WJE

Indiana War Memorial

Building Envelope Assessment and Repair | Indianapolis, IN



CLIENT

Indiana Department of Administration (IDOA)

Indiana War Memorials Commission (IWMC)

BACKGROUND

The Indiana War Memorial (IWM) occupies one city block and sits in the center of the five-block Indiana War Memorial Plaza Historic District. Designed by Walker and Weeks, construction of the IWM commenced in 1926, but was not fully completed until 1965. The IWM consists of a mausoleum structure that sits atop a plaza deck and auditorium. The mausoleum structure has three distinct roof areas, which include the ziggurat steps, statuary level above the colonnade, and between columns at the base of the colonnade.



ENGINEERS Architects Materials scientists Ongoing water infiltration was occurring at the ziggurat step and statue level above the colonnade roof areas and into the interior and mausoleum. Many historic plaster finishes and murals had been damaged as a result of the ongoing water leakage. The State of Indiana retained WJE to assess the areas of ongoing water infiltration and develop repair or replacement recommendations.





SOLUTION

WJE's Difficult Access Team assessed the reported water infiltration and existing conditions at the interior and exterior areas. Investigative openings at locations in the exterior limestone and lead sheet flashing were utilized to identify the source of the leakage.

Based on WJE's assessment, water leakage into the interior of the building at the ziggurat steps was a result of distress and deficiencies in the original lead flashings, lead flat-lock panels, and low-sloped roofing systems. WJE also noted distress to limestone cladding units at the ziggurat resulting from corrosion of anchorage.

WJE developed construction documents to replace the roofing systems and remove all limestone cladding at the ziggurat, incorporate a new waterproofing membrane below the cladding, and install new lead-coated copper flashings.

WJE provided construction observation services during the project to ensure the repairs were implemented in accordance with the construction documents and to address additional conditions uncovered during the repair.