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 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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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 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.)
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-