

FIRE CODE AMENDMENTS

2015 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Curtis S. Bramble

House Sponsor: James A. Dunnigan

LONG TITLE

Committee Note:

The Business and Labor Interim Committee recommended this bill.

General Description:

This bill modifies provisions of the State Fire Code relating to carbon monoxide detection.

Highlighted Provisions:

This bill:

► modifies references to certain standards established by Underwriters Laboratories, Inc. that relate to carbon monoxide detection systems.

Money Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

AMENDS:

15A-5-204, as last amended by Laws of Utah 2014, Chapters 74 and 243

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **15A-5-204** is amended to read:

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



28 For IFC, Fire Protection Systems:

29 (1) IFC, Chapter 9, Section 901.2, Construction Documents, is amended to add the
30 following at the end of the section: "The code official has the authority to request record
31 drawings ("as built") to verify any modifications to the previously approved construction
32 documents."

33 (2) IFC, Chapter 9, Section 901.4.6, Pump and Riser Room Size, is deleted and
34 replaced with the following: "Pump and Riser Room Size. Fire pump and automatic sprinkler
35 system riser rooms shall be designed with adequate space for all installed equipment necessary
36 for the installation and to provide sufficient working space around the stationary equipment.
37 Clearances around equipment shall be in accordance with manufacturer requirements and not
38 less than the following minimum elements:

39 901.4.6.1 A minimum clear and unobstructed distance of 12 inches shall be provided
40 from the installed equipment to the elements of permanent construction.

41 901.4.6.2 A minimum clear and unobstructed distance of 12 inches shall be provided
42 between all other installed equipment and appliances.

43 901.4.6.3 A clear and unobstructed width of 36 inches shall be provided in front of all
44 installed equipment and appliances, to allow for inspection, service, repair or replacement
45 without removing such elements of permanent construction or disabling the function of a
46 required fire-resistance-rated assembly.

47 901.4.6.4 Automatic sprinkler system riser rooms shall be provided with a clear and
48 unobstructed passageway to the riser room of not less than 36 inches, and openings into the
49 room shall be clear and unobstructed, with doors swinging in the outward direction from the
50 room and the opening providing a clear width of not less than 34 inches and a clear height of
51 the door opening shall not be less than 80 inches.

52 901.4.6.5 Fire pump rooms shall be provided with a clear and unobstructed
53 passageway to the fire pump room of not less than 72 inches, and openings into the room shall
54 be clear, unobstructed and large enough to allow for the removal of the largest piece of
55 equipment, with doors swinging in the outward direction from the room and the opening
56 providing a clear width of not less than 68 inches and a clear height of the door opening shall
57 not be less than 80 inches."

58 (3) IFC, Chapter 9, Section 903.2.1.2, Group A-2, is amended to add the following

59 subsection: "4. An automatic fire sprinkler system shall be provided throughout Group A-2
60 occupancies where indoor pyrotechnics are used."

61 (4) IFC, Chapter 9, Section 903.2.2, Ambulatory Health Care Facilities, is amended as
62 follows: On line two delete the words "all fire areas floor" and replace with the word
63 "buildings" and delete the last paragraph.

64 (5) IFC, Chapter 9, Section 903.2.4, Group F-1, Subsection 2, is deleted and rewritten
65 as follows: "A Group F-1 fire area is located more than three stories above the lowest level of
66 fire department vehicle access."

67 (6) IFC, Chapter 9, Section 903.2.7, Group M, Subsection 2, is deleted and rewritten as
68 follows: "A Group M fire area is located more than three stories above the lowest level of fire
69 department vehicle access."

70 (7) IFC, Chapter 9, Section 903.2.8 Group R, is amended to add the following:
71 "Exception: Detached one- and two-family dwellings and multiple single-family dwellings
72 (townhouses) constructed in accordance with the International Residential Code for one- and
73 two-family dwellings."

74 (8) IFC, Chapter 9, Section 903.2.8, Group R, is amended to add a second exception as
75 follows: "Exception: Group R-4 fire areas not more than 4,500 gross square feet and not
76 containing more than 16 residents, provided the building is equipped throughout with an
77 approved fire alarm system that is interconnected and receives its primary power from the
78 building wiring and a commercial power system."

79 (9) IFC, Chapter 9, Section 903.2.8 Group R, is amended to add a third exception as
80 follows: "Exception: Single story group R-1 occupancies with fire areas not more than 2,000
81 square feet that contain no installed plumbing or heating, where no cooking occurs, and
82 constructed of Type I-A, I-B, II-A, or II-B construction."

83 (10) IFC, Chapter 9, Section 903.2.9, Group S-1, Subsection 2, is deleted and rewritten
84 as follows: "A Group S-1 fire area is located more than three stories above the lowest level of
85 fire department vehicle access."

86 (11) IFC, Chapter 9, Section 903.3.1.1 is amended by adding the following subsection:
87 "903.3.1.1.2 Antifreeze Limitations. Antifreeze used in a new automatic sprinkler system
88 installed in accordance with NFPA 13 may not exceed a maximum concentration of 38%
89 premixed propylene glycol or 48% premixed glycerin, and the capacity of the system may not

90 exceed 150 gallons."

91 (12) IFC, Chapter 9, Section 903.3.1.2 is amended by adding the following subsection:
92 "903.3.1.2.2 Antifreeze Limitations. Antifreeze used in a new automatic sprinkler system
93 installed in accordance with NFPA 13R may not exceed a maximum concentration of 38%
94 premixed propylene glycol or 48% premixed glycerin, and the capacity of the system may not
95 exceed 150 gallons."

96 (13) IFC, Chapter 9, Section 903.3.1.3 is amended by adding the following subsection:
97 "903.3.1.3.1 Antifreeze Limitations. Antifreeze used in a new automatic sprinkler system
98 installed in accordance with NFPA 13D may not exceed a maximum concentration of 38%
99 premixed propylene glycol or 48% premixed glycerin, and the capacity of the system may not
100 exceed 150 gallons."

101 (14) IFC, Chapter 9, Section 903.3.5, Water supplies, is amended as follows: On line
102 six, after the word "Code", add "and as amended in Utah's State Construction Code".

103 (15) IFC, Chapter 9, Section 903.5 is amended to add the following subsection:
104 "903.5.1 Tag and Information. A tag shall be attached to the riser indicating the date the
105 antifreeze solution was tested. The tag shall also indicate the type and concentration of
106 antifreeze solution by volume with which the system is filled, the name of the contractor that
107 tested the antifreeze solution, the contractor's license number, and a warning to test the
108 concentration of the antifreeze solutions at yearly intervals."

109 (16) IFC, Chapter 9, Section 904.11, Commercial cooking systems, is deleted and
110 rewritten as follows: "The automatic fire extinguishing system for commercial cooking systems
111 shall be of a type recognized for protection of commercial cooking equipment and exhaust
112 systems. Pre-engineered automatic extinguishing systems shall be tested in accordance with
113 UL300 and listed and labeled for the intended application. The system shall be installed in
114 accordance with this code, its listing and the manufacturer's installation instructions. The
115 exception in Section 904.11 is not deleted and shall remain as currently written in the IFC."

116 (17) IFC, Chapter 9, Section 904.11.3, Carbon dioxide systems, and Section
117 904.11.3.1, Ventilation system, are deleted and rewritten as follows:

118 (a) "Existing automatic fire extinguishing systems used for commercial cooking that
119 use dry chemical are prohibited and shall be removed from service."

120 (b) "Existing wet chemical fire extinguishing systems used for commercial cooking

121 that are not UL300 listed and labeled are prohibited and shall be either removed or upgraded to
122 a UL300 listed and labeled system."

123 (18) IFC, Chapter 9, Section 904.11.4, Special provisions for automatic sprinkler
124 systems, is amended to add the following subsection: "904.11.4.2 Existing automatic fire
125 sprinkler systems protecting commercial cooking equipment, hood, and exhaust systems that
126 generate appreciable depth of cooking oils shall be replaced with a UL300 system that is listed
127 and labeled for the intended application."

128 (19) IFC, Chapter 9, Section 904.11.6.2, Extinguishing system service, is amended to
129 add the following: "Exception: Automatic fire extinguishing systems located in occupancies
130 where usage is limited and less than six consecutive months may be serviced annually if the
131 annual service is conducted immediately before the period of usage, and approval is received
132 from the AHJ."

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

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

142 (21) IFC, Chapter 9, Section 905.8, Dry Standpipes, Exception is deleted and rewritten
143 as follows: "Where subject to freezing conditions and approved by the fire code official."

144 (22) IFC, Chapter 9, Section 905.11, Existing buildings, and IFC, Chapter 11, Section
145 1103.6, Standpipes, are deleted.

146 (23) In IFC, Chapter 9, Section 906.1, Where Required, the exception under paragraph
147 1 is deleted and rewritten to read: "Exception: In new and existing Group A, B, and E
148 occupancies equipped with quick response sprinklers, portable fire extinguishers shall be
149 required only in locations specified in items 2 through 6.

150 (24) IFC, Chapter 9, Section 907.2.3 Group E:

151 (a) The first sentence is deleted and rewritten as follows: "A manual fire alarm system

152 that initiates the occupant notification system in accordance with Section 907.5 and installed in
153 accordance with Section 907.6 shall be installed in Group E occupancies."

154 (b) Exception number 3, on line five, delete the words, "emergency voice/alarm
155 communication system" and replace with "occupant notification system."

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

160 (26) IFC, Chapter 9, Section 908.7, Carbon Monoxide Alarms, is deleted and rewritten
161 as follows:

162 "908.7 Carbon Monoxide Detection.

163 908.7.1 Groups R-1, R-2, R-3, R-4, I-1, and I-4. Carbon monoxide detection shall be
164 installed on each habitable level of a dwelling unit or a sleeping unit in Groups R-1, R-2, R-3,
165 R-4, I-1, and I-4 occupancies that are equipped with a fuel-burning appliance.

166 908.7.1.1 If more than one carbon monoxide detector is required, the carbon monoxide
167 detectors shall be interconnected as required in IFC, Chapter 9, Section 907.2.11.3.

168 908.7.1.2 In new construction, a carbon monoxide detector shall receive its primary
169 power as required under IFC, Chapter 9, Section 907.2.11.4.

170 908.7.1.3 Upon completion of the installation, a carbon monoxide detector system
171 shall meet the requirements listed in NFPA 720, Installation of Carbon Monoxide Detection
172 and Warning Equipment and [~~UL 2034, Standard for Single and Multiple Carbon Monoxide~~
173 ~~Alarms~~] UL 2075, Standard for Gas and Vapor Detectors and Sensors.

174 908.7.2 Group E. A carbon monoxide detection system shall be installed in new
175 buildings that contain Group E occupancies in accordance with IFC, Chapter 9, Sections
176 908.7.2.1 through 908.7.2.6. A carbon monoxide detection system shall be installed in existing
177 buildings that contain Group E occupancies in accordance with IFC, Chapter 11, Section
178 1103.9.

179 908.7.2.1 Where required. In Group E occupancies, a carbon monoxide detection
180 system shall be provided where a fuel-burning appliance, a fuel-burning fireplace, or a
181 fuel-burning forced air furnace is present.

182 908.7.2.2 Detection equipment. Each carbon monoxide detection system shall be

183 installed in accordance with NFPA 720 and the manufacturer's instructions, and be listed as
184 complying with [~~UL 2034~~ and] UL 2075.

185 908.7.2.3 Locations. Each carbon monoxide detection system shall be installed in the
186 locations specified in NFPA 720.

187 908.7.2.4 Combination detectors. A combination carbon monoxide/smoke detector is
188 an acceptable alternative to a carbon monoxide detection system if the combination carbon
189 monoxide/smoke detector is listed in accordance with UL 2075 and UL 268.

190 908.7.2.5 Power source. Each carbon monoxide detection system shall receive primary
191 power from the building wiring if the wiring is served from a commercial source. If primary
192 power is interrupted, each carbon monoxide detection system shall receive power from a
193 battery. Wiring shall be permanent and without a disconnecting switch other than that required
194 for over-current protection.

195 908.7.2.6 Maintenance. Each carbon monoxide detection system shall be maintained
196 in accordance with NFPA 720. A carbon monoxide detection system that becomes inoperable
197 or begins to produce end-of-life signals shall be replaced."

198 (27) IFC Section 908.7.1 is renumbered to 908.7.3.

Legislative Review Note
as of 10-17-14 3:15 PM

Office of Legislative Research and General Counsel