

General Description:

- **Location:**
Lansing, MI
- **Profile:**
House of Representatives Building
- **Project:**
Platinum ProgramSM - Restoration

Services Provided:

- Leakage Evaluation
- Design of interior repairs
- Interior wall repairs
- Field Quality Assurance

Challenge:

- Client does not have ownership of the building
- Interior Leakage
- Condensation within wall system

Solution:

- Supported client in meetings
- Interior wall repairs
- Roof flashing and exterior wall repairs

Michigan House of Representatives *Anderson Building*

The Michigan House of Representatives Anderson House Office Building was constructed in 1999 and accommodates all 110 representatives with suites facing the capitol building. The contractor had built the building in 18



*Overview of Michigan House of Representatives
Anderson House Office Building*

months, and had leased it to the Michigan House of Representatives. Soon after the construction, leakage was reported. Previous repairs made by the general contractor were proven ineffective and the process was ambiguous.

Window perimeter sealant was replaced on all west elevation windows by the general contractor, however, the leakage continued. Michigan House of Representatives hired StructureTec to conduct their own evaluation of the building. StructureTec identified roof flashing details, cracked concrete panels, and failed sealant as the sources

for leakage. During the evaluation, StructureTec also indicated a potential for condensation on the interior side of the concrete panels due to air leakage from the interior. Using the recommendations by StructureTec, the general contractor decided to proceed with roof flashing repairs and exterior wall repairs on the west elevation, where the majority of the leakage occurred. In addition to the evaluation, Michigan House of Representa-

tives hired StructureTec to coordinate the required scope of work on the exterior and to perform Field Quality Assurance. At the same time, a secondary evaluation per-



*Crack in precast concrete panel
allowing water infiltration*



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formed by StructureTec indicated a potential for condensation within the wall cavity from the observed air leakage. StructureTec was contracted by Michigan House of Representatives to design and oversee interior wall repairs in order to prevent the air leakage (Platinum Program).

After the completion of the west elevation designs, Michigan House of Representatives decided to have StructureTec devise the exterior wall repairs for the remaining elevations. ■



Failed sealant along top of roof flashing termination bar allowing water infiltration (Inadequate design and construction of original flashings)



Voids in joint sealant between precast pane causing premature failure and openings

A Systematic Sequential Phased Approach:

1. Evaluation - Building
2. Evaluation - Wall Cavity
3. Design Development - interior wall repairs
4. Field Quality Assurance
5. **Platinum Program**SM - Oversee interior wall repairs



FEATURES

Leakage Evaluation

Prioritization which encompasses entire building envelope

Platinum ProgramSM

Field Quality Assurance

BENEFITS

Identified several sources of leaks

Inventory of all facility assets

Ensures a total quality process providing a "turn key" solution with one point of contact

Ensures high quality end product

Total Building Envelope Management SolutionSM

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