

SEISMIC UPGRADE GUIDE FOR COMMERCIAL BUILDINGS

What triggers a building seismic upgrade?

- Any “change in use” to a more complicated occupancy rating requires seismic upgrade

Examples

“B” to “H”, “B” to “A”, or “F” to “H”

Structural UBC upgrades that affect the structural integrity of the building (i.e. cut-ins for man doors and windows, etc.)

Special Note

If a permit is pulled for improvements for a building built prior to 1970, entire building should be seismically upgraded (*under discussion by Fremont*). 1970/1985 buildings that exceed 40,000 s.f. that require permit improvements (*Standard for Mountain View*).

Who determines if seismic upgrading is necessary?

- Local building departments determine extent of seismic upgrading requirements

Special Note

Every county requires seismic upgrades to un-reinforced masonry buildings (*California Mandate*)

What is the design intent behind seismic upgrades?

- *Make safe, save lives!*
(Make safe so people can exit; then the building can fall.)

Who is asking for seismic upgrading?

- Lenders who have seismic standards for lending protocol with a minimal of what UBC requires -
Lenders, in general want to maximize their exposure to 20% of replacement costs for all repairs (generally termed PML). If the engineer's analysis on the building shows a PML greater than 20%, the lender will request a seismic upgrade as defined by the structural engineer to bring the PML within the 20% range.
- Owners
- Tenants/Customers (i.e. Raynet and U.S. Government)
- Insurance Companies

Special Note

The Probable Maximum Loss (PML) is the percentage of the shell and interior components that will be repaired or replaced during a seismic event.

Who should perform a seismic inspection?

- A registered California structural engineer (preferably) listed on the lender's "pre-approved" list

Are there insurance savings?

- Seismic retrofitting to UBC requirements generates minimal insurance savings. More stringent seismic upgrades could increase savings.

Special Note

Consult your insurance carrier

The foregoing guidelines are given for guidance purposes only. Please consult your insurance carrier