

12 Fifth Avenue

Raker Support System | 2023

**CLIENT**

Fifth Avenue Owners
Group LLC

LOCATION

12 Fifth Ave., New York, NY
10011, United States

INDUSTRY

Real Estate and Insurance
/ Construction and
Engineering

SERVICE

Structural Dynamic
Analysis; Continuous
Monitoring

IMPACT

Gave the project team timely information about how the excavation supports responded as drilling progressed.

CHALLENGE

Drilling during excavation called for tracking strain in the raker supports while accounting for temperature-driven variation in the readings.

STRAAM APPROACH

STRAAM installed 12 strain gauges on the raker supports on Aug 22, 2023 and recorded a roughly two-week pre-drilling baseline. Monitoring tracked strain during drilling; an empirical thermal adjustment helped interpret temperature effects. A monitoring site displayed readings near real time.

RESULT

The monitored supports showed no sudden changes during drilling. Over time, readings revealed gradual shifts, giving the team an ongoing view of how the supports responded as excavation progressed.