



Knowledge | Experience | Solutions

BUILDING EXTERIOR SOLUTIONS

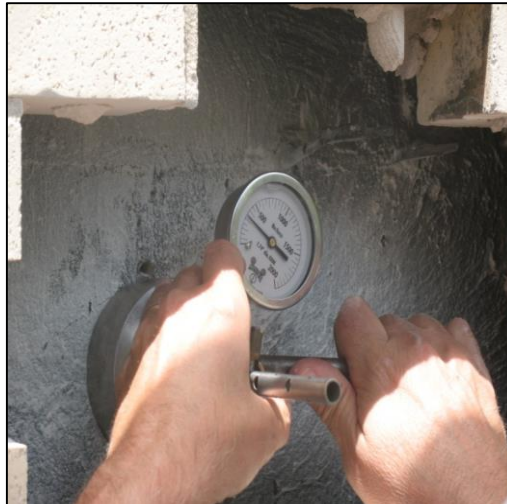
A Terracon COMPANY

PROJECT SUMMARY

The Lamar Tower (Tower) is a high-rise residential condominium which is approximately 34 years old and is L-shaped in plan with a ground floor level pool plaza within the inset building corner. The building exterior wall construction generally consists of brick veneer cavity wall system supported on steel ledger angles at each floor, cantilevered structural concrete balconies, exposed concrete columns, and openings generally consisting of operable punched windows and sliding glass doors for balcony entrances.

In 2008, brick masonry cladding distress and spalling of the concrete balconies was observed. BES performed a forensic evaluation of the brick cladding and concrete distress. Our evaluation determined that the majority of distress appeared to be the result of the original construction. Improper flashing and inadequate drainage, resulting corrosion of the ledger angle, inadequate lateral support, inadequate allowance for wall movement, and poorly constructed repairs were all observed during our evaluation. In addition, spalling of the concrete at balcony edges, corrosion and resulting spalling of the exposed concrete columns and balconies, and inadequate support conditions for the balcony railings was observed. BES provided two repair approaches and presented these options, related cost, aesthetic, occupant impacts, and corresponding anticipated performance for both options to the Home Owner's Association. The repair approaches were to a) reestablish the intent of the original design for a drainage type masonry cladding system or b) modify the existing systems so that they become barrier systems. The HOA elected the barrier approach.

BES developed repair documents to address the Owner selected repair approach. In addition, we assist with the bidding and bid evaluation. Finally, we performed contract administration and construction observations of the repairs.



THE LAMAR TOWER



PROJECT LOCATION

Houston, Texas

OWNER

The Lamar Tower
2929 Buffalo Speedway
Houston, TX 77098-1720

CONTRACTOR

Millsap Waterproofing, Inc.

BES TEAM

Amy Peevey- Project Manager and Designer
Matt McElvogue- Project Engineer

PRACTICE AREAS

Forensic Evaluation
Field Material Testing
Non-Destructive Field Testing
Repair/Replacement Design
Brick Cladding Systems
Structural Concrete Systems
Contract Administration & Construction Observation

TYPE OF CONSTRUCTION

Renovation

PROJECT SIZE

34 Story High Rise

COST OF CONSTRUCTION

\$2.4 million

Building Exterior Solutions

A Terracon Company
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