WJE

Children's Health Bright Building and Skybridges

Facade Assessment and Water Intrusion Investigation | Dallas, TX



CLIENT

Children's Health

BACKGROUND

The Bright Building is a five-story rectangular office/administrative building at the south end of the Children's Health (CH) campus, constructed in 1999. Floor 4 was added in 2003 as part of the adjacent skybridge construction. The exterior cladding is primarily comprised of precast panels, stucco, exterior insulation and finish system (EIFS), and aluminumframed windows.

The CH campus also contains skybridges to facilitate pedestrian foot traffic across roadways and train tracks. The three skybridges involved in WJE's investigation were constructed between 2003 and 2007, with lengths between 185 and 240 feet. Each bridge features aluminum-framed windows and metal wall panels.



Water intrusion was reported at several locations throughout the Bright Building, primarily associated with the concave window system on the north facade and the curtain wall window system on the south facade. Ongoing water intrusion issues were also reported at several of the skybridges. WJE was engaged to perform a condition assessment and water intrusion investigation for both the Bright Building and three skybridges.







SOLUTION

At the Bright Building, WJE performed an overall inspection with up-close observations of the facades as well as isolated water testing at known leak locations. Testing was conducted at four general areas that corresponded with previous reports of water intrusion.

At the skybridges, WJE performed a condition assessment and water intrusion investigation at each skybridge. The condition assessment included both interior and exterior visual observations of each skybridge. Up-close exterior observations at Skybridges A and B were made by WJE's Difficult Access Team, who accessed the facades using the specialty rail system.

Water intrusion issues were primarily related to failed exterior sealants/coatings and internal window deficiencies. Based on the results of the assessment and water intrusion testing for both the Bright Building and skybridges, short- and long-term repair considerations were presented to the client for consideration. WJE provided design and construction phase services for the selected repair scopes.