



## PROJECT PROFILE

# Miami-Dade County Courthouse

Terra Cotta, Windows, Plaza, and Roof Restoration | Miami, FL



### CLIENT

Miami-Dade County - Internal Services Department

### BACKGROUND

Built in 1928, the Miami-Dade County Courthouse is 360 feet tall and was the first high-rise building constructed in Miami for the County. For decades after construction, it was known as the tallest building south of Baltimore. The building is in the art deco style of South Florida and is clad in terra cotta with a granite base. The plaza encompasses nearly a square city block and includes granite and slate paving. The building was added to the National Register of Historic Places in 1989.

After decades of neglect, the terra cotta facade of the Miami-Dade County Courthouse had deteriorated beyond a serviceable condition. WJE was selected to investigate the cause of distress and to develop a sympathetic repair approach to preserve the original aesthetics of the landmark structure. The key to insuring serviceability of this facade was a thorough understanding of the original construction, causes of deterioration, and appropriate methods of preservation.

### SOLUTION

After a thorough investigation of the exterior terra cotta, windows, plaza, and roofing, including materials testing conducted in WJE's in-house laboratory, it was determined that a significant portion of the building facade and plaza was in disrepair. In total, nearly 7,000 terra cotta units were removed and replaced; another 2,000 terra cotta units were removed and reused; and 4,000 units were repaired in place. In combination with the terra cotta work, nearly 7,500 lineal feet of shelf angle repairs and new structural supports were added. To blend the new with the old, the entire terra cotta facade and plaza were restoration cleaned.

The original windows had been previously replaced in the early 1990s and were known for water infiltration. WJE developed a historically sensitive repair solution of sealant to maintain the appearance of the existing windows while improving the window performance. The slate and granite plaza that encompasses the city block around the building was also in disrepair. Plaza repairs included concrete structural repairs, repointing, isolated slate and granite replacement, and restoration of the eight bronze, historic lamp posts. All of the roof levels on the building also were removed and replaced, and a new building lighting system was installed.

