

PROJECT PROFILE

St. Francis de Sales Church Philadelphia, PA

VERTICAL
access

Since 2006, Vertical Access has performed several interior and exterior conditions assessments for St. Francis de Sales Church. As part of an access study, we gained a unique in-depth understanding of the conditions of the drum, and our expansive knowledge of Guastavino construction aided in the assessments. Our ongoing relationship with the Church, and with various architects and engineers, has provided the Church with continuity and a clear picture of conditions as they have changed over the years. This has allowed the Church to make informed decisions over time regarding not only capital projects, but also how to maintain a safe structure.

Building description

Completed in 1911, St. Francis de Sales Church was designed by Henry D. Dagit with a massive structural tile dome by the R. Guastavino Company. The exterior walls of the church are clad in rock-faced, white marble and the trim, window surrounds and figurative statues are carved in Indiana limestone. At the crossing of the church, brick walls form an octagonal base for the terra cotta and brick cylindrical drum and large tiled dome. The dome above the drum is clad in glazed ceramic tile, which was installed with a concrete substrate in 1955 to replace the original Guastavino finish tile.

The interior of the church is richly decorated with marble, granite and limestone at the lower walls, patterned brick surfaces and polychromatic terra cotta arches at the upper areas, and a terra cotta cornice topped by a brick drum and Guastavino dome. The central dome, which has a glazed oculus at the interior, has a diameter of approximately 60 feet and rises 108 feet above the floor level of the church. Guastavino vaulting is employed at the gallery, nave, transepts and sanctuary. Arched stained glass windows line the east and west walls of the nave and round stained glass windows perforate the brick walls at the gallery, east and west transepts and north wall of the sanctuary.

Scope of work

- Surveyed and documented existing conditions at interior and exterior of church.
- Sounded Guastavino tile and masonry materials at interior and exterior to identify loose and hollow areas.
- Performed investigation of all subsurface drains and pipes using a fiber-optic diagnostic tool (See Snake®).
- Provided live-feed video to project team during inspection of representative exterior areas.



- Performed a hands-on survey along with measurements and documentation of existing conditions of the interior of the drum, particularly above the cornice level surrounding the windows. The survey included areas of terra cotta, masonry, metal, and glass to assist the architect with the feasibility study for a future access system at this area.

Building owner

Archdiocese of Philadelphia

In collaboration with

- Historic Building Architects, LLC (2006, 2007, 2017)
- Silman (2006, 2007, 2017)
- Jablonski Berkowitz Conservation, Inc. (2006)
- Femenella & Associates, Inc. (2006)
- Princeton Engineering Group, MEP engineer (2006)

Photo: Jon Reis