

The FUTURE of SEISMIC ANALYSIS is Here!

OKAMOTO Structural Engineering offers a Ground Breaking New Service in partnership with SENSEQUAKE . . .



Sensequake is a world leader in structural health monitoring and seismic assessment for buildings, bridges and infrastructure. We have developed state-of-the-art software and sensors to provide professional services and a turnkey solution to engineers, governments, insurance firms and the real-estate industry.

Our patented technology performs structural health monitoring and seismic assessment solely based on actual data from highly sensitive vibration sensors—saving engineers time, effort and money—all the while providing superior results. By doing so, you create a smart baseline which can be used for determining any structural changes over time. This allows for the detection of **hidden defects**, **undocumented structural modifications** and **integrity concerns** not detected by visual inspection and traditional engineering practices which can significantly improve disaster preparedness and recovery plans. We also provide periodic, permanent and specialized structural health monitoring solutions.



Baseline Analysis
Ambient Vibration Test

Find the natural frequencies, modal shapes and the damping ratios to create a baseline



Non-Destructive
Condition Assessment

Focus on critical locations, examine integrity between structural blocks, structural joints or the flexibility of floors



Vibration
Monitoring

Track long-term vibration to check for excessive motion. Especially useful near construction sites or for highly sensitive equipment / structures



Structural Health
Monitoring

Monitor a structure's modal properties periodically or permanently to detect hidden changes



Improving Reliability Of
Assumption-Based Models

Calibrate pre-existing finite element models to increase their reliability



Seismic Structural
Evaluation

Run time-history analyses on any amount of ground motions to provide the response histories and maximum global seismic demands without finite element models



Seismic Non-Structural
Evaluation

Supply response spectra at any location on the structural platforms to provide further component damage evaluations



Damage
Estimation

Compare the generated seismic demands with codes such as FEMA P58 leading to repair time and damage cost estimates