FIFTH PRINTING (Updated February 1, 2016)

CHAPTER 2 DEFINITIONS

[BS] SUBSTANTIAL STRUCTURAL DAMAGE. A condition where one or both of the following apply:

1. In any story, the <u>The</u>vertical elements of the lateral forceresisting system have suffered damage such that the lateral load-carrying capacity of the structure <u>any story</u> in any horizontal direction has been reduced by more than 33 percent from its predamage condition.

2. The capacity of any vertical gravity load-carrying component, vertical component carrying gravity load, or any group of such components, that supports more than 30 percent of the total area of the structure's floor(s) and roof(s) has been reduced more than 20 percent

from its predamage condition and the remaining capacity of such affected elements, with respect to all dead and live loads, is less than 75 percent of that required by this code for new buildings of similar structure, purpose and location.

UNSAFE. Buildings, structures or equipment that are unsanitary, or that are deficient due to inadequate means of egress facilities, inadequate light and ventilation, or that constitute a fire hazard, or in which the structure or individual structural members meet the definition of "*Dangerous*," or that are otherwise *dangerous* dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance shall be deemed unsafe. A vacant structure that is not secured against entry shall be deemed unsafe.

(Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated February 13, 2015)

CHAPTER 2 DEFINITIONS

[A]ADDITION. An extension or increase in floor area, number of stories, or height of a building or structure.

[A]ALTERATION. Any construction or renovation to an existing structure other than a *repair* or *addition*. Alterations are classified as Level 1, Level 2 and Level 3.

[A] CHANGE OF OCCUPANCY. A change in the use of the building or a portion of a building. A change of occupancy shall include any change of occupancy classification, any change from one group to another group within an occupancy classification or any change in use within a group for a specific occupancy classification.

[A]CODE OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code.

[A]DEFERRED SUBMITTAL. Those portions of the design that are not submitted at the time of the application and that are to be submitted to the *code official* within a specified period.

[A] EXISTING BUILDING. A building erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued.

[A]HISTORIC BUILDING. Any building or structure that is one or more of the following:

1. Listed, or certified as eligible for listing, by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places.

2. Designated as historic under an applicable state or local law.

3. Certified as a contributing resource within a National Register, state designated or locally designated historic district.

[BS] REHABILITATION, SEISMIC. Work conducted to improve the seismic lateral force resistance of an existing building.

[A]REPAIR. The reconstruction or renewal of any part of an *existing building* for the purpose of its maintenance or to correct damage.

[BS] SEISMIC LOADING. The forces prescribed herein, related to the response of the structure to earthquake motions, to be used in the analysis and design of the structure and its components.

(Portions of text and tables not shown are unaffected by the errata)

SIXTH PRINTING (Updated September 19, 2018)

CHAPTER 4 PRESCRIPTIVE METHOD

[BS] 403.4 Existing structural elements carrying lateral load. Except as permitted by Section 403.5-403.9, where the alteration increases design lateral loads in accordance with Section 1609 or 1613 of the International Building Code, or where the alteration results in a prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609 and 1613 of the International Building Code. For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 301.1.4.1 for the applicable risk category, shall be deemed to meet the requirements of Section 1613 of the International Building Code.

403.11.2 Ambulatory care. In ambulatory care facilities required to be separated by Section 422.2 of the International Building Code, the required capacity of the refuge areas for smoke compartments in accordance with Section 422.4 422.3.2 of the International Building Code shall be maintained.

THIRD PRINTING (Updated April 15th 2015)

CHAPTER 4 PRESCRIPTIVE METHOD

406.2 Replacement window opening control devices. In Group R-2 or R-3 buildings containing dwelling units, window opening control devices complying with ASTM F 2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

- 1. The window is operable;
- 2. The window replacement includes replacement of the sash and the frame;
- 3. The top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor;
- 4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position; and
- 5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1029.2 1030.2 of the *International Building Code*.

Exceptions:

- 1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F 2006.
- 2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F 2090.

(Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated February 13, 2015)

CHAPTER 4 PRESCRIPTIVE METHOD

406.3 Replacement window emergency escape and rescue openings. Where windows are required to provide *emergency escape* and *rescue openings* in Group R-2 and R-3 occupancies, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.5 <u>of the *International Building Code*</u> provided the replacement window meets the following conditions:

- 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
- 2. The replacement of the window is not part of a change of occupancy.

[B] 409.1 Conformance. Structures moved into or within the jurisdiction shall comply with the provisions of <u>the</u> <u>International Building Code</u> this code for new structures.

(Portions of text and tables not shown are unaffected by the errata)

SIXTH PRINTING (Updated September 19, 2018)

CHAPTER 7 ALTERATIONS – LEVEL 1

702.5 Emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.5 of the *International Building Code* and Sections R310.21-R310.2.1, R310.2.2 and R310.2.3 of the *International Residential Code* accordingly, provided the replacement window:

Is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening.

The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

Window opening control devices complying with ASTM F 2090 shall be permitted for use on windows required to provide *emergency escape* and *rescue openings*.

SIXTH PRINTING (Updated September 19, 2018)

CHAPTER 14 PERFORMANCE METHOD

1401.6.1.1 Height formula. The following formulas shall be used in computing the building height value.

Height Value, feet = $\frac{(AH) - (EBH)}{425 \cdot 12.5} \times CF$ (Equation 13-1)

Height value, stories = (AS - EBS) × CF (Equation 13-2)

where:

AH = Allowable height in feet (mm) from Section 504 of the International Building Code. EBH = Existing building height in feet (mm). AS = Allowable height in stories from Section 504 of the International Building Code. EBS = Existing building height in stories. CF = 1 if (AH) – (EBH) is positive. CF = Construction-type factor shown in Table 1301.6.6(2) if (AH) – (EBH) is negative.

Note: Where mixed occupancies are separated and individually evaluated as indicated in Section 1301.6, the values *AH*, *AS*, *EBH* and *EBS* shall be based on the height of the occupancy being evaluated.

[B] 1401.6.7.1 Categories. The categories for HVAC systems are:

1. Category a—Plenums not in accordance with Section 602 of the International Mechanical Code. -10 points.

2. Category b—Air movement in egress elements not in accordance with Section <u>1020.5</u> of the International Building Code. -5 points.

3. Category c—Both Categories a and b are applicable. -15 points.

4. Category d—Compliance of the HVAC system with Section <u>1020.5</u> <u>1018.5</u> of the International Building Code and Section 602 of the International Mechanical Code. 0 points.

5. Category e—Systems serving one story; or a central boiler/chiller system without ductwork connecting two or more stories. +5 points.

2015 International Existing Building Code Errata (Portions of text and tables not shown are unaffected by the errata)

FIFTH PRINTING (Updated March 1, 2017)

CHAPTER 14 PERFORMANCE METHOD

TABLE 1401.6.15 **MEANS-OF-EGRESS EMERGENCY LIGHTING VALUES**

CATEGORIES		
А	b	С
NP	0	4
0	1	1
	A NP 0	A b

NP = Not permitted

(Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated October 30, 2014)

CHAPTER 14 PERFORMANCE METHOD

1401.2.5 Accessibility requirements. Accessibility shall be provided in accordance with Section 410 or 605 705.

1401.6.2.1 Allowable area formula. The following formula shall be used in computing allowable area:

 $Aa = At + (NS \times If)$ (Equation 14-3)

where:

Aa = Allowable building area per story (square feet).

At = Tabular allowable area factor (NS, S1, S13R, or SM value, as applicable) in accordance with Table 506.2 of the *International Building Code*.

NS = Tabular allowable area factor in accordance with Table 506.2 of the *International Building Code* Or for nonsprinklered building (regardless of whether the building is sprinklered).

If = Area factor increase due to frontage as calculatedin accordance with Section 506.3 of the *International Building Code*.

[B] 1401.6.5.1 Categories. The categories for corridor walls are:

- 1. Category a-No fire partitions; incomplete fire partitions; no doors; or doors not self-closing.
- 2. Category b—Less than 1-hour fire-resistance rating or not constructed in accordance with Section 708.4 of the *International Building Code*.
- Category c—1-hour to less than 2-hour fire-resistance rating, with doors conforming to Section 716 of the International Building Code or without corridors as permitted by Section 1018 1020 of the International Building Code.
- 4. Category d—2-hour or greater fire-resistance rating, with doors conforming to Section 716 of the *International Building Code*.

1401.6.11 Means of egress capacity and number. Evaluate the means of egress capacity and the number of exits available to the building occupants. In applying this section, the means of egress are required to conform to the following sections of the *International Building Code:* 1003.7, 1004, <u>1005</u> 1005.1, 1006, 1007, 1016.2, 1025.1 <u>1026.1</u>, 1028.2, 1028.5, 1029.2, 1029.3, 1029.4 and 1030. The number of exits credited is the number that is available to each occupant of the area being evaluated. Existing fire escapes shall be accepted as a component in the means of egress when conforming to Section 405. Under the categories and occupancies in Table 1401.6.11, determine the appropriate value and enter that value into Table 1401.7 under Safety Parameter 1401.6.11, Means of Egress Capacity, for means of egress and general safety.

1401.6.11.1 Categories. The categories for means-ofegress capacity and number of exits are:

- 1. Category a—Compliance with the minimum required means-of-egress capacity or number of exits is achieved through the use of a fire escape in accordance with Section 405.
- Category b—Capacity of the means of egress complies with Section <u>1005</u> 1004 of the International Building Code, and the number of exits complies with the minimum number required by Section <u>1006</u> 1021 of the International Building Code.
- 3. Category c—Capacity of the means of egress is equal to or exceeds 125 percent of the required means-of-egress capacity, the means of egress complies with the minimum required width dimensions specified in the *International Building Code*, and the number of exits complies with the minimum number required by Section 1006 of the *International Building Code*.
- 4. Category d—The number of exits provided exceeds the number of exits required by Section 1006 of the *International Building Code*. Exits shall be located a distance apart from each other equal to not less than that specified in Section <u>1007</u> 1015.2 of the *International Building Code*.
- 5. Category e—The area being evaluated meets both Categories c and d.

FIFTH PRINTING (Updated April 27th, 2016)

CHAPTER 14 PERFORMANCE METHOD

1401.6.13 Maximum exit access travel distance to an exit. Evaluate the length of exit access travel to an approved exit. Determine the appropriate points in accordance with the following equation and enter that value into Table 1401.7 under Safety Parameter 1401.6.13, Maximum Exit Access Travel Distance for means of egress and general safety. The maximum allowable exit access travel distance shall be determined in accordance with Section <u>1017.1</u> 1016.1 of the *International Building Code*.

1401.6.21 Patient ability, concentration, smoke compartment location and ratio to attendant. In I-2 occupancies, the ability of patients, their concentration and ratio to attendants shall be evaluated and applied in accordance with this section. Evaluate each smoke compartment using the categories in Sections 1401.6.21.1, 1401.6.21.2 and 1401.6.21.3 and enter the value in Table <u>1401.7</u> <u>1401.8</u>. To determine the safety factor, multiply the three values together, if the sum is 9 or greater, compliance has failed.

1401.6.21.2.1 Categories: The categories for patient concentration are:

- 1. <u>Category a smoke compartment has 1 to 10 patients.</u>
- 2. Category b smoke compartment has more than 10 to 40 patients
- 3. Category d smoke compartment has greater than 40 patients

(Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated October 30, 2014)

CHAPTER 15 CONSTRUCTION SAFEGUARDS

[BSBE] 1505.1 Stairways required. Where a building has been constructed to a building height of 50 feet (15 240 mm) or four stories, or where an *existing building* exceeding 50 feet (15 240 mm) in building height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.