

International Fire Code Significant Changes from the 2012 to the 2015 Edition

Section 1:

- Section 903.2.1.6 adds a requirement for sprinklers on levels between the roof and the exit discharge where an occupied roof has high assembly loads.
- Section 904.13 now allows residential cooking facilities in Group I-2 nursing homes with certain precautions and requirements for their safety.
- Chapter 10 has been completely rewritten in the IBC and the new IFC matches that, with many familiar sections now being contained in new and unfamiliar places. In general, previous sections 1015 and 1021 were moved near the front in order to provide a logical and sequential order of thought such as: 1004, determine the occupant load; 1005, establish the exit width; 1006, establish the number of exits; 1007, address how to arrange them. This pushes the other sections that they replaced back further.
- Section 1010.1.9.8 clarifies the confusing language of delayed egress, electromagnetic locks and introduces “sensor release of electrically locked” egress doors and adds I-1 to the provisions. Several of these neighboring sections have undergone changes that hope to clarify application that for years has been confusing.

Section 2:

- Section 604.2.6 now includes additional requirements for emergency and standby power systems in Group I-2 Occupancies. The change makes a direct requirement to follow NFPA 99 when considering essential electrical systems. This will ensure it is being followed.
- Section 609.2 modifies the requirement for when a Type 1 Kitchen hood is required, and makes it consistent with the IMC. When it is proven that grease emissions are low enough, a simple Type II hood would be allowed, and no fire extinguishing system would be required.
- Section 903.2.1.7 now clarifies that if multiple group A occupancies exist that don't require sprinklers based on individual occupant loads, yet they use the same exit system, the occupant loads using the same exit system must be combined to determine if sprinklers are required.
- Section 903.3.1.1.1 introduces the concept of machine room-less elevator control areas and how those are to be protected. This newer technology has not been specified before but is seen in many buildings.
- Section 904.2 and 904.11 add in the increasingly common use of Automatic Water Mist Systems and how those are to be regulated.
- Section 907.2.3 changes the threshold for a manual fire alarm system from 30 occupants to 50 occupants to allow small schools and day-care facilities to be exempt since the risk is small and there is close visual/audible contact. Also, this section increases the threshold for voice evacuation to 100 occupants. **This is a game changer as I know of two day cares that could have saved a significant amount of money if this code edition was in place at the time of their build-outs.**
- Section 908.7 requires carbon monoxide alarms for Group R and I occupancies with fuel burning appliances or attached garages in new and existing buildings. The 2015 edition now relocates

these to section 915 since they are not an emergency alarm, and rewrites it, adding the requirement to classrooms in Group E. The retroactive aspect doesn't apply to the Group E.

- Section 909.4.7 has added the requirement to have multiple smoke control system designs evaluated for how they will work together. This reduces the inevitability that the systems are discovered to be incompatible by the inspector at final inspection.
- Section 910 on smoke and heat vents has been extensively rewritten based on studies of roof venting. Details of where they are required and how to calculate the sizes are now included.
- Section 1011.16 adds the ability to use ladders as a means of egress in certain special needs and locations and explains how to construct them.
- Section 1020.2 allows certain corridors in the I-2 to be exempt from the 96" width requirement if not being used for stretchers. This may involve some judgment as to how the corridors will be used in certain places, but now will agree with NFPA 101 section 18.2.3.4 as part of a desire to coordinate the codes.
- Section 1023.3.1 now allows a vertical exit enclosure to be connected to a passageway without the connecting door previously required. This door served no purpose anyway, and was another obstruction to fire-fighting efforts.
- Section 1103.4.1 requires existing I-2 and I-3's with vertical openings through 2 or more stories between floors to meet certain retroactive protection requirements. Note: The only I-2 within our city limits that is two or more stories above grade plane is South Baldwin Regional Medical Center.
- Section 1105 introduces a new requirement that existing I-2 occupancies must reach a minimum fire and life safety level described there.
- Section 3103.9.1 now requires tents and membrane structures over one story to meet the structural design requirements of the IBC.
- Section 3105 adds requirements for temporary stage canopies that have suffered serious collapses in recent years in North America.

Section 3:

- Section 312.3 now provides performance criteria for vehicle barriers instead of prescriptive design that was missing an impact velocity. This would mean that approved portable LP gas cages would no longer require vehicular protection if the performance standards are met.
- Sections 315.6 and 605.12 now give Firefighters specific wording to require removal of old wiring in plenums and any storage there that might cause more fuel load or cause a ceiling to collapse due to weight.
- Section 403 has moved all the emergency preparedness requirements from 404 and 408 into one place for easier access to all of it in one place. The change was not intended to be technical, only an editorial location change for ease of use.
- Section 604.1 has added specific requirements on Emergency and Standby Power Systems that were previously located in the IBC. This criteria is now all in one spot, and is more readily available to Fire Staff here than it was in Chapter 27 of the IBC.

- Section 609.3.3.2 now adds a cleaning standard for kitchen exhaust hoods, and requires a hood with any spot check showing over an 1/8" of grease to be cleaned and a record of cleaning kept on the hood.
- Section 611 adds new requirements on how to deal with hyperbaric facilities (usually found in hospitals). We currently have hyperbaric chambers in the Wound Care wing of South Baldwin Regional Medical Center.
- Sections 903.3.1.2.2, 1027.6 and 1104.22 now clarify that open ended corridors (breezeways) must be protected when part of a 13R sprinkler system.
- Section 903.3.8 adjusts requirements for limited area sprinkler systems from 20 heads to 6, and prevents multiple such systems.
- Section 907.2.11.3 and 907.2.11.4 now require placement of smoke alarms to be at least 3' from a bathroom door, and specific distances from cooking appliances based on the type of alarm.
- Section 913.2.2 has added protection of the electrical circuit supplying power to Fire Pumps by including a UL standard that will add fire resistivity to the cables.
- Section 1017.2.2 increases travel distance in certain F-1 and S-1 occupancies to 400' providing there are other safety factors involved.
- Section 1018.3 and 1018.5 coordinates access aisles with corridor requirements rather than being based only on the occupant load of the room served.
- Section 2307.4 introduces new requirements for LP gas dispensing by the public.
- Section 3206.4.1 relocates the requirements and modifies the standards and rules regarding plastic pallets.
- Section 3306.2 adds safety requirements for flammable gas piping and an NFPA standard to govern their cleaning and purging. There have been several deaths from improper cleaning and purging.
- Section 3510 introduces how hot work on flammable and combustible liquid storage tanks shall be carried out.
- Section 5307 adds regulations for large carbon dioxide systems used in beverage dispensing. Large refrigerated systems can create a life safety hazard resulting in oxygen being replaced in a room, thus the need for this regulation.
- Section 5808 provides new requirements for the onset of hydrogen fuel gas rooms on the market. The requirements are related to the new definition in chapter 2 of a gaseous hydrogen system.