



# The Artsgarden at Circle Center

**S**ITTING 17' ABOVE A MAJOR INTERSECTION IN DOWNTOWN INDIANAPOLIS is the new Artsgarden. A domed glass atrium, the building curves 95' above street level (equal to seven stories) and is 118' in diameter. The architectural marvel serves as both a venue for the arts and also acts as a bridge connecting the retail buildings on three of the intersection's corners, along with a park on the fourth corner.

Owned and operated by the Arts Council of Indianapolis, the

glass building and central location makes it the perfect spot to promote cultural and arts activities. Each day, at least 10,000 people are estimated to walk through the building, bringing exposure to the programs offered at the Artsgarden. The building adds a new dimension to the blossoming arts scene in Indianapolis.

There are over 300 events a year held at the Artsgarden. Some of the events at the atrium include art exhibits, visual arts



*The Artsgarden is supported by two 185'-long steel plate girders spanning each direction across the intersection. The top of the dome soars some 95' above the street.  
Photo (above and opposite page) by Timothy Hursley*

and craft exhibitions, music, theater and dance presentations, lectures, films, readings, artists-in-residence, educational projects, fairs and festivals. The building can house up to 600 people standing, 400 people seated for a performance and 250 people seated at tables. It also acts an information center for other art and cultural events in Indianapolis by providing calendars, schedules, maps, directories, and other information.

Even those not there for a per-

## Project Team

*Structural Engineer:*

Weiskopf & Pickworth LLP, New York City (AISC Professional Member)

*Architect:*

Ehrenkrantz & Eckstut Architects, New York City

*Construction Manager:*

DeMars Program Management, Indianapolis

*Owner:*

Simon Development Company, Indianapolis

*Steel Fabricator:*

The Kilroy Structural Steel Co.

*Steel Erector:*

Runyon Erectors

*Steel Detailers:*

Associated Drafting Service, Inc.



*The dome takes its shape from a steel-framed skylight consisting of a series of circular arch trusses with pipe section chords and tie rod diagonals. The chords of each truss converge to a single pipe column ringing the perimeter of the Artsgarden space.*

*Photo by Timothy Hursley*



*The Artsgarden is the central civic element in a city that boasts many remarkable public spaces. This nighttime photo shows the headlights of traffic flowing under the Artsgarden. Note the sloped glass at the base of the smallest arch, which creates a more circular floorplan.*

*Photo by Timothy Hursley*

formance can enjoy the Artsgarden as they relax in the sunlight under a grove of Black Olive trees. Movable café chairs and tables also provide visitors with a place to socialize.

Lilly Endowment, Inc. funded the project, which cost \$12 million. The structure, which encompasses 19,000 sq. ft. (including bridges), utilizes 1.1 million pounds of steel in addition to 32,000 sq. ft. of glass.

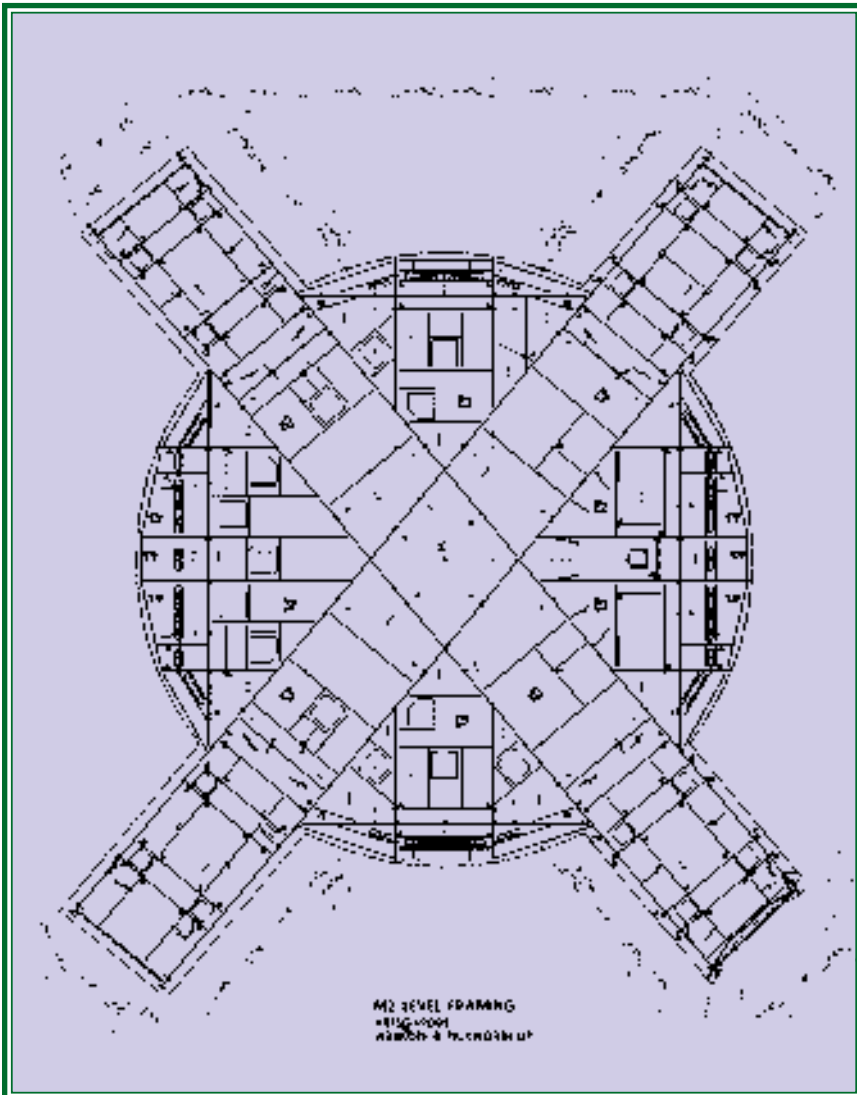
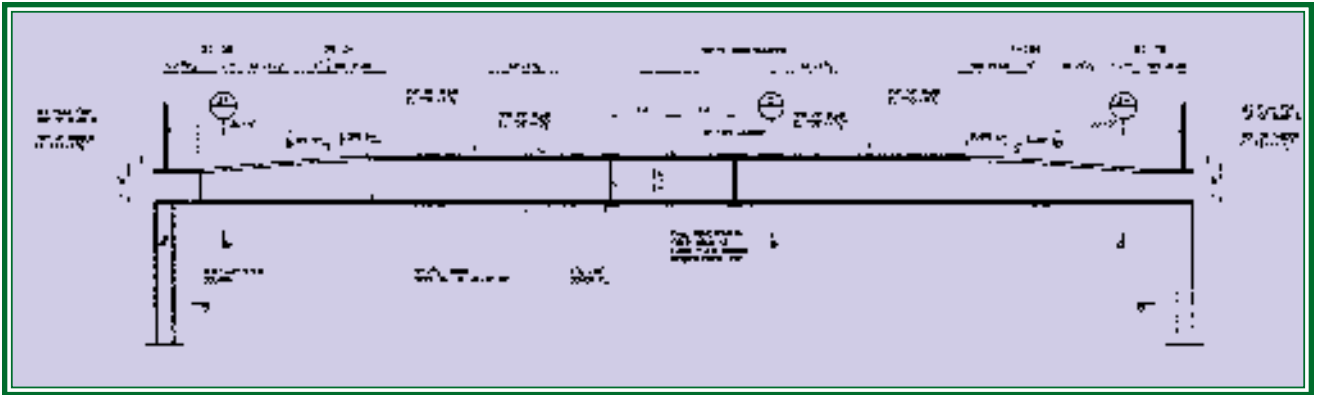
In order to create an open, airy feel to the structure, hollow structural sections with elegant designs were used to create semi-circular arch trusses. Reaching up 75' above the floor level, the dome has a 110' column-free span.

A series of arched trusses support the skylight roof of this structure. The trusses have HSS chords, verticals and diagonals with tie rods acting as lateral braces between the trusses. The chords of each truss rise from a single pipe column. These columns form a ring at the perimeter of the Artsgarden space. The lighting and sound canopy is suspended from the arches, forming a cloud-like illusion.

### HSS COLUMNS

The surrounding buildings did not have the additional capacity to support the new "bridge" across the intersection. In order to tie together the four corners, the designers supported the dome on built-up plate girders that span 185' diagonally across the intersection – two in each direction. Columns either embedded within the surrounding buildings or freestanding at the stair tower that leads down to a neighborhood park support these girders.

The eight support columns were built up from plates up to 2½" thick to form 28" square box sections. None of the columns interfere with the intersection or pedestrian walkways. Also, with 17' clearance below the Artsgarden, there is plenty of room for truck traffic.



Lateral support below the floor of the Artsgarden is through moment connections, while diagonal bracing was used in the dome itself. The stepped profile of the structure allows more light and air to the street, along with extensive lighting to enhance the environment below.

The Artsgarden is a part of an on-going effort by the city to revitalize the downtown area. It now serves as the bridge between the new Circle Centre (see April 1997 *Modern Steel Construction*), which contains 970,000 sq. ft. of retail, parking and entertainment, the Claypool Shops and Merchants Plaza. The fourth corner links to a public park, connecting the Artsgarden to Indianapolis Monument Circle.

The Arts Council said that the building's visibility has already increased interest in their programs, as well as improving the credibility of the arts.

The Artsgarden structural also acts as bridge linking the buildings on the intersection's four corners. The bridges are supported by three pipe columns as they converge with the glass dome.

At the outer ends, the bridges are supported either on columns embedded within the buildings or on freestanding columns with stairs.

The dome itself reaches 75' above the floor level and boasts a 110' column-free space.