

CHAPTER 11

ADDITIONS

(including 2017 errata)

SECTION 1101 GENERAL

1101.1 Scope. An *addition* to a building or structure shall comply with the *International Codes* as adopted for new construction without requiring the *existing building* or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an *addition* impacts the *existing building* or structure, that portion shall comply with this code.

1101.2 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.

1101.3 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 5.

SECTION 1102 HEIGHTS AND AREAS

1102.1 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.

1102.2 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 stairway shafts shall be permitted beyond that permitted by the *International Building Code*.

1102.3 Fire protection systems. Existing fire areas increased by the *addition* shall comply with Chapter 9 of the *International Building Code*.

SECTION 1103 STRUCTURAL

1103.1 Structural. Additions to existing buildings or structures are new construction and shall comply with Section 305.3.

~~([BS] 1103.1 Compliance with the International Building Code. Additions to existing buildings or structures are new~~

construction and shall comply with the *International Building Code*.

~~[BS] 1103.2 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.~~

~~[BS] 1103.3 Lateral force resisting system. The lateral force resisting system of existing buildings to which additions are made shall comply with Sections 1103.3.1, 1103.3.2 and 1103.3.3.~~

~~Exceptions:~~

- ~~1. Buildings of Group R occupancy with no more than five dwelling 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.~~
- ~~2. Any existing lateral load carrying structural element whose demand capacity ratio with the addition considered is not more than 10 percent greater than its demand capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of this exception, comparisons of demand capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction. For purposes of calculating demand capacity ratios, the demand shall consider applicable load combinations involving International Building Code level seismic forces in accordance with Section 301.1.4.1.~~

~~[BS] 1103.3.1 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 International Building Code wind provisions and the International Building Code level seismic forces specified in Section 301.1.4.1 of this code.~~

~~[BS] 1103.3.2 Horizontal addition. Where horizontal additions are structurally connected to an existing struc-~~

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ture, all lateral force-resisting elements of the existing structure affected by such *addition* shall comply with the *International Building Code* wind provisions and the IBC-level seismic forces specified in Section 301.1.4.1 of this code.

[BS] 1103.3.3 Voluntary addition of structural elements to improve the lateral force-resisting system. Voluntary addition of structural elements to improve the lateral force-resisting system of an *existing building* shall comply with Section 807.6.

[BS] 1103.4 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*.)

[BS] 1103.5 Flood hazard areas. Additions and foundations in flood hazard areas shall comply with ((the following requirements)) Section ((307)) 310.

((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*, or Section R322 of the *International Residential Code*, as applicable.
- 1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable.

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*, or Section R322 of the *International Residential Code*, as applicable.
- 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*, or Section R322 of the *International Residential Code*, as applicable.

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*, or Section R322 of the *International Residential Code*, as applicable.

4. For a 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*, or Section R322 of the *International Residential Code*, as applicable.

5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the *International Building Code* or Section R322 of the *International Residential Code*, as applicable.)

SECTION 1104 SMOKE ALARMS IN OCCUPANCY GROUPS R AND I-1

1104.1 Smoke alarms in existing portions of a building.

Where an *addition* is made to a building or structure of a Group R or I-1 occupancy, the *existing building* shall be provided with smoke alarms as required by Section 1103.8 of the *International Fire Code* ((or Section R314 of the *International Residential Code* as applicable)).

SECTION 1105 ACCESSIBILITY

1105.1 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 307 ((Sections 705, 806 and 906, as applicable)).

((1105.2 Accessible dwelling units and sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for accessible units apply only to the quantity of spaces being added.

1105.3 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

1105.4 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of spaces being added.))

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**~~((SECTION 1106
ENERGY CONSERVATION~~**

~~**1106.1 Minimum requirements.** Additions to existing buildings shall conform to the energy requirements of the *International Energy Conservation Code* or *International Residential Code* as they relate to new construction.))~~

**SECTION 1107
ADDITION OF DWELLING UNITS**

1106.1 Automatic sprinkler systems. Automatic sprinkler systems are required when new dwelling units are added to buildings according to Items 1 through 5 below. This provision is permitted to be used to add one unit after October 29, 1990.

1. One unit is permitted to be added to a residential or commercial building without an automatic sprinkler system unless sprinklers are otherwise required by this section. If more than one unit is added, the new units shall be equipped with a sprinkler system.
2. In buildings that do not comply with the provisions of this code for number of stories, allowable area, height or type of construction before the unit is added, an automatic sprinkler system shall be provided in the new unit. The addition of the new unit shall not be allowed if it increases the nonconformity.
3. In buildings undergoing *substantial alteration*, an automatic sprinkler system shall be installed where required by this code for new construction.
4. One unit is permitted to be added to an existing duplex without an automatic sprinkler system where both of the following conditions are met:
 - 4.1 The project is considered a *substantial alteration* only because of the change in occupancy; and
 - 4.2 The building complies with the requirements for building height and number of stories for a Group R-2 occupancy.
5. Where one unit is added to an existing duplex, sprinklers are required in the new unit and not in the existing units where all of the following conditions are met:
 - 5.1 The existing duplex does not comply with the requirements for building height and story count for a Group R-2 occupancy;
 - 5.2 The project is considered a *substantial alteration* only because of the change in occupancy;
 - 5.3 The new unit is constructed as an *addition* to the duplex;
 - 5.4 The new unit is separated from the existing duplex by a fire wall; and
 - 5.5 The *addition* by itself complies with the requirements for a Group R-2 occupancy.

1106.1.1 Fire walls. An existing nonconforming building to which an *addition* is made is permitted to exceed the height, number of stories and area specified for new build-

ings if a fire wall is provided, the existing building is not made more nonconforming, and the *addition* conforms to this code.

