PROJECT PROFILE

Metropolitan Museum of Art

Masonry Restoration of the Fifth Avenue Facades | New York, NY

CLIENT

The Metropolitan Museum of Art

BACKGROUND

The five wings of The Metropolitan Museum of Art facing Fifth Avenue extend four blocks and were built over a twenty-four-year period. The first central wing was designed by Richard Morris Hunt. The balance of the Fifth Avenue facades, were designed by McKim, Mead and White based on Hunt's master plan and completed in 1926. The facades are designed following a Corinthian order and are substantially composed of limestone.

The museum's facade showed symptoms of distress including compression spalling of the limestone at joints attributed to repointing with hard cement; efflorescence, anchor spalls, and unsound deteriorated collar joints attributed to water ingress via failed gutters; and cracking attributed to thermal cycling.

SOLUTION

WJE's multidisciplinary team developed and implemented a coordinated facade evaluation and restoration effort appropriate for the museum's historic architecture and materials. The team studied original construction drawings and photographs as a basis for understanding existing conditions and performed a hands-on survey to document the severity and extent of typical symptoms as well as to identify unusual conditions.

WJE preservationists tested and specified a restoration plan that included traditional dutchman patches; several types of pinning for stabilization and anchorage; hydraulic lime-based mortars and grouts for all masonry repointing and restoration procedures; and cleaning systems tested for effectiveness, risk of damage, cost, environmental concerns, and logistics.

WJE oversaw contract documents, bidding, and construction administration for the masonry facade repair and restoration, Monel metal gutter replacements, and the monumental bronze window restoration. The four-year project was successfully completed on time and on budget in 2005. WJE's work was acknowledged with the NY Landmarks Conservancy Lucy G. Moses Preservation Award.

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