

# BCAC Occupancy WG

2015 Group A Code Change Cycle

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## BCAC item G37-12:

### G??– 15

308.5, 308.5.6, 202

**Proponent:** Building Code Action Committee

**Revise as follows:**

**308.5 Institutional Group I-3.** This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally *incapable of selfpreservation* due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

- Correctional centers
- Detention centers
- Jails
- Lockup facility
- Prerelease centers
- Prisons
- Reformatories

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.5.1 through 308.5.5 (see Section 408.1).

**308.5.6 Lockup facilities.** A lockup facility for five or less persons shall be classified part of the primary occupancy provided they comply with the following provisions:

1. The area containing a lockup facility shall be separated from other rooms, spaces or areas by approved smoke barriers complying with Section 709.
2. The area containing a lockup facility shall be protected with an automatic fire sprinkler system complying with Section 903.
3. The area containing a lockup facility shall be provided with an automatic smoke detection system installed in accordance with Section 907.

**Ad new definition as follows:**

## SECTION 202 DEFINITIONS

**LOCKUP FACILITY.** Buildings or portions of buildings containing holding cells, rooms or areas where occupants are restrained or detained.

**Reason:** From original proposal.....

Part 1 of this code proposal is the revision of Section 308.5 and the addition of Section 308.5.6. The revision removes more than five persons, and adds buildings and structures containing a room, holding cell or cellblock used to place persons under restraint or security. The new section adds lockup facilities and also clarifies that an approved smoke barrier complying with Section 709 be provided, and also fire sprinkler and smoke detectors be installed.

Part 2 of this code proposal adds a definition for lockup facilities that is needed in the Code that clarifies the use occupancies for buildings/spaces that contain five or less occupants under restraint or detained.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 3 open meetings and over 15 workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: <http://www.iccsafe.org/cs/BCAC/Pages/default.aspx>.

**Cost Impact:** From original proposal.....

This proposal will increase the cost of construction of rooms or spaces used to restrain or detain occupants.

## BCAC item G41-12:

### G??– 15

310.5, 310.5.1, 310.5.2

**Proponent:** Building Code Action Committee

**Revise as follows:**

**310.5 Residential Group R-3.** Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two *dwelling units*  
*Boarding houses* (nontransient) with 16 or fewer occupants  
*Boarding houses* (*transient*) with 10 or fewer occupants  
Care facilities that provide accommodations for five or fewer persons receiving care  
*Congregate living facilities* (nontransient) with 16 or fewer occupants  
*Congregate living facilities* (*transient*) with 10 or fewer occupants  
Owner-occupied lodging houses (*transient*) with 5 or fewer guestrooms and 10 or fewer occupants.

**310.5.1 Care facilities within a dwelling.** Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

**310.5.2 Owner occupied lodging houses.** Owner-occupied lodging houses with five or fewer guestrooms and 10 or fewer occupants shall be permitted to be constructed in accordance with the *International Residential Code for One- and Two-family Dwellings* where equipped with an automatic sprinkler system in accordance with Section P2904 of the *International Residential Code for One- and Two-family Dwellings*.

**Reason:** The purpose of this code change is to provide correlation between the International Residential Code and the International Building Code. During the 2009/2010 code cycle, an exemption to IRC Section R101.2 was approved allowing owner-occupied lodging houses with five or fewer guestrooms to be constructed under the IRC. However, a correlating provision was not added to the IBC, resulting in a conflict between the two codes and a potential for confusion in enforcement.

This proposal resolves the conflict by adding owner-occupied lodging houses to the IRC as Occupancy Group R-3 structures. The general condition for qualifying as Group R-3 is set at 10 or fewer occupants, consistent with the requirement for boarding houses and congregate living facilities with transient occupants. The condition of five or fewer guestrooms is also added to correlate with the language of IRC Section R101.2, Exception #2. It is noted the IRC does not contain provisions for calculating an occupant load, but does contain specific requirements relating to sleeping rooms.

Further, during the 2012/2013 code cycle, proposal RB177-13 was approved which amended Section R320 of the IRC to clarify that the term "guestroom" used in the IBC and IRC is considered equivalent to the term "sleeping unit" used in fair housing provisions and the IBC accessibility provisions, and to exempt owner-occupied lodging houses with five or fewer guestrooms from accessibility requirements. These changes to the IRC address concerns that were raised during the Group A IBC-General hearings in regards to the BCAC's proposal G41-12.

**Cost Impact:** This proposal will decrease the cost of construction by clarifying that certain owner-occupied lodging houses can be constructed under the IRC rather than the IBC. The savings is anticipated to be 5-10% of the construction cost as structures under the IRC can be constructed without retaining a registered design professional (architect or engineer). Additional savings would accrue from being able to follow requirements appropriate for a small residential structure rather than a large multifamily condominium or apartment building.

# BCAC item G89-12

## G??– 15

### 419.1, 419.1.1, 419.2

**Proponent:** Building Code Action Committee

**Revise as follows:**

**419.1 General.** A *live/work unit* shall comply with Sections 419.1 through 419.9.

**Exceptions:**

1. Dwelling or sleeping units that include an office that is less than 10 percent of the area of the *dwelling unit* are permitted to be classified as *dwelling units* with accessory occupancies in accordance with Section 508.2.
2. Dwelling or sleeping units that include an office that is less than 150 square feet are permitted to be classified as *dwelling units* with accessory occupancies in accordance with Section 508.2.

**419.1.1 Limitations.** The following shall apply to all live/work areas:

1. The live/work unit is permitted to be not greater than 3,000 square feet (279 m<sup>2</sup>) in area;
2. The nonresidential area is permitted to be not more than 50 percent of the area of each live/work unit;
3. The nonresidential area function shall be limited to the first or main floor only of the live/work unit; and
4. Not more than five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.

**419.2 Occupancies.** *Live/work units* shall be classified as a Group R-2 occupancy. Separation requirements found in Sections 420 and 508 shall not apply within the *live/work unit* where the *live/work unit* is in compliance with Section 419. Nonresidential uses which would otherwise be classified as either a Group H or S occupancy shall not be permitted in a live/work unit.

**Exceptions:**

1. Storage shall be permitted in the *live/work unit* provided the aggregate area of storage in the nonresidential portion of the *live/work unit* shall be limited to 10 percent of the space dedicated to nonresidential activities.
2. Detached one- and two-family dwellings that include an office meeting the requirements of a *live/work unit* shall be classified as a Group R-3 occupancy.

**Reason:** The purpose of this code change is to address a conflict between the IBC and the IRC relative to live/work units. Following the addition of Section 419 to the IBC, an exception was added to Section R101.2 of the IRC allowing a one- and two- family dwelling and townhouses that contains a space which would qualify as a live/work unit under Section 419 of the IBC, but otherwise is within the scope of the IRC (i.e. not more than three stories above grade plane) to be constructed under the IRC, provided the work area meets the requirements of IBC Section 419 and an automatic sprinkler system is installed. However, IBC Section 419.2 states that live/work units must be classified as a R-2 occupancy, and the IBC does not permit Group R-2 buildings to be constructed per the IRC.

This proposal adds two new exemptions to Section 419. First, a new exception to the general compliance requirement for a live/work unit is added for an office less than 150 square feet. Some dwelling units can be as small as 900 or 1000 square feet. To comply with the existing 10% limit for such a dwelling would result in an office size that is barely feasible, and may not be workable at all. The new exception would allow a reasonably sized room in a small dwelling or dwelling unit to be used as an office without surpassing the 10% limit and thus triggering all of the requirements associated with a live/work unit.

The second exception permits a detached one- or two-family dwelling, and certain townhouse buildings, containing an area large enough to trigger Section 419 to be classified as Group R-3 instead of R-2. Group R-2 is typically associated with apartments, condominiums, and other buildings containing multiple dwelling units. The owner of a detached single-family dwelling who wants to

maintain an office large enough to qualify the dwelling as a *live/work* unit should not be required to construct (or upgrade) the residential portions of the dwelling to requirements intended for multifamily or commercial construction. Similarly, townhouse units otherwise within the IRC scope but passed over to IBC Section 419 from IRC Section 101.2, Exception #2 need to be able to be classified as Group R-3 buildings to preserve the ability to otherwise use the IRC.

If this proposal is successful, a companion proposal will be developed for the IRC in Group B to coordinate the scoping language in IRC Section 101.2, Exception #2 and restore detached one- and two-family dwellings to the IRC exception. For additional clarity the exceptions and limitations from Section 419 will be mirrored in the IRC.

**Cost Impact:** This proposal will decrease the cost of construction. Small dwellings or dwelling units that meet the 150sf exception will only need to comply with the Section 508 requirements for accessory occupancies, not the more stringent egress, accessibility, ventilation and structural requirements of Section 419. One- and two-family dwellings and townhouses that otherwise fall within the IRC scope except for the specific requirements applying to the work area will see additional savings. The savings is anticipated to be 5-10% of the construction cost as structures under the IRC can be constructed without retaining a registered design professional (architect or engineer). Additional savings would accrue from being able to follow requirements appropriate for a small residential structure rather than a large multifamily condominium or apartment building

## BCAC item IBC 4-2:

### G??– 15

#### 403.2.1.1

**Proponent:** Building Code Action Committee

**Revise as follows:**

**403.2.1.1 Type of construction.** The following reductions in the minimum *fire-resistance rating* of the building elements in Table 601 shall be permitted as follows:

1. For buildings not greater than 420 feet (128 000 mm) in *building height*, the *fire-resistance rating* of the building elements in Type IA construction shall be permitted to be reduced to the minimum *fire-resistance ratings* for the building elements in Type IB.

**Exception:** The required *fire-resistance rating* of columns supporting floors shall not be reduced.

2. In other than Group F-1, H, M and S-1 occupancies, the *fire-resistance rating* of the building elements in Type IB construction shall be permitted to be reduced to the *fire-resistance ratings* in Type IIA.
3. The *building height* and *building area* limitations of a building containing building elements with reduced *fire-resistance ratings* shall be permitted to be the same as the building without such reductions.

**Reason:**

**Cost Impact:**

## BCAC item IBC Chapter 3-4:

### G??– 15

301.1, 302.1, 302.2 (New)

Proponent: Building Code Action Committee

Revise as follows:

#### CHAPTER 3

#### USE AND OCCUPANCY CLASSIFICATION AND USE

##### SECTION 301 GENERAL SCOPE

**301.1 Scope General.** The provisions of this chapter shall control the classification of all buildings and structures as to ~~use and occupancy~~ occupancy and use. Different classifications of occupancy and use represent varying levels of hazard and risk to building occupants.

##### SECTION 302 OCCUPANCY CLASSIFICATION AND USE DESIGNATION

**302.1 General.** ~~Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed in this section. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.~~

**302.1 Occupancy classification.** Occupancy classification is the formal designation of the primary purpose of the building, structure or portion thereof. Buildings and structures shall be classified into one or more of the occupancy groups listed in this section based on the nature of the hazards and risks to building occupants generally associated with the intended purpose of the building or structure. An area, room or space that is intended to be occupied at different times for different purposes shall comply with all applicable requirements associated with such potential multi-purpose. Buildings containing multiple occupancy groups shall comply with Section 508. Buildings containing incidental uses shall comply with Section 509. Where a building or structure is proposed for a purpose that is not specifically listed in this section, such building or structure shall be assigned an occupancy classification of the occupancy group that it most nearly resembles based on the fire safety and relative hazard.

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5.
2. Business (see Section 304): Group B.
3. Educational (see Section 305): Group E.
4. Factory and Industrial (see Section 306): Groups F-1 and F-2.

5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5.
6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4.
7. Mercantile (see Section 309): Group M.
8. Residential (see Section 310): Groups R-1, R-2, R-3 and R-4.
9. Storage (see Section 311): Groups S-1 and S-2.
10. Utility and Miscellaneous (see Section 312): Group U.

**302.2 Use designation.** Occupancy groups contain subordinate uses having somewhat similar hazards and risks to building occupants. Uses include, but are not limited to, those functional designations listed within the occupancy group descriptions in this section. Certain uses require specific limitations and controls in accordance with the provisions of Chapter 4 and elsewhere in this code.

## **SECTION 1004 OCCUPANT LOAD**

**1004.1 Design occupant load.** In determining means of egress requirements, the number of occupants for whom means of egress facilities are provided shall be determined in accordance with this section. The determination of occupant loads for the purposes of means of egress design is based on the function of the area, room or space under consideration as listed in Table 1004.1.2. The assigned function of the space establishes an occupant density (occupant load factor) based on typical usage.

**Reason:** Properly classifying the purpose of a given building or structure is the very important first step in the design or analysis process. The reason for this is that the various designations account for the inherent hazards and risks typically associated with the intended purpose. Based on those hazards and risks, appropriate limitations and controls are assigned to the building or structure. The International Building Code uses several specific terms to identify the purpose of the building or structure. Those are: occupancy classification, use and function. Occupancy classification and use are often confused and function is misunderstood.

The purpose of this code change is to simply formalize these terms and explain their relationship. This will assist code practitioners in properly establishing applicable code requirements and improve uniformity and continuity in the identification of appropriate provisions. Some of the current confusion is owed to the fact that the legacy codes used these terms, however, in different ways. For instance, BOCA used "use group" as the major designation with "occupancy" being the subordinate term. On the other hand, ICBO used "occupancy/division" as the major designation with "use" as the secondary term. The IBC was created using provisions from each of the legacy codes and the terms are often seen out of technical context.

This proposal will inform users of the IBC system of building classification and assist all concerned in the proper communication of applicable code requirements.

**Cost Impact:** None. Provisions simply provide clarification of current requirements.