

Citrus Tower Building

Commercial Office Building | Riverside, California | 2012



CLIENT

Smith-Emery International, Inc.

LOCATION

Citrus Tower, Lime Street between Ninth Street and University Avenue, Riverside, CA, United States

INDUSTRY

Construction and Engineering

SERVICE

Baseline Dynamic Signature; Structural Commissioning

IMPACT

Established an initial dynamic baseline for the six-story office building as it awaited final completion, creating a measured reference for future comparison.

CHALLENGE

Smith-Emery sought measured response data to support finite-element model calibration for low-cycle fatigue assessment while construction was nearing completion.

STRAAM APPROACH

On June 27, 2012, STRAAM used four accelerometers: three fixed at sixth-floor corners and one traveler placed at levels in the north stairwell.

RESULT

The report identified nine modes and three tentative modes. The first three principal frequencies were 1.01, 1.18, and 1.36 Hz, with damping at or below 1% of critical.