

## Neonatal Intensive Care Unit of Pitt County Memorial Hospital

Stucco Facade Evaluation and Replacement  
Greenville, North Carolina



### CLIENT

Poyner & Sprall, LLP

### CHALLENGE

Water leakage began occurring shortly after completion of this new hospital structure. The leakage affected operations within the facility. To remediate the problem, the sources of the water leakage had to be identified and appropriate repairs developed. Due to the sensitive nature of the building operations, the owners wanted to minimize any chance of future water leakage.

### STRUCTURE

The neonatal intensive care unit of Pitt County Memorial Hospital is a two-story steel-frame structure clad with stucco. The building was constructed in 2003 and houses fifty beds in addition to office and support spaces.

### SOLUTION

WJE performed a visual condition survey of the existing stucco facade and roof systems, inspected underlying conditions via exploratory openings, and conducted water leakage testing. We found systemic problems with the design and installation of the stucco cladding. Given the extent of the problems, it was not practical to repair the existing system in a manner that would provide a high degree of confidence that future leakage would not occur. Based on this, the owners opted to remove and replace the existing stucco system and asked WJE to prepare drawings and specifications for this work. Our design included a replacement stucco facade, installed as a drainage system, with effective flashings and an air barrier; removal and reinstallation of all windows with proper flashings; water testing of reinstalled windows and new backup wall construction (air/moisture barrier) to ensure integrity prior to stucco application; and installation of collectors, downspouts, and underdrains at roof scuppers to evacuate water from the building perimeter. We also provided construction period services, including water testing, to verify that the entire system performed as required.

