



PROJECT PROFILE

Auto-Owners Insurance Headquarters

Building Enclosure Consulting | Lansing, MI



CLIENT

Auto-Owners Insurance
Headquarters

BACKGROUND

Built in the 1970s, the Auto-Owners building utilized an exterior wall cladding consisting of thin, resinous fiber-reinforced panels providing a precast concrete aesthetic. Over the years, this proprietary resinous panel system exhibited deterioration in the form of cracking, spalled fragments, and discoloration. In an effort to both improve the energy efficiency of the exterior wall assembly and to address the aged condition of the cladding, Auto-Owners retained The Christman Company (Christman) to serve as the Construction Manager and Mayotte Group Architects (Mayotte) to serve at the architect of record for the design and implementation of the replacement cladding systems.

Auto-Owners retained WJE to provide Building Envelope Commissioning (BECx) services to help ensure the replacement cladding system and related detailing would perform as intended. These services included assisting Mayotte with selection of cladding systems, peer review of Mayotte's construction documents, review of construction submittals, construction observations, assisting with technical inquiries, computer-simulated analyses of certain constructed envelope conditions, and field-performed air/water infiltration testing.



SOLUTION

WJE provided peer review services prior to construction of the enclosure and performed 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 new exterior wall enclosures and the related tie-in detailing. Mayotte, Christman, and WJE worked collaboratively during the early phases of construction to refine details and to 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, to evaluate air and water infiltration resistance. The replacement cladding systems addressed by WJE as part of this project included a multi-layered metal panel wall assembly and a high-performance, multi-story, triple-glazed glass and aluminum curtain wall system.