



PROJECT PROFILE

Pinnacle Bank Arena

Building Enclosure Review and Construction Observation | Lincoln, NE



CLIENT

M.A. Mortenson Company

BACKGROUND

The Pinnacle Bank Arena is a new, multipurpose, 470,000-square-foot, 16,500-seat event facility. The main tenants of the building are the men's and women's basketball teams from the University of Nebraska. The building structure consists of cast-in-place concrete columns, beams, and floor slabs up to the main concourse level, with structural steel framing and composite deck floors above. The facade is clad with a combination of architectural precast concrete panels, various metal panel systems, and an aluminum and glass curtain wall system. The main roof consists of a mechanically fastened, single-ply thermoplastic polyolefin (TPO) membrane over rigid insulation and corrugated metal deck.

M.A. Mortenson Company engaged WJE to perform a third-party design peer review and construction observation services related to the building envelope, including the exterior cladding, windows, roofing, and waterproofing details.

SOLUTION

WJE's enclosure review focused on issues and concerns related to the constructability and anticipated performance of the designed exterior wall and roof assemblies and interface conditions. Coordination between the information conveyed in the architectural drawings and the corresponding requirements of the technical specifications was also evaluated, specific to the continuity of thermal protection, the control of air and water infiltration and the management of incidental moisture that may enter the building envelope.

Following the completion of design review services, WJE was retained by Mortenson to participate in preconstruction meetings with subcontractors and suppliers; to review the scope, assembly, and testing of exterior enclosure mock-ups; to witness quality assurance testing of curtain wall assemblies, and to conduct periodic site observations during the construction of the arena. WJE submitted written site visit reports following each site visit, and provided additional consultation as needed by Mortenson as construction progressed. The arena was completed in 2013.

