Effective 5/3/2023

15A-5-204 Amendments and additions to IFC related to fire protection and life safety systems.

For IFC, Chapter 9, Fire Protection and Life Safety Systems:

(1) IFC, Chapter 9, Section 901.4.7, Pump and riser room size, is deleted and replaced with the following:

"901.4.7 Pump and Riser Room Size.

901.4.7.1 Fire pump rooms and automatic sprinkler system riser rooms shall be designed with adequate space for all installed equipment necessary for the installation and to provide sufficient working room around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly and not less than the following minimum elements:

901.4.7.1.1 A minimum clear and unobstructed distance of 12 inches shall be provided from the installed equipment to the elements of permanent construction.

901.4.7.1.2 A minimum clear and unobstructed distance of 12 inches shall be provided between all other installed equipment and appliances.

901.4.7.1.3 A clear and unobstructed width of 36 inches shall be provided in front of all installed equipment and appliances, to allow for inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire resistance-rated assembly.

901.4.7.2 Fire Pump Room. Fire pumps and controllers shall be provided with ready access. Fire pump rooms shall be provided with doors and an unobstructed passageway large enough to allow for the removal of the largest piece of equipment. The passageway shall have a clear width not less than 72 inches. Openings into the room shall be clear and unobstructed, with doors swinging in the outward direction from the fire pump room and the opening providing a clear width of not less than 68 inches and a clear height of the door opening shall not be less than 80 inches. The door shall be permitted to be locked provided that the key is available at all times and located in a Key Box in accordance with IFC, Section 506.

901.4.7.3 Automatic Sprinkler Riser Room. Automatic sprinkler system risers shall be provided with ready access. Automatic sprinkler system riser rooms shall be provided with doors and an unobstructed passageway large enough to allow for the removal of the largest piece of equipment. The passageway shall have a clear width not less than 36 inches. Openings into the room shall be clear and unobstructed, with doors swinging in the outward direction from the riser room and the opening providing a clear width of not less than 32 inches and a clear height of the door opening shall not be less than 80 inches. The door shall be permitted to be locked provided that the key is available at all times and located in a Key Box in accordance with IFC, Section 506.

901.4.7.4 Marking on Access Doors. Access doors for automatic sprinkler system riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 2 inches (51 mm) with a minimum stroke of 3/8 inch (10 mm).

901.4.7.5 Environment. Automatic sprinkler system riser rooms and fire pump rooms shall be maintained at a temperature of not less than 40 degrees F (4 degrees C). Heating units shall be permanently installed.

902.6 Lighting. Permanently installed artificial illumination shall be provided in the automatic sprinkler system riser rooms and fire pump rooms."

(2) IFC, Chapter 9, Section 903.2.1.2, Group A-2, is amended to add the following subsection: "4. An automatic fire sprinkler system shall be provided throughout Group A-2 occupancies where indoor pyrotechnics are used."
(3) IFC, Chapter 9, Section 903.2.2, Ambulatory care facilities, is amended as follows: On line two delete the words "entire floor" and replace with the word "building" and delete the last paragraph.
(4) IFC, Chapter 9, Section 903.2.4, Group F-1, Subsection 2, is deleted and rewritten as follows: "A Group F-1 fire area is located more than three stories above the lowest level of fire department vehicle access."
(5) IFC, Chapter 9, Section 903.2.7, Group M, Subsection 2, is deleted and rewritten as follows: "A Group M fire area is located more than three stories above the lowest level of fire department vehicle access."
(6) IFC, Chapter 9, Section 903.2.8 Group R, including all subsections, is deleted and rewritten as follows:

"903.2.8 Group R.

An automatic sprinkler system installed in accordance with Section 903.3 shall be proved throughout all buildings with a Group R fire area.

Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) constructed in accordance with the International Residential Code for One- and Two-Family Dwellings.

2. Single story Group R-1 occupancies with fire areas not more than 2,000 square feet that contain no installed plumbing or heating, where no cooking occurs, and constructed of Type I-A, I-B, II-A, or II-B construction.

3. Group R-4 fire areas not more than 4,500 gross square feet and not containing more than 16 residents, provided the building is equipped throughout with an approved fire alarm system that is interconnected and receives its primary power from the building wiring and a commercial power system."

(7) IFC, Chapter 9, Section 903.2.9, Group S-1, Subsection 2, is deleted and rewritten as follows: "A Group S-1 fire area is located more than three stories above the lowest level of fire department vehicle access."
(8) IFC, Chapter 9, Section 903.3.1.2, NFPA 13R sprinkler systems, Subsections 2 and 3, are deleted and rewritten as follows:

"2. The floor level of the highest story is 40 feet (12192 mm) or less above the lowest level of fire department vehicle access.

3. The floor level of the lowest story is 40 feet (12192 mm) or less below the lowest level of fire department vehicle access."

(9) IFC, Chapter 9, Section 903.3.1.2.3, Attics, is amended by adding the following: "Exception: Sprinkler protection in attics is not required in buildings that are not required to be sprinklered by another section of this code."
(10) IFC, Chapter 9, Section 903.3.5, Water supplies, is amended as follows: On line six, after the word "Code", add "and as amended in the State Construction Code".
(11) IFC, Chapter 9, Section 903.5, Testing and maintenance, is amended to add the following subsection: "903.5.1 Tag and Information. A tag shall be attached to the riser indicating the date the antifreeze solution was tested. The tag shall also indicate the type and concentration of antifreeze solution by volume with which the system is filled, the name of the contractor that tested the antifreeze solution, the contractor's license number, and a warning to test the concentration of the antifreeze solutions at yearly intervals."

(12) IFC, Chapter 9, Section 904.13.5.2, Extinguishing system service, is amended to add the following: "Exception: Automatic fire extinguishing systems located in occupancies where usage is limited and less than six consecutive months may be serviced annually if the annual service is conducted immediately before the period of usage, and approval is received from the AHJ."

(13) IFC, Chapter 9, Section 905.3.9 is a new subsection as follows: "Open Parking Garages. Open parking garages shall be equipped with an approved Class I manual standpipe system when fire department access is not provided for firefighting operations to within 150 feet of all portions of the open parking garage as measured from the approved fire department vehicle access. Class I manual standpipe shall be accessible throughout the parking garage such that all portions of the parking structure are protected within 150 feet of a hose connection.

Exception: Open parking garages equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1."

(14) IFC, Chapter 9, Section 905.12, Existing buildings, is deleted.

(15) In IFC, Chapter 9, Section 906.1, Exception 2 is amended as follows: on line three after the word "6," delete the remainder of the paragraph.

(16) IFC, Chapter 9, Section 907.2.3 Group E:

(a) 907.2.3 Group E is deleted and rewritten as follows: "A manual fire alarm system that initiates the occupant notification signal using an emergency voice/alarm communication system that meets the requirements of Section 907.5.2.2, or a manual fire alarm system that initiates an approved audible and visual occupant notification signal that meets the requirements of Sections 907.5.2.1, 907.5.2.1.1, 907.5.2.1.2, and 907.5.2.3, and is installed in accordance with Section 907.6, and with rules made by the Utah Fire Prevention Board in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, shall be installed in Group E occupancies. Where automatic fire sprinkler systems or smoke detectors are installed, the fire sprinkler systems and smoke detectors shall be connected to the building fire alarm system."

(b) Exception 2, delete entirely and the remaining exceptions are renumbered.

(c) Exception number 4.2, is deleted and rewritten as follows: "The fire alarm system will activate on sprinkler water flow."

(d) New Sections 907.2.3.1 through 907.2.3.7 are added as follows:

"907.2.3.1 Automatic detection devices that detect smoke shall be installed throughout all corridors and spaces open to the corridor at the maximum prescribed spacing of thirty feet on center and no more than fifteen feet from the walls or smoke detectors shall be installed as required in NFPA, Standard 72, Section 17.7.

907.2.3.2 Where structures are not protected or are partially protected with an automatic fire sprinkler system, approved automatic smoke detectors shall be installed in accordance with the complete coverage requirements of NFPA, Standard 72.

907.2.3.3 An approved key plan drawing and operating instructions shall be posted at the main fire alarm panel which displays the location of all alarm zones and if applicable, device addresses.

907.2.3.4 The main panel shall be located in a normally attended area such as the main office or lobby. Location of the Main Panel other than as stated above, shall require the review and authorization of the State Fire Marshal Division. Where location as required above is not possible, an electronically supervised remote annunciator from the main panel shall be located in a supervised area of the building. The remote annunciator shall visually indicate system power status, alarms for each zone, and give both visual and audible indication of trouble conditions in the system. All indicators on both the main panel and remote annunciator shall be adequately labeled.

907.2.3.5 All system wiring shall be as follows:

(A) The initiating device circuits shall be designated and installed Class A as defined in NFPA Standard 72.

(B) The notification appliance circuits shall be designated, and installed Class A as defined in NFPA Standard 72.

(C) Signaling line circuits shall be designated and installed Class A loop as defined in NFPA Standard 72.

907.2.3.6 Fan Shutdown shall be as follows:

(A) Fan shut down shall be as required in the International Mechanical Code, Chapter 6, Section 606.

(B) Duct detectors required by the International Mechanical Code shall be interconnected and compatible with the fire alarm system."

(17) In IFC, Chapter 9, a new Section 907.5.2.3.4 is added as follows: "907.5.2.3.4 Special Education Classrooms. Visible and audible alarm notification appliances in Special Education classrooms may be replaced with a solid red light when approved by the fire code official."

(18) IFC, Chapter 9, Section 907.8, Inspection, testing, and maintenance, is amended to add the following sentences at the end of the section: "Increases in nuisance alarms shall require the fire alarm system to be tested for sensitivity. Fire alarm systems that continue after sensitivity testing with unwarranted nuisance alarms shall be replaced as directed by the AHJ."

(19) IFC, Chapter 9, Section 915.2.3, Group E occupancies and Exception is deleted and replaced with the following:

"915.2.3 Group E Occupancies. Carbon monoxide detectors shall be installed in the following areas within Group E occupancies:

(1) Boiler rooms, furnace rooms, and similar rooms, or in adjacent areas where carbon monoxide is likely to spread. (The installation of carbon monoxide detectors in boiler rooms and furnace rooms may cause a false alarm problem. Locating these detectors in adjacent spaces where the carbon monoxide is likely to spread may be a better option.)

(2) Home economics rooms with gas appliances.

(3) School kitchens with gas appliances. (Commercial kitchens).

(4) Arts rooms and other areas with a gas kiln or open flame.

(5) Gas roof top units, and other carbon monoxide producing HVAC units, one per zone. (The zone shall be the area covered by the HVAC unit.)

(6) In areas with gas wall units.

(7) In areas with a gas water heater or boiler.

(8) Areas with a forge or foundry.

(9) Metal shop or auto shop areas or in adjacent areas where carbon monoxide is likely to spread. (The installation of carbon monoxide detectors in metal shop or auto shop areas may cause a false alarm problem. Locating these detectors in adjacent spaces, i.e. class rooms or corridors, where the carbon monoxide is likely to spread from these spaces may be a better option.)

(10) Labs with open flame.

(11) HVAC units drawing outside air that could be contaminated with carbon monoxide.

(12) Other areas with an open flame or fuel fired appliance.

(F) 915.2.3.1 Carbon monoxide alarm signals shall be automatically transmitted to an onsite location that is staffed by school personnel.

Exception: Carbon monoxide alarm signals shall not be required to be automatically transmitted to an onsite location that is staffed by school personnel in Group E occupancies with an occupant load of 30 or less."

(20) In IFC, Chapter 9, a new Section 915.7 is added as follows:

"915.7 Carbon Monoxide Systems in Group E Occupancies. Carbon monoxide systems may be part of a fire alarm system or standalone system.

915.7.1 Power and Wiring.

915.7.1.1 Power. Carbon monoxide detection systems shall require a primary and secondary power source.

915.7.1.2 Wiring. Class "A" wiring is required when the carbon monoxide system is part of, or connected to, a fire alarm system. Standalone carbon monoxide detection systems may use Class "B" wiring. All wiring shall be Class "A" or "B".

915.7.2 Equipment Shut Down. Equipment and appliances that are producing carbon monoxide shall shut down automatically in the zone involved upon carbon monoxide system activation.

915.7.3 Notification.

915.7.3.1 Local Alarm. Each occupied space shall sound an audible alarm when detecting carbon monoxide at a level in excess of 70 ppm for one hour.

915.7.3.2 General Alarm. A blue strobe, visual alarm, is required in a normally occupied location, similar to the administrative offices, when carbon monoxide is detected in the facility in excess of 70 ppm for one hour.

915.7.3.2.1 The general alarm shall require a manual reset following an alarm activation.

915.7.3.3 Digital Notification. Portable carbon monoxide detectors, with digital read out indicating parts per million of carbon monoxide, in a space to determine the level of hazard in a given space.

915.7.4 Monitoring. System monitoring is not required. If the system is monitored, the signal should be a supervisory signal indicating carbon monoxide.

915.7.5 Inspection.

915.7.5.1 The carbon monoxide detection system shall be tested in the presence of a Deputy or Special Deputy of the State Fire Marshal Division. The Deputy shall require "spot testing" of the system and its components.

915.7.5.2 Before requesting final inspection and approval, the installing contractor shall test each component of the system and issue a statement of compliance, in writing, to the State Fire Marshal Division that the carbon monoxide detection system has been installed in accordance with approved plans and has been tested in accordance with the manufacturer's specifications, and the appropriate installation standard.

915.7.5.3 Systems shall be tagged with the State approved tag for fire alarm systems, upon final approval and shall be inspected and tagged annually by an individual certified as a Master Fire Alarm Technician, by the State Fire Marshal Division.

915.7.6 Evacuation. The affected area within Group E Occupancies shall be evacuated when carbon monoxide is detected at a level in excess of 70 ppm for one hour in that area."

Amended by Chapter 95, 2023 General Session