

Appendix 11B

EXISTING BUILDING PROVISIONS

11B.1 SCOPE

The provisions of this appendix shall apply to the design and construction of alterations and additions and to existing structures with a change in use.

11B.2 STRUCTURALLY INDEPENDENT ADDITIONS

An addition that is structurally independent from an existing structure shall be designed and constructed in accordance with the seismic requirements for new structures.

11B.3 STRUCTURALLY DEPENDENT ADDITIONS

Where an addition is not structurally independent from an existing structure, the addition and alterations to the existing structure shall be designed and constructed such that the entire structure conforms to the seismic force-resistance requirements for new structures.

EXCEPTIONS: The entire structure shall not be required to comply with the seismic force-resistance requirements for new structures where all of the following conditions are met:

1. The addition complies with the requirements for new structures.
2. The addition does not increase the seismic forces in any structural element of the existing structure by more than 10 percent unless the capacity of the element subject to the increased forces is still in compliance with this standard.
3. The addition does not decrease the seismic resistance of any structural element of the existing structure unless the reduced resistance is equal to or greater than that required for new structures.

11B.4 ALTERATIONS

Alterations are permitted to be made to any structure without requiring the existing structure to comply

with this standard provided the alterations comply with the requirements for a new structure. Alterations that increase the seismic force in any existing structural element by more than 10 percent or decrease the design strength of any existing structural element to resist seismic forces by more than 10 percent shall not be permitted unless the entire seismic force-resisting system is determined to comply with this standard for a new structure.

EXCEPTIONS: Alterations to existing structural elements or additions of new structural elements that are not required by this standard and are initiated for the purpose of increasing the strength or stiffness of the seismic force-resisting system of an existing structure shall not be required to be designed for forces in accordance with this standard provided that an engineering analysis is submitted indicating the following:

1. The design strengths of existing structural elements required to resist seismic forces are not reduced.
2. The seismic force to required existing structural elements is not increased beyond their design strength.
3. New structural elements are detailed and connected to the existing structural elements as required by this standard.
4. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by this standard.
5. The alteration does not create a structural irregularity or make an existing irregularity more severe.

11B.5 CHANGE OF USE

Where a change of use results in a structure being reclassified to a higher occupancy category as defined in Table 1-1 of this standard, the structure shall conform to the seismic requirements for new construction.

EXCEPTIONS:

1. Where a change of use results in a structure being reclassified from Occupancy Category I or II to Occupancy Category III and the structure is located in a seismic map area