MASONRY REFLASHING

Maintaining Keen Attention to Detail While Working on a Massive Scale







Winchester Medical Center
Winchester, Virginia

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

Correcting Extremely Difficult Leaks Where Past Efforts Had Failed

Winchester Medical Center

Masonry Reflashing

PROJECT BACKGROUND

- Five-story 340-bed Valley Health hospital constructed in 1990; building includes two L-shaped patient wings connected to a central core
- Facility's facade is comprised of brick masonry, precast concrete lintels, and glass fiber reinforced concrete (GFRC) decorative spandrel panels and sills
- Widespread interior leakage was noticed almost immediately after the building was completed
- From 1997 to 2004, many attempts were made to investigate and correct the leakage, with minimal success
- In 2005, MPS was hired to execute pilot repairs, develop shoring options, and prove the viability and costs associated with this work
- Strict AAMA and ASTM water testing and subsequent review determined that pilot phase repairs were successful and that implementation of a full-scale solution should be deployed

PROJECT CHALLENGES

- Construction sequence needed to minimize closure of patient and mission-critical rooms; onsite planning and coordination with hospital engineering allowed same-day turnaround of patient rooms in order to accommodate demolition and temporary waterproofing
- An infection control risk assessment (ICRA) plan needed to be developed and implemented in order to manage construction dust
- Custom temporary shoring was developed to support and stabilize precast concrete lintels and the masonry above, while brick support piers were removed to access critical flashing locations at spandrel panels and sills
- A variety of structural deficiencies plagued the building and needed to be corrected during restoration

PROJECT APPROACH

- A massive flashing campaign was required to address all potential water infiltration locations
- More than 400,000 bricks were removed and relaid to accommodate the installation of over 1.4 miles of window head flashing and 1 mile of sill flashing
- A cost savings of over $200,000 was credited back to the facility owner
- MPS won a 2008 Masonry Award of Merit from the International Concrete Repair Institute for the repairs completed on the project













"In short, MPS is the best contractor I have worked with in my 20+ year career. The quality of work, craftsmanship, and attention to detail were second to none. The Winchester Medical Center project was one of the most difficult and challenging projects I have ever been involved with. Through it all, MPS performed flawlessly and completed the project on time and under budget (a remarkable feat in and of itself)."

Mark Baker
Director of Facilities & Construction Services
Valley Health

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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