



PROJECT PROFILE

1010 Fifth Avenue

Replacement of Garden Roof and Facade Repairs | New York, NY



CLIENT

Barbara Hubshman &
1010 Tenants Corporation

BACKGROUND

1010 Fifth Avenue is a fourteen-story residential, apartment building. The structure was completed in 1925 and is within the Metropolitan Museum Historic District of New York City.

The building's facade is a combination of terra cotta, limestone, and brick. There is a large terra cotta cornice at the roof level. The west penthouse incorporates an intensive garden roof along the west and southern sides of the building. The garden roof, which is considered to be one of the first green roofs in New York City, has several feet of overburden, including mature trees, brick pavers, and wood trellises. A glass rail also exists along the cornice.

WJE was retained to investigate water infiltration into the upper portions of the building. Based on the results of the investigation a long-term repair approach was undertaken. The work included the removal and replacement of the garden roof, including restoration of the landscaping, paving, and trellises to their original design. The project also included facade repairs and repair of the rooftop water tank structure.

SOLUTION

In order to mitigate water infiltration as soon as possible, a phased approach to the repairs was developed by WJE.

The first phase of the work included the removal of the existing overburden and the installation of a two-ply modified bitumen temporary roof. This work occurred as the construction documents for the remainder of the project were being developed.

A reinforced, cold, fluid-applied waterproofing membrane was installed onto the temporary roof. The membrane was extended through the parapet and across the top of the cornice and was also flashed into the penthouse walls, providing a continuous membrane from the top of the cornice into the penthouse walls. The landscaping, paving, and trellises were then replaced to their original configuration. During the work, repairs to the facade, including replacement of damaged terra cotta units, patching, pinning, and repointing, were also performed.

