

PROJECT PROFILE

CityPlace I Exterior Envelope Consulting | Hartford, CT



CLIENT

Jones Lang LaSalle

BACKGROUND

CityPlace I, Connecticut's tallest building, is a thirty-eight-story office building in the heart of downtown Hartford constructed circa 1984. It is clad with a granite and aluminum curtain wall system. WJE's involvement with the property began in 2001 with a water leakage investigation and has continued with several projects at the building since that time. WJE's work at CityPlace I includes a largescale copper roof replacement, repairs to the curtain wall, replacement of the lobby atrium roof, removal of the skybridge and repairs to the granite paving system at the building entrance.



ENGINEERS ARCHITECTS MATERIALS SCIENTISTS

WJE was initially retained to investigate the source of persistent water leakage through a large glass atrium above the building's lobby. After designing repairs to correct these leaks, WJE was charged with assessing the condition of the building's granite and aluminum curtain wall system. Subsequent work included an investigation of the 40,000-square-foot Bermuda-style copper roof during which it was determined that the FRT plywood roof substrate under the copper roof was deteriorating prematurely.

SOLUTION

WJE traced the lobby atrium leakage to poorly positioned weep tubes, which caused water to back up and overflow when storm water reached the atrium's condensation gutter. Drawings and specifications were prepared and issued for the replacement of sealant within the atrium as well as replacement of the surrounding roof membrane.

To assess the condition of the curtain wall, WJE utilized the in-house Difficult Access Team (DAT) to rappel the facade since the building's window washing scaffold system was inoperable. The DAT engineers found that the original urethane joint sealant had reached the end of its service life and had reverted, exhibiting both adhesive and cohesive failures.

To address the deteriorated plywood roof sheathing, WJE designed a copper roof replacement project and then performed construction observations during the replacement.