

LIGHT ON ICE CASE STUDY

Yost Ice Arena
University of Michigan



+ PROJECT SNAPSHOT

Architect / Designer
ROSSETTI

General Contractor
Spence Brothers

Dealer
Madison Heights Glass

Window Design Consultation
Jim Barbour, GAP Midwest Regional Manager
Bill Wilder, GAP Director of Technical Sales
Greg Turnage, GAP Sr. Project Design Engineer

Product
Custom window based on S6800

Assignment
Using an aluminum system, Graham sought to provide a replication for the 58 large, round-top steel windows that had graced this iconic University of Michigan building since its construction in 1923.

+ CHALLENGE

Although the project was in the design phase and the architect had originally specified a curtain wall system, Graham Architectural Products felt it could offer a better solution. The challenge came in convincing the owner and architect to reconsider, even though the train had seemingly left the station.

+ CASTING A PROJECT IN A WHOLE NEW LIGHT

When constructed in 1923, the University of Michigan's Yost Field House was the largest indoor building of its kind on any campus in the United States. Over the years it showcased a lot of elite Wolverine athletes, including the great Michigan track teams of the '50s and the Cazzie Russell-led basketball teams of the '60s, while also serving as the indoor practice home for early Bo Schembechler football teams.

Over the decades it has undergone many renovations. In 1973, it was converted into an ice arena. Additional renovations took place in 1992, 1996, 2001 and again in 2006. But it wasn't until the ultimate renovation in 2012 that they finally decided to tackle the building's 58 iconic windows.

According to ROSSETTI, the Detroit-based architectural firm that oversaw the project, "...removing the decades-old coverings on the original arched windows... transformed this arena from a dark hockey barn into a bright, modern arena while retaining its historic feel. The building was constructed in 1923, however several renovations did not address the windows. With a new glazing system and technology on the exterior window openings, the system provides nearly 75 percent daylight transmission while reducing heat gain."

What's interesting is, the project was headed in a different direction before Graham Architectural Products (GAP) got wind of it.

Jim Barbour, GAP's midwest regional manager, heard about the project through one of his contacts at the University. After meeting with the architect, GAP was allowed to bid the window system as an alternate to the specified curtain wall system.

"...removing the decades-old coverings on the original arched windows... transformed this arena from a dark hockey barn into a bright, modern arena while retaining its historic feel."

ROSSETTI, Detroit area architectural firm

GAP instead proposed a custom aluminum window system designed to replicate the original large, round-top, steel windows. Working with the GAP engineering team, primarily Greg Turnage, and Bill Wilder, GAP's director of technical sales, GAP designed a system that matched the original windows while being able to be exterior glazed with 1-9/16" glazing.

The owner found the Graham window system to be more aesthetically pleasing than the curtain wall alternative, and it was game on.

The timeline was "very tight," Barbour said, "with multiple radius tops and several new dies required to accommodate the exterior glazing. But working with the platform of the S6800 Series and Graham's engineering expertise, the project went very smoothly." Included among the custom solutions noted by Barbour were custom mullion caps that matched the original steel window system and a new exterior applied grid system for the S6800, all of which helped to maintain the architectural integrity of the athletic campus.

The renovation also included new bleacher seats, ADA accessible seating and loge boxes, new premium seating areas, and a new press box area, as well as an upgraded concourse with improved concessions and more points of sale.

"It would have been a shame not to maintain the original look of this magnificent building. I believe the custom windows that Graham designed for this project represent the best option for the owner and I'm proud to have been part of this project," noted Jim Barbour.