University at Buffalo's Structural Engineering and Earthquake Simulation Laboratory

Vulnerability of Suspended Ceilings

Department of Civil, Structural and Environmental Engineering
University at Buffalo (SUNY)
Testing frame on 6D shake table
Estimating input motions for nonstructural building components

- This is not straightforward

4-story hospital in Palm Springs, CA

Roof, 0.21g
Third Floor, 0.17g
Second Floor, 0.13g
Basement, 0.07g

Instrumentation and records by CSMIP-CGS
Testing frame on 6D shake table
Test Protocol – Simulated Earthquake (sample)

*Build up-Hold-Decay
Ceiling systems testing
Damage to ceiling systems
Development of a National Seismic Testing Facility at UB as “NCS” Nonstructural Components Simulator

http://nees.buffalo.edu