

CHAPTER 9

ADDITIONS

SECTION 901 GENERAL

901.1 Scope. An addition to a building or structure shall comply with the building, plumbing, electrical, and mechanical codes, without requiring the existing building or structure to comply with any requirements of those codes or of these provisions.

Exception: In flood hazard areas, the existing building is subject to the requirements of Section 903.5.

901.2 Creation or extension of nonconformity. An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing, or electrical systems.

901.3 Other work. Any repair or alteration work within an existing building to which an addition is being made shall comply with the applicable requirements for the work as classified in Chapter 3.

SECTION 902 HEIGHTS AND AREAS

902.1 Height limitations. No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the *International Building Code* for new buildings.

902.2 Area limitations. No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the *International Building Code* for new buildings unless fire separation as required by the *International Building Code* is provided.

Exception: In-filling of floor openings and nonoccupiable appendages such as elevator and exit stair shafts shall be permitted beyond that permitted by the *International Building Code*.

902.3 Fire protection systems. Existing fire areas increased by the addition shall comply with Chapter 9 of the *International Building Code*.

SECTION 903 STRUCTURAL

903.1 Compliance with the *International Building Code*. Additions to existing buildings or structures are new construction and shall comply with the *International Building Code*.

903.2 Additional gravity loads. Existing structural elements supporting any additional gravity loads as a result of additions shall comply with the *International Building Code*.

Exceptions:

1. Structural elements whose stress is not increased by more than 5 percent.
2. Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the *International Building Code* or the provisions of the *International Residential Code*.

903.3 Lateral-force-resisting system. The lateral-force-resisting system of existing buildings to which additions are made shall comply with Sections 903.3.1, 903.3.2, and 903.3.3.

Exceptions:

1. In Type V construction, Group R occupancies where the lateral-force story shear in any story is not increased by more than 10 percent.
2. Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the *International Building Code* or the provisions of the *International Residential Code*.
3. Additions where the lateral-force story shear in any story is not increased by more than 5 percent.

903.3.1 Vertical addition. Any element of the lateral-force-resisting system of an existing building subjected to an increase in vertical or lateral loads from the vertical addition shall comply with the lateral load provisions of the *International Building Code*.

903.3.2 Horizontal addition. Where horizontal additions are structurally connected to an existing structure, all lateral-force-resisting elements of the existing structure affected by such addition shall comply with the lateral load provisions of the *International Building Code*. Lateral loads imposed on the elements of the existing structure and the addition shall be determined by a relative stiffness analysis of the combined structure including torsional effects.

903.3.3 Voluntary addition of structural elements to improve the lateral-force-resisting system. Voluntary addition of structural elements to improve the lateral-force-

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resisting system of a building shall comply with Section 707.7.

903.4 Snow drift loads. Any structural element of an existing building subjected to additional loads from the effects of snow drift as a result of an addition shall comply with the *International Building Code*.

Exceptions:

1. Structural elements whose stress is not increased by more than 5 percent.
2. Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the *International Building Code* or the provisions of the *International Residential Code*.

903.5 Flood hazard areas. Additions and foundations in flood hazard areas shall comply with the following requirements:

1. For horizontal additions that are structurally interconnected to the existing building:
 - 1.1. If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the *International Building Code*.
 - 1.2. If the addition constitutes substantial improvement, the existing building and the addition shall comply with Section 1612 of the *International Building Code*.
2. For horizontal additions that are not structurally interconnected to the existing building:
 - 2.1. The addition shall comply with Section 1612 of the *International Building Code*.
 - 2.2. If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the *International Building Code*.
3. For vertical additions and all other proposed work that, when combined, constitute substantial improvement, the existing building shall comply with Section 1612 of the *International Building Code*.
4. For a new, replacement, raised, or extended foundation, if the foundation work and all other proposed work, when combined, constitute substantial improvement, the existing building shall comply with Section 1612 of the *International Building Code*.

SECTION 904 SMOKE ALARMS IN OCCUPANCY GROUPS R-3 AND R-4

904.1 Smoke alarms in an addition. Whenever an addition is made to a building or structure of a Group R-3 or R-4 occupancy, hardwired, interconnected smoke alarms meeting the requirements of the *International Building Code* or *International Residential Code* as applicable shall be installed and maintained in the addition.

904.2 Smoke alarms in existing portions of a building. Whenever an addition is made to a building or structure of a Group R-3 or R-4 occupancy, the existing building shall be provided with smoke alarms as required by the *International Building Code* or *International Residential Code* as applicable.

SECTION 905 ACCESSIBILITY

905.1 Minimum requirements. Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, primary function shall comply with the requirements of Section 506.2 for accessible routes.

SECTION 906 ENERGY CONSERVATION

906.1 Minimum requirements. Additions to existing buildings or structures may be made to such buildings or structures without making the entire building or structure comply with the requirements of the *International Energy Conservation Code*. The addition shall conform to the requirements of the *International Energy Conservation Code* as they relate to new construction only.