

A TechNotes

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Preliminary Results of the Public Comment Hearings for ICC Group B for 2018 IFC, IBC, IRC

The Public Comment Hearings (PCH) for the development of the 2018 editions of IFC, IRC, and portions of IBC is complete and the code development process for these editions is nearly done. What remains is the Online Governmental Consensus Vote (OGCV) for validated ICC governmental members to cast their votes in November to ratify hundreds of changes. Stay tuned for exact dates of the two-week voting period to come from NFSA. Below are the top fire sprinkler issues that will be on the online voting agenda for code officials to decide.

ADM36

The IBC permits specific occupancies to be built according to the IRC provided they have fire sprinklers installed. This proposal clarifies the IRC text of the IBC requirements and is written to be insulated from jurisdictions that remove Section R313 (the residential sprinkler section). The proposed language is below in legislative text:

R101.2 Scope. The provisions of the International Residential Code for One- and Two-family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height.

Exception: The following shall be permitted to be constructed in accordance with this code where provided with a residential fire sprinkler system complying with Section P2904:

- 1. Live/work units located in *townhouses* and complying with the requirements of Section 419 of the *International Building Code*.
- Owner-occupied lodging houses with five or fewer questrooms.
- 3. A care facility with five or fewer persons receiving custodial care within a dwelling unit.
- 4. A care facility with five or fewer persons receiving medical care within a dwelling unit.
- 5. A care facility for five or fewer persons receiving care that are within a single-family dwelling.

F157

This proposal adds a 300-person occupant load threshold for fire sprinklers in educational occupancies in IFC/IBC Section 903.2.3. The code uses the 300-person occupant load in several areas, such as for assembly occupancies, to justify fire sprinkler systems. Educational occupancies are frequently used for assembly purposes for community events and emergencies. The proposed language is





903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

- 1. Throughout all Group E *fire areas* greater than 12,000 square feet (1115 m) in area.
- 2. The fire area has an occupant load of 300 or more.
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has not fewer than one exterior exit door at ground level.

F172

This proposal is a response to concerns about fires involving tall pedestal building attics protected with a NFPA 13R system. Such attic or attics will be required to have increased fire protection. The proposed language is below in legislative text:

903.3.1.2.3 Attics. Attic protection shall be provided as follows:

- 1. Attics that are used or intended for living purposes or storage shall be protected by sprinklers.
- 2. Where fuel-fired equipment is installed in an unsprinklered attic, at least one quick-response intermediate temperature sprinkler shall be installed above the equipment.
- 3. Where located in a building of Type III, Type IV or Type V construction designed in accordance with Section 510.2 or Section 510.4 of the *International Building Code*, attics not required by Item 1 to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet (16 764 mm) above the lowest level of required fire department vehicle access:
 - a. Provide sprinkler protection.
 - <u>b. Construct the attic using noncombustible materials.</u>
 - c. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the *International Building Code*.
- d. Fill the attic with noncombustible insulation. The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503.
- 4. Group R-4 Condition 2 occupancy attics not required by Item 1 to have sprinklers shall comply with one of the following:
 - a. Provide sprinkler protection.
 - b. Provide a heat detector system throughout the attic that is arranged to activate the building fire alarm system in accordance with Section 907.2.10.
 - c. Construct the attic using noncombustible materials.
 - d. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the *International Building Code*.
 - e. Fill the attic with noncombustible insulation.

F238

This proposal will require fire sprinklers to be retrofitted using NFPA 13 into existing A-2 occupancies, such as nightclubs and restaurants. This change is a response to the NIST Report of The Station Nightclub Fire that killed 100 patrons in 2003. The proposed text is very





specific and only applies to fire areas with an occupant load over 300 where alcoholic beverages are consumed. The proposed language is below in legislative text:

1103.5.1 Group A-2. Where alcoholic beverages are consumed in a Group A-2 occupancy having an occupant load of 300 or more, the fire area containing the Group A-2 occupancy shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.

Several other fire sprinkler related proposed changes will be included on the online voting agenda. Below is a brief list of the remaining items:

F19: Modifies storage height in sprinklered and non-sprinklered rooms in IFC Section 315.3.1.

F154: Requires sprinklers below LED in ambulatory health care facilities in IFC/IBC Section 903.2.2.

F170: Balcony and deck protection and construction correlation of IBC/IFC Section 903.3.1.2.1 and IBC Section 1406.3 Exception 3 F185: Requires Class I standpipes in B and E occupancies and permits occupant handline removal during new construction. F220: Smoke and heat vents visual inspection annually and operational testing every five years.

F221: Permits fire department connection locations facing fire apparatus access roads. Section 912.2.1

F250: Requires retrofit of I-2 occupancies below LED. IFC Section 1105.9

RB89: Provides a sprinkler tradeoff in IRC for basement egress windows.

November 15

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should not be relied upon, to provide professional consultation or services. Please send comments to Victoria B. Valentine, P.E. at <u>valentine@nfsa.org</u>.





