

Example No. 1

A civil engineer is designing a 5-story building with a discontinuous diaphragm assigned to Seismic Design Category E. Which of the following will be required to be increased by a factor of 1.25?

- A. Base shear
- B. Diaphragm connection to the vertical elements
- C. Collector connections using the overstrength factor
- D. Non-structural element forces

Example No. 2

An apartment building of reinforced concrete construction was built in 1930. For the maximum considered earthquake, what minimum level of seismic design is appropriate to satisfy the *CBC* design philosophy for the replacement of this building?

- A. Minor structural damage or loss of function
- B. Limited property damage
- C. Limited damage in order to maintain function
- D. Major structural damage but no collapse

Example No. 3

A one-story, fully grouted masonry wall supported by a reinforced concrete footing is under construction. Assume concrete strength (f'_c) is 2,500 psi and masonry strength (f'_m) is 1,800 psi. The presence of a special inspector is required during the placement of

- A. grout
- B. masonry units
- C. reinforcement in the wall
- D. reinforcing steel in the footing