



PROJECT PROFILE

Syngenta Biotechnology

Exterior Enclosure Consulting Services | Durham, NC



CLIENT

Lend Lease, Inc.

BACKGROUND

The primary facade components of the building envelope under construction included glazed aluminum punched windows and curtain wall—with sunshades at some locations—insulated metal panels, and areas of clay brick masonry in a cavity wall configuration.

WJE was engaged to provide design peer review services, preconstruction services—including preconstruction mock-up review and testing as well as shop drawing and submittal review assistance—and construction period services—including construction observation as well as observation of field performance testing—in relation to the project objectives associated with serviceability, durability, and performance of the wall systems.



SOLUTION

WJE reviewed construction document drawings and specifications pertaining to the above- and below-grade building envelope—including performance design criteria for heat/air/moisture transfer, system attachments/connections, interfaces with adjacent building systems, and quality control measures to be performed by the construction team—and provided recommendations to the project team. WJE also observed construction and testing of the exterior enclosure systems mock-up and noted any detailing or constructability issues that were likely to impact the specified performance. WJE then worked with the project team to resolve these issues as they arose during testing of the mock-ups.



As directed by the client, WJE reviewed subcontractor submittals, shop drawings, test reports, samples, and mock-ups relevant to the above-grade building envelope for general conformance with contract documents and recognized industry standards. WJE also observed and documented the work in progress at representative areas of the building envelope at various stages of the construction. Finally, WJE documented the execution of the performance testing program established by the Quality Assurance and Performance Testing Plan based on the requirements of the contract documents.