

2 5th Avenue

New York, NY

SPECIFIER – Façade MD, New York, NY CONTRACTOR – Times Square Construction, New York, NY DISTRIBUTOR – Allied Building Products, Long Island City, NY Concrete & Masonry Repair 2012-2013

PROJECT TASK

Quickly and economically reface a 20 story façade while installing moisture protection.

PROJECT SOLUTION

Use of a liquid air barrier membrane in conjunction with Structural Skin.

PRODUCTS

Structural Skin







All photographs were taken "during" the work being completed.







PROJECT HISTORY

This luxury co-op faced a very pressing and expensive issue. Areas of the façade's white glazed brick were buckling, leading the fire department to cordon off the street below, but investigation uncovered much more serious problems. The building had been constructed of cinder blocks with brick veneer. There was no air or vapor barrier insulation within the exterior wall system. In 2009, that system had completely failed.

Due to the building's location in a designated landmark district, any remediation plan would have to be approved by the Landmark Preservation Commission. The cost of the initial plan for restoration led to the entire co-op board being ousted. The newly elected board had to find a reasonable solution its 1100 residents and the commission could support.

All of the glazed brick and the terraces were removed, exposing a very irregular block surface. Steel supports were installed. Pinholes and voids were guaranteed if the liquid air barrier membrane was applied directly to the block, compromising that system. Structural Skin, a fiber reinforced

structural coating that shows a 100% reduction in water penetration and leakage per ASTM E514, was applied as a fairing coat at a depth of a quarter inch. This application not only provided a uniform surface for the air barrier, it offered secondary protection for the system by allowing moisture diffusion and acting as a moisture barrier, thereby also protecting the reinforcing steel supports from corrosion. A new brick veneer was then applied over insulation.