A series of long and low horizontal forms, Discovery World (in background at right) allows the exuberant vertical masts of the Calatrava-designed Milwaukee Art Museum to dominate.
DISCOVERY WORLD MUSEUM, Milwaukee, Wisconsin, 2007

A First Place entry into a 2003 design competition developed into this new 120,000 sf museum on Milwaukee's lake front. With a waterfront site close the Milwaukee Art Museum by Calatrava, the competition was held in large part to find a design that would complement the Calatrava, and not detract from it. In contrast to the tall vertical masts of the Calatrava, the competition entry assumed a long, low horizontal character, in keeping with the horizon offered on the lake front site. With two simple forms, a floating rectangle for technology exhibits, and a floating cylinder over the water for water-related exhibits, these two forms are linked by a glass promenade held close to the waters edge. Underground parking for 200 cars is covered with a green roof which has become a major public event space in the city. A new Ipe wood amphitheater facing the water allows for a summer concert series, while new piers and docks provide public access and anchorage for Milwaukee's tall-masted ship. New Ipe wood boardwalks wrap the water's edge, sliding into the building to become the floors of the public concourse. Like the Calatrava and most boats in the new harbor, the new building is white, clad in a rain screen of composite Trespa panels with exposed stainless steel fasteners. Among many sustainable features such as the use of both green roofs and cool white roofs, all cooling loads for the complex are handled by using the cool water of lake Michigan; not warming the new small harbor by more than 1 degree F in the worst summer heat.
The South façade of the new museum, wrapped with a continuous public boardwalk.
Historically, Milwaukee has had few places by the waters of Lake Michigan that could be enjoyed and experienced year round. A “Public Trust Doctrine” that prohibits any private development of filled lake bed has preserved the city’s waterfront green space, but these spaces are vacant for much of the year as there are no facilities of any kind that would support the use of the waters edge. As a public museum, this project met the conditions of the Public Trust Doctrine, and was approved for construction. This offered a rare, perhaps once in a lifetime opportunity, to provide access to the waters edge in a variety of ways. Design decisions were therefore weighed by how well they dealt with access to, and views of the water. With this in mind, a new waterfront amphitheater was built to encourage use of the waters edge, and has attracted thousands of people to events like the Wednesday night Live @ the Lakefront concert series, and the very popular Friday night Fish Fry & A Flick events. These events are supported by a 200-car garage located under a Great Lawn, a public events space where tie-downs were installed to allow for the frequent use of tent structures. A permanent pier for Milwaukee’s tall-masted ship, the Dennis Sullivan was built, drawing large numbers of people to see, tour, and ride on the ship. A public boardwalk was built which allows year-round access to the waters edge, and the concourse of the museum is a free zone, offering people a place to warm up and view the lake in inclement weather with rest rooms and a modest café. A rooftop multi-purpose events space was also built called the Pilot House, a 360-degree glass cylinder with unprecedented views of the harbor and the city. The Lecture Hall / Digital Theater was also built with curtains that can be opened to reveal a panoramic view of the new harbor. Finally, a floating public access dock offers the first water craft access to downtown in almost a century, and is low enough to the water for fishing and for simply getting one’s feet wet on a hot summers day.
The long and linear concourse along the waters edge, as seen at the winter solstice. A wood floor of ipe wood extends out to an exterior boardwalk.
Outside the concourse a public boardwalk extends around the entire perimeter of the museum.
The Ipe-floored glass link in between the two buildings serves as an entry space for school groups.
The Lecture Hall / Theater features a panoramic view of the harbor through a glass double envelope.

Automated curtains close and a screen descends to allow for high-resolution digital projections.

The roof terrace and sunshades of the Pilot House on top of the round Water Building.