# 1<sup>st</sup> thru 7<sup>th</sup> PRINTING (October 31, 2012)

SUMMARY SHEET- BUILDING CODE				
SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)	
1401.6.13 Maximum Exit Access Travel Distance	* * * *			
1401.6.14 Elevator Control	* * * *			
1401.6.15 Means of Egress Emergency Lighting				
1401.6.16 Mixed Occupancies				
1401.6.17 Automatic Sprinklers		**** ÷2 =		
1401.6.18 Standpipes				
1401.6.19 Incidental Use		<del>;2 =</del>		

**TABLE 1301.7** 

\* \* \* \* No applicable value to be inserted.

#### FOURTH PRINTING (Updated)

### CHAPTER 6 ALTERATIONS-LEVEL 1

**606.3.1 Bracing for unreinforced masonry parapets.** Where a permit is issued for reroofing for more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall include installation of parapet bracing to resist the reduced *International Building Code* seismic forces <u>level as</u> specified in Section 101.5.4.2 of this code unless an evaluation demonstrates compliance of such items.

# FOURTH PRINTING (Updated)

### CHAPTER 7 ALTERATIONS-LEVEL 2

**708.1 New installations.** All newly installed electrical equipment and wiring relating to work done in any *work area* shall comply with the materials and methods requirements of Chapter 5 6.

**Exception:** (no change to current text.)

# 2009 International Existing Building Code Errata

# FOURTH PRINTING (Updated)

## CHAPTER 13 PERFORMANCE COMPLIANCE METHODS

**[B] 1301.2.5 Accessibility requirements.** All portions of the buildings proposed for change of occupancy shall conform to the accessibility provisions of Section <del>308</del> <u>310</u>.

#### FOURTH PRINTING (Updated)

### APPENDIX B SUPPLEMENTARY ACCESSIBILTIY REQUIREMENTS FOR EXISTING BUILDINGS AND FACILITIES.

**B101.3 Qualified historic buildings and facilities subject to Section 106 of the National Historic Preservation Act.** Where an alteration or change of occupancy is undertaken to a qualified historic building or facility that is subject to Section 106 of the National Historic Preservation Act, the federal agency with jurisdiction over the undertaking shall follow the Section 106 process. Where the state historic preservation officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the alternative requirements of Section 1005 310.9 for that element are permitted.

**B101.4 Qualified historic buildings and facilities not subject to Section 106 of the National Historic Preservation Act.** Where an alteration or change of occupancy is undertaken to a qualified historic building or facility that is not subject to Section 106 of the National Historic Preservation Act, and the entity undertaking the alterations believes that compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the entity shall consult with the state historic preservation officer. Where the state historic preservation officer determines that compliance with the accessibility requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historical significance of the building or facility, the alternative requirements of Section 1005 <u>310.9</u> for that element are permitted.

**B102.2.3 Direct connections.** New direct connections to commercial, retail, or residential facilities shall, to the maximum extent feasible, have an accessible route complying with Section  $506.2 \\ 605.2 \\ from the point of connection to boarding platforms and transportation system elements used by the public. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and transportation system elements used by the public.$ 

### CHAPTER 1 ADMINISTRATION

**104.11.1 Research reports**. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

**104.11.2 Tests.** Whenever there is insufficient evidence of compliance with the provisions of this code or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the code official shall be performed by an approved agency. Reports of such tests shall be retained by the code official for the period required for retention.

**106.1 (Supp) General.** Submittal documents consisting of construction documents special inspection and structural observation programs, investigation and evaluation reports, and other data shall be submitted in one two or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the code official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: (no change to current text)

## CHAPTER 3 PRESCRIPTIVE COMPLIANCE METHOD

**301.2.1 Existing materials.** Materials already in use in a building in <del>conformance</del> <u>compliance</u> with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the code official to be detrimental to life, health or safety.

**302.1 General.** Additions to any building or structure shall comply with the requirements of the *International Building Code* for new construction. Alterations to the existing building or structure shall be made to ensure that the existing building or structure together with the addition are no less conforming with the provisions of this code the *International Building Code* than the existing building or structure was prior to the addition. An existing building together with its additions shall comply with the height and area provisions of Chapter 5 of the *International Building Code*.

**302.3 Existing structural elements carrying gravity load.** Any existing gravity loadcarrying structural element for which an addition and its related alterations cause an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, replaced, or otherwise altered as needed to carry the increased load required by this code the *International Building Code* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased shall be considered an altered element subject to the requirements of Section 303.3. Any existing element that will form part of the lateral load path for any part of the addition shall be considered an existing lateral load-carrying structural element subject to the requirements of Section 302.4.

**302.4.1 Seismic.** Seismic requirements for <u>alterations</u> <u>additions</u> shall be in accordance with this section. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R,  $\Omega_0$  and  $C_d$  for the existing seismic force-resisting system shall be those specified by this code the *International Building Code* for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate or special system.

**303.1 General.** Except as provided by Section 301.2 or this section, alterations to any building or structure shall comply with the requirements of the <u>code</u> <u>International</u> <u>Building Code</u> for new construction. Alterations shall be such that the existing building or structure is no less conforming with the provisions of <u>this code</u> <u>the International</u> <u>Building Code</u> than the existing building or structure was prior to the alteration.

Exceptions: (no change to current text)

**303.3 Existing structural elements carrying gravity load**. Any existing gravity loadcarrying structural element for which an alteration causes an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, replaced, or otherwise altered as needed to carry the increased gravity load required by this code the *International Building Code* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the alteration shall be shown to have the capacity to resist the applicable design gravity loads required by this code the *International Building Code* for new structures.

**303.4 Existing structural elements carrying lateral load.** Except as permitted by Section 303.5, with the *alteration* increases design lateral loads in accordance with Section 1609 of the *International Building Code* or 1613 of the *International Building Code*, or where the *alteration* results in a 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*.

**303.4.1 Seismic.** Seismic requirements for alterations shall be in accordance with this section. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R, W0 and C d for the existing seismic force-resisting system shall be those specified by this code for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate or special system.

**303.5 Voluntary seismic improvements.** Alterations to existing structural elements or additions of new structural elements that are not otherwise required by this chapter and are initiated for the purpose of improving the performance of the seismic force-resisting system of an existing structure or the performance of seismic bracing or anchorage of existing nonstructural elements shall be permitted, provided that an engineering analysis is submitted demonstrating all of the following:

- 1. The altered structure and the altered nonstructural elements are no less conforming with the provisions of this code the *International Building Code* with respect to earthquake design than they were prior to the alteration.
- 2. New structural elements are detailed and connected to the existing structural elements as required by Chapter 16 of the *International Building Code*.
- 3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by Chapter 16 of the *International Building Code*.
- 4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

**[B] 304.1 General.** Buildings and structures, and parts thereof, shall be repaired in conformance with <u>this section and with</u> Section 301.2. Work on nondamaged components that is necessary for the required *repair* of damaged components shall be

considered part of the *repair* and shall not e subject to the requirements for alterations in this chapter. Routine maintenance required by Section 301.2, ordinary repairs exempt from permit in accordance with Section 105.2, and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.

**304.2.3 Extent of repair for noncompliant buildings.** If the evaluation does not establish compliance of the pre-damage building in accordance with Section 304.2.1, then the building shall be rehabilitated to comply with applicable provisions of this code the *International Building Code* for load combinations, including wind or seismic loads. The wind loads for the repair shall be as required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be as required by the code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be as required by the code in effect at the time of original construction or as required by this code the *International Building Code*, whichever are greater. Earthquake loads for this rehabilitation design shall be those required for the design of the pre-damage building, but not less than 75 percent of those prescribed in Section 1613 of the *International Building Code*. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of this code the *International Building Code* for new buildings of similar structure, purpose and location.

**304.3 Substantial structural damage to gravity load-carrying components**. Gravity load-carrying components that have sustained substantial structural damage shall be rehabilitated to comply with the applicable provisions of this code the International Building Code for dead and live loads. Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects. Existing gravity load-carrying structural elements shall be permitted to be designed for live loads approved prior to the damage. Nondamaged gravity load-carrying components that receive dead, live or snow loads from rehabilitated components shall also be rehabilitated or shown to have the capacity to carry the design loads of the rehabilitation design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of this code the International Building Code for new buildings of similar structure, purpose and location.

**304.4 Less than substantial structural damage.** For damage less than substantial structural damage, repairs shall be allowed that restore the building to its pre-damage state using materials and strengths that existed prior to the damage. New structural members and connections used for this repair shall comply with the detailing provisions of this code the *International Building Code* for new buildings of similar structure, purpose and location.

[B] SECTION 305

[B] SECTION 306

**[B] 307.4 Structural.** When a *change of occupancy* results in a structure being reclassified to a higher occupancy category, the structure shall conform to the seismic requirements for a new structure of the higher occupancy category. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of *R*,  $\Omega_0$ , and  $C_d$  for the existing system will provide performance equivalent to that of a detailed, intermediate or special system.

# **Exceptions:**

- 1. Specific seismic detailing requirements of this code or Section 1613 of the International Building Code for a new structure shall not be required to be met where it can be shown that the level of performance and seismic safety is equivalent to that of a new structure. Such analysis shall consider the regularity, over strength, redundancy and ductility of the structure within the context of the existing and retrofit (if any) detailing provided.
- When a change of use results in a structure being reclassified from Occupancy Category I or II to Occupancy Category III and the structure is located in a seismic map area where <u>the seismic coefficient</u>, S<sub>DS1</sub> < <u>is less</u> <u>than</u> 0.33, compliance with the seismic requirements of <del>this code and</del> Section 1613 *International Building Code* are <u>is</u> not required.

**308.2 Flood hazard areas.** Within flood hazard areas established in accordance with Section 1612.3 of the *International Building Code*, where the work proposed constitutes *substantial improvement* as defined in Section 1612.2 of the *International Building Code*, the building shall be brought into conformance compliance with Section 1612 of the *International Building Code*.

Exceptions: (no change to current text)

## CHAPTER 6 ALTERATIONS-LEVEL 1

**606.2 Addition or replacement of roofing or replacement of equipment.** (no change to current text)

## **Exceptions:**

- Structural elements where the additional dead load from the roofing or equipment is not increased does not increase the force in the element by more than 5 percent.
- 2. Buildings constructed in accordance with the *International Residential Code* or the conventional light-frame construction methods of the *International Building Code* and where the <del>additional</del> dead load from the roofing or equipment is not increased by more than 5 percent.
- 3. (no change to current text)

**606.3.1 Bracing for unreinforced masonry bearing wall parapets.** Where a permit is issued for reroofing for more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall include installation of parapet bracing to resist the reduced *International Building Code* level seismic forces as specified in Section 101.5.4.2 of this code, unless an evaluation demonstrates compliance of such items.

### CHAPTER 7 ALTERATIONS-LEVEL 2

**707.2 New structural members** <u>elements</u>. New structural <u>members</u> <u>elements</u> in alterations, including connections and anchorage, shall comply with the *International Building Code*.

### CHAPTER 9 CHANGE OF OCCUPANCY

**912.4.1 Means of egress for change to higher hazard category.** When a change of occupancy classification is made to a higher hazard category (lower number) as shown in Table 912.4, the means of egress shall comply with the requirements of Chapter 10 of the *International Building Code*.

**Exceptions:** (no change to Exceptions 1, 2, 3, 5, 6 and 7)

4. Existing corridor wall constructed <u>of both sides</u> of wood lath and plaster in good condition or 1/2-inch thick (12.7 mm) gypsum wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.

### CHAPTER 13 PERFORMANCE COMPLIANCE METHODS

 Table 1301.6.3 (third row replace A-1 with A-2)

- [B]1301.6.4.1 Categories. The categories for tenant and dwelling unit separations are: (no change to items 1, 2, 4 and 5)
  - 3. Category c- Fire partitions with 1-hour or greater fire-resistance rating constructed in accordance with Section 709 of the *International Building Code* and floor assemblies with 1-hour but less than 2-hour fire-resistance rating constructed in accordance with Section 712 of the *International Building Code* or with only one item tenant within the fire floor area.
- [B]1301.6.8.1 Categories. The categories for automatic fire detection are: (no change to items 1, 2, 3 and 4)
  - 5. Category c-Smoke detectors installed throughout the fire floor area.
- [B]1301.6.10.1 Categories. The categories for smoke control are: (no change to items 1, 2, 3, 4 and 6)

5. Category e-The building is equipped throughout with an automatic sprinkler system. Each floor area is provided with a mechanical air-handing system designed to accomplish smoke containment. Return and exhaust air shall be moved directly to the outside without recirculation to other floor areas of the building under floor fire conditions. The system shall exhaust not less than six air changes per hour from the floor area. Supply air by mechanical means to the floor area is not required. Containment of smoke shall be considered as confining smoke to the floor area involved without migration to other floor areas. Any other tested and approved design that will adequately accomplish smoke containment is permitted.

### Table 1301.6.11(1) EGRESS WIDTH PER OCCUPANT SERVED. (no changes to table)

Footnote a: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.1.1 903.3.1.1 or 903.3.1.2 of the International Building Code.

**[B]1301.6.19 Incidental accessory occupancy.** Evaluate the protection of incidental accessory occupancies in accordance with Section 508.2.5 of the *International Building Code*. Do not include those where this code requires suppression throughout the building

including covered mall buildings, high-rise buildings, public garages and unlimited area buildings. Assign the lowest score from Table 1301.6.19 for the building or floor area being evaluated and enter that value into Table 1301.7 under Safety Parameter 1301.6.19, Incidental Accessory Occupancy, for fire safety, means of egress and general safety. If there are no specific occupancy areas in the building or floor area being evaluated the value shall be zero.

## CHAPTER 14 CONSTRUCTION SAFEGUARDS

**1405.1 Stairways required.** Where an *existing building* a <u>building has been constructed to a</u> <u>height of 50 feet (15 240 mm) or four stories</u>, or where an existing building exceeding 50 feet (15 240mm) in <u>building</u> height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways is available for egress are erected as the construction progresses.

**1405.2 Maintenance of means of egress.** Required *means of egress* shall be maintained at all times during <u>construction</u>, <u>demolition</u>, <u>remodeling or</u> <u>alterations</u>, <u>repairs</u> and <u>additions</u> to any building.

Exception: Approved temporary means of egress systems and facilities.

**1406.1 Where required.** Buildings required to have a standpipe system in accordance with this code shall be provided with not less than one standpipe for use during construction. Such standpipes shall be installed where the progress if construction is not more than 40 feet (12 192 mm) in height above the lowest level of fire department access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.

In buildings required to have standpipes by Section 905.3.1, not less than one standpipe shall be provided for use during construction. Such standpipes shall be installed when the progress of construction is not more than 40 feet (12 192 mm) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured checking or flooring.

#### FIRST AND SECOND PRINTING (Updated January 22, 2010)

#### CHAPTER 1 Scope and Administration

#### Section 101.5.4.1, item 1 – Replace as follows:

<u>One-hundred percent of the values in the International Building Code.</u> Where the existing seismic force-resisting system is a type that can be designated as "Ordinary", values of *R*, Ω<sub>0</sub>, and C<sub>d</sub> used for analysis in accordance with Chapter 16 of the International Building Code shall be those specified for structural systems classified as "Ordinary" in accordance with Table 12.2-1 of ASCE 7, unless it is demonstrated that the structural system will provide performance equivalent to that of a "Detailed", "Intermediate" or "Special" system.

#### Table 101.5.4.1 – Replace footnote a as follows:

#### PERFORMANCE CRITERIA FOR IBC LEVEL SEISMIC FORECES

	OCCUPANCY	PERFORMANCE	PERFORMANCE
	CATEGORY	LEVEL FOR USE WITH	LEVEL FOR USE WITH
	(Based on IBC Table	ASCE 41 BSE-1	ASCE 41 BSE-2
	1604.5)	EARTHQUAKE	EARTHQUAKE
	,	HAZARD LEVEL	HAZARD LEVEL
a.	Acceptance criteria for Occupancy	Category III shall be taken as 80 percent	of the acceptance criteria specified for

a. <u>Acceptance criteria for Occupancy Category III shall be taken as 80 percent of the acceptance criteria specified for</u> <u>Occupancy Category II performance levels</u>, but need not be less than the acceptance criteria specified for <u>Occupancy Category IV performance levels</u>.

#### Table 101.5.4.2 – Replace footnote a as follows:

#### PERFORMANCE CRITERIA FOR REDUCED IBC LEVEL SEISMIC FORECES

OCCUPANCY	PERFORMANCE	PERFORMANCE
CATEGORY	LEVEL FOR USE WITH	LEVEL FOR USE WITH
(Based on IBC Table	ASCE 31 BSE-1	ASCE 41 BSE-2
1604.5)	EARTHQUAKE	EARTHQUAKE
	HAZARD LEVEL	HAZARD LEVEL

a. <u>Acceptance criteria for Occupancy Category III shall be taken as 80 percent of the acceptance criteria specified for</u> <u>Occupancy Category II performance levels</u>, but need not be less than the acceptance criteria specified for <u>Occupancy Category IV performance levels</u>.

#### Section 101.5.4.2 Item 2.5 – Replace as follows:

2.5 <u>Seismic evaluation and design of concrete buildings in all occupancy categories are permitted to be based on</u> the procedures specified in Chapter A5.

#### CHAPTER 1 Scope and Administration

Table 101.5.4.1 – Delete footnote b as follows:

#### PERFORMANCE CRITERIA FOR IBC LEVEL SEISMIC FORECES

OCCUPANCY	PERFORMANCE	PERFORMANCE
CATEGORY	LEVEL FOR USE WITH	LEVEL FOR USE WITH
(Based on IBC Table	ASCE 41 BSE-1	ASCE 41 BSE-2
1604.5)	EARTHQUAKE	EARTHQUAKE
	HAZARD LEVEL	HAZARD LEVEL
	Note a, <del>Note b</del>	Note a

a. No change.

b. For Occupancy Category III, the ASCE 31 screening phase checklists shall be based on the life safety performance level.

#### Table 101.5.4.2 – Add footnote b as follows:

#### PERFORMANCE CRITERIA FOR REDUCED IBC LEVEL SEISMIC FORECES

OCCUPANCY	PERFORMANCE	PERFORMANCE
CATEGORY	LEVEL FOR USE WITH	LEVEL FOR USE WITH
(Based on IBC Table	ASCE 31 BSE-1	ASCE 41 BSE-2
1604.5)	EARTHQUAKE	EARTHQUAKE
	HAZARD LEVEL	HAZARD LEVEL
III	Note a, <u>Note b</u>	Note a

a. No change.

b. For Occupancy Category III, the ASCE 31 screening phase checklists shall be based on the life safety performance level.

#### CHAPTER 5

## Repairs

**506.2.2.1 Evaluation.** The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the *code official*. The evaluation shall establish whether the damaged building, if repaired to its pre-damaged state, would comply with the provisions of the *International Building Code*, except that the seismic design criteria shall be the reduced <u>IBC</u> level seismic forces specified in Section 101.5.4.2.

#### CHAPTER 6 ALTERATIONS—LEVEL 1

606.2 Addition or replacement of roofing or replacement of equipment. (No change to current text.)

#### **Exceptions:**

- 1. (No change to current text.)
- Buildings constructed in accordance with the International Residential Code or the conventional lightframe construction methods of the International Building Code and where the additional dead load from the roofing or equipment is not increased by more than 5 percent.
- 3. (No change to current text.)

**606.2.1 Wall anchors for concrete and masonry buildings.** Where a permit is issued for reroofing more than 25 percent of the roof area of on a building assigned to Seismic Design Category D, E, or F, with a structural system consisting of concrete or reinforced masonry walls with a flexible roof diaphragm or unreinforced masonry with any type of roof diaphragm, the work shall include installation of wall anchors at the roof line to resist the reduced *International Building Code* level seismic forces as specified in Section 101.5.4.2 of this code and design procedures of Section 101.5.4, unless an evaluation demonstrates compliance of existing wall anchorage.

**606.3.1 Bracing for unreinforced masonry bearing wall parapets.** Where a permit is issued for reroofing more than 25 percent of the roof area of an <u>unreinforced masonry bearing wall</u> building assigned to Seismic Design Category D, E, or F that has parapets constructed of <u>unreinforced</u> masonry, the work shall include installation of parapet bracing to resist the reduced *International Building Code* level seismic forces as specified in Section 101.5.4.2, unless an evaluation demonstrates compliance of such items.