

PROJECT PROFILE

The Cathedral Church of St. John the Divine ♦ New York, NY

VERTICAL
access

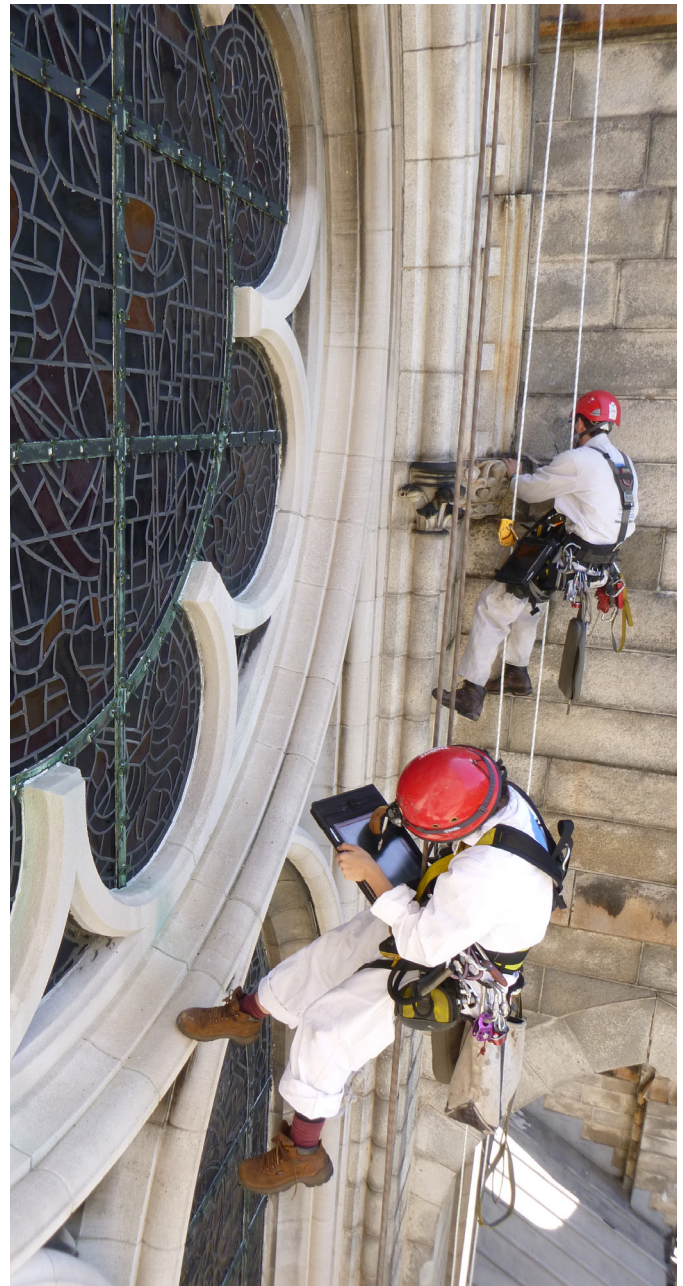
Since 2004 Vertical Access has conducted numerous conditions assessments and hands-on investigations of the exterior and interior of The Cathedral Church of St. John the Divine, working primarily with the design team led by Silman. This ongoing relationship has presented the Cathedral with much-needed information to pursue capital projects and maintain a safe structure as well as provide continuity from trusted partners who understand the condition of the Cathedral facility.

Building description

The Cathedral was originally designed by George Lewis Heins and Christopher Grant LaFarge in 1888. Construction of the apse began in 1892 and the large central dome constructed by The Guastavino Company was completed in 1909, the largest dome ever constructed by the firm. After Heins died, Ralph Adams Cram was hired in 1911 to re-place LaFarge as the architect of the Cathedral. granite, the newer portion of the south tower is faced in limestone.

Scope of work

- In 2004, VA worked with engineers from Silman and Urbitran OSMOS to install and calibrate the OSMOS fiber optic crack gauges across cracks in the buttress arches above the aisles. The underside of the slab and concrete beams in the south tower were also measured, inspected and photographed.
- VA returned in 2013 to identify and stabilize potential public safety concerns while documenting existing conditions and providing video documentation of select areas of the exterior to allow for the planning of permanent repairs.
- In 2017, VA utilized a Rigid SeeSnake® system to investigate two below grade drainage pipes for any obstructions or faulty connections.
- We returned in 2019 to assist with the safety inspection of the Guastavino ceiling at the interior by hammer-sounding and probing with hand tools as necessary to determine the condition of the masonry above the ambulatory, high altar, and choir. VA also assisted with a grout injection mock-up at the dome above the crossing by performing a close-up observation of the interior of the dome during the mock-up.
- In 2020, VA returned to assist with an exterior inspection of the Cathedral's north tower as part of a FISP inspection.



Building owner

Episcopal Diocese of New York

In collaboration with

- Silman (2004, 2013, 2017, 2019, 2020, 2021) • Urbitran Engineers OSMOS (2004) • Building Conservation Associates (2013) • Ennead Architects (2013) • JS Mitchell & Sons (2013, 2017, 2019, 2020)