



Exterior Restoration, Roof Replacement, and Structural Rehabilitation

41 Eastern Parkway, Brooklyn, NY

PROPERTY

Copley Plaza is a 12-story apartment building completed in 1926 and designed by Shampman & Shampman. Located along Eastern Parkway in Prospect Heights, the building is distinguished by its beige brick facade, decorative terra cotta and limestone, Juliet balconies, and monumental triple-arched entrance.

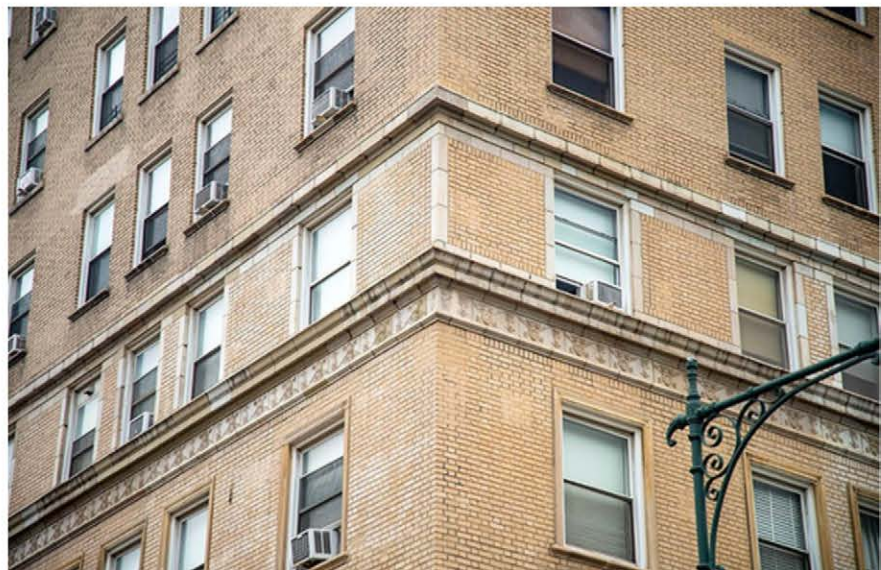
PROJECT OVERVIEW

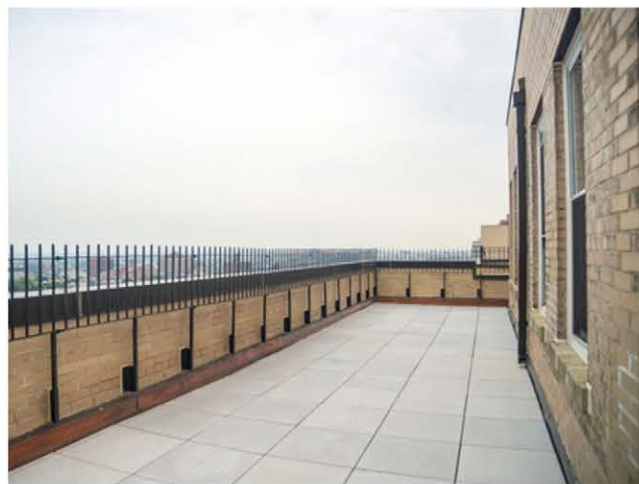
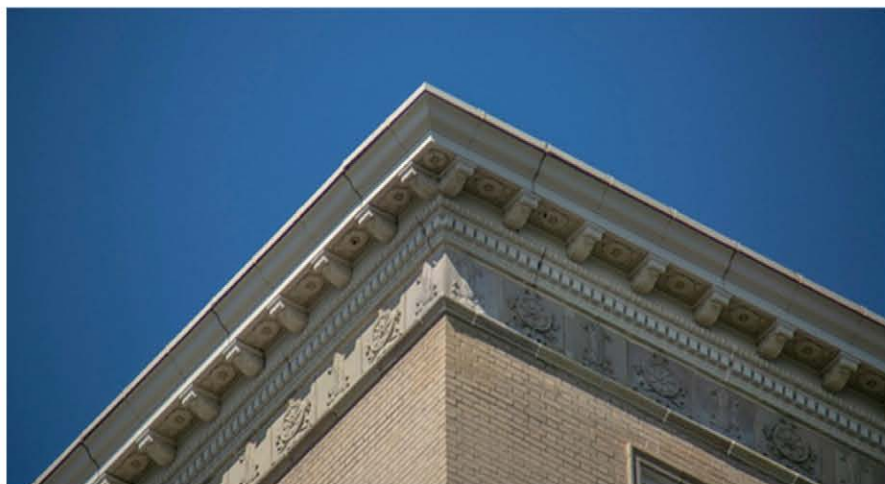
RAND was retained to design and administer three coordinated scopes of work: an 8th Cycle Facade Inspection and Safety Program (FISP) repair program, replacement of the main and penthouse roofs, and structural repairs at the water tank tower. As construction progressed and concealed conditions were uncovered, the work in all three areas grew. The project ultimately addressed extensive masonry and ornamental deterioration, chronic leakage and complex waterproofing conditions, aging roofing, and structural deficiencies at the penthouse and water tank tower.

PROJECT APPROACH

The repair approach prioritized retaining sound historic materials and matching new cast stone components to the profiles and appearance of the original terra cotta and limestone. Leak investigation and penthouse terrace flood testing helped evaluate water infiltration and inform repairs at critical roofing and waterproofing transitions.

As concealed deterioration was exposed, RAND coordinated the exterior, roofing, waterproofing, plumbing, and structural work while the building remained occupied and its domestic and sprinkler water tanks stayed in operation. RAND's continued involvement also included the 9th Cycle FISP inspection using motorized scaffolds already in place for the repair work and the 10th Cycle inspection performed by industrial rope access.





SCOPE OF WORK

RAND provided design and construction administration services for the following project scope:

- 8th Cycle FISP repair design and construction administration
- Brick replacement and repointing
- Lintel replacement and steel reinforcement
- Terra cotta and limestone repair; replacement of approximately 150 deteriorated terra cotta units in cast stone
- Correction of earlier limestone patches at the arched entrance to better match the surrounding historic stonework, shown before and after at right
- Removal of deteriorated Juliet balconies, reinforcement of supporting steel, and installation of custom cast stone infill matching the surrounding limestone
- Main and penthouse roof replacement
- Parapet reconstruction and code-related upgrades
- Leak investigation and water testing, including penthouse terrace flood testing, to evaluate infiltration and support waterproofing repairs
- Waterproofing improvements at roofs, masonry, doors, skylights, and drainage points
- Structural repairs at the penthouse roof and water tank tower
- Replacement of more than 300 square feet of penthouse roof slab
- Repair of the main roof structural slab
- Installation of approximately 3,900 square feet of new precast concrete roof pavers

RAND's Code & Zoning Compliance Team obtained work permits from the New York City Department of Buildings. RAND also served as the project's Special Inspections Agency, conducting the required inspections throughout construction.

Architect of Record: RAND Engineering & Architecture, DPC

Contractor: Structural Preservation Systems, LLC

