

(Effective July 1, 2023)

WAC 51-50-480503 Section 503—Alterations.

503.13 Voluntary lateral force-resisting system alterations. Structural alterations that are intended exclusively to improve the lateral force resisting system and are not required by other sections of this code, shall not be required to meet the requirements of Section 1609 or 1613 of the *International Building Code*, provided that all of the following apply:

1. The capacity of existing structural systems to resist forces is not reduced.

2. New structural elements are detailed and connected to existing or new structural elements as required by the selected design criteria.

2.1 Where approved, new lateral force-resisting systems are permitted to be of a type designated as "Ordinary" or "Intermediate" where ASCE 7 Table 12.2-1 states these types of systems are not permitted provided that both of the following apply:

2.1.1 The selected design criteria is the International Building Code.

2.1.2 The new "Ordinary" or "Intermediate" system provides deformation compatibility with the existing lateral force-resisting system.

3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the *International Building Code* for new construction.

4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

503.19 Seismic requirements for alterations with increased occupant load of unreinforced masonry or hollow clay tile buildings. In addition to the requirements in Sections 503.4 through 503.11, alterations meeting all of the following conditions shall comply with the applicable requirements in Sections 503.19.1 through 503.19.4.

1. The occupant load of a building increases by more than 20 percent for occupancy groups A, I, E, R, M, B, H, or S used for storage of hazardous materials.

2. Buildings assigned to Seismic Design Category C, D, E, or F.

3. The building's structural system includes unreinforced masonry and hollow clay tile bearing walls.

Where there is a change of occupancy with the alteration, the most restrictive seismic requirements in accordance with Section 506 and this section shall apply. The cumulative effect of alterations compared with the original occupant load that have an increase in occupant load over time exceeding 20 percent shall comply with these provisions.

EXCEPTIONS:

1. A cumulative increase in the occupant load of less than 50 for occupancy categories A or I.
2. A cumulative increase in the occupant load of less than 25 for E occupancies.
3. R-3 occupancies, and all other R occupancies with an increase of 5 dwelling or sleeping units or less.
4. A cumulative increase in occupant load of less than 100 for occupancy categories M or B.
5. A cumulative increase in the occupant load of less than 10 for H occupancies or S occupancies using hazardous materials.

503.19.1 Large buildings. Buildings four or more stories or buildings more than 12,000 square feet shall be required to perform seismic evaluation in accordance with IEBC 304.3. Any lateral resisting elements shall be required to comply with design requirements for reduced seismic forces in accordance with Section 304.3.2 where found to be deficient.

503.19.2 Parapet bracing. Buildings with parapets constructed of unreinforced masonry where the parapet height to thickness ratio exceeds 1.5:1 shall be required to have parapets anchored, removed, or altered to resist out-of-plane seismic forces unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

503.19.3 Floor and roof wall anchors. The alteration work shall include the installation of wall anchors at the floor and roof lines unless an evaluation demonstrates compliance of existing wall anchorage. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

503.19.4 Bracing of partitions and nonstructural walls. Unreinforced masonry partitions and nonstructural walls within the alteration area and adjacent to egress paths from the alteration area shall be anchored, removed, or altered to resist out-of-plane seismic forces unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces in accordance with Section 304.3.2 shall be permitted.

[Statutory Authority: RCW 19.27.031, 19.27.074, and 19.27.540. WSR 23-02-073, § 51-50-480503, filed 1/4/23, effective 7/1/23.]