HISTORIC FACADE PRESERVATION

Preserving the Durability of Classic American Masonry

Reynolds Building
Winston-Salem, North Carolina

MPS
MASONRY PRESERVATION SERVICES, INC.
TRADITION ◆ TECHNOLOGY ◆ INTEGRITY

Complicated Repair Process Breathes New Life Into a Landmark Building

Reynolds Building

Historic Facade Preservation

PROJECT BACKGROUND

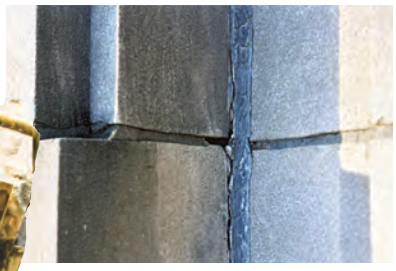
- A prototype for the Empire State Building, the Reynolds Building was built in 1929 and stands today as a tribute to early 20th-century American architecture
- 22-story tower, with attached 10-story office wings, is constructed of Indiana limestone with brick and structural clay tile backup
- Spalling and displacement of limestone components were noted at the low-rise office wing's upper floors and parapets
- Fourteen pieces of limestone were disassembled to confirm the severity of hidden deterioration; oxide jacking was identified on heavily corroded lintels and anchors (most limestone panels were missing anchors) as the cause of displacement and spalling
- The building's parapets would have to be removed, disassembled, and rebuilt

PROJECT CHALLENGES

- Several conditions complicated the project including rigging challenges at the heavily congested rooftop mechanical areas and the size and weight of the limestone components requiring removal (some exceeded 1.5 tons)
- Occupied adjacent structures had to remain in service during the lifting of the limestone components

PROJECT APPROACH

- Working with Sutton-Kennerly & Associates (SKA) of Greensboro, North Carolina, MPS designed a structural steel lifting assembly to serve as a hoisting frame for limestone parapet disassembly and rebuilding
- An elaborate scaffolding system was erected to provide a separate structural platform to support cantilevered outrigger beams and counterweights required for swing-stage scaffolding
- Additional work included repointing, spall repair, and copper spandrel repair; under a separate contract, the building's original windows were replaced
- Repairs included provisions for through-wall flashing and anchorage of all limestone components in accordance with building codes, without any change in the building's exterior appearance
- Project was completed in just seven and a half months
- Based on MPS's performance, the project's size and scope were extended to include the completion of the upper tower and the cleaning of the entire structure



"The restoration of the historic Reynolds Building included cleaning and repointing of the limestone, and replacement of deteriorated flashing beneath large coping stones. MPS lifted, stored, reflashed, and reinstalled the massive stones without incident. The repointing and cleaning of the limestone facade provided a much-needed facelift to the most prominent historic building in the city. It was a pleasure working with MPS during this complicated and very successful project."

Chuck Ernest, PE
Principal
Sutton-Kennerly & Associates

Crafting a higher standard for preservation, Masonry Preservation Services is recognized throughout America for our unique approach to masonry preservation and building envelope diagnostics. MPS has been specializing in architectural maintenance and restoration since 1985.

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