

Pier Wisconsin

Milwaukee, WI



Pier Wisconsin contains the Discovery Museum and is a center for Great Lakes research. The City of Milwaukee approved the construction of the structure in 2004. The 120,000-square-foot, \$46 million complex opened in 2006 and contains a Science Education building with interactive exhibits and classrooms connected to a Great Lakes history and a research building that includes saltwater and freshwater tanks, a high-definition digital theater, classrooms, learning labs, and a stepped-down amphitheater to the water.

A number of sustainable elements were included in the project including a cold lake water intake that has been used to cool the building and return the water to the lake with a net change in the inner harbor of less than 1° F. Air conditioning loads are reduced through the use of a "cool roof" that uses reflective white roofing to reflect solar heat gain. Further, the 200-car underground parking garage is covered with a green roof, reducing runoff.

Because it is located along the shore of Lake Michigan, the Pier Wisconsin construction project has posed some unique challenges including waterproofing, which was accomplished using bentonite. Portions of the Aquarium are over the lake's surface, supported by a series of pilings driven deep into the lake bottom. These pilings are approximately 9 feet in diameter and paired with a series of smaller pilings that support an outdoor amphitheater and dock.

Team

Owner:

Pier Wisconsin Ltd.

Architect:

Hammel, Green and Abrahamson
Architects and Engineers

General Contractor:

GPD/Gilbane

Design Criteria:

- Provide space for museum and aquarium.
- Enhance accessibility to the lakefront.
- Minimize impact of auto parking.
- Provide highest aesthetic and environmental standards.

Total Project Cost: \$46 million

Award:

2008 American Institute of Architects (AIA),
Wisconsin Honor Award.

2008 American Council of Engineering
Companies, National Grand Award.

2007 American Society of Civil Engineers
Wisconsin, Engineering Achievement Award.

Photography:

flicker.com

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