

Tall Buildings Initiative

A user-sponsored program to develop performance-based seismic design guidelines for tall buildings.



Courtesy Solomon Cordwell Buenz



Courtesy Steve Boland

Construction Boom

Tens of highrise buildings are planned in west coast cities. Most are being designed using a performance-based approach.

PEER's Tall Buildings Initiative is addressing several key issues:

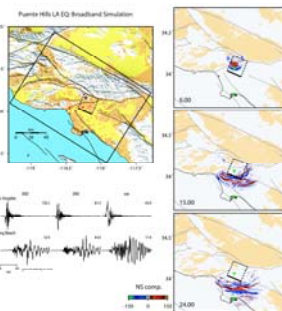
- Performance objectives
- Building case studies
- Synthetically generated ground motions
- Ground motion review and validation
- Ground motion guidelines
- Structural modeling/acceptance criteria
- Buildings with subterranean levels
- Design guidelines
- Technology transfer



Pankow Foundation Link Beam Project
J. Wallace and D. Naish (UCLA), R. Klemencic and A. Fry (MKA)

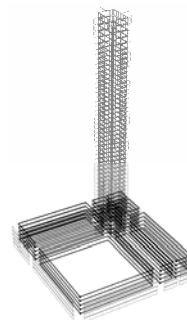
Modeling Guidelines

Using the latest data from field, laboratory, and numerical studies, the Tall Buildings Initiative is developing guidance on good practices in nonlinear modeling and dynamic analysis for typical tall building components and systems.



Ground Motions

USGS/SCEC collaborators are developing ground motions for large earthquakes, while PEER researchers are developing guidelines for ground motion selection and scaling.



Building Studies

A variety of tall building computer models including foundations are being subjected to hundreds of earthquake records to understand building response characteristics and design requirements.



Los Angeles Tall Buildings Structural Design Council

The Pacific Earthquake Engineering Research Center

headquarters at the University of California, Berkeley
for more information see <http://peer.berkeley.edu>