WJE

PROJECT PROFILE

New Science and Engineering Hall

Exterior Enclosure Consulting Services | Washington, D.C.



CLIENT

George Washington University, through a contract with Boston Properties

BACKGROUND

The new Science and Engineering Hall (SEH) includes a mixture of terra cotta rain screen panels, unitized curtain wall with engineered transition assembly, and metal panel cladding with modified bitumen green roofs as well as polyvinyl chloride roofs, a pyramidal skylight, a functioning greenhouse, and interior planters containing fully grown trees. The building abuts two existing student residence halls on the campus as well as the Foggy Bottom-GWU Metrorail Station. As with any high-performance building, particularly a building containing laboratories and sensitive equipment, achieving a weather-tight enclosure was critical. To mitigate the risk for uncontrolled rainwater penetration and moisture ingress, condensation, and moisture-laden air flow through the new above-grade building enclosure, WJE was retained by George Washington University to provide exterior enclosure consulting services during design and construction of the nearly 500,000-square-foot building.





SOLUTION

Construction of the new SEH building included many complex interface conditions including interface details at the greenhouse, the projecting curtain wall bays (particularly at their transition to adjacent terra cotta assemblies), the skylight, and the adjacent buildings. WJE worked closely with the design and construction teams to resolve these conditions throughout the entire design and construction process, including assistance with submittals, particularly shop drawing review; assisting the architect of record with responses to ASIs and RFIs; and development of a quality assurance testing plan for consideration, and ultimately acceptance, by the owner and architect of record.

WJE also witnessed quality assurance testing, assisted in diagnosing leaks found during testing, and performed regular site visits to observe the work in progress and to verify that the construction was in general accordance with the contract documents.



ENGINEERS Architects Materials Scientists