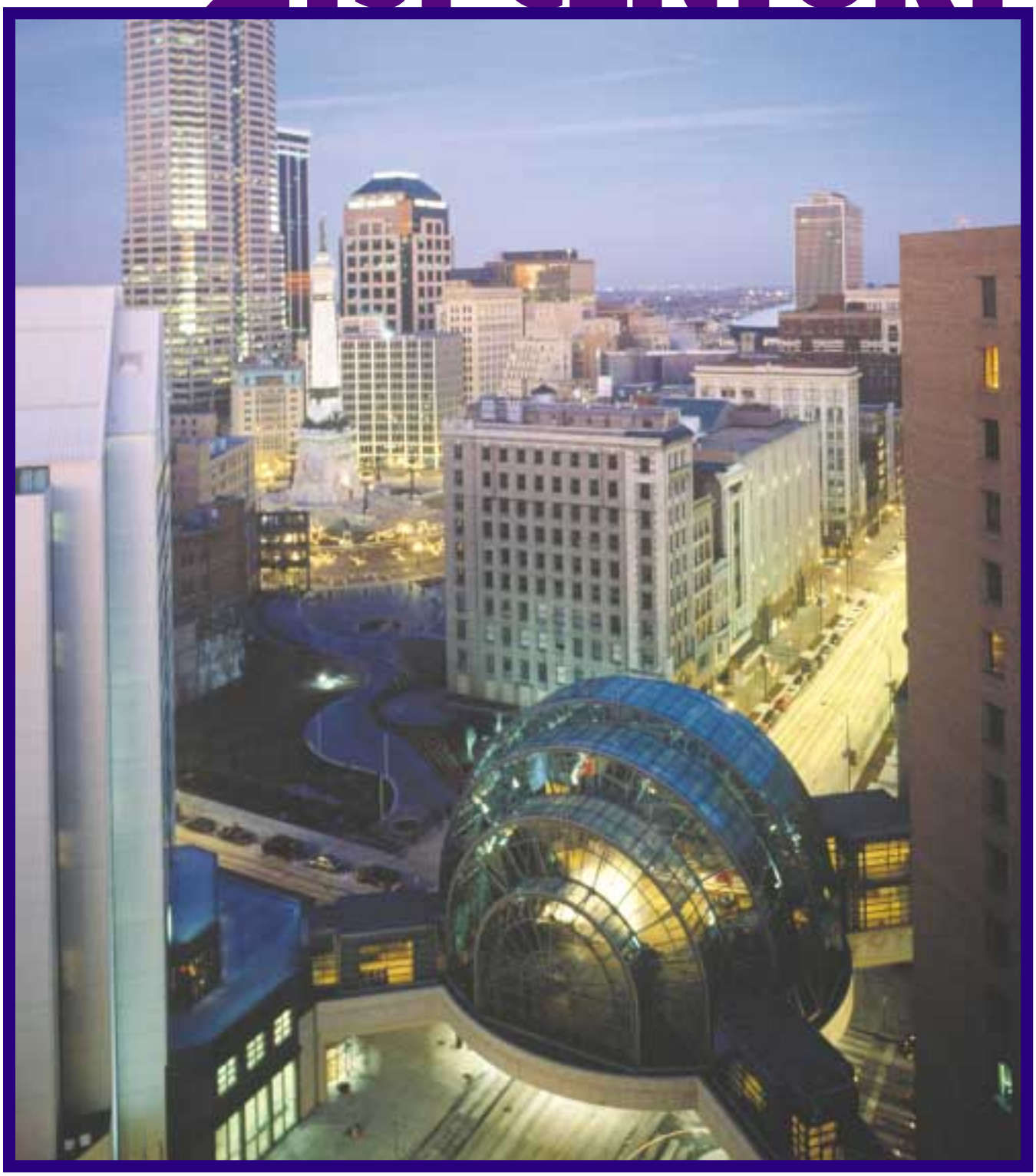
HSS: DESIGNS FOR THE 21st CENTURY



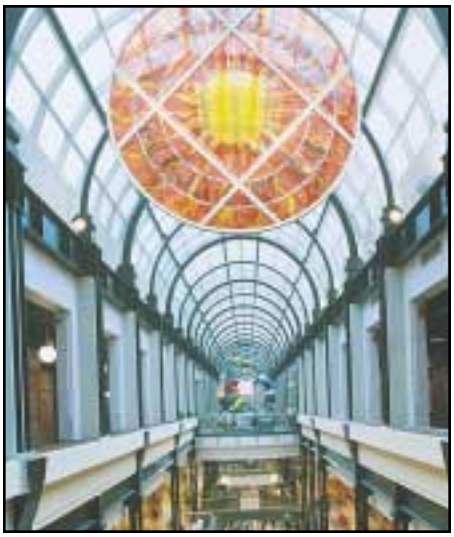
Circle Centre, Indianapolis, Indiana

HSS HELPS ARCHITECTS RECREATE A EUROPEAN ARCADE

Aesthetic Qualities, Strength Make HSS Ideal for the Job

The architects and designers of Circle Centre wanted to do something unique: create a space that was bright and airy with an interior based on the concept of a European shopping arcade. This, in turn, meant making use of exterior light, and framing the interior with the graceful arches reminiscent of 18th and 19th century Europe's market streets.

"Though it's based on a classical concept, this mall is all about retailing in its most modern sense," says Greg Jacoby, a Co-Project Manager of Indianapolis' new Circle Centre. "We've got a 700-foot long central arcade—-sort of like a European walking mall. It's filled with retail stores, many of which have spent lavishly on their facades, and they all want to be seen.



This meant we needed a design and materials that would make each store extra-visible to shoppers. The aesthetic qualities and strength of steel Hollow Structural Sections (HSS) made it an ideal choice.

HSS Fire Resistance Earned A Code Variance

The architects' design to use HSS initially created a controversy. When the design was first submitted, local authorities wanted the builders to surround the arcade's interior columns with dry-wall or some other sort of fire-rated material. But covering the HSS would compromise the concept and destroy the open look the architects wanted in the first place.

So they argued that because HSS doesn't burn, there would be no need for cladding. The building authorities compromised by requiring an increase in the number of sprinkler heads, and issued the appropriate variance; construction proceeded smoothly.

Combining the Old With The New

Though Circle Centre had to be shoe-horned around several existing historic structures and facades, most of the project was fairly straightforward. Typical bays are a standard 30 feet wide and are connected with skywalks. The architect came up with a triangular grouping of three 5-inch-diameter HSS (8-inch in the main atrium) with vertical transitions for the main ornamental columns that run the length of the concourse. These columns provide support for the arches and the second floor gallery. Each column is surrounded by an eliptical glass fibre-reinforced gypsum and square stone base, imparting a look of firmness and solidity.

But because the columns are simple and open, they provide just the right look for the mall.

The central concourse splits the building into two halves, separated by a large skylight. Since the skylight's strength was insufficient to tie the two halves of the building together, this was done by building pedestrian bridges.

Another key to the project's success was the combination of the old streetscape with new retail space. In one section of the project, the entire first floor of existing building was left intact. Then, new construction was supported on a truss over the first level.

A Design That's Boosted Sales of Retailers

This project, which features nearly one million square feet of retail, entertainment and parking space has proved an overwhelming success, playing host to more than 12 million visitors. More importantly, sales averaged a whopping $400/square foot last year, compared with a national average of $230. And that may well be the best testimonial yet to the use of HSS.

Principal participants in the development of Circle Centre included the engineer, Fink, Roberts & Petrie; the design architect, Ehren Krantz & Eckstat; the project architects, a joint venture of Browning Day Mullins Deardorf Inc. and CSO Architects, Engineers and Interiors; the construction manager, Geupel-DeMars; the steel fabricator, PKM Steel Service, Inc.; and the facility manager, Simon DeBartolo.