



Property of the Month: Skylight replacement at Manhattan Surrogate's Courthouse wins preservation award from NYLC

May 19, 2020 - Design / Build



The replacement and restoration of the historic skylight within the landmark Manhattan Surrogate's Courthouse. The interior is often used for filming of movies, commercials and for events. Photo by: Ola Wilk/Wilk Marketing Communications

Manhattan, NY The replacement and restoration of the historic skylight within the landmark Surrogate's Courthouse has received a 2020 Lucy Moses Preservation Award from the New York Landmarks Conservancy (NYLC). The design team for this highly complex project included Urbahn Architects, program manager the NYC Department of Design and Construction (DDC), historic conservator Jablonski Building Conservation (JBC), and construction manager The LiRo Group. The Moses Awards are the NYLC's highest honors for preservation excellence.

Designed by John Thomas, and completed in 1907, this Beaux-Arts structure encompasses an entire block downtown. The interior and exterior are both landmarks. The building was also placed on the National Register of Historic Places in 1972 and designated a National Historic Landmark in 1977.

The opulent three-story atrium features a 40 ft. by 60 ft. skylight that soars overhead, illuminating the rich and highly articulated interiors. The monumental atrium space features an extraordinary double staircase of Tuscan marble imported from Siena.

The interior is often used for the filming of movies and commercials. The television show “Law and Order,” “The Devil Wears Prada” and “Great Expectations” movies, and many other productions feature scenes shot within the building.

The renovation team removed the entire outer monitor system and replaced it with a new copper-anodized aluminum frame to emulate the original copper frame cladding.

Photo by: Ola Wilk/Wilk Marketing Communications

The original skylight monitor actually consists of two separate glazed assemblies with an interstitial space in between. The outer assembly faces the sky and provides protection from the weather. The interior glass layer, or “laylight,” is seen by the public from within the atrium, and is treated in a highly ornamental fashion. The monitor that projects from the roof is gable-shaped, with glass panels originally supported by a copper frame structure with a ridge at its peak. Ten clerestory windows are on the vertical sides where the skylight drops to a walkway that stretches around its perimeter. The laylight within the atrium is comprised of hundreds of translucent glass panels set in an ornamental bronze clad cast iron frame forming a monumental barrel vault.

Based on Urbahn’s design, the renovation team removed the entire outer monitor system and replaced it with a new copper-anodized aluminum frame to emulate the original copper frame cladding. Several new copper elements were fabricated to match the originals, including leaders, gutters, and a ridge vent replicating the original ornate rope motif.

For the laylight, the team removed the glass panels to facilitate the restoration of the leading that holds the glass in place, and the replacement of missing or broken panes. The bronze cladding was stripped of all coatings, cleaned, and refinished in situ. EverGreene Architectural Arts recreated the lunettes and the ornamental bronze cladding.

The team also designed a new protective assembly, including laminated glass protecting the glass blocks, with new durable aluminum panels as a walking surface. The team replicated the original hexagonal glass blocks, which are 1½” thick, 3½” wide, with groups of blocks forming a total of 24 glass panels running on two sides of the skylight.

“Working within a cherished historic edifice such as Surrogate’s Court required a team that is attuned to the aesthetics, materials, and building practices of another age, as well as well versed in both the limitations and advances of modern construction technologies,” said Rafael Stein, AIA, an Urbahn principal.

The construction team of contractor BQE Industries was operating in a tight space within a historic structure. First, crews installed a working platform resting on scaffolding, with a stair access to the skylight from below. The construction team also built a temporary roof to make the atrium watertight during construction. The roof’s components were hoisted over the building’s main roof and

assembled in place over the skylight within the courtyard.

Some of the original steel frame elements supporting the skylight were corroded. “We found that numerous structural elements that support the skylight had to be replaced or reinforced,” said Salvatore Paratore, AIA, LEED AP, Urbahn’s project manager.

Mary Jablonski, JBC’s principal, noted that scaffold access revealed multiple unforeseen conditions, including marble spalls, cracks, and losses on the cornice. “Many of the marble spalls were due to corrosion of the structural steel. The marble cornice and fascia were cleaned using a latex-based cleaner in order to minimize the amount of water used. Cracks and spalls were repaired using tinted epoxy and the dutchman method.”

The award will be bestowed upon the project team during the 30th anniversary Lucy Moses Preservation Awards Gala.

Project team:

Architect: Urbahn Architects

Owner: NYC Dept. of Citywide Administrative Services (DCAS)

Project manager: NYC Dept. of Design and Construction

Historic conservator: Jablonski Building Conservation (JBC)

Construction manager: The LiRo Group

General contractor: BQE Industries

Structural engineer: Ysrael Seinuk

Laylight restorer: Bovard Studio

Cast iron frams: Wemco Casting

Glass blocks: Gillinder Brothers

Skylight fabrication: Linel

Lunettes and ornamental bronze cladding: EverGreene Architectural Arts.