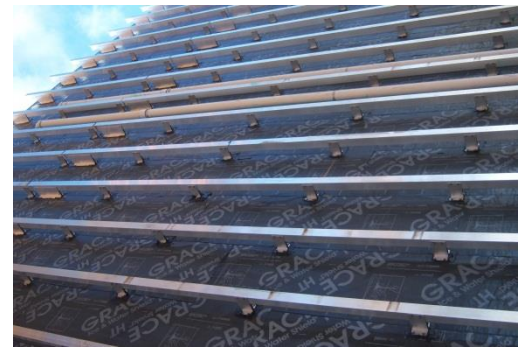
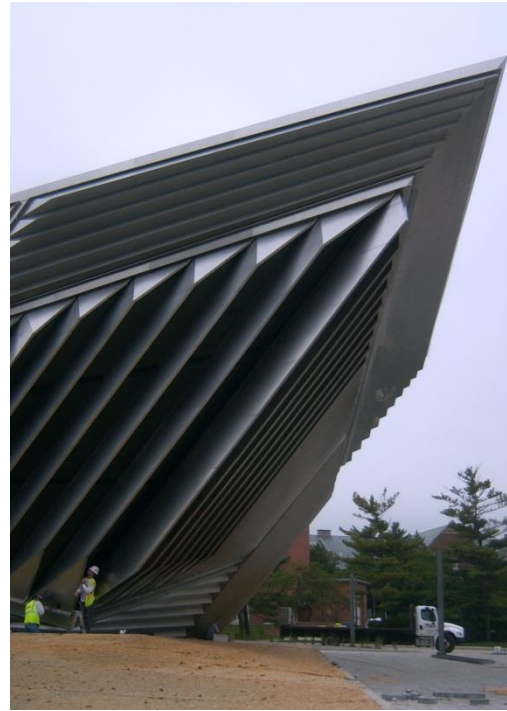




PROJECT PROFILE

Eli & Edythe Broad Art Museum

Building Enclosure Consulting | East Lansing, MI



CLIENT

Barton Malow Construction Company on behalf of Michigan State University

BACKGROUND

The approximate 46,000-square-foot project features a striking pleated, sloped facade. A skylight and custom glazing system allows natural light into the interior galleries, education wing, works-on-paper study center, shop, and café. Building enclosure materials include pleated stainless steel rainscreen panels over exterior insulation and an air barrier, a steel-framed glazed curtain wall with triple-glazed insulated glass units, glazed aluminum skylight assembly, a protected roof membrane, and below-grade membrane waterproofing. The estimated cost of the new structure at completion was \$45 million.

WJE was retained by the construction manager, Barton Malow, to assist in the development of details for the building enclosure and to establish a program of performance testing. The owner's Project Requirements outlined the importance of preventing unanticipated air and moisture flow to/from the controlled interior environment of the new art museum. The unique building was designed by Zaha Hadid with construction documents developed by the architect of record, Integrated Design Solutions (IDS).

SOLUTION

WJE provided peer review comments prior to construction of the enclosure and reviews of contractor submittals. WJE's focus during these reviews was the integration of the various enclosure systems to achieve continuous thermal, air, and moisture barriers at the exterior walls and roofs. Barton Malow, IDS, and WJE worked collaboratively during the early phases of construction to refine details and establish an agreed-upon construction quality control program. Periodically throughout construction, WJE performed milestone site visits to observe and document the building enclosure work in progress and to conduct performance testing on the various assemblies. Extensive testing of the enclosure was performed, particularly at the glazing assemblies, for evaluation of air and water infiltration resistance.

