. Molitor
National Airlines, Inc., Hangar No. 2
Wray Studio
Studio
Bill Hedrich, Hedrich-Blessing
The Hillier Group Building
John Brefach
Headquarters Building for The Progressive Farmer Company
Gordon H. Schenck, Jr.
Homestead Federal Savings and Loan Association
George Cserna
United States Pavilion, Expo '74
Chas. R. Pearson
Seattle Center Covered Walkways
Marsha and Michael Burns
Paramus Park Shopping Center
Roger Miller
Downtown Mall
Joel Strasser
Control Center for Power Plants
Daniel Bartush
Jury of Awards

From left to right:

WILLIAM L. PEREIRA, FAIA
William L. Pereira Associates
Planners, Architects, Engineers
Los Angeles, California

ROY O. ALLEN, FAIA
Design Partner
Skidmore, Owings & Merrill
New York, New York

MAXWELL G. MAYO, AIA
Associate Professor
Department of Architecture
Carnegie-Mellon University
Pittsburgh, Pennsylvania

BYRON L. NISHKIAN, F.ASCE
President
Nishkian, Hammill & Associates, Inc.,
San Francisco, California

WILLIAM MARSHALL, JR., FAIA
President
The American Institute of Architects;
Principal
McGaughy, Marshall & McMillan
Norfolk, Virginia
1974 Architectural Awards of Excellence

GUNNAR BIERKERTS AND ASSOCIATES
Federal Reserve Bank of Minneapolis

MAURICE A. CAPOBIANCO
FLEAGLE AND KAEYER
Frank B. Hall & Co., Inc. Office Building

GREENLEAF/TELESCA
KELLERMANN & DRAGNETT, INC.
National Airlines, Inc., Hangar No. 2

DAVID HAID
Studio

J. ROBERT HILLIER
The Hillier Group Building

JOYA/DANIELS/BUSBY
Headquarters Building for The Progressive Farmer Company

RICHARD LEVIN ASSOCIATES INC.
Homestead Federal Savings and Loan Association

NARAMORE BAIN BRADY & JOHANSON
United States Pavilion, Expo '74

PAGE SOUTHERLAND PAGE
Page Soutlerland Pagc Headquarters Building

THE RICHARDSON ASSOCIATES
Seattle Center Covered Walkways

RTKL ASSOCIATES INC.
Paramus Park Shopping Center

THE SPITZNAEL PARTNERS INC.
HERB BALDWIN
Downtown Mall

ROBERT L. ZIEGELMAN
Control Center for Power Plants
"This is a courageous design, completely honest in appearance, imaginative, and highly innovative."—Jurors' Comments
Architect
Gunnar Birkerts and Associates, Birmingham, Michigan

Project
Federal Reserve Bank of Minneapolis, Minneapolis, Minnesota

Structural Engineer
Skilling, Helle, Christiansen, Roberts
Seattle, Washington and New York, New York

General Contractor
Knutson Construction Company, Minneapolis, Minnesota

Steel Fabricator
The Maxson Corporation, St. Paul, Minnesota

Steel Erector
Allied Structural Steel Company, Industrial Construction Division
Minneapolis, Minnesota

Owner
Federal Reserve Bank of Minneapolis, Minneapolis, Minnesota

This unique “banker’s bank” was conceived as two distinct buildings to meet the unusual space and security requirements of the Federal Reserve System. Under the 2.5-acre plaza are the “high security” portions of the bank (99,000 square feet) and employee parking for 280 cars (100,000 square feet). Rising from the plaza is the “non-secure” 11-story office tower (267,000 square feet). The design was required to permit a 50 percent expansion of the office portion, more than the area normally permitted for the site.

Built like a bridge, the office tower free spans 275 feet above the plaza, with all floors entirely open. The tower columns do not penetrate the intricate random structure of the “high security” portion below.

The entire structural wall forming the long facade of the building is composed of the primary catenary (made of welded steel plate, wide flange sections and post-tensioned cables), with wide flange columns above and flat steel hangers below. The floor planes of steel deck and concrete act as horizontal clamps, providing horizontal bracing for the structure. In the transverse directions the supporting end cores provide the necessary lateral bracing. All floor loads are transferred from the catenary to the main supporting end cores, with the horizontal component taken by a 28-foot deep trussed strut.

Provisions have been made in the design for a six-story addition using arch construction atop the 11-story building.
"Here is a sensitive, straightforward design, skillfully detailed and executed. The structure has been carefully fitted to its sloping site."—Jurors' Comments
Situated on an elegant 10-acre suburban estate, this corporate headquarters is the first office building to go up in an established residential community. The building has a paint-exposed structural steel frame. A reflective glass facade mirrors the handsome site. The shape of an existing pond enhances the building and contains runoff during heavy rains.

Placement of the building at the rear of the property, along with the low profile of the structure, provides maximum privacy and preserves the residential appearance of the community. The cost of the building came to less than $35 per square foot.
The semicircular building design with a cantilevered hangar roof was determined by a small site and the necessity for the facility to accommodate various types of aircraft. The radial configuration permits the circumference of the building and its maintenance area to be free of columns or other obstructions; it requires 20 percent less floor area than an equivalent rectangular building.

The ground floor covers 215,000 square feet, with 160 square feet of unobstructed maintenance area, and it can accommodate two 747's and one DC-10 with various other combinations of smaller aircraft. Maintenance access is via work crew platforms suspended from eight 3-ton bridge cranes, as well as from pivoting monorails serving the forward sections of the planes. A 200-foot diameter 11-story central administrative office and maintenance tower core plus two 5-story wings comprise a counterweight for the hangar's 212-foot long cantilevered roof. The cantilevered trusses are 52 feet deep at the 100-foot radius. The top chords slope slightly to the 200-foot radius where the slope steepens to aid in rainwater runoff. The bottom chords step upward at the 175-foot radius from a height of 64 feet to a height of 87 feet, 4 inches, where it stays constant to the outer edge (312 feet from the center). At this point, the truss is only 16 feet deep.

The structure is designed to withstand winds of 130 mph. The 85-foot high motorized doors can enclose the hangar and act as tie-downs for the cantilevered hangar roof to limit deflection during hurricane-force winds.
"This is an imaginative, strikingly attractive design. The structure is outstanding, both architecturally and from an engineering standpoint."
—Jurors’ Comments
Architect
J. Robert Hillier, Princeton, New Jersey

Project
The Hillier Group Building, West Windsor, New Jersey

Structural Engineer
Paulus and Sokolowski, Watchung, New Jersey

General Contractor
Donalc N. Armstrong, Cranbury, New Jersey

Steel Fabricator/Steel Erector
Vernor Fabricating Co., Inc., Robbinsville, New Jersey

Owners
J. Robert and Susan B. Hillier, Princeton, New Jersey

The architect was confronted with a flood plain swamp site on which to build a totally flexible working environment for a design firm employing forty to fifty people, and a future growth projection of seventy-five people.

Due to poor soil conditions at the surface and the flood plain law which precluded the changing of any grades, a large span elevated structure was conceived. Given these parameters, steel was selected as the most cost effective material for the frame.

The building is "fused" from four major corner columns. The offset of the columns makes the building appear larger than its actual size and puts it in scale with the surrounding fields and the speed of passing vehicles. Parking for fourteen cars is below the building.

The building is a two-story high loft with exposed steel structure and deck. As growth requires it, future mezzanine decks can be installed in certain areas using the center steel columns.

The service core areas are a separating element between visitors and the totally open office operations. However, clients waiting in the lobby feel psychologically and aesthetically within the office.
"This is a bold, imaginative design. The four major columns and extended mezzanine create an exciting interior atmosphere with total flexibility."
—Jurors' Comments
The new headquarters of the Progressive Farmer Company exemplify the editorial policies of its two magazines—environmental and ecological concerns and good contemporary design. The three-level, 46,000 square-foot building is located on a beautifully wooded three-acre site that slopes evenly upward some 35 feet from its street frontage. To hold disturbance of the nature, contour and vegetation to a minimum, the three-level building is set well back on the site, with a two-level parking structure set on the rearmost portion and cut slightly into the slope, allowing access to its upper level at natural grade from the driveways on both sides of the site. Primary access to the building is from the upper parking level, across a bridge through the upper limbs of an immense oak tree, to the upper or third level of the building.

The upper level houses the magazine offices and is the largest and most public of the three levels. The middle level is considerably smaller and the lower level somewhat smaller still. The inverted pyramid of the section accomplishes two important design objectives: actual ground coverage of the building is held to a bare minimum, while future expansion may occur within the existing structural frame under the broad overhang of the upper level.

The exposed skeleton, which is both structure and skin at the building's perimeter, is infilled with semi-reflective glass held in tee-section painted steel frames with neoprene gaskets, or with prefabricated foam core metal panels with weathering steel face sheets set in similar tee-section frames. The extensive glass areas on the upper level are protected from the sun by channel frame sunshades with break-formed blades suspended from strut beams that project from the fascia.
Vertical beams reaching 45 feet to the roof and extending five feet beyond cantilevers provide a new image and improved visibility for this small savings and loan bank, located at an intersection of two one-way streets.

Triangular in plan, the visual free-standing diagonal front wall is a giant stainless-steel billboard reflecting a landscaped plaza by day and kinetic city lights by night. The plaza is a continuation of standard city sidewalks with a brick collector along the curb around the trees and fountain. A planting strip adjacent to the diagonal wall accommodates a changing display of flowers. Entry is provided through a 45-foot arcade. The lobby utilizes soft colors in contrast to the hard slick exterior.

A clean roof and receptive clients allowed a little fun in the form of roof graphics. In addition to becoming a city landmark immediately after completion, the structure is now the main attraction from the tower across the street.
An excellent design of a small urban bank that can successfully cope with tall buildings nearby. The architect has created a corner park that is a great concession to open space in a city setting."—Jurors’ Comments
"An exciting use of steel in tension to provide a unique sculptural form well suited to its function and setting."—Jurors' Comments
The architects' assignment was to provide a temporary economical cover of contemporary design for a large exhibit area, to design a pavilion for temporary use (but include one permanent building), and to leave an attractive landscaped area after the pavilion closes.

They began with the concept of a canopy shape that would be a strong statement of form, but would also express the environmental theme through conserving materials and energy.

With a fast track schedule of just 15½ months for design and construction and with the requirements for an economical and lightweight structure, a steel cable framework was chosen for the pavilion. The cover would provide adequate protection from the weather, but could be easily removed after the fair.

The solution is a large, translucent roof of coated fabric spanning 280 feet by 320 feet and supported from a stressed cable network. The network is suspended from a crown ring and a 152-foot high slender mast and is anchored to perimeter concrete piers with 145-foot open arches on each side for pedestrian circulation and views. The grade is bermed up to the exterior walls, so that the soft-shell curve of the roof is a visual extension of the berms. Two theaters (one with a 90-foot wide by 65-foot high screen) are placed underneath the soft-shell fabric, along with 20,000 square feet of display space. At the opposite end is a permanent building, placed beneath the berm. The landscaping in and around the pavilion utilizes indigenous materials.
Major influences on the 18,500 square-foot building’s design were a creekside location, the desire for maximum natural light, and flexibility to expand with minimum remodeling cost. A modified form of “open” office planning was selected as the best interior arrangement for the 100-person architect/engineer firm.

The exterior of the building was conceived as a glass and steel envelope in the International Style. This approach was selected for its aesthetic timelessness, honesty of form, speed of steel construction, and for its capacity to “bring the outdoors in.” Reflective glass on the West and South reduces heat load and mirrors oaks and hackberry trees in the creek and beside the building. These reflections of greenery, disrupted little by the thin, flat-black steel structure, were planned to soften visual impact on the surrounding environment. Natural light and views into the trees permeate the interior.

To similarly reduce the building’s impact on the creek bank environment, exposed piers were used for the foundation instead of extensive earth filling and concrete retaining walls.

It was the intent that every element of the facade have a structural purpose—even the window frames bear weight. In fact, there are no true window frames as such, with the one-quarter-inch thick glass panels being “zipped” in between steel verticals using neoprene rubber gaskets.
"This is an excellent example of exposed steel construction, carefully detailed and well executed. The use of steel as an architectural expression is reflected throughout the structure."

—Jurors' Comments
"These covered walkways interestingly tie the buildings together visually. They provide pedestrian protection yet do not give the sense of an enclosure. They are very well done, attractively designed, nicely detailed. —Curators' Comments
Architect/Engineer
The Richardson Associates, Seattle, Washington

Project
Seattle Center Covered Walkways, Seattle, Washington

General Contractor

Steel Fabricator

Steel Erector
Sound Steel Service, Seattle, Washington

Owner
Seattle Center, Seattle, Washington

Steel and glass were combined to provide a system of noncombustible covered walks between recreation, performing arts, convention and restaurant facilities, and the monorail link to the central business district.

By manipulation of the transparent cover's width, this combination was placed on existing tree-lined walks in a manner that allowed for continued appreciation of the landscape. With Seattle's mild winters, this significant addition to the Center has encouraged a greater year-round use of the existing facilities by both local and out-of-town groups.
Located on a 60-acre site, this completely enclosed, air-conditioned shopping mall accommodates over 100 specialty shops and two major department stores, one at each end of the complex.

A "park" theme is followed throughout the mall. The central court, the largest of five special theme courts, features a man-made waterfall, a generous tropical landscaping, a terraced pedestrian walkway to the top, and a glass enclosed elevator. The waterfall, flanked by two escalators, spanned overhead by 120-foot long, 13-foot deep steel trusses and a glass roof, provides a focal point from which it climbs. Common seating areas, many covered by colorful umbrellas, provide a unique vantage point in viewing the activity below. The glass enclosed elevator, although rising only one level, provides access to the mezzanine level for the handicapped and for mothers with strollers.

Enroute to either of the two department stores, the shopper passes through other theme courts featuring: an antique clock; a sunken children's play area with sliding boards and timber climbing blocks; and a weathering steel sculpture of an Indian boy and a wild turkey, reflecting the area's early heritage. The courts and the malls incorporate over 50 trees and 1,000 individual tropical plants in many different varieties.
"This attractive complex offers a great deal of variety and interest. There is a stimulating indoor-outdoor relationship created by the visual play of light, glass, steel, and interior greenery."—Jurors' Comments
"This conversion of a city street to a pedestrian mall is bold, interesting, nicely detailed, and complemented by imaginative landscaping. It is an excellent urban design solution." — Jurors' Comments
This downtown mall instills a new vitality into the City's heart by capturing the small town quality that still prevails. It is a recreation of the "street scene" in a new vernacular. The auto has been abolished, the store fronts are still there, but the space outside has been articulated to provide more relationships between shopper and merchant.

The spatial framework of the mall is composed of three basic elements, buildings, trees and architectural canopies. Within these spaces lights, benches, play structures and kiosks provide further delineation of space and overall spirit.

As the trees were selected to provide a variety of shade and shelter and softness, so were the steel framed architectural canopies designed of varying heights and sizes with pyramidal plexiglass roofs to shed the elements, filter the sun and give a sense of honest structural solidity.

An additional design factor was the requirement to provide a fire lane through the mall for access by the City's largest fire fighting equipment. This was subtly achieved by routing the equipment through and under the tallest canopies and around the smaller ones.
These transportable modules for computers are both building enclosures and shipping enclosures, housing electronic apparatus and human operators for the automated control centers of varying size power plants throughout the northern hemisphere.

The basic structure consists of a rigid structural steel frame 12 feet wide by 49 feet long by 10 feet high, divided into standard vertical and horizontal sub-bays. Each module is self-sufficient for lighting, heating, air conditioning, computer hook-up, and as a shipping container. Any number of the standard building units can be combined to facilitate use as 50, 100, 260, 500 and 1000 megawatt control centers with office space modules as needed.

The modules are designed to withstand the effects of earthquakes and hurricanes. The basic controller consists of three standard modules for a 260 megawatt power plant control center. All electrical wiring for both lighting and computers run in ceiling chases.

"A skilful and positive design. This portable pre-fab building is simple, yet flexible in application, and relates nicely to a variety of locations."—Jurors’ Comments