

# IBC Ordinance Submittal and Synopsis

Ordinance Title: 2015 International Building Code

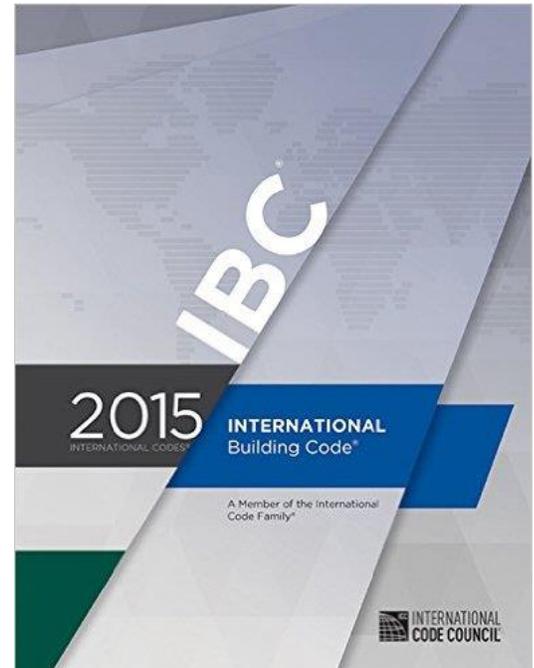
Date:

Section Numbers/Titles: Chapter 150,  
Sections 150.015 and 150.017

First Reading:

Requested Date of Hearing:

Proposed by: Ron Bell  
Chief Building Services Official  
Planning and Building Services



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**Reason:** The attached ordinance proposes to adopt the 2015 *International Building Code* (IBC), which is promulgated and published by the International Code Council (ICC). The IBC is revised and published in a three-year code cycle. It provides and establishes minimum standards and regulations for commercial building systems to safeguard the public health and safety in the built environment. The IBC features time-tested safety concepts addressing structural strength, sanitation, and fire- and life-safety provisions covering means of egress, accessibility, fire and smoke protection systems, interior finish requirements, comprehensive roof provisions, innovative construction technology, occupancy classifications, and the latest in industry standards in material design. The IBC applies to all occupancies except for one and two family dwellings and townhouses covered under the scope of the *International Residential Code*.

**Significant changes to the 2015 IBC are as follows:**

Previous editions of the IBC have been adopted at the state or local level in all 50 states. Now in its sixth edition, the 2015 IBC contains many important changes such as:

- **HEIGHT AND AREA REQUIREMENTS.** Chapter 5 of the IBC has been heavily revised into a new, more user friendly format. The revisions were meant primarily as a format change and were not intended to be technical in nature. The increases for both height and area when sprinklers are installed are now integrated into the tables with separate tables used for height, number of stories and for allowable areas of buildings based on occupancy and type of construction.
- **HEALTHCARE.** There was a comprehensive re-working of requirements in the codes for Groups I-1 and R-4 (assisted living and group homes) and Group I-2 (hospitals and nursing homes).

Both Group I-1 and Group I-2 will now have Condition 1 and Condition 2, based on the type of care, level of care and the occupant's capability for self-evacuation. In the case of Group I-1, Condition 1 denotes facilities where the occupants are capable of evacuation without assistance. Condition 2 occupants require some assistance during evacuation.

Generally, the requirements for Condition 2 are more restrictive than Condition 1. In the case of Group I-2 occupancies, the two conditions are used to separate those types of facilities with ongoing nonsurgical care such as nursing homes (Condition 1) and those that perform surgeries or procedures such as hospitals (Condition 2). The Condition 1 and Condition 2 terminology will be used where the requirements differ. If the requirement is generally applicable, the requirement will have a general reference to Group I-1 or I-2.

There were also several significant revisions with regard to Group I-2 hospitals (Condition 2). The smoke compartment size for Group I-2 hospitals was increased from 22,500 square feet (2,090 m<sup>2</sup>) to 40,000 square feet (3,716 m<sup>2</sup>). In addition, smoke dampers in smoke barriers were eliminated where a fully ducted system is provided.

- **STRUCTURAL.** The construction of complying storm shelters will be required in critical emergency operations facilities such as fire, rescue, ambulance and police stations. Additionally storm shelter construction capability will be required in new schools.

A new structural standard, ASTM E2397, *Standard Practice for the determination of Dead and Live Loads Associated with Vegetative (Green) Roof Systems* has been introduced to accommodate soil and vegetative load on occupiable roofs.

- **HORIZONTAL BUILDING SEPARATION.** There is no longer a limit of one story above grade plane for that portion of a structure located below the three hour separation for that portion of a pedestalled building. The limitation of permitted occupancies located below the horizontal separation has been eliminated, except for Group H, hazardous occupancies.

- **SHAFT ENCLOSURES.** Ducts are now expressly allowed to exit a shaft, transition horizontally, and then enter another shaft without continuous shaft construction.
- **CO DETECTION AND ALARMS.** The carbon monoxide (CO) alarm provisions have been relocated, reformatted and revised to clarify the requirements with regard to detector and alarm placement. As part of these revisions, the requirements have also been increased in scope to address Group E educational occupancies, which is consistent with a nationwide trend.
- **SPRINKLERS.** An automatic sprinkler system is now required to be installed throughout a building when the roof is used for a drinking and dining assembly use exceeding 100, as well as other assembly occupancies where the occupant load exceeds 300.
- **MEANS OF EGRESS.** For stairways in buildings  $\geq$  four stories above grade plane that do not have an occupied roof or elevator equipment on the roof, access to the roof does not need to be by one of the stairways in the building. It can be provided by an alternating tread device, a ship's ladder or a permanent ladder. A new section with specific requirements for permanent ladders has been added. Such ladders cannot serve as a part of the means of egress from occupied spaces within a building.

Exit access is permitted through an enclosed elevator lobby that leads to at least one of the required exits. Exit access to not less than one of the other required exits shall be provided without travel through the enclosed elevator lobby.

An exit stairway does not require a door at the stairway opening into an exit passageway if the exit passageway has no other openings into it from the building.

The occupant load for mercantile occupancies has been revised to 60 square feet per occupant for all floors. Previously, the basement and grade-level floors had a higher occupant load of 30 square feet per person.

- **ACCESSIBILITY.** More detailed scoping requirements for recreational facilities have been included in Chapter 11 of the IBC and the A117.1 accessibility standard to coordinate with modifications to the Americans with Disabilities Act (ADA).
- **ELEVATORS.** The 2015 IBC has undergone many changes with regard to elevators. Hoistway venting was deleted. The provisions were historic in nature and were provided for the fire service, but they were no longer seen as necessary. In addition, the hoistway venting requirements often conflicted with the hoistway pressurization option for elevator lobby enclosures.
- **EXISTING BUILDINGS.** A significant change in the IBC is the deletion of Chapter 34 dealing with existing buildings. The requirements (Chapter 34) for existing structures have been removed from the 2015 IBC. All existing construction requirements are now in the 2015 International Existing Building Code (IEBC).

**The majority of local modifications to the 2015 IBC carry over the same provisions from the 2012 IBC. Notable local ordinances or modifications to the 2012 IBC with a commentary are as follows:**

- **[A] 101.2 Scope.** The previous local amendment that referenced the utilization of the *International Existing Building Code (IEBC)* instead of Chapter 34 for remodels, renovations and repairs has been eliminated because the 2015 IBC has deleted Chapter 34 from its entirety and existing buildings will now be solely regulated by the *IEBC*.
- **706.6.2 Buildings with sloped roofs.** Instead of mandating a parapet that would extend perpendicular to the slope of a roof to protect the possibility of fire spread over the top of a fire wall, this local provision will provide an alternate consistent with the same type of protection for a fire wall located in a stepped building.
- **[E] 1301.1.1 Criteria.** This clarifies that the less stringent energy conservation provisions of the 2009 International Energy Conservation Code is the applicable standard for determining energy efficiency standards.
- **1011.5.5.3 Solid Risers.** The previous local amendment allowing open risers in stairs has been eliminated because it is not consistent with the A117.1 Accessibility Standards or the ADA.
- **1009.13 Alternating tread devices; 1009.14 Ship ladders; 1009.16 Stairway to roof. 2012 IBC.** These local amendments have been eliminated because the 2015 IBC recognizes ladders consistent with the previous local amendments.