

1 STATE FIRE CODE ADOPTION

2 2010 GENERAL SESSION

3 STATE OF UTAH

4

5 LONG TITLE

6 General Description:

7 This bill adopts the State Fire Code in accordance with the Utah Fire Prevention and
8 Safety Act.

9 Highlighted Provisions:

10 This bill:

- 11 ▶ includes general provisions; and
- 12 ▶ adopts the state fire code.

13 Monies Appropriated in this Bill:

14 None

15 Other Special Clauses:

16 This bill takes effect on July 1, 2010.

17 Utah Code Sections Affected:

18 ENACTS UNCODIFIED MATERIAL

19

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

21 Section 1. Title -- Definitions -- General Provisions.

22 (1) This bill is known as the "State Fire Code Adoption Act."

23 (2) As used in this bill:

24 (a) "Board" means the Utah Fire Prevention Board created in Utah Code, Section
25 53-7-203.

26 (b) "Division" means the State Fire Marshal Division created in Utah Code, Section
27 53-7-103.

28 (c) "State Fire Code" means the code adopted under Section 2 of this bill.

29 (d) "Utah Code" means the Utah Code Annotated (1953), as amended.

30 (3) Consistent with Utah Code, Title 53, Chapter 7, Utah Fire Prevention and Safety
31 Act, the division under the direction of the board may modify the format of the state fire code
32 to provide accessibility to users of the State Fire Code.

33 Section 2. **State Fire Code adopted.**

34 In accordance with Utah Code, Title 53, Chapter 7, Utah Fire Prevention and Safety
35 Act, the Legislature, repeals the state fire code in effect on June 30, 2010, and adopts the
36 following as the State Fire Code effective July 1, 2010:

37 **State Fire Code**

38 **Part 1. General Provisions**

39 **Section 101. Scope of State Fire Code.**

40 In accordance with Utah Code, Title 53, Chapter 7, Utah Fire Prevention and Safety
41 Act, these provisions are adopted to provide minimum requirements for safeguarding life and
42 property from the hazards of fire and explosion.

43 **Section 102. Definitions.**

44 As used in the State Fire Code:

45 (1) "Appreciable Depth" means a depth greater than 1/4 inch.

46 (2) "AHJ" means "authority having jurisdiction," which is the State Fire Marshal, an
47 authorized deputy of the State Fire Marshal, or the local fire enforcement authority.

48 (3) "IFC" means International Fire Code.

49 (4) "NFPA" means National Fire Protection Association.

50 (5) "UL" means Underwriters Laboratories, Inc.

51 **Section 103. Nationally recognized codes incorporated by reference.**

52 The following codes are incorporated by reference into the state fire code:

53 (1) the International Fire Code (IFC), 2009 edition, excluding appendices, as issued by
54 the International Code Council, Inc., except as amended by State Fire Code, Part 2, Statewide
55 Amendments and Additions; and

56 (2) National Fire Protection Association (NFPA), NFPA 96, Standard for Ventilation
57 Control and Fire Protection of Commercial Cooking Operations, 2008 edition, except as
58 amended State Fire Code, Part 2, Statewide Amendments and Additions.

59 **Part 2. Statewide Amendments and Additions**

60 **Section 201. Amendments and additions -- IFC.**

61 The following amendments and additions are adopted for application statewide:

62 (1) For IFC, Scope and Administration:

63 (a) IFC, Chapter 1, Section 105.6.16, Flammable and combustible liquids, is amended

64 to add the following section: "12. The owner of an underground tank that is out of service for
65 longer than one year, shall receive a Temporary Closure Notice from the Department of
66 Environmental Quality and a copy shall be given to the AHJ."

67 (b) IFC, Chapter 1, Section 109.2, Notice of violation, is amended as follows: On line
68 three after the words "is in violation of this code," insert in the section the phrase "or other
69 pertinent laws or ordinances".

70 (2) For IFC, Definitions:

71 (a) IFC, Chapter 2, Section 202, General Definitions, Occupancy Classification,
72 Educational Group E, Day care, is amended as follows: On line three delete the word "five"
73 and replace it with the word "four".

74 (b) IFC, Chapter 2, Section 202, General Definitions, Occupancy Classification,
75 Institutional Group I, Group I-1, is amended as follows: On line ten add "Type I" in front of the
76 words "Assisted living facilities".

77 (c) IFC, Chapter 2 Section 202, General Definitions, Occupancy Classification,
78 Institutional Group I, Group I-2, is amended as follows:

79 (i) On line three delete the word "for" and insert the following into the sentence "on a
80 24 hour basis of more than three".

81 (ii) On line ten after the words "Nursing homes" add the following: "both intermediate
82 nursing care and skilled nursing care facilities, ambulatory surgical centers with five or more
83 operating rooms where care is less than 24 hours, and Type II assisted living facilities. Type II
84 assisted living facilities with five or fewer persons shall be classified as a Group R-4. Type II
85 assisted living facilities with at least six and not more than 16 residents shall be classified as a
86 Group I-1 facility".

87 (d) IFC, Chapter 2, Section 202, General Definitions, Occupancy Classification,
88 Institutional Group I, Group I-4, Day care facilities, Child care facility, is amended as follows:

89 (i) On line three delete the word "five" and replace it with the word "four".

90 (ii) On line two of the exception delete the word "five" and replace it with the word
91 "four".

92 (e) IFC, Chapter 2, Section 202, General Definitions, Occupancy Classification,
93 Residential Group R, R-2, is amended to add the following: "Exception: Boarding houses
94 accommodating 10 persons or less shall be classified as Residential Group R-3."

95 (3) For IFC, General Requirements:

96 (a) IFC, Chapter 3, Section 304.1.2, Vegetation, is amended as follows: Delete line six
97 and replace it with: "the Utah Administrative Code, R652-122-200, Minimum Standards for
98 Wildland Fire Ordinance".

99 (b) IFC, Chapter 3, Section 311.1.1, Abandoned premises, is amended as follows: On
100 line ten delete the words "International Property Maintenance Code and the".

101 (c) IFC, Chapter 3, Section 311.5, Placards, is amended as follows: On line three delete
102 the word "shall" and replace it with the word "may".

103 (d) IFC, Chapter 3, Section 315.2.1, Ceiling clearance, is amended to add the
104 following: "Exception: Where storage is not directly below the sprinkler heads, storage is
105 allowed to be placed to the ceiling on wall mounted shelves that are protected by fire sprinkler
106 heads in occupancies meeting classification as light or ordinary hazard."

107 (4) For IFC, Emergency Planning and Preparedness:

108 (a) IFC, Chapter 4, Section 404.2, Where required, Subsection 8, is amended as
109 follows: After the word "buildings" add "to include sororities and fraternity houses".

110 (5) For IFC, Building Services and Systems:

111 (a) IFC, Chapter 6, Section 607.4, Elevator keys, is deleted and rewritten as follows:
112 "Firefighter service keys shall be kept in a "Supra-Stor-a-key" elevator key box or similar box
113 with corresponding key system that is adjacent to the elevator for immediate use by the fire
114 department. The key box shall contain one key for each elevator, one key for lobby control,
115 and any other keys necessary for emergency service. The elevator key box shall be accessed
116 using a 6049 numbered key. All existing elevator key box locks that do not use the numbered
117 6049 key shall be changed to the 6049 key by December 31, 2011."

118 (b) IFC, Chapter 6, Section 609.1, General, is amended as follows: On line three after
119 the word "Code" add the words "and NFPA 96".

120 (6) For IFC, Fire Protection Systems:

121 (a) IFC, Chapter 9, Section 901.2, Construction documents, is amended to add the
122 following at the end of the section: "The code official has the authority to request record
123 drawings ("as built") to verify any modifications to the previously approved construction
124 documents."

125 (b) IFC, Chapter 9, Section 902.1, Definitions, RECORD DRAWINGS, is deleted and

126 rewritten as follows: "Drawings ("as built") that document all aspects of a fire protection
127 system as installed."

128 (c) IFC, Chapter 9, Section 903.2.1.2, Group A-2, is amended to add the following
129 subsection: "4. An automatic fire sprinkler system shall be provided throughout Group A-2
130 occupancies where indoor pyrotechnics are used."

131 (d) IFC, Chapter 9, Section 903.2.2, Group B ambulatory health care facilities, is
132 amended as follows: On line three delete the words "all fire areas" and replace with the word
133 "buildings".

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

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

140 (g) IFC, Chapter 9, Section 903.2.8 Group R, is amended to add the following:
141 "Exception: Detached one- and two-family dwellings and multiple single-family dwellings
142 (townhouses) constructed in accordance with the International Residential Code for one- and
143 two-family dwellings."

144 (h) IFC, Chapter 9, Section 903.2.8, Group R, is amended to add a second exception as
145 follows: "Exception: Group R-4 fire areas not more than 4500 gross square feet and not
146 containing more than 16 residents, provided the building is equipped throughout with an
147 approved fire alarm system that is interconnected and receives its primary power from the
148 building wiring and a commercial power system."

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

152 (j) (i) IFC, Chapter 9, Section 903.2.10, Group S-2 enclosed parking garages, is deleted
153 and rewritten as follows: "An automatic sprinkler system shall be provided throughout
154 buildings classified as parking garages in accordance with Section 406.2 of the International
155 Building Code or where located beneath other groups."

156 (ii) IFC, Chapter 9, Section 903.2.10, Group S-2 enclosed parking garages, the

157 exception is deleted and rewritten as follows: "Exception: Parking garages of less than 5,000
158 square feet (464m2) accessory to Group R-3 occupancies."

159 (iii) IFC, Chapter 9, Section 903.2.10, Group S-2 enclosed parking garages, is amended
160 to add a second exception, as follows: "Exception: Open parking garages not located beneath
161 other groups if one of the following conditions are met:

162 1. Access is provided for fire fighting operations to within 150 feet (45 720mm) of all
163 portions of the parking garage as measured from the approved fire department vehicle access,
164 or.

165 2. Class I standpipes are installed throughout the parking garage."

166 (k) IFC, Chapter 9, Section 903.2.10.1, Commercial parking garages, is deleted and
167 rewritten as follows: "An automatic sprinkler system shall be provided throughout buildings
168 used for storage of commercial trucks or buses."

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

171 (m) IFC, Chapter 9, Section 903.6, Existing Buildings, and Chapter 46, Section 4603.4
172 Sprinkler systems, is amended to add the following subsection to each section: "903.6.3 Group
173 A-2 and 4603.4.3 Group A-2. An automatic fire sprinkler system shall be provided throughout
174 existing Group A-2 occupancies where indoor pyrotechnics are used."

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

182 (o) IFC, Chapter 9, Section 904.11.3, Carbon dioxide systems, and Section 904.11.3.1,
183 Ventilation system, are deleted and rewritten as follows:

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

186 (ii) "Existing wet chemical fire extinguishing systems used for commercial cooking
187 that are not UL300 listed and labeled are prohibited and shall be either removed or upgraded to

188 a UL300 listed and labeled system."

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

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

199 (r) IFC, Chapter 9, Section 905.11, Existing buildings, and IFC, Chapter 46, Section
200 4603.5, Standpipes, are deleted.

201 (s) IFC, Chapter 9, Section 907.3, Where required in existing buildings and structures,
202 is deleted, and IFC, Chapter 46, Section 4603.6, Fire alarm systems are deleted and rewritten as
203 follows: "An approved automatic fire detection system shall be installed in accordance with the
204 provisions of this code and NFPA 72. Devices, combinations of devices, appliances and
205 equipment shall be approved. The automatic fire detectors shall be smoke detectors, except an
206 approved alternative type of detector shall be installed in spaces such as boiler rooms where,
207 during normal operation, products of combustion are present in sufficient quantity to actuate a
208 smoke detector."

209 (t) IFC, Chapter 9, Section 907.9.5, Maintenance, inspection and testing, is amended to
210 add the following sentences at the end of the section: "Increases in nuisance alarms shall
211 require the fire alarm system to be tested for sensitivity. Fire alarm systems that continue after
212 sensitivity testing with unwarranted nuisance alarms shall be replaced as directed by the AHJ."

213 (u) IFC, Chapter 9, Section 907.10, Carbon monoxide alarms, is added as follows:
214 "Carbon monoxide alarms shall be installed on each habitable level of a dwelling unit or
215 sleeping unit in Groups R-2, R-3, R-4, and I-1 equipped with fuel burning appliances.

216 901.10.21.1. If more than one Carbon monoxide detector is required they shall be
217 interconnected as required in IFC, Chapter 9, Section 907.2.11.3.

218 901.10.21.2. In new construction, carbon monoxide detectors shall receive their

- 219 primary power as required in IFC, Chapter 9, Section 907.2.11.4.
- 220 901.10.21.3. Upon completion of the installation, the carbon monoxide detector system
- 221 will meet the requirements listed in NFPA 720, Installation of Carbon Monoxide Detection and
- 222 Warning Equipment and UL2034, Standard for Single and Multiple Station Carbon Monoxide
- 223 Alarms."
- 224 (7) For IFC, Means of Egress:
- 225 (a) IFC, Chapter 10, Section 1008.1.9.6, Special locking arrangements in Group I-2, is
- 226 amended as follows:
- 227 (i) The section title "Special locking arrangements in Group I-2." is rewritten to read
- 228 "Special locking arrangements in Groups I-1 and I-2."
- 229 (ii) On line three, after the word "Group", add the words "I-1 and".
- 230 (iii) On line two and line four delete the word "delayed" and replace it with the word
- 231 "controlled".
- 232 (iv) Beginning on line 11, the entire sentence that begins with "A building occupant" is
- 233 deleted.
- 234 (v) After existing Item 6 add Item 7 as follows: "7. The secure area or unit with
- 235 controlled egress doors shall be located at the level of exit discharge in Type V construction."
- 236 (b) In IFC, Chapter 10, Section 1008.1.9.7, Delayed egress locks, Item 7 is added after
- 237 the existing Item 6 as follows: "7. The secure area or unit with delayed egress locks shall be
- 238 located at the level of exit discharge in Type V construction."
- 239 (c) IFC, Chapter 10, Section 1009.4.2, Riser height and tread depth, is amended as
- 240 follows:
- 241 (i) On line six of Exception 5 delete "7¾ inches (197mm)" and replace it with "8
- 242 inches".
- 243 (ii) On line seven of Exception 5 delete "10 inches (254mm)" and replace it with "9
- 244 inches".
- 245 (d) IFC, Chapter 10, Section 1009.12, Handrails, is amended to add the following
- 246 exception: "6. In occupancies in Group R-3, as applicable in Section 101.2 and in occupancies
- 247 in Group U, which are accessory to an occupancy in Group R-3, as applicable in Section 101.2,
- 248 handrails shall be provided on at least one side of stairways consisting of four or more risers."
- 249 (e) IFC, Chapter 10, Section 1013.2, Height, is amended to add the following

250 exception: "5. For occupancies in Group R-3 and within individual dwelling units in
251 occupancies in Group R-2, as applicable in Section 101.2, guards shall form a protective barrier
252 not less than 36 inches (914mm)."

253 (f) IFC, Chapter 10, Section 1015.2.2, Three or more exits or exit access doorways, is
254 amended to add the following sentence at the end of the section: "Additional exits or exit
255 access doorways shall be arranged a reasonable distance apart so that if one becomes blocked,
256 the others will be available."

257 (g) IFC, Chapter 10, Section 1024, Luminous Egress Path Markings, is deleted.

258 (h) IFC, Chapter 10, Section 1030.2, Reliability, is amended to add the following: On
259 line six after the word "fire" add the words "and building".

260 (8) For IFC, Explosives and Fireworks:

261 (a) IFC, Chapter 33, Section 3301.1.3, Fireworks, Exception 4 is amended to add the
262 following sentence at the end of the exception: "The use of fireworks for display and retail
263 sales is allowed as set forth in Utah Code, Title 53, Chapter 7, Sections 53-7-220 through
264 53-7-225; Utah Code, Title 11, Chapter 3, County and Municipal Fireworks Act, Utah
265 Administrative Code, R710-2; and the State Fire Code."

266 (9) For IFC, Flammable and Combustible Liquids:

267 (a) IFC, Chapter 34, Section 3401.4, Permits, is amended to add the following at the
268 end of the section: "The owner of an underground tank that is out of service for longer than one
269 year, shall receive a Temporary Closure Notice from the Department of Environmental Quality
270 and a copy shall be given to the AHJ."

271 (b) IFC, Chapter 34, Section 3406.1, General, is amended to add the following special
272 operation: "8. Sites approved by the AHJ".

273 (c) IFC, Chapter 34, Section 3406.2, Storage and dispensing of flammable and
274 combustible liquids on farms and construction sites, is amended to add the following: On line
275 five after the words "borrow pits" add the words "and sites approved by the AHJ".

276 (10) For IFC, Liquefied Petroleum Gas:

277 (a) IFC, Chapter 38, Section 3809.12, Location of storage outside of buildings, is
278 amended as follows: In Table 3809.12, Doorway or opening to a building with two or more
279 means of egress, with regard to quantities 720 or less and 721 -- 2,500, the currently stated "5"
280 is deleted and replaced with "10".

281 (11) IFC, Chapter 47, Referenced Standards, is amended as follows:

282 (a) Under the heading NFPA -- National Fire Protection Association, add the
283 following: "NFPA 720, Installation of Carbon Monoxide (CO) Detection and Warning
284 Equipment, 2009 edition."

285 (b) Under the heading UL -- Underwriters Laboratories, Inc. add the following:
286 "UL2034, Standard for Single and Multiple Station Carbon Monoxide Alarms, 1998."

287 **Section 202. Amendments and additions -- NFPA.**

288 The following amendments and additions are adopted for application statewide:

289 (1) For NFPA 72, National Fire Alarm Code:

290 (a) NFPA 72, Chapter 2, Section 2.2, NFPA Publications, is amended to add the
291 following NFPA standard: "NFPA 20, Standard for the Installation of Stationary Pumps for
292 Fire Protection, 2007 edition."

293 (b) NFPA 72, Chapter 4, Section 4.3.2, System Designer, Subsection 4.3.2.2(2), is
294 deleted and rewritten as follows: "National Institute of Certification in Engineering
295 Technologies (NICET) fire alarm level II certified personnel."

296 (c) NFPA 72, Chapter 4, Section 4.3.3, System Installer, Subsection 4.3.3(2), is deleted
297 and rewritten as follows: "National Institute of Certification in Engineering Technologies
298 (NICET) fire alarm level II certified personnel."

299 (d) NFPA 72, Chapter 4, Section 4.4.3.7, Alarm Signal Deactivation, Subsection
300 4.4.3.7.2, is amended to add the following sentence: "When approved by the AHJ, the audible
301 notification appliances may be deactivated during the investigation mode to prevent
302 unauthorized reentry into the building."

303 (e) NFPA 72, Chapter 4, Section 4.4.5, Protection of Fire Alarm System, is deleted and
304 rewritten as follows: "Automatic smoke detection shall be provided at the location of each fire
305 alarm control unit(s), notification appliance circuit power extenders, and supervising station
306 transmitting equipment to provide notification of fire at the location."

307 (f) In NFPA 72, Chapter 4, Section 4.4.5, a new Exception 1, is added as follows:
308 "When ambient conditions prohibit installation of automatic smoke detection, automatic heat
309 detection shall be permitted."

310 (g) In NFPA 72, Chapter 6, Section 6.8.5.9, Signal Initiation -- Fire Pump, Subsection
311 6.8.5.9.3 is added as follows: "Automatic fire pumps shall be supervised in accordance with

312 NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, and the AHJ."

313 (h) NFPA 72, Chapter 7, Section 7.4.1 General Requirements, Subsection 7.4.1.2, is
314 amended as follows: On line three delete "110dBA" and replace it with "120dBA".

315 (i) NFPA 72, Chapter 8, Section 8.3.4 Indication of Central Station Service, Subsection
316 8.3.4.7 is amended as follows: On line two, after the word "notified" insert the words "without
317 delay".

318 (j) NFPA 72, Chapter 10, Section 10.2.2.5, Service Personnel Qualifications and
319 Experience, Subsection 10.2.2.5.1, is deleted and rewritten as follows: "Service personnel shall
320 be qualified and experienced in the inspection, testing and maintenance of fire alarm systems.
321 Qualified personnel shall meet the certification requirements stated in Utah Administrative
322 Code, R710-11-3, Fire Alarm System Inspecting and Testing."

323 (2) NFPA 1124 Manufacture, Transportation, Storage and Retail Sales of Fireworks
324 and Pyrotechnic Articles:

325 (a) In NFPA 1124, Chapter 7, Section 7.2, Special Limits for Retail Sales of Consumer
326 Fireworks, Subsection 7.2.8 is added as follows: "Display of Class C common state approved
327 explosives inside of buildings protected throughout with an automatic fire sprinkler system
328 shall not exceed 25 percent of the area of the retail sales floor or exceed 600 square feet,
329 whichever is less."

330 (b) In NFPA 1124, Chapter 7, Section 7.2, Special Limits for Retail Sales of Consumer
331 Fireworks, Subsection 7.2.9 is added as follows: "Rack storage of Class C common state
332 approved explosives inside of buildings is prohibited."

333 (c) NFPA 1124, Chapter 7, Section 7.3.1, Exempt Amounts, Subsection 7.3.1.1, is
334 deleted and rewritten as follows: "Display of Class C common state approved explosives inside
335 of buildings not protected with an automatic fire sprinkler system shall not exceed 125 pounds
336 of pyrotechnic composition."

337 (d) NFPA 1124, Chapter 7, Section 7.3.15.2, Height of Sales Displays, Subsection
338 7.3.15.2.2, is amended as follows: On line three delete "12 ft (3.66m)" and replace it with "6
339 ft".

340 **Section 3. Effective date.**

341 This bill takes effect on July 1, 2010.